Determinant of firm financial performance: Case of Indonesian conventional banks

Silvi Aditya Wilujeng¹, Fadilla Cahyaningtyas²*

¹²Faculty of Economics and Business, The Asia Institute of Technology and Business, Indonesia

DOI: https://doi.org/10.24123/jati.v16i2.5617

Abstract
The objective of this study is to assess the influence of good corporate governance, intellectual capital, credit risk, and sales growth on the financial performance of conventional banking firms that are listed on the Indonesia Stock Exchange throughout the period of 2018-2021. The sample approach employed in this study is purposive sampling. The sample size consists of 21 firms. Various data analysis approaches employ normality testing, double regression tests, hypothesis tests, and determination coefficient tests. The findings indicate that there is no significant relationship between corporate governance performance, intellectual capital, credit risk, sales growth, and financial performance. The results of this study provide practical implications, especially for investors and management of banking companies to consider various factors in improving the company's financial performance.

Keywords: Credit Risk; Firm Financial Performance; Good Corporate Governance; Intellectual Capital; Sales Growth.

Abstrak

Kata kunci: Good Corporate Governance; Intellectual Capital; Kinerja Perusahaan; Pertumbuhan Penjualan; Risiko Kredit.

*Corresponding email: fadillacahyaningtyas@asia.ac.id
INTRODUCTION

The bank, as a corporate entity, wields significant power within the financial domain. Consequently, any underperformance on the part of the bank could potentially exert a substantial impact on the financial system of Indonesia. According to Adi & Suwarti (2022), the assessment of a bank's financial performance serves as a key indicator for evaluating its overall condition. Over the past few years, a series of factors have contributed to a decline in the firm financial performance of the bank, thereby impacting various aspects, including policy formulation and implementation. Refer to Figure 1, bank experienced a decreased in profit of 2019 compared to the previous year, resulting a decline in credit throughout the year. This decline in credit had a negative impact on the firm financial performance of conventional bank. Hence, the Financial Services Authority has enacted a loan restructuring strategy aimed at facilitating economic recuperation. However, the implementation of this policy has resulted in heightened credit risk for banking institutions in the year 2020 (Big Alpha, 2021).

The impact of heightened credit risk on debtor restructuring is evident, and this increased credit risk is projected to last until the year 2022. In the year 2018, the bank's profit experienced an increase due to the improvement in credit expansion, but in the year 2019, there was a decrease in profit caused by the increase in provisioning expenses to follow Indonesia Financial Accounting Standards (PSAK) 71 (Yunita & Indahwati, 2022). PSAK 71 governs the procedures and guidelines for managing modifications in the categorization and assessment of financial assets and liabilities, depreciation, and the implementation of hedge accounting. The occurrence of heightened credit risk can lead to credit default, thereby impacting the depletion of a bank's capital and subsequently causing a deterioration in the firm financial performance of a banking institution (Marietza et al., 2020).

Fluctuations in firm financial performance can be attributed to various factors, including credit risk, Good Corporate Governance (GCG), intellectual capital, and sales growth. The statistical data provided pertains to the profits and expenditures of conventional banks from 2018 to 2021. This data has been obtained from the statistical report on conventional banking issued by the Financial Services Authority (Otoritas Jasa Keuangan, 2021).

Based on previous empirical studies, this study aims to determine the factors that affect financial performance in banking companies listed on the Indonesia Stock Exchange (IDX) during the 2018-2021 period. The results of this study are expected to have a scientific contribution by enriching the existing literature, as well as providing practical contributions for
investors and management to consider factors that affect the financial performance of banking companies.

![Conventional Bank Profit or Loss Statistics](image_url)

**Figure 1. Conventional Bank Profit or Loss Statistics 2018-2021**  
**Source:** Otoritas Jasa Keuangan, 2021

**LITERATURE REVIEW**

**Signalling Theory**

The concept of signal theory was initially proposed by Michael Spence in his seminal work titled "Job Market Signaling" in 1973 (Spence, 1973). This theoretical framework encompasses two distinct entities, specifically an internal entity such as management, which assumes the role of the signal receiver, and an external entity, especially an investor, who serves as the signal recipient. Signaling theory is a theoretical framework that elucidates the significance of information disseminated by a corporation to external stakeholders, which is subsequently employed in the decision-making process. The signal theory perspective is useful for explaining behavior when both parties have varied access to information, both individually and organizationally. Signal theory emphasizes the importance of precise and relevant data for investors and business operators in the capital markets, addressing their urgent need for such information. In signal theory, managers or companies can provide more information compared to what can be obtained from outside the company that allows them to use specific facilities to demonstrate the quality of the company (Zanetty & Efendi, 2022).
Good Corporate Governance (GCG) and Firm Financial Performance

