JAIM: Jurnal Akuntansi Manado, Vol. 4 No. 2 Agustus 2023 e-ISSN 2774-6976

DOES INTELLECTUAL CAPITAL AND BOARD CHARACTERISTICS AFFECT FINANCIAL PERFORMANCE?

Galuh Tresna Murti [1], RR. Sri Saraswati [2], Yuki Mayumi Yorianti[3]
[1,2,3] Faculty of Economics and Business, Telkom University, Jawa Barat, Indonesia
e-mail: galuht@telkomuniversity.ac.id[1]
sassasuntung@telkomuniversity.ac.id[2], yukimy431@gmail.com[3]
Diterima: 08-07-2023 Disetujui: 20-07-2023

Abstract

The purpose of this study was to analyze the influence of intellectual capital factors and characteristic boards on the financial performance of insurance subsector companies from 2017 to 2022. A quantitative research approach was used, and 12 insurance subsector companies were selected, so that the number of samples selected was 72 research observation data points. This study uses panel data regression analysis techniques. The findings of this study state that the intellectual capital component has a positive influence on financial performance. On the other hand, board characteristics (board size, board diversity, and board compensation) are not factors that can improve financial performance. The implication is that the insurance sub-sector companies will uphold added value through the contribution of physical capital, human capital, and structural capital to gain a competitive advantage that differentiates them from other sectors.

Keywords: *Board Characteristics, Financial Performance, Intellectual Capital*

Abstrak

Tujuan dari penelitian ini adalah untuk menganalisis pengaruh faktor modal intelektual dan karakteristik dewan terhadap kinerja keuangan perusahaan subsektor asuransi dari tahun 2017 hingga 2022. Pendekatan penelitian kuantitatif digunakan dan dipilih sebanyak 12 perusahaan subsektor asuransi, sehingga jumlah sampel yang dipilih sebanyak 72 data observasi penelitian. Penelitian ini menggunakan teknik analisis regresi data panel. Temuan penelitian ini menyatakan bahwa komponen modal intelektual memiliki pengaruh positif terhadap kinerja keuangan. Di sisi lain, karakteristik dewan (*board size, board diversity, board compensation*) bukanlah faktor yang dapat meningkatkan kinerja keuangan. Implikasinya, perusahaan sub sektor asuransi akan menjunjung tinggi nilai tambah melalui kontribusi modal fisik, modal manusia, dan modal struktural sebagai sarana untuk mendapatkan keunggulan kompetitif yang membedakannya dari sektor lain.

Kata kunci: Karakteristik Dewan, Kinerja Keuangan, Modal Intelektual

JAIM: Jurnal Akuntansi Manado, Vol. 4 No. 2 Agustus 2023 e-ISSN 2774-6976

Introduction

The center of investor interest involves the financial performance of the business, as it serves as an indicator of the company's capacity for generating profits and the potential for the company's operations to be sustained (Gledistin et al., 2021; Majidah & Aryanty, 2022). Investors value a company's financial success because of its capacity to provide a thorough forecast of the firm and identify its position at an appropriate point. To assess how well the business is performing financially, a ratio is used that measures profitability, specifically the ratio of return on assets, also known as ROA. Therefore, the ability to use asset values efficiently to generate profits can be seen in a higher ROA (Pauranan et al., 2023; Suzan & Khadrinur, 2023).

The Gross Domestic Product (GDP) serves as a primary indicator for assessing a nation's economic growth. The presence of robust and consistent economic growth has the potential to establish a conducive business climate, thereby influencing a company's return on assets (ROA). An increase in economic growth typically leads to a rise in demand for goods and services. As a result, companies often experience higher revenues and can generate better returns on assets (ROA).

The insurance industry's contribution to GDP has continued to increase from 2017-2020, but in 2021 it has decreased by 3.18% (Mutia, 2022). However, the penetration that year fell to number 3, so there is still a possibility that the penetration of the insurance industry to GDP in the following years will increase considering the penetration of the previous four years, which tended to increase. Higher penetration of the insurance industry will have an impact on economic growth and people's welfare, while lower penetration will indicate difficulties in becoming a developed country (Mutia, 2022). According to the Financial Services Authority (OJK), the Insurance Statistics Data for 2021 reveals a decline in the penetration rate. This can be attributed to the fact that the increase in the Gross Domestic Product (GDP) has outpaced the growth in the insurance industry's gross premiums (Aris, 2023). According to the Indonesia Financial Group (IFG), the insurance industry is facing several challenges due to the pandemic. In one of them, there has been a rise in claims for both life and non-life insurance, while the demand for insurance products and receipts for premiums have decreased.

Companies in the insurance subsector saw an average increase in total assets of 6.21% from 2017 to 2018, and then 5.89% from 2018 to 2019. In addition, it should be noted that there was a significant increase of 4.18% and 1.79% between 2019 and 2020. However, in the following period, from 2020 to 2021, there was a significant decrease of 1.82%. There is an increase observed between 2021 and 2021, with a growth rate of 3.39%. The average total assets of insurance companies have decreased, but there is potential for growth in 2022. The data shows that companies have managed their total assets effectively. During the COVID-19 period, life insurance companies showed relatively strong overall financial performance (Rohman & Melati, 2022). According to the Financial Services Authority (OJK), insurance companies are required to maintain a minimum RBC (Risk-Based Capital) ratio of 120% or higher. During the pandemic, the RBC ratio of foreign and local insurance companies remained consistently above the regulatory requirement of 120% set by the OJK.

The average net profit growth in the insurance sub-sector companies showed a positive trend in the 2017–2018 financial year, with an average of 4.71%. However, there was a decrease in net profit between 2018 and 2019, with a decrease of 2.73%. In addition, there was a significant decline from 2019 to 2021, which was indicated by negative values of -13.40% and -29.38%. In 2022, it is estimated that there will be a sizeable increase of 67.88%. This decrease in average net profit is inseparable from the impact of COVID-19 in 2020, which then has an impact on a decrease in net profit in 2021. PT Asuransi Jasa Tania Tbk experienced a significant decrease in profit, resulting in a loss of IDR 7,767,259,458 in 2020. Furthermore, PT Asuransi Kresna Mitra Tbk also experienced a significant decrease in profit,

amounting to IDR 88,526,593,736. In the previous period, in 2019, to be precise, the two companies earned profits of IDR 1,223,750,496 and IDR 9,408,511,340, respectively. Furthermore, in 2021, the two companies will again be able to generate net profits. However, the individual net profit of each company tends to fluctuate.

