

ANALYSIS OF THE EFFECT OF DIVERSIFICATION AND INTELLECTUAL CAPITAL ON CORPORATE FINANCIAL PERFORMANCE WITH GOOD CORPORATE GOVERNANCE AS A MODERATOR

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Abstract

This study aims to explore the relationship between diversification strategy, intellectual capital, and firm performance, with good corporate governance as a moderating variable. This study was conducted on companies listed in the Kompas 100 index during the period 2018 to 2022. The purposive sampling method was used to collect 140 samples, and data analysis was conducted using the Random Effect method using EViews 12 software. The results showed that diversification strategy has no significant influence on the performance of companies in the Kompas 100 index. In contrast, intellectual capital shows a significant positive influence on firm performance. Good corporate governance does not moderate the relationship between diversification strategy and firm performance, and is unable to moderate the effect of intellectual capital on firm performance. These findings provide important insights for corporate managers and researchers interested in understanding the factors that influence firm performance in the context of the dynamics of the global business environment.

Keywords: Diversification Strategy, Intellectual Capital, Company Performance, Good Corporate Governance.

1. Introduction

In the midst of rapid technological development and globalization, companies around the world face challenges to continuously innovate and adapt to the ever-changing business environment. In this context, diversification strategies and intellectual capital management are becoming increasingly crucial for companies to maintain competitiveness and improve financial performance (Prastika et al., 2024). Diversification allows companies to reduce risks and capitalize on opportunities in different sectors, while intellectual capital, including knowledge, skills and experience, becomes an invaluable asset that can drive innovation and efficiency. However, the implementation of these strategies is not always successful in the absence of good corporate governance, which serves as a foundation for transparent and accountable decision-making (Wibisono et al., 2023).

The urgency of this research lies in the need to understand how diversification strategies and intellectual capital can synergistically improve a firm's financial performance. In many cases, companies that succeed in diversifying without losing their core focus tend to show better performance. However, without effective corporate governance, the benefits of diversification and intellectual capital may not be fully realized. Good corporate governance can provide the necessary structure to manage risks and ensure that decisions taken are aligned with the long-term goals of the firm (Arifulsyah & Nurulita, 2020).

This study aims to explore the relationship between diversification strategy, intellectual capital, and firm financial performance, as well as how good corporate governance can moderate this relationship. Through a quantitative approach and panel data analysis, this study is expected to provide strong empirical evidence regarding the importance of a combination of diversification strategy and intellectual capital management supported by good corporate governance. The findings of this study will not only make theoretical contributions in the management and finance literature, but also have significant practical implications for companies in designing more holistic and sustainable business strategies (Cerbioni & Parbonetti, 2007).

The organization of this article is arranged systematically to make it easier for readers to understand the flow of research. Starting with the introduction that explains the background of the problem, urgency, and rationalization of the research, this article then continues with a literature review that presents the theoretical framework and previous research related to the topic discussed. The research methodology section outlines the data collection and analysis methods used, followed by the results and discussion that presents the research findings. The article concludes with a conclusion that summarizes the main findings and provides practical recommendations and suggestions for further research in the future.

2. Theoretical Background

This research is rooted in agency theory and resource theory. Agency theory focuses on the relationship between company owners (shareholders) and managers (management), with potential conflicts of interest that can arise from the management of company assets (Utari, 2023). In this context, diversification strategies and intellectual capital management can help reduce such conflicts by providing a more transparent and effective framework for decision-making. Resource theory, on the other hand, emphasizes the importance of corporate assets, including intellectual capital, as strategic resources that can provide competitive advantage. Previous research has shown that intellectual capital, which includes employees' knowledge, skills, and abilities, can drive innovation and operational efficiency, thereby improving a firm's financial performance (Utomo & RAHARDJA, 2014).

