

INTELLECTUAL CAPITAL AND FINANCIAL PERFORMANCE: EVALUATING ASSET TURNOVER

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Abstract: This study aims to provide empirical evidence on the influence of Intellectual Capital on financial performance in secondary manufacturing companies listed on the Indonesia Stock Exchange during the 2021–2023 period. The components of Intellectual Capital examined include Value Added Capital Employed (VACA), Value Added Human Capital (VAHU), and Structural Capital Value Added (STVA), while financial performance is measured using the Asset Turnover (ATO) ratio. The research sample was selected using purposive sampling, resulting in 114 companies and 239 observations. Hypothesis testing was conducted using multiple linear regression analysis. The results show that VACA has a positive and significant effect on financial performance, while VAHU and STVA do not show a significant partial effect. However, all three components of Intellectual Capital are found to have a significant joint effect on financial performance. These findings suggest that the efficiency of capital employed plays a crucial role in enhancing asset effectiveness, while the contributions of human and structural capital require further management to drive operational efficiency.

Keywords: Asset Turnover, Intellectual Capital, STVA, VACA, VAHU

1. Introduction

In recent years, the global economy has faced increasingly complex challenges due to multidimensional crises that have undermined international stability. The International Monetary Fund (IMF) reported that global economic growth declined from 3.4% in 2022 to 2.8% in 2023 (Kemenkeu, 2023). This slowdown is largely driven by geopolitical uncertainties such as the war in Ukraine, geo-economic fragmentation, and the growing risk of debt crises in developing countries. Moreover, high inflation, rising interest rates, and liquidity-tightening policies implemented by central banks have exerted significant pressure on the international banking system, leading to capital flow volatility, exchange rate fluctuations, and a decline in investor confidence (Hasan et al., 2024).



Figure 1: Projected Growth of G-20 and ASEAN-6 Countries
 Sources: (mediakeuangan.kemenkeu.go.id, 2023)

Indonesia's economy has demonstrated resilience amid global pressures, recording 5% year-on-year (YoY) growth in 2023 along with a 5.6% year-to-date (YtD) Rupiah appreciation, supported by stable financial markets and moderate government bond yields that reflected sustained investor confidence (Purwowidhu, 2023). Nevertheless, global uncertainties have also placed significant strain on the real sector, particularly manufacturing, through rising input costs, exchange rate volatility, and weakening export demand from major trading partners. These conditions have compelled firms to enhance operational efficiency and shift from labor-based models toward knowledge-based approaches, where Intellectual Capital plays a central role in driving sustainable competitiveness (Wijayani, 2017). Within this framework, financial performance emerges as a vital indicator of corporate success, reflecting resource management efficiency and forming the basis for assessing overall financial health. This is especially relevant in the banking sector, which relies heavily on public trust, making transparency and accountability in financial reporting indispensable (Yusniawati & Romdioni, 2024). However, not all industries recorded positive outcomes; for instance, the technology sector contracted by 15% due to stringent regulations, elevated valuations, and declining investor interest, ultimately constraining flexibility, hindering innovation, and weakening overall financial performance (Heryani, 2024). This decline is further reflected in the sharp fall in stock prices of several Indonesian listed companies, particularly in the technology and digital sectors, as shown in Table 1.

Table 1. Companies with Declining Performance

Company Name	Share Price
PT Goto Gojek Tokopedia (GOTO)	-75,94%
PT Wir Asia Tbk (WIRG)	-86,03%
PT Elang Mahkota Tbk (EMTK)	-70,93%
PT Digital Mediatama Maxima Tbk (DMMX)	-61,42%
PT Bank	-82,10%

Sources: (CNBC Indonesia, 2023)

These declining performances highlight the vulnerability of firms that rely heavily on external capital and investor sentiment, underscoring the need for more sustainable value creation strategies. In this context, Intellectual Capital becomes vital as it enhances efficiency, strengthens reputation, facilitates funding access, and ultimately improves financial performance (Ramírez & Gómez 2015). The effective use of structural capital—covering technology, culture, infrastructure, and information systems—further drives operational and financial outcomes (Wahyudi & Lydia 2023). In modern accounting, intangible assets have become essential in reporting value-based information, as relying solely on tangible assets fails to capture the full scope of performance. Innovation, intellectual property, and human resources, collectively referred to as Intellectual Capital, are therefore critical (Nikmah & Apriyanti, 2019).

Nevertheless, measuring Intellectual Capital remains challenging, with no universal standard established. The Value Added Intellectual Coefficient (VAIC™) model, developed by Pulic, as cited by Dewi et al., (2020), is one of the most widely applied approaches to assess value creation efficiency through three components: Value Added Capital Employed (VACA), Value Added Human Capital (VAHU), and Structural Capital Value Added (STVA).