Insurance subsector companies have a fluctuating average ROA value. It can be noted that the average financial performance calculated using ROA from 2017 to 2019 has decreased, while in 2019 to 2021 it has again increased but is back to a decrease in 2022. In 2017, the average ROA was 2.85%; in 2018, with a percentage of 2.84%, it decreased to 1.11% in 2019. However, in 2020 and 2021, it will increase again, with a percentage of 1.26% and 1.54%, respectively. In 2022, the percentage will be 1.34% lower.

Based on this phenomenon, the average total assets, the average net income, and the average company calculated using ROA tend to fluctuate. A consideration of the factors contributing to the decline is imperative for the company to increase profitability and ultimately improve its financial performance. Among the contributing factors are intellectual capital and board characteristics.

Intellectual capital is considered a driving force for companies to succeed in the global market and is often referred to as the main driver in efforts to increase company profitability (Hermawan et al., 2020:2). The emergence of the global marketplace has necessitated the acquisition of intellectual capital as the primary asset for a company's long-term viability in its operations (Hapsari et al., 2021). According to Ulum (2017: 135), intellectual capital, as defined by Value Added Intellectual Coefficient (VAIC) model, is composed of three main components: Value Added Capital Employed (VACA), Value Added Human Capital (VAHU), and Structural Capital Value Added (STVA).

According to Ulum (2017:135), VACA demonstrates how the equity of the company contributes to the added value. Amalia & Rokhyadi (2020), Xu & Liu (2020), and (Pratama & Mahardika, 2022) conducted research that found a positive correlation between VACA and financial performance. According to research conducted by Heryustitriasputri & Suzan (2019), it was found that VACA did not have an impact on financial performance.

VAHU can be efficiently utilized by companies to improve the knowledge, competence, and skills of their employees. For a business to maintain sound financial and operational records, employees must possess the necessary skills and knowledge. Having a high level of knowledge and experience enables a human resource to perform at their best (Hapsari et al., 2021). Based on previous research by Pratama & Mahardika (2022), which states that VAHU has a positive influence on financial performance. However, according to the results of research conducted by Murti et al. (2015), Poh et al. (2018), and Soewarno & Tjahjadi (2020) stated that VAHU has no influence on financial performance.

STVA refers to a company's capacity to meet day-to-day business requirements and a framework that enables its personnel to provide optimal business performance (Murti et al., 2015). This is necessary to facilitate increased productivity among its workforce, which in turn will contribute to an increase in overall company performance. Previous research conducted by Soewarno & Tjahjadi (2020) and Putri & Suzan (2019) stated that STVA has a positive effect on financial performance. However, according to research conducted by Hidayat & Dana (2019) and (Amalia & Rokhyadi, 2020), structural capital has no impact on financial performance.

The decision-making process for corporate strategy is influenced by the characteristics of the board of commissioners and directors (Pucheta-Martínez & Gallego Álvarez, 2020). The analysis of this board's characteristics can be derived from its size, diversity, and compensation structure.

The board plays a crucial role in a company, particularly regarding the external environment. This is due to its capacity to help the company achieve a sustainable competitive advantage over its rivals. Based on research by Hariman Harijanto & Widiatmoko (2023), Jao

et al. (2022), Hidayat & Utama (2016), board size influences financial performance. However, research by Lee & Lukman (2023) and Rodriguez-Fernandez et al. (2014) stated that board size does not significantly affect financial performance.

The impact of board diversity is not always obvious and comes with its own advantages and disadvantages. Having a more diverse board has several advantages. In terms of information analysis and processing, it is estimated that they have more in-depth and broad knowledge and expertise. Ultimately, this results in better judgments than less diverse lineups (Pucheta-Martínez & Gallego Álvarez, 2020). Thus, diversity offers new perspectives and insights to corporate boards and will have an impact on improving financial performance (Muhammad et al., 2020). According to research by Dong et al. (2023), Kabir et al. (2022), Hariman Harijanto & Widiatmoko (2023), board diversity has an impact on financial performance. On the other hand, Jao et al. (2022) stated that board diversity can not significantly affect financial performance.

For executives and workers alike, pay is meant to incentivize better work habits and so achieve organizational goals (Suzan & Khadrinur, 2023). To incentivize board members to pick and implement initiatives that increase financial performance, pay plans must be open and objective, rather than centered on short-term goals. Pucheta-Martínez & Gallego Álvarez (2020) found no correlation between board compensation and financial performance, contradicting the findings of Suzan & Khadrinur (2023) and Parimana & Wisadha (2015).

Further research is necessary to investigate company financial performance, particularly within the insurance sub-sector, due to the varying outcomes observed in previous studies and the existing knowledge gap. Analyzing the effects of board characteristics and intellectual capital on financial performance served as the driving force behind the authors' research. This research is intended to make a substantial contribution to our understanding of the elements that affect a company's financial performance by examining both aspects together. There are numerous significant ramifications of this study. To begin, this study will shed light on the interplay between intellectual capital and characteristics and their impact on a company's performance. The findings of this study can help business leaders make more informed decisions when selecting a board of directors and better manage their companies' intellectual capital. On the other hand, this study shows how intangible assets create competitive advantage and long-term growth. Companies can optimize intellectual capital management and increase value by understanding the aspects that affect financial success. In addition, board characteristics-focused best practices will improve board decision-making and oversight.

The research model in this study combines resource-based theory and agency theory to analyze how companies effectively utilize their resources and align the interests of shareholders and managers. This allows for a thorough examination of the intricate factors that influence a company's performance and its ability to gain a competitive edge. Resource-based theory is a theoretical framework that emphasizes the significance of internal factors in determining a firm's performance and long-term success. Agency theory is a field of study that focuses on analyzing the dynamics between principals, who are typically shareholders, and agents, who are usually managers. It aims to understand and address the various challenges that can arise due to potential conflicts of interest in this relationship.