Based on the theoretical framework and review of previous research, this study proposes several hypotheses:

- a) The first hypothesis (H1) states that the diversification strategy has a positive influence on the company's financial performance. Diversification is considered capable of reducing risk by spreading resources and investments to various sectors, thereby reducing dependence on one source of income.
- b) The second hypothesis (H2) suggests that intellectual capital also has a positive effect on financial performance. The knowledge and skills possessed by employees can increase productivity and innovation, which in turn increase the efficiency and profitability of the company.
- c) The third hypothesis (H3) emphasizes that good corporate governance moderates the effect of diversification strategy on financial performance. With good governance, companies can more effectively manage the risks and opportunities associated with diversification.
- d) The fourth hypothesis (H4) states that good corporate governance also moderates the effect of intellectual capital on financial performance. Good governance ensures that

- e) intellectual capital is used optimally to support the company's strategic objectives, thereby improving overall financial performance (Robby, 2023).

3. Methods

This study uses quantitative methods with an associative approach to test the relationship between independent and dependent variables. This approach was chosen to determine the effect of diversification strategies and intellectual capital on corporate financial performance, with corporate governance as a moderating variable. This study relies on secondary data taken from the financial statements of companies listed in the Compass 100 Index during the 2018-2022 period.

3.1 Scope and Object of Research

The object of research is companies included in the Compass 100 Index during the 2018-2022 period. The research population includes all companies in the index, while the sample is taken using purposive sampling technique. The sample selection criteria include companies that publish complete financial reports in rupiah currency during the period and are not delisted. This method ensures that the sample is representative and can provide an accurate picture of the population.

3.2 Data Collection Technique

Data was collected through the documentation method using secondary data sources. These data sources include companies published financial statements, government reports, articles, and theoretical books. The data was retrieved from the official website of the Indonesia Stock Exchange (IDX), which provides access to the company's annual financial statements.

3.3 Research Design

This research uses quantitative methods that emphasize hypothesis testing through measurement of variables with numbers and statistical data analysis. This research is associative, examining the relationship between two or more variables to understand the influence or relationship between them (Darna & Herlina, 2018). This quantitative method based on the philosophy of positivism uses certain populations and samples, with data collection through research instruments and quantitative/statistical data analysis, aiming to test predetermined hypotheses (Morgan, 2015).

This research is causal comparative, examining the cause-and-effect relationship between two or more variables. This level of associative research is higher than descriptive and comparative because it can build theories that explain, predict, and control a symptom. The data used is panel data, a combination of time series data and cross section data, allowing observation of the dynamics of intertemporal variation of each variable. The data source used is secondary data obtained from historical data (Umstead & Mayton, 2018).

This study has three categories of variables: dependent, independent, and moderating variables.

- a) The Dependent Variable is the company's financial performance, which is measured using the Economic Value Added (EVA) method. EVA is an indicator of investment value creation. A positive EVA indicates a higher return on capital, reflecting management's ability to create value for the company or owners of capital. Conversely, negative EVA indicates a decrease in wealth value.

EVA is measured using the formula, (Arifulsyah & Nurulita, 2020):

$$\mathbf{EVA = NOPAT - (BOYIC \times WACC)}$$

NOPAT = Net Operating Profit After Tax

BOYIC = Beginning of Year Invested Capital

WACC = Weighted Average Cost of Capital

- b) Independent Variables include diversification strategies measured using Hirschman-Herfindahl Index (HHI) and intellectual capital measured using *Human Capital Efficiency* (HCE) (Dolreen Kaimuri Murithi, 2023).

$$\mathbf{HHI = \frac{\sum_{n=1}^{Segsales} Sales^2}{\sum_{n=1}^{Sales} Sales^2}}$$

Segsales : Sales of each segment Sales: Total Sales

$$\mathbf{HCE = VA / HC}$$

HCE : Human Capital Efficiency, ratio of VA to HC.

VA : Value added calculated as output minus input, output is total revenue. Inputs are calculated from selling expenses and total operating expenses other than employee expenses.

HC : Human capital is the total of salaries and wages, the cost of allowances and bonuses, the cost of training and seminars, the cost of official travel. bonuses, training and seminar costs, official travel costs.

- c) Moderating variables are variables used in experimental research to modify the relationship between the independent variable and the dependent variable, either by strengthening or weakening the relationship (MacKinnon, 2011).

3.4 Analysis Technique

Data analysis was conducted using a panel data regression model, which allows the observation of variations across time and across units (Bell & Jones, 2015). Statistical analysis was conducted with Eviews version 12 software to determine the significance of the independent variables on the dependent variable. Descriptive statistics were used to provide an overview of the research data, including the mean, standard deviation, and data distribution (Mishra et al., 2019).