Corporate governance refers to the set of principles that a corporation employs in order to optimize its value, enhance its performance and impact, and ensure the enduring viability of the organization in the long run. The concept of Good Corporate Governance (GCG) serves as a fundamental basis for ensuring effective protection of the principal, enabling the company to ensure that the agent does not engage in excessive behavior but rather invests funds in a prudent and valuable manner. In the study conducted by Kustiani et al. (2019), it was observed that the assessment of GCG involves the utilization of the Board of Directors (BOD). This body consists of a group of individuals elected by the company's shareholders to champion the company's interests and ensure that the management operates in accordance with these interests. These directors convene at regular intervals to establish management policies and oversee corporate activities. A positive correlation exists between the quality of GCG and firm financial performance. Recent studies conducted by Fitrianingsih & Asfaro (2022), Rahmawati et al. (2021), and Watiputri & Pranoto (2021) has demonstrated a notable correlation between GCG and firm financial performance.

H1: Good Corporate Governance (GCG) affects firm financial performance.

Intellectual Capital and Firm Financial Performance

According to Roos et al. (1997), the concept of intellectual capital encompasses all processes and assets that are typically not reflected on the balance sheet. This includes intangible assets, such as trademarks and patents, which are evaluated using contemporary accounting methodologies. According to the Organization for Economic Cooperation and Development (OECD), intellectual capital refers to the economic value of two distinct types of intangible assets held by corporations, specifically organizational (structural) capital and human capital. A positive correlation exists between intellectual capital level possessed by a company and the investor's evaluation of its firm financial performance. A well-defined strategic decision-making process can serve as a favorable indicator for investors, as it suggests that a company possesses the ability to enhance its growth prospects. According to the findings of Fitriasari & Sari (2019), Saragih & Sihombing (2021), and Pratiwi (2017), it has been established that there is a significant relationship between intellectual capital and firm financial performance.

Credit Risk and Firm Financial Performance

According to Sahabuddin et al. (2022), credit risk refers to the potential loss that arises from the likelihood of a debtor's failure to meet their obligations or the probability of non-repayment of a debt. The primary goal of credit risk management is to mitigate the potential risks associated with lending funds to financial institutions, thus safeguarding them from potential losses (Rustam, 2017). A positive link has been observed between credit risk and the probability of clients encountering adverse credit events. The existence of non-performing credit may serve as a possible indicator for investors allocating their resources to a particular company. According to the findings of Wulandari & Novitasari (2021), Mariana & Manda (2021), Afifah (2021), and Sahabuddin et al. (2022), it has been established that credit risk has a significant impact on firm financial performance.

H3: Credit risk affects firm financial performance.

Sales Growth and Firm Financial Performance

Sales growth is a quantitative measure employed to assess a company's historical operational performance, with the aim of forecasting its future growth and accomplishments (Maurien & Ardana, 2019). As sales growth increases, there will be a corresponding increase in the company's profit. The magnitude of profits made affects positively toward company's financial performance. The upward trend in the company's revenue provides a favorable indication to investors allocating their financial resources to the organization. According to Yuliani (2021), Zanetty & Efendi (2022), and Prabasari & Amalia (2022), it has been observed that there exists a relationship between sales growth and firm financial performance.

H4: Sales growth affects firm financial performance.

METHODS

This research uses a quantitative approach method, which the data in this study obtained from conventional banks listed on the Indonesia Stock Exchange (IDX). The selection of conventional banking data is due to the phenomenon of declining firm financial performance, which has had a significant impact on conventional commercial banks. In addition, other data sources in this study utilize secondary data.

The sampling method carried out in this study is purposive sampling, resulting in a sample of 21 conventional commercial banks with the 2018-2021 research year. Since the selected conventional bank earned profits for four years, there are 84 observations in the study. The independent variables in this research are Good Corporate Governance (GCG), intellectual
capital, credit risk, and sales growth, while the dependent variable in this study is firm financial performance. The analytical tool used in this study is multiple linear regression analysis with the equation:

\[ Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon \]  

Equation (1) is a regression model aiming to understand the firm financial performance (Y). In this equation, Y is the dependent variable representing financial performance, \( \alpha \) is the constant term, \( \beta_1, \beta_2, \beta_3, \beta_4 \) are regression coefficients, and \( X_1, X_2, X_3, X_4 \) are independent variables. \( X_1 \) is good corporate governance, \( X_2 \) is intellectual capital, \( X_3 \) is credit risk, and \( X_4 \) is sales growth. \( \varepsilon \) represents the error term. The following is an overview of the conceptual framework of this study.