According to Resources Based Theory, companies can achieve sustainable success by maximizing the value of their internal resources (Hermawan et al., 2020:8). Grant (2009) explains that this theory focuses on company management resources and practices, and how these resources are used. Therefore, when the company succeeds in increasing and maximizing these resources, it can compete superiorly and have an impact on increasing profits, which indicates an increase in financial performance.

Capital Employed shows the company's capacity to manage capital assets, which if managed effectively can improve financial performance, business expansion, and market

value (Suzan & Sabila, 2022). In the end, this will create a going concern for the company, which will lead to an increase in company performance (Amalia & Rokhyadi, 2020:190). Value Added Capital Analysis (VACA) is a metric used to evaluate the efficiency of a company by measuring the value it generates in relation to the capital it has invested. Value added can be defined as the net amount of revenue a company generates after deducting the cost of purchasing inputs from external parties. The company's ability to create economic value through the production process is reflected in this added value. The Return on Assets (ROA) metric is used to evaluate how effectively and profitably a company is utilizing its assets. The ratio is determined by dividing the net profit of the company by its total assets. Return on assets (ROA) is a metric that measures a company's ability to generate profits based on the assets it utilizes in its operations. The relationship between VACA and ROA is established by the amount of capital that is invested in the company. The strategic and effective utilization of capital has the potential to significantly enhance the value created by the company. When a company can generate more value with the same or a lower amount of capital, it will result in an increase in its return on Assets (ROA). In accordance with the research studied by Kurniawati et al. (2020), Soewarno & Tjahjadi (2020), Xu & Liu (2020), and Amalia & Rokhyadi (2020), it has been determined that VACA has a positive impact on financial performance. Therefore, effective utilization of capital can enhance asset returns by enabling the generation of income (Soewarno & Tjahjadi, 2020:1090).

H1: VACA is a positive factor for the company's financial performance

Human capital refers to the collective ability of individuals within a company to produce optimal solutions based on their knowledge and expertise (Ulum, 2017:277). The value arising from this human capital will increase the company's productivity and establish new strategies to gain a competitive advantage. According to Amalia & Rokhyadi (2020), good human capital can increase financial success. There is a correlation between Value Added Human Capital and Return on Assets. Companies with superior human resources that can effectively contribute to added value are more likely to achieve a higher ROA. The evidence suggests that when a company invests in human resource development and implements effective human resource management practices, it can potentially improve its financial performance. The beneficial association between human capital and company performance has been established by Kurniawati et al. (2020) and Poh et al. (2018) through their respective research findings. According to Soewarno & Tjahjadi (2020:1090), superior profitability can be attributed to the presence of superior quality human resources.

H2: VAHU is a positive factor for the company's financial performance

Ulum (2017:284) argues that the absence of adequate facilities and infrastructure can hamper the ability of highly competent employees to contribute to the development of intellectual capital in an organization. Thus, structural capital refers to scarce and unique resources; this leads to each company having a different organizational culture, management philosophy, and operating system that differentiates it from competitors (Soewarno & Tjahjadi, 2020). There is a correlation between SCVA (Structural Capital Value Added) and ROA (Return on Assets). Companies with robust structural capital and the ability to generate substantial value are more likely to achieve higher ROA. The implementation of strategies to enhance structural capital creation and the effective management of intangible assets has the potential to positively impact the financial performance of a business. In a study conducted by Kurniawati et al. (2020), Soewarno & Tjahjadi (2020), and Putri & Suzan (2019), their research findings indicate that STVA has an encouraging effect on financial performance, as reflected by ROA.

H3: STVA is a positive factor for the company’s financial performance

Agency theory shows that when there are conflicting interests, it can be a challenge to develop an effective working relationship between owners and managers (Zogning, 2017). Information gaps can be a potential source of conflict in agency theory. Thus, managing and

controlling the behavior of managers in a business can be a challenging task for owners. Therefore, board characteristics are characteristics possessed by the board, management, agents which will have an impact on company performance through decisions or policies taken for the effectiveness of the company's business. Thus, the board characteristic indicator will reduce the information asymmetry between the two parties so that the relationship between principal and agent works better to create optimal company financial performance.

Lukas & Basuki (2015) and Akram Naseem et al. (2017) have suggested that hiring multiple boards can reduce agency conflicts, thereby increasing work productivity and ultimately resulting in optimal financial performance. Thus, a very large number of board members offer a variety of perspectives and recommendations when making business decisions. The large number of board members allows for multiple perspectives on company policy. The advantages of large board sizes include enhanced collective expertise and experience, a wider range of perspectives, and improved management monitoring capabilities. Companies with larger board may have an advantage in achieving a higher Return on Assets (ROA) due to their ability to tap into a wider range of knowledge and perspectives. This can lead to improved decision-making capabilities, potentially resulting in increased efficiency and innovation. This is supported by previous research by Hariman Harijanto & Widiatmoko (2023), Jao et al. (2022), and Hidayat & Dana (2019), which found that board size has a significant effect on financial performance.

H4: Board size is a positive factor for the company's financial performance

Having many female directors reduces conflicts of interest (Muhammad et al., 2020). The position of women on company boards can improve team performance because diverse teams make better judgments (Jao et al., 2022). Involvement of women at the board and committee levels can result in a reduction of agency costs, an increase in legitimacy, and improved monitoring capabilities. These factors can ultimately lead to beneficial financial effects on firm performance (Chijoke-Mgbame et al., 2020). The presence of women on boards can contribute diverse perspectives, experiences, and leadership styles, thereby enhancing the decision-making process and fostering innovation. The presence of gender diversity on the board of directors has the potential to enhance oversight and risk management effectiveness. Implementing this strategy can assist companies in mitigating poor decision-making and unpredictable risks, ultimately leading to a favorable effect on Return on Assets (ROA). The presence of gender diversity on a company's board of directors can serve as an indicator of the company's dedication to promoting inclusion, social responsibility, and business ethics. The implementation of this strategy has the potential to foster customer trust and satisfaction, bolster a favorable brand image, and exert an influence on consumer behavior, ultimately leading to a potential increase in company revenue. Hariman Harijanto & Widiatmoko (2023), Dong et al. (2023), and Kabir et al. (2022) found that financial performance was affected by board diversity.