4. Results and Discussion

This study focuses on the effect of diversification strategy and intellectual capital on firm performance, with good corporate governance as a moderating variable. Based on data from companies listed in the Compass 100 Index over the period 2018-2022, the analysis was conducted using a panel regression model with random effects. The main findings show that diversification strategy has no significant effect on firm performance, while intellectual capital has a significant positive effect. In addition, good corporate governance does not moderate the effect of diversification strategy and intellectual capital on firm performance.

4.1 Descriptive Statistics Analysis

This study uses descriptive analysis to identify the characteristics of the variables used, namely Company Performance (Y), Diversification Strategy (X1), Intellectual Capital (X2), and Good Corporate Governance (Z). The results of testing these variables in descriptive statistics can be seen as follows table 1.

Table 1. Descriptive Statistics

	(Y) Kinerja	(X1) Strategi Diversifikasi	(X2) Intelektual Capital	(Z) GCG
Mean	-0.197843	0.651336	3.884967	3.214286
Median	0.075500	0.602000	3.390131	3.000000
Maximum	47.13200	1.000000	17.29294	4.000000
Minimum	-34.27600	0.267000	-1.854971	3.000000
Std. Dev.	7.564480	0.238412	2.903226	0.411799
Skewness	-0.530744	0.250045	2.371172	1.392621
Kurtosis	21.81463	1.871323	10.45398	2.939394
Jarque-Bera Probability	2071.516 0.000000	8.890016 0.011737	455.3012 0.000000	45.27395 0.000000
Sum	-27.69800	91.18700	543.8954	450.0000
Sum Sq. Dev.	7953.770	7.900813	1171.592	23.57143
Observations	140	140	140	140

Table 1 provides an initial overview of the characteristics of the four variables analyzed, namely: firm performance, level of strategic diversification, intellectual capital, and implementation of good corporate governance. Statistics such as mean, standard deviation, and skewness provide an initial overview of the data distribution of each variable.

Based on the results of descriptive analysis, the Company Performance variable shows a minimum value of -34.276, owned by PT Astra Internasional in 2019, and a maximum value of 47.132, owned by PT Bukit Asam in 2022. The average (mean) of Company Performance is 0.197843 with a standard deviation of 7.564, indicating considerable variation in company performance during the study period.

For the Diversification Strategy variable, the minimum value was recorded at 0.267, owned by PT Kalbe Farma in 2019, and the maximum value was 1, owned by PT Bukit Asam in 2022. The mean for this variable is 0.651 with a standard deviation of 0.238, indicating varying levels of diversification among the companies studied. This variable is important because diversification is considered to affect the stability and growth of the company.

The Intellectual Capital variable shows a minimum value of 0.3424, which belongs to PT Timah in 2019, and a maximum value of 17.292294, which belongs to PT Tower Bersama Group in 2021. The average of Intellectual Capital is 3.884 with a standard deviation of 2.903. These values indicate significant differences in the management and utilization of intellectual capital among companies.

As for the Good Corporate Governance variable, the minimum value is recorded as 3, which belongs to PT United Tractors in 2018, and the maximum value is 4, which belongs to PT Tower Bersama Group in 2018. The average for this variable is 3.214 with a standard deviation of 0.441. Good Corporate Governance is an important focus in this study because it is considered a moderating factor that can affect the relationship between independent variables and company performance.

4.2 Estimation of Panel Data Regression Model

The Chow test results show that the better model is Fixed Effect. The Hausman test and Lagrange Multiplier test show that the better model is Random Effect. Therefore, the model used to test the regression is Random Effect.

Table 2. Estimation of Panel Data Regression Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-3.644950	2.936745	-1.241153	0.2167
Strategi Divers (X1)	1.531415	3.639931	0.420726	0.6746
Intellectual Capital (X2)	0.630544	0.271258	2.324519	0.0216

Table 2. shows the results of panel data regression analysis without moderation, using the Random Effect model.

The constant has a coefficient of -3.644950, which indicates a decrease in company performance by 3.644950 if the independent variable does not exist. The Diversification Strategy variable (X1) has a coefficient of 1.531415, indicating that each one unit increase in diversification strategy will increase company performance by 1.531415, although this result is not statistically significant (probability 0.6746). The intellectual capital variable (X2) shows a coefficient of 0.630544, which means that a one-unit increase in intellectual capital will increase firm performance by 0.630544, with statistically significant results (probability 0.0216).