![Conceptual Framework](https://example.com/figure2.png)

**Figure 2. Conceptual Framework**

**RESULTS AND DISCUSSION**

**Test for Assumption**

This study conducted tests for assumptions, including normality, multicollinearity, heteroscedasticity, and autocorrelation. To conduct normality test, researchers used the Monte Carlo method without data reduction. Following the Monte Carlo analysis of the Kolmogorov-Smirnov statistical test score, a value of 0.001 was obtained with a significance level of 0.084. Since the significance value of 0.084 is greater than 0.05, it indicates that the data used in this study is normally distributed.

Multicollinearity can be observed from the VIF value of each variable: Board of directors variable is 1.016, the VAIC variable is 1.073, the credit risk variable is 1.004, and the
sales growth variable is 1,056. VIF results indicate that all independent variables have VIF values less than 10, thus it can be concluded that there is no multicollinearity between the independent variables of this research.

Heteroscedasticity is tested using the Spearman's rho test, which shows a correlation between the variables board of directors, VAIC, credit risk, and sales growth with an unstandardized residual value having a significance of 60 (Sig-2 tailed) more than 0.05. The significance level is 0.889 > 0.05, which means that there is no heteroscedasticity. Autocorrelation test is calculated using the Durbin-Watson value which shows the number of 1,634. As the values of Durbin-Watson is ranged between +2 and -2, it can be concluded that the data used in this study does not exhibit autocorrelation.

**Multiple Linear Regression Analysis**

Multiple linear regression analysis is obtained as follows: Return on Assets = 0.829 + 0.077 Board of Directors – 0.027 VAIC + 0.043 Credit Risk + 0.052 Sales Growth + e. The t-test was employed to ascertain the partial impact of each independent variable on the dependent variable. T-test values can be understood by comparing the t-count with the t-table. The following are the results of the t test, which can be seen in Table 1.

**Table 1. Multiple Linear Regression Analysis**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Standard Error</td>
</tr>
<tr>
<td>(Constant)</td>
<td>0.829</td>
<td>0.721</td>
</tr>
<tr>
<td>Board of Directors</td>
<td>0.077</td>
<td>0.053</td>
</tr>
<tr>
<td>VAIC</td>
<td>-0.027</td>
<td>0.119</td>
</tr>
<tr>
<td>Credit Risk</td>
<td>0.043</td>
<td>0.138</td>
</tr>
<tr>
<td>Sales Growth</td>
<td>0.052</td>
<td>0.082</td>
</tr>
</tbody>
</table>

**Source:** Processed data, 2023

Board of directors has a significance value of 0.149 > 0.05, which implies that the board of directors has no effect on return on assets. VAIC has a significance value of 0.821 > 0.05, which implies that VAIC has no effect on return on assets. Credit risk has a significance value of 0.758 > 0.05, which means that credit risk has no effect on the return on assets. Sales growth has a significance value of 0.523 > 0.05, which means that sales growth has no effect on return on assets.

**Hypothesis Testing**

Based on the findings presented in Table 2, it can be inferred that the null hypothesis (H0) is accepted, whereas the alternative hypothesis (H1) is rejected. The observation of the F-test statistic, which has a value of 1,345, provides evidence for this assertion. The obtained p-
value of 0.261 exceeds the predetermined significance level of 0.05. Therefore, it may be inferred that the independent variables, namely Good Corporate Governance (GCG), intellectual capital, credit risk, and sales growth, do not exert any influence on the dependent variable of financial success.

### Table 2. F-value Test

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>0.902</td>
<td>4</td>
<td>0.225</td>
<td>1.345</td>
<td>0.261</td>
</tr>
<tr>
<td>Residual</td>
<td>12,399</td>
<td>74</td>
<td>0.168</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>13,301</td>
<td>78</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Processed data, 2023

### Determination Coefficient Test

The test findings for the coefficient of determination (R) yielded an R value of 0.182. This result denotes the extent to which the independent variable accounts for the variation in the dependent variable, with a proportion of 18.2%, while the remaining 81.8% is attributed to other factors that were not considered in the analysis.

### Table 3. Determination Coefficient

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Standard Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.182</td>
<td>0.033</td>
<td>-0.016</td>
<td>1.52894</td>
</tr>
</tbody>
</table>

**Source:** Processed data, 2023

### Effect of Good Corporate Governance to Firm Financial Performance

The findings of the study indicate that there is no significant impact on firm financial performance when evaluating excellent corporate governance through the metric of the number of Board of Directors (BOD). The rejection of this hypothesis suggests a divergence from the principles of signal theory. Therefore, it is not suitable for investors to rely on it as a substantive factor in their investment decisions. The findings of the study indicate that there was no substantial variation in the number of BOD throughout the course of the research period. Rather, it exhibited a tendency to remain constant. Hence, it can be concluded that the number of BOD during the study period does not exert any influence on the firm financial performance level. This finding aligns with the prior study conducted by Rahmatin & Kristanti (2020), which suggests that there is no significant impact of effective corporate governance on firm financial performance. The assertion made by the user is inconsistent with the findings of Fitrianingsih & Asfaro (2022), Rahmawati et al. (2021), and Watiputri & Pranoto (2021), have provided evidence to support the notion that a correlation exists between superior corporate governance and firm financial performance.
Effect of Intellectual Capital to Firm Financial Performance