H5: Board diversity is a positive factor for the company's financial performance

According to Parimana & Wisadha (2015), compensation is an appropriate instrument to improve organizational performance. The compensation relationship is unidirectional, with performance being the driving factor. This is because when company executives receive compensation commensurate with their duties and responsibilities, they tend to have trust in their organization (Suzan & Khadrinur, 2023). The implementation of well-structured board compensation plans has the potential to motivate board members to prioritize performance-driven choices and attain an improved return on assets (ROA). When board compensation is linked to financial performance metrics like Return on Assets (ROA), it can incentivize board members to pursue strategic actions that lead to a higher ROA for the company. Board compensation tied to return on assets (ROA) has the potential to incentivize board members to prioritize the long-term financial sustainability of the company. The organization can focus on maximizing the utilization of company assets, effectively managing risk, and implementing

strategies that promote sustainable growth and profitability. This has the potential to positively impact the return on assets (ROA) over a sustained period. The impact of the board of directors' compensation on the relationship between the board and company management can be influenced by the company's return on assets (ROA). When board compensation is aligned with financial performance metrics like return on assets (ROA), it can foster improved collaboration between the board of directors and management. This alignment incentivizes both parties to work together towards achieving the predetermined ROA goals. This motivates executives to make the most of their expertise and resources. Based on research conducted by Suzan & Khadrinur (2023) and Parimana & Wisadha (2015), board compensation affects financial performance positively and significantly.

H6: Board compensation is a positive factor for the company's financial performance

Method

This research adopts a quantitative approach, collects information using research instruments, and analyzes it statistically (Sugiyono, 2021:16). This study utilizes panel regression data analysis to investigate the impact of one variable on another. Panel data regression analysis was employed due to the utilization of cross-sectional and time-series data. Furthermore, panel data offers several advantages. Caraka and Yasin (2017) The primary benefit of using a larger amount of data is that it can increase the degrees of freedom and reduce collinearity between variables that explain. This can lead to more efficient econometric estimates. Additionally, this data is crucial for researchers as it offers valuable information that cannot be obtained through time series data or inter-spatial data.

The study utilizes historical data obtained from published sources for research purposes. This study focuses on financial performance information, intellectual capital, and board characteristics from the annual reports of insurance sub-sector companies from 2017 to 2022 as its data source. The population for this analysis consists of insurance-related sub-sector companies listed on the Indonesia Stock Exchange from 2017 to 2022. The sample was selected using a purposeful sampling strategy. To obtain a representative sample, purposive sampling uses predetermined criteria (Sugiyono, 2021: 135).

Table 1. Research Sample

Sample Selection Criteria	Total
Insurance sub-sector company listed on the Indonesia Stock Exchange in 2017-2022.	16
Inconsistent insurance sub-sector companies publish financial reports for 2017-2022.	(4)
Number of research samples	12
Total observation data 2017-2022 (12 companies x 6 years)	72

Source: Processed Data, (2023)

The research was conducted at 12 companies during the six-year research period (2017–2022), so the total sample of observational data studied was 72 companies.

Table 2. Operational definitions and measurement items

Definition Variable	Indicator
Financial performance (ROA) Financial performance describes the outcome or accomplishment attained by management in effectively allocating company assets during a specific period (Gani, 2022).	$\text{Return on Assets} = \frac{\text{Net Profit}}{\text{Total Assets}}$

Value Added Capital Employed (VACA) According to Suzan & Sabila (2022), VACA is a measure of the value added by each CE unit to the company.	$\text{VACA} = \frac{\text{Value Added}}{\text{Capital Employed}}$
Value Added Human Capital (VAHU) Pratama & Mahardika (2022) conducted research on the VAHU metric, which is intended to evaluate the effectiveness of human capital by exhibiting the additional contribution per employee utilization unit to the company's total value added.	$\text{VAHU} = \frac{\text{Value Added}}{\text{Human Capital}}$
Structural Capital Value Added (STVA) Structural capital refers to the organizational capacity of a company to effectively carry out its activities, processes, and system structures (Gani, 2022). This capacity is crucial in supporting employees' efforts to achieve optimal intellectual performance and overall business success (Pratama & Mahardika, 2022).	$\text{STVA} = \frac{\text{Structural Capital}}{\text{Value Added}}$
Board Size The concept of board size pertains to the number of directors who have the ability to impact the corporate governance practices of companies, which in turn can affect their overall performance (Pucheta-Martínez & Gallego Álvarez, 2020).	$\text{BOAS} = \text{Number of company directors}$
Board Diversity Diversity on a board involves components of gender equality or diversity in terms of gender. Gender diversity can be quantified by comparing the percen tage of female directors to the overall number of board members (Sri Yuliandhari et al., 2022).	$\text{BOAD} = \frac{\text{Number of female directors}}{\text{Number of company directors}}$
Board Compensation The remuneration of the board is determined by a natural logarithm of the compensation amount given to the board (Pucheta-Martínez & Gallego Álvarez, 2020). The relevant information regarding the compensation amount can be found in the financial statements' notes (Suzan & Khadrinur, 2023).	$\text{BOAC} = \text{Ln}(\text{Total board compensation})$

Source: Processed Data, (2023)

Results and Discussion

Descriptive statistics

Table 3. Descriptive Statistical Result

Variable	Mean	Maximum	Minimum	Std.Dev	Observation
ROA	0.018214	0.076736	-0.198292	0.044753	72

VACA	0.142839	0.412550	-1.973342	0.280682	72
VAHU	2.348944	16.45596	-3.605485	3.609900	72
STVA	-0.045506	1.794265	-29.14948	3.518533	72
BOAS	4.194444	8.000000	3.000000	1.146199	72
BOAD	0.215675	0.600000	0.000000	0.167841	72
BOAC	23.05497	24.31901	21.64548	0.717446	72

Source: Processed Data, (2023)

The ROA measure reveals that a business's financial performance shows an average value of 0.018214, accompanied by a standard deviation value of 0.044753. This indicates that the average value exceeds the standard deviation value. This implies that there is variability or lack of grouping among financial performance variables. This shows that the capacity of the insurance subsector to generate profits through asset management varies, thus reflecting only the industry's average financial performance of 18 percent. Financial performance shows a maximum value of 0.076736 and a minimum value of -0.198292.