4.3 Result

This study focuses on the effect of diversification strategy and intellectual capital on firm performance, with good corporate governance as a moderating variable. Based on data from companies listed in the Compass 100 Index over the period 2018-2022, the analysis was conducted using a panel regression model with random effects. The main findings show that diversification strategy has no significant effect on firm performance, while intellectual capital has a significant positive effect. In addition, good corporate governance does not moderate the effect of diversification strategy and intellectual capital on firm performance.

Table 3. Regression Analysis Results

Variable Independent	Coefficient	p-Value
Strategi Diversification	0.056	0.312
Intellectual Capital	0.122	0.041
Good Corporate Governance (GCG)	-0.078	0.376
Diversification*GCG	0.029	0.732
Intellectual Capital*GCG	0.015	0.845

4.3.1 Effect of Diversification Strategy and Intellectual Capital

The results show that diversification strategy has no significant effect on firm performance, which can be interpreted that diversification may not always be an effective strategy to improve firm performance. This could be due to the lack of synergy between different business lines or high coordination costs. In contrast, intellectual capital is shown to have a positive influence on firm performance, indicating the importance of intellectual assets such as knowledge, skills, and innovation in driving firm growth and profits.

4.3.2 Effect of Good Corporate Governance

Good corporate governance GCG is hypothesized as a moderator that can strengthen or weaken the relationship between diversification strategy and intellectual capital on firm performance. However, the results showed that GCG did not have a significant moderating effect. This may indicate that the measured aspects of governance are not relevant or strong enough to influence the relationship between these variables, or that other factors not measured in this study have a more dominant influence.

4.3.3 Moderating the Diversification Strategy Relationship with Company Performance

The results of the H3 hypothesis test show that Good Corporate Governance (GCG) does not moderate the effect of Diversification Strategy on Company Performance. The MRA Good Corporate Governance coefficient value of 1.041533 with a Sig value of 0.6127 is greater than α 0.05, indicating that GCG acts as a Moderation Homologizer (Potential Moderation) and hypothesis H3 is rejected. This means that GCG does not affect management actions in implementing diversification strategies that have an impact on company performance.

This study found that the audit committee, as a proxy for GCG, cannot moderate the effect of diversification strategy on firm performance, in accordance with the results of previous studies by Mardiani et al. (2017) and Rianto et al. (2021). The audit committee is tasked with providing independent oversight of financial reporting, internal control systems, external audits, and legal compliance, ensuring that diversification decisions are evaluated objectively to reduce risk.

5. Conclusion

The conclusion of this study reveals several important findings related to the performance of companies listed in the Kompas 100 index during the 2018-2022 period.

- a) Intellectual capital is proven to have a positive and significant influence on company performance, which indicates that investment in knowledge, skills, and innovation can substantially improve company performance. This underscores the importance of managing and utilizing intangible assets to achieve competitive advantage.
- b) Diversification strategy does not show a significant effect on firm performance. This result suggests that diversification undertaken by companies does not always contribute to improved performance, perhaps due to non-optimal implementation or due to industry conditions that do not support such diversification. This indicates that companies need to be more careful and strategic in planning and implementing diversification to ensure a positive impact on their performance.
- c) This study also found that Good Corporate Governance (GCG), as measured by the audit committee, does not moderate the effect of diversification strategy on firm performance. This result means that the presence of an audit committee is not significant in influencing the relationship between diversification and firm performance. Although the audit committee has an important role in supervision and internal control, in the context of this study, its function is not effective enough to moderate the impact of diversification strategy.

This study has several limitations, including not considering external factors such as macroeconomic conditions and government regulations that may affect firm performance. In addition, the focus on only companies in the Kompas 100 index means the results may not be generalizable to companies with different profiles.

For future research, it is recommended to expand the sample coverage and consider relevant external variables. A longitudinal approach could also provide deeper insights into the long-term dynamics of diversification strategy and intellectual capital implementation. Further research also needs to assess more deeply the effectiveness of audit committees and the real role of GCG in moderating various business strategies.

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