The research's findings indicate that there is no significant impact of intellectual capital, specifically measured by the variable of human capital utilizing VAIC, on firm financial performance. The rejection of this hypothesis suggests that there exists a divergence from the framework of signal theory. The lack of development of intangible assets, such as human capital and technological resources, within a banking organization can potentially lead to this outcome. It is evident that the utilization of tangible assets, both physical and financial, continues to play a dominant role and significantly impacts the financial success of the bank. This suggests that the influence of intellectual capital on firm financial performance is not substantial. Consequently, investors are unable to depend on intellectual capital as a fundamental factor for formulating investment decisions. This finding is consistent with the results of a previous study conducted by Gunawan et al. (2019), which showed that there is no statistically significant effect of intellectual capital, as evaluated by the VAIC variable, on firm financial performance. The assertion made does not align with the findings of previous studies conducted by Fitriasari & Sari (2019) and Pratiwi (2017), which have shown evidence of a substantial correlation between intellectual capital and firm financial performance.

Effect of Credit Risk to Firm Financial Performance

The findings of this study deviate from the signaling theory employed by scholars, indicating that credit risk does not possess the ability to effectively convey positive or negative signals to investors. Non-Performing Loan (NPL) should not be relied upon as a reliable source for guiding investment decisions about the allocation of capital by investors. NPL is utilized as a factor in bank management's decision-making process when it comes to effectively managing non-performing loans. The concept of credit risk serves as an indicator of the proficiency of bank management in effectively handling NPL issued by financial institutions. The presence of either high or low NPL does not appear to have a significant effect on firm financial performance. The rationale behind the ability of productive asset bad debt reserves to mitigate NPL is due to its inherent worth. This finding aligns with the research conducted by Budiman & Fadillah (2017), which suggests that there is no significant impact of credit risk on firm financial performance. The assertion contradicts the findings of several studies, such as Wulandari & Novitasari (2021), Mariana & Manda (2021), Afifah (2021), and Sahabuddin et al. (2022), which have established a significant relationship between credit risk and firm financial performance.
Effect of Sales Growth to Firm Financial Performance

The findings of the research indicate that there is no significant impact of sales increase on financial success. The rejection of this hypothesis suggests that there exists a divergence from the principles of signal theory. The primary determinant of a bank's firm financial performance is not just contingent upon sales growth. Inconsistent and erratic sales growth, which frequently manifests year after year, can detrimentally impact firm success. This phenomenon is seen in the financial gains attained by a corporation, whereby the generated sales fail to sufficiently offset the expenses associated with manufacturing, resulting in an inability to attain the targeted level of firm financial performance. Hence, it may be posited within the context of this study that the growth in sales does not have a significant impact on the firm financial performance. The utilization of sales growth as a factor for investors to make investment decisions is not viable. The findings of this study align with the research conducted by Mardaningsih et al. (2021), which posits that there is no significant impact of sales growth on financial success. The assertion is inconsistent with the findings of Yuliani (2021), which suggests that there exists a relationship between sales growth and firm financial performance.

CONCLUSION

Based on the findings derived from the rigorous analysis and subsequent discussion of the data, it can be inferred from the research that there is no discernible impact of sound corporate governance, credit risk, intellectual capital, and sales growth on firm financial performance. The findings of this study indicate that bank management should allocate attention to many factors that contribute to enhancing firm financial performance. These factors include earnings management, company management, and the management of existing risks or hazards. In the context of investment, the term ‘return’ does not encompass these elements. Investors have the ability to examine various factors when allocating their capital to a certain company.

This study is subject to various limitations. One such drawback is the focus on conventional banking companies listed on the IDX, which restricts the generalizability of the findings to other industries. This study examines the impact of Good Corporate Governance (GCG), intellectual capital, credit risk, and sales growth on financial success. However, it is important to note that the acquired results may be subject to limitations in terms of accuracy.

One recommendation that researchers can offer based on the findings of this study is for future researchers to consider using other organizations listed on the IDX. By including
entities such as insurance companies, finance companies, securities companies, and others, researchers can gain a more comprehensive understanding of the differences that may exist within this context. Future researchers should incorporate additional variables that have not been explored in the current study, such as the operating cost-to-income ratio, risk management, earnings management, and Capital Adequacy Ratio (CAR), among others. This would enable them to generate more comprehensive and improved research findings.

REFERENCES