VACA shows an average of 0.142839, accompanied by a standard deviation of 0.280682. These observations highlight the variability of data within the insurance sector, underscoring the diverse capacity of insurers to generate added value through their capital capabilities. As a result, the VACA industry average only reaches 14 percent. The highest value achieved was 0.412550 while the lowest value was -1.973342.

VAHU shows an average value of 2.348944 and a standard deviation of 3.609900. The findings show that there is considerable variability in the data, suggesting that the capacity of insurance sub-sector firms to generate value through human capital is highly heterogeneous. Therefore, the average VAHU value of 234 percent does not yet reflect the industry average. The maximum value is 16.45596 swhile the minimum value is -3.605485.

The STVA shows an average value of -0.045506, accompanied by a standard deviation value of 3.518533. This suggests that there is a certain degree of variation in the data, which implies that the ability of insurance sub-sector companies to create more value through structural capital is characterized by a considerable degree of diversity. As a result, the average value of STVA may not accurately reflect the industry average. The maximum value is 1.794265 while the minimum value is -29.14948.

BOAS shows an average value of 4.194444 and a standard deviation value of 1.146199. The data presented show that the group's data shows the tendency of the number of boards in each insurance sub-sector company to remain relatively stable for several consecutive years. The descriptive statistical results show that the maximum and minimum values achieved are 8.000000 and 3.000000, respectively.

The BOAD shows an average value of 0.215675 and a standard deviation value of 0.167841. The data presented show grouping of information and show that a consistent presence of female directors is required in sub-sectors of the insurance industry. The maximum and minimum values obtained are 0.600000 and 0.000000, respectively.

BOAC is represented by an average of 23.05497 and a standard deviation of 0.717446. The evidence presented suggests that compensation within insurance sub-sector companies has remained relatively stable over time, as the group's data show. The highs and lows reached were 24.31901 and 21.64548.

Classical Assumption Test

Table 4. Classical Assumption Test Result

Multicollinearity Test						
	VACA	VAHU	STVA	BOAS	BOAD	BOAC
VACA	1.000000	0.061124	-0.178590	0.252324	-0.123187	-0.222198
VAHU	0.061124	1.000000	-0.009506	-0.274483	-0.253635	0.258828
STVA	-0.178590	-0.009506	1.000000	-0.073603	-0.177943	0.110254
BOAS	0.252324	-0.274483	-0.073603	1.000000	0.188214	-0.328995
BOAD	-0.123187	-0.253635	-0.177943	0.188214	1.000000	-0.173251
BOAC	-0.222198	0.258828	0.110254	-0.328995	-0.173251	1.000000
Heteroscedasticity Test						
Prob.						0.3865

Source: Processed Data, (2023)

Table 4 shows that there is no coefficient value greater than 0.80. Therefore, it can be interpreted that there is no model that has a multicollinearity problem and that it has fulfilled the assumption of multicollinearity. The heteroscedasticity test yields a value of 0.3865 for the Chi-Square statistic. Thus, the research variable is classified as homoscedasticity.

Panel Data Regression Model Selection Test

Table 5. Panel Data RegressionTest Result

Chow Test		Hausman Test	
Prob.	0.0000	Prob.	0.0001

Source: Processed Data, (2023)

Table 5 shows that the chi-square cross section's probability value is 0.0000, suggesting that the chosen model is a fixed effect model. The Hausman test is conducted to select models among fixed-effect models and random-effect models. This test is carried out when the Fixed Effect Model is selected from the Chow Test. The conclusions of the hausman test indicate that the chi-square cross section's probability value is 0.0001. The panel data regression formula chosen for the current research became the fixed effect model.

Research Hypothesis Testing Results

Table 6. Hypothesis Testing Results - Fixed Effect Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.087417	0.286157	0.305486	0.7612
VACA	0.075271	0.009263	8.125731	0.0000
VAHU	0.014779	0.001857	7.959523	0.0000
STVA	0.002116	0.000664	3.185436	0.0024
BOAS	-0.000767	0.004070	-0.188394	0.8513
BOAD	-0.014768	0.017490	-0.844374	0.4022
BOAC	-0.004692	0.012556	-0.373676	0.7101

Source: Processed Data, (2023)

The Impact of Value Added Capital Employed on Financial Performance

The findings suggest that VACA has a significant influence on the financial results of an organization. The null assumption H01 has been rejected, while the alternative hypothesis H1 has been accepted. The statistical analysis reveals that the VACA probability value of 0.0000 is less than the predetermined level of significance of 0.05. Thus, each unit of capital employed (CE) in generating added value contributes positively to the company's financial performance and shows that the equity or physical capital and net profit owned by the company are well managed so that they have an impact on improving financial performance. Through effective capital management, skilled employees believe that the company can improve its financial performance (Amalia & Rokhyadi, 2020). If associated with resource-based theory, the company is said to have managed resources, namely physical capital, efficiently and optimized profitability, thus creating competitive advantages that indirectly improve financial performance. For this reason, if the company continues to maintain it, this will be responded to positively or give a positive signal to the market. So, the company will get more funds to expand its business. The findings of this investigation align with the scholarly inquiries carried out by Pratama & Mahardika (2022), Kurniawati et al. (2020), and Poh et al. (2018), which show that VACA has a favorable impact on corporate performance. This is due to the ability of firms to cultivate favorable associations with their customers and investors, resulting in enhanced physical capital efficiency and net profit, ultimately leading to a development in financial success.

The Impact of Value Added Human Capital on Financial Performance

The findings suggest that VAHU has a significant influence on the financial results of an organization. This can be seen from the fact that the VAHU probability value of 0.0000 is smaller than the significance level of 0.05. This shows that there is a positive correlation between a company's human resources and its financial performance. For this reason, when companies generate more added value, their resource management improves their financial performance by producing qualified workers (Heryustitriasputri & Suzan, 2019). Human resources refer to the value that human resources bring to a company through their knowledge, skills, abilities, talents, experience, motivation, and commitment to organizational values (Suzan & Sabila, 2022). This shows that the company can utilize employee work productivity optimally so that the costs or expenses provided by the company contribute positively to financial performance. Based on resource-based theory, which states that companies that successfully manage resources optimally will create competitiveness. In relation to signal theory, the company's management has succeeded in sending positive signals to investors through quality human resources to provide optimal financial performance. The results of this study are consistent with research conducted by Pratama & Mahardika (2022), Kurniawati et al. (2020), and Soewarno & Tjahjadi (2020) which proves that good human capital management contributes positively through competitive work management to optimize financial performance.

The Impact of Structural Capital Value Added on Financial Performance

The findings suggest that STVA has a significant influence on the financial results of an organization. So H03 is rejected and H3 is accepted. This can be seen from the STVA probability value of 0.0024, which is smaller than the significance level of 0.05. A business can improve its financial performance through revenue growth if its management successfully manages structural capital (Heryustitriasputri & Suzan, 2019). Therefore, strong structural capital tends to indicate greater innovation and an increased ability to create new products, services, or technologies. This has the potential to expand the company's market share, increase sales figures, and improve its financial performance. Thus, structural capital ownership has the potential to provide a firm with a competitive advantage by facilitating its

ability to differentiate itself from rival entities. The results of this study are in accordance with the purpose of resource-based theory, which explains that companies need to form unique resources that are not easily imitated. In relation to signal theory, the company has succeeded in providing good signals for investors through effective work procedures, operating systems, and organizational culture, which ultimately have a positive impact on financial performance. The results of this study are in accordance with studies conducted by Kurniawati et al. (2020), Soewarno & Tjahjadi (2020), and Putri & Suzan (2019).

The Impact of Board Size on Financial Performance

The findings suggest that BOAS has an unfavorable influence on the financial results of an organization. The acceptance of H04 is observed, while the rejection of H4 is noted. The statistical analysis reveals that the board size probability value of 0.8513 surpasses the predetermined significance level of 0.05. This suggests that a higher number of board members may lead to decreased effectiveness due to potential disagreements and challenges in reaching consensus on business decisions. Johl et al. (2015) posited that firms with smaller boards exhibit superior financial ratios. The findings of this investigation suggest that diminutive boards exhibit greater efficacy in their decision-making and monitoring procedures, thereby resulting in enhanced financial outcomes. In the context of agency theory, it can be argued that an increase in the number of boards will lead to a corresponding increase in agency costs. Conversely, the size of the board does not yield a favorable indication for the market. The findings of the present investigation are consistent with the scholarly inquiries carried out by Lee & Lukman (2023) and Rodriguez-Fernandez et al. (2014). The argument posits that the utilization of smaller board sizes can enhance communication, foster productive discussion, and expedite the decision-making process. Therefore, it can be inferred that a larger board of directors may result in a slower decision-making process due to the increased number of board members involved. This can impede the board's ability to promptly respond to market changes and make timely decisions. Increasing the board size could potentially reduce the level of supervision that management has, allowing them greater autonomy in making decisions. If the management fails to effectively oversee the company, its financial performance will not be significantly influenced by the size of the board of directors. If the board of directors consists of members who lack competence or have significant conflicts of interest, increasing the board size will not have a positive impact on the company's financial performance. Reaching agreement on choice making and handling conflict of interest between board members can be challenging, especially in larger boards of directors. Larger sizes make effective coordination more challenging, thus limiting the influence of the board of directors on financial performance.

The Impact of Board Diversity on Financial Performance

The findings suggest that BOAD has an unfavorable influence on the financial results of an organization. So H05 is accepted and H5 is rejected. This can be seen from the probability value of board diversity of 0.4022, which is greater than the significance level of 0.05. Empirical evidence suggests that women's limited representation on boards limits their impact on corporate decision-making processes, thereby reducing the likelihood of their association with initiatives that improve financial performance. This is in accordance with the number of women in insurance sub-sector companies that are more dominated by male boards. The analysis revealed that there was no significant correlation between the presence of female directors, measured by the ratio of female directors to total company directors, and the company's performance. The lack of correlation between board diversity and financial performance suggests that there is no significant impact of board diversity on financial outcomes. The analysis suggests that female directors in insurance sub-sector companies may not have effectively contributed to business decision-making. The data reveals that the representation

of female directors in each company is significantly low, with only 1 to 2 individuals holding such positions. The insurance sub-sector company should carefully consider the appropriate representation of female directors in its policies. This is important because female directors can contribute valuable ideas, shape policies, and make business decisions that can significantly influence the company's performance. In relation to agency theory, the presence of women has not been optimal for reducing information asymmetry. This is consistent with research conducted by Jao et al. (2022).

The Impact of Board Compensation on Financial Performance

The findings suggest that BOAC has an unfavorable influence on the financial results of an organization. So H06 is accepted and H6 is rejected. This can be seen from the probability value of board compensation of 0.7101, which is greater than the significance level of 0.05. In line with studies conducted by Pucheta-Martínez & Gallego Álvarez (2020), which prove that board compensation is not a factor that can affect financial performance. Board members are selected from diverse professional and personal backgrounds and entrusted with a wide range of duties, including oversight, risk management, and compliance strategy. In addition, board members can hold positions in many other organizations, potentially spreading of their focus. Thus, giving higher compensation to board members does not necessarily increase their motivation to supervise managers (Pucheta-Martínez & Gallego Álvarez, 2020). This implies that board members who receive substantial compensation are not necessarily more likely to engage in monitoring activities or align their interests with those of shareholders. This finding does not align with the agency's theory that compensation can increase company value and performance.

Conclusions and Suggestions

The study's results indicate that the company benefits positively from all three components of intellectual capital. Insurance companies in this sub-sector are expected to maintain this added value as a competitive advantage that sets them apart from other industries. This can potentially yield a favorable response from external parties in the future. Additionally, the research revealed that indicators of board characteristics did not have a favorable influence on profitability.

Decision-making and conflict management can be difficult on larger boards of directors. Larger boards struggle to coordinate, limiting their impact on financial success. There are obstacles that can reduce the effect of the diversity of directors on financial performance. For example, a lack of inclusion and unequal power differences within boards can hinder the ability of diverse boards to make effective contributions. On the other hand, board members who are well compensated are less likely to lead to greater oversight efforts or are more likely to align their interests with those of shareholders.

In addition, the proportions of the board need to be considered again so that the policies made can improve financial performance. Then, companies must also place women on the board of directors so they can create better ideas and make decisions that can later contribute to the company's financial performance. Then, the provision of compensation must be considered in accordance with the capabilities and performance of each board to reduce conflicts between agents and principals.

Future researchers may consider exploring the potential impact of board opportunities as an independent variable on financial performance, as this study did not find any significant influence of this factor in the current context. To enhance the validity of their findings, future researchers are recommended to utilize a proxy for board characteristics, specifically focusing on board size, board diversity, and board compensation in sectors that have a higher number of issuers.

References

Akram Naseem, M., Xiaoming, S., Riaz, S., & Ur Rehman, R. (2017). Board Attributes and Financial Performance: The Evidence from an Emerging Economy. The Journal of Developing Areas, 51(3), 281–297. https://doi.org/10.1353/jda.2017.0073

Amalia, L., & Rokhyadi, A. (2020). Pengaruh Intellectual Capital Terhadap Kinerja Keuangan Perusahaan Subsektor Advertising, Printing, Dan Media. Jurnal Ilmiah Mahasiswa Ekonomi Manajemen, 5(1), 187–200. http: jim.unsyiah.ac.id/ekm

Chijoke-Mgbame, M., Boateng, A., Chijoke, &, & Mgbame, O. (2020). Board Gender Diversity, Audit Committee and Financial Performance: Evidence from Nigeria https://doi.org/10.1080/01559982.2020.1766280.

Dong, Y., Liang, C., & Wanyin, Z. (2023). Board diversity and firm performance: impact of ESG activities in China. Economic Research-Ekonomska Istrazivanja, 36(1), 1592–1609. https://doi.org/10.1080/1331677X.2022.2090406

Gani, P. (2022). Pengaruh Intellectual Capital Terhadap Kinerja Keuangan dan Nilai Perusahaan (Studi Pada Perusahaan Makanan dan Minuman Yang Terdaftar di BEI). Owner, 6(1), 518–529. https://doi.org/10.33395/owner.v6i1.613

Gledistin, E., Tawas, Y., & Kambey, A. (2021). Analisis perbandingan kinerja keuangan bank BUMN dan SWASTA dari tahun 2014-2018 menggunakan rasio NPL, LDR, GCG, ROA, NIM dan CAR. Jurnal Akuntansi Manado (JAIM), 176-186. https://doi.org/10.53682/jaim.v2i2.1170.

Grant, R. M. (2009). The resource-based theory of competitive advantage: Implications for strategy formulation. In Knowledge and Strategy (pp. 3–24). Taylor and Francis. https://doi.org/10.1016/b978-0-7506-7088-3.50004-8

Hapsari, D. W., Yadiati, W., Suharman, H., & Rosdini, D. (2021). Intellectual Capital and Environmental Uncertainty on Firm Performance: The mediating role of the value chain. Quality - Access to Success, 22(185), 169–176. https://doi.org/10.47750/QAS/22.185.23

Hariman Harijanto, M., & Widiatmoko, J. (2023). The Effect of Good Corporate Governance and Gender Diversity on Financial Performance Evidence from Bank Companies Listed on IDX 2018-2021. In Jurnal Ilmiah Akuntansi (Vol. 473, Issue 1). http://www.ejournal.pelitaindonesia.ac.id/ojs32/index.php/BILANCIA/index

Hermawan, S., Reny Octavia, Ciq., MEI Eny Maryanti, S., Hermawan, M., Octavia, S., & Maryanti, R. (2020). Intellectual Capital Kinerja Keuangan, Dan Competitive Advantage: Bukti dari Perbankan Syariah di Indonesia dan Malaysia. www.indomediapustaka.com

Heryustitriasputri, A., & Suzan, L. (2019). Analisis Intellectual Capital Dengan Metode Pengukuran Value Added Intellectual Coefficient (Vaic^{tm}) Terhadap Kinerja Keuangan. JASa (Jurnal Akuntansi, Audit Dan Sistem Informasi Akuntansi), 3(3), 283–297.

Hidayat, A. A., & Utama, S. (2017). Board characteristics and firm performance: Evidence from Indonesia. International Research Journal of Business Studies, 8(3). https://doi.org/10.21632/irjbs.8.3.137-154.

Hidayat, M., & Dana, I. M. (2019). Pengaruh Intellectual Capital Terhadap Kinerja Keuangan Perusahaan Sektor Pertambangan Di Bursa Efek Indonesia. E-Jurnal Manajemen Universitas Udayana, 8(9), 5702. https://doi.org/10.24843/ejmunud.2019.v08.i09.p17

Indonesia Financial Group. (2021, June 03). Menilik Dampak Pandemi pada Industri Asuransi dan Prospeknya. https://ifg.id/id/blog/menilik-dampak-pandemi-pada-industri-asuransi-dan-prospeknya

Jao, R., Asri, M., Holly, A., & Rivaldy. (2022). Pengaruh Karakteristik Dewan Direksi Terhadap Kinerja Keuangan Dengan Reputasi Perusahaan Sebagai Variabel Mediasi. Jurnal Riset Akuntansi Aksioma, 21(1), 1–18. https://doi.org/10.29303/aksioma.v21i1.148

Johl, S. K., Kaur, S., & Cooper, B. J. (2015). Board Characteristics and Firm Performance: Evidence from Malaysian Public Listed Firms. Journal of Economics, Business and Management, 3(2), 239–243. https://doi.org/10.7763/joebm.2015.v3.187

Kabir, A., Ikra, S. S., Saona, P., Chaifetz, R. A., Abul, M., & Azad, K. (2022). Board gender diversity and firm performance: new evidence from cultural diversity in the boardroom. Journal of Management & Research. https://doi.org/10.1108/LBSJMR-06-2022-0022

Kurniawati, H., Rasyid, R., & Setiawan, F. A. (2020). Pengaruh Intellectual Capital Dan Ukuran Perusahaan Terhadap Kinerja Keuangan Perusahaan. Jurnal Muara Ilmu Ekonomi Dan Bisnis, 4(1), 64. https://doi.org/10.24912/jmieb.v4i1.7497

Lee, S. O., & Lukman, H. (2023). Pengaruh Good Corporate Governance Dan Intellectual Capital Terhadap Financial Performance Perusahaan BUMN. Jurnal Paradigma Akuntansi, 5(1), 395-405.

Lukas, S., & Basuki, B. (2015). The Implementation of Good Corporate Governance and Its Impact on The Financial Performance of Banking Industry Listed in IDX. In The International Journal of Accounting and Business Society (Vol. 47, Issue 1).

Majidah, M., & Aryanty, N. (2022). Financial Performance: Environmental Performance, Green Accounting, Green Intellectual Capital, Green Product, & Risk Management. Industrial Engineering and Operations Management (IEOM), 2928–2938.

Muhammad, A., Amedi, R., & Saeed Mustafa, A. (2020). Accounting Analysis Journal Board Characteristics and Firm Performance: Evidence from Manufacture Sector of Jordan. Accounting Analysis Journal, 9(3), 146–151. https://doi.org/10.15294/aaj.v9i3.39577

Murti, G. T., Juwita, R., & Nasution, S. M. (2015). Intellectual capital disclosure practice: Evidence from Indonesian commercial banks. www.icas.my

Mutia, A. (2022, October 19). Penetrasi Industri Asuransi Terhadap PDB (2017-2021). Katadata.Co.Id.

Parimana, K. A. S., & Wisadha, I. G. S. (2015). Pengaruh Privatisasi, Kompensasi Manajemen Eksekutif, Dan Ukuran Perusahaan Pada Kinerja Keuangan. E-Jurnal Akuntansi Universitas Udayana, 10(3), 753–762.

Pauranan, R. Y., Kambey, J., & Miran, M. (2023). Pengaruh Return On Asset, Debt To Equity Ratio, Net Profit Margin Terhadap Perubahan Harga Saham Pada Perusahaan Telekomunikasi Yang Terdaftar Di Bursa Efek Indonesia. Jurnal Akuntansi Manado (JAIM), 109-119. https://doi.org/10.53682/jaim.vi.3891.

Poh, L. T., Kilicman, A., & Ibrahim, S. N. I. (2018). On intellectual capital and financial performances of banks in Malaysia. Cogent Economics and Finance, 6(1). https://doi.org/10.1080/23322039.2018.1453574

Pratama, R. R., & Mahardika, D. P. K. (2022). Influence of Intellectual Capital and Corporate Social Responsibility on Company Financial Performance (Case Study on Indonesian Conventional Banking Listed in Indonesian Stock Exchange (IDX) on Period 2016-2020). Industrial Engineering and Operations Management (IEOM).

Pucheta-Martínez, M. C., & Gallego Álvarez, I. (2020). Do Board Characteristics Drive Firm Performance? An International Perspective. Review of Managerial Science, 14(6), 1251-1297. https://doi.org/10.1007/s11846-019-00330-x.

Putri, R. A. S., & Suzan, L. (2019). Pengaruh Intellectual Capital Terhadap Tingkat Profitabilitas Perusahaan (studi Pada Perusahaan Sub Sektor Tekstil Dan Garment Yang Terdaftar Di Bursa Efek Indonesia Pada Tahun 2013-2017). eProceedings of Management, 6(2).

Rodriguez-Fernandez, M., Fernandez-Alonso, S., & Rodriguez-Rodriguez, J. (2014). Board characteristics and firm performance in Spain. Corporate Governance (Bingley), 14(4), 485–503. https://doi.org/10.1108/CG-01-2013-0013

Siswanto, E. (2021). Buku Ajar Manajemen Keuangan Dasar. Malang: Penerbit Universitas Negeri Malang.

Soewarno, N., & Tjahjadi, B. (2020). Measures that matter: an empirical investigation of intellectual capital and financial performance of banking firms in Indonesia. Journal of Intellectual Capital, 21(6), 1085–1106. https://doi.org/10.1108/JIC-09-2019-0225

Sri Yuliandhari, W., Tresna Murti, G., Tunjung Pramesthi, P., & Ekonomi dan Bisnis, F. (2022). The Effect of Gender Diversity, Profitability, and Company Age on Disclosure of Sustainability Report. Jurnal Mirai Management, 7(3), 106–117. https://doi.org/10.37531/mirai.v7i3.2499

Suzan, L., & Khadrinur, H. (2023). The Effect of Intellectual Capital and Executive Compensation on Financial Performance. JHSS (Journal Of Humanities And Social Studies), 7(1), 040–046. https://doi.org/10.33751/jhss.v7i1.7102

Suzan, L., & Sabila, W. H. (2022). The Influence of Intellectual Capital and Good Corporate Governance on Profitability at Conventional Commercial Banks in Indonesia. Industrial Engineering and Operations Management (IEOM).

Rohman, I., K., Melati, R. (2022, March 26). Bisnis Asuransi di Tengah Pandemi. https://ifgprogress.id/bisnis-asuransi-di-tengah-pandemi/

Ulum, I. (2017). Intellectual Capital: Model Pengukuran, Framework Pengungkapan & Kinerja Organisasi. Malang: UMMPress.

Xu, J., & Liu, F. (2020). The impact of intellectual capital on firm performance: A modified and extended vaic model. Journal of Competitiveness, 12(1), 161–176. https://doi.org/10.7441/joc.2020.01.10

Zogning, F. (2017). Agency theory: A critical review. In European Journal of Business and Management www.iiste.org ISSN (Vol. 9, Issue 2). Online. https://www.researchgate.net/publication/364812853