Research on the relationship between Intellectual Capital and financial performance has produced mixed findings. Studies by Dianty (2019), Nikmah & Apriyanti (2019), Tarigan et al., (2019), Surbakti & Suzan (2020), Extevanus & Habiburahman (2024) report a significant

positive effect of Intellectual Capital on corporate financial performance. In contrast, research by Kesaulya & Cellvia (2019) and Natalia et al., (2020) found no significant relationship between the two variables. These divergent conclusions highlight unresolved theoretical and empirical issues, thereby creating a research gap.

Building on this background, this study aims to examine the influence of Intellectual Capital on the financial performance of manufacturing companies in Indonesia. Financial performance is measured using a single key indicator, Asset Turnover (ATO), which reflects the effectiveness with which a company utilizes its assets to generate revenue. The use of ATO as the primary indicator is supported by prior studies (Muchlis & Suzan, 2020; Pohan et al., 2018), which found that Intellectual Capital is significantly related to operational effectiveness, particularly in terms of asset utilization. ATO is considered especially relevant for manufacturing firms, which typically operate with large and complex fixed-asset structures.

2. Literature Review

Resources-Based Theory

According to Wernerfelt, as cited in Wijayani (2017), Resource-Based Theory (RBT) posits that a firm's competitive advantage can be achieved when it possesses and effectively manages resources that are unique, scarce, and difficult for competitors to imitate. The theory highlights the strategic importance of leveraging both tangible and intangible internal resources to create added value and sustain competitive advantage. Intellectual Capital is one such intangible asset, recognized for its potential to enhance long-term organizational performance. By managing these resources effectively, firms can better exploit market opportunities and respond adaptively to external threats, thereby fostering a sustainable competitive position.

Stakeholder Theory

According to Shella & Wedari (2016), Stakeholder Theory asserts that companies are accountable not only to shareholders but also to a broader range of parties with vested interests, including employees, customers, suppliers, creditors, government, and society. Corporate decisions and activities can influence stakeholder welfare; therefore, stakeholders are entitled to access relevant information regarding the impact of such activities.

In this context, Surbakti & Suzan (2020) note that financial statements generally disclose two types of information: mandatory disclosures, such as income statements, and voluntary disclosures, such as Intellectual Capital. The disclosure of Intellectual Capital is thus regarded as an important form of corporate accountability to stakeholders and may shape perceptions of a company's financial performance. Continued stakeholder support, in turn, plays a pivotal role in ensuring business sustainability and maintaining competitive advantage.

Intellectual Capital

Intellectual Capital represents an intangible asset encompassing a company's knowledge, expertise, experience, and capacity to generate added value and sustain competitive advantage. The term was first introduced by economist John Kenneth Galbraith in his correspondence with Michal Kalecki, which subsequently inspired extensive academic discourse on its meaning and role within organizational contexts (Febriani, 2021). Conceptually, Intellectual Capital comprises non-physical resources, including human knowledge, accumulated experience, and technology embedded in corporate operations.

In general, Intellectual Capital comprises three key components that collectively generate value added for the company. Value Added Capital Employed (VACA) refers to the efficient use of

physical and financial assets in supporting operational activities. Value Added Human Capital (VAHU) relates to the knowledge, expertise, experience, and creativity of human resources that contribute to value creation. Structural Capital Value Added (STVA) encompasses organizational systems, structures, and internal processes that enable the effective utilization of human and physical capital. These components operate synergistically in enhancing corporate value and sustaining competitive advantage. To assess the efficiency of Intellectual Capital utilization, Pulic introduced the Value Added Intellectual Coefficient (VAIC™) model, which evaluates the contribution of its three main components to value creation.

Financial Performance

Financial performance reflects a firm's ability to manage resources efficiently and effectively to achieve operational, investment, and financing objectives (Irfani, 2020). Wijayani (2017), notes that financial performance can be evaluated using various financial ratios that describe both financial conditions and operational achievements. Such information is crucial for investors and stakeholders as it indicates the extent to which a company generates value and economic benefits (Kristianti, 2018). Similarly, Fahmi, as cited in Nasution (2019), emphasizes that financial performance analysis demonstrates how effectively a firm adheres to sound financial management principles. In this regard, the effective management of Intellectual Capital is believed to foster value creation and competitive advantage, thereby enhancing overall financial performance. This study measures financial performance using Asset Turnover (ATO), a financial ratio that reflects how efficiently a company utilizes its assets to generate sales revenue.

Theoretical Framework

The framework of this study is based on Resource-Based Theory, which asserts that a firm's competitive advantage derives from managing valuable, rare, and inimitable resources, including Intellectual Capital. It also adopts Stakeholder Theory, emphasizing the role of intellectual resources in sustainable value creation. This study examines three components of Intellectual Capital—VACA, VAHU, and STVA—hypothesized to influence financial performance as measured by Asset Turnover (ATO). VACA represents capital utilization efficiency, VAHU reflects human resource contributions, and STVA captures the role of organizational structures. These components are expected to improve financial performance both individually and collectively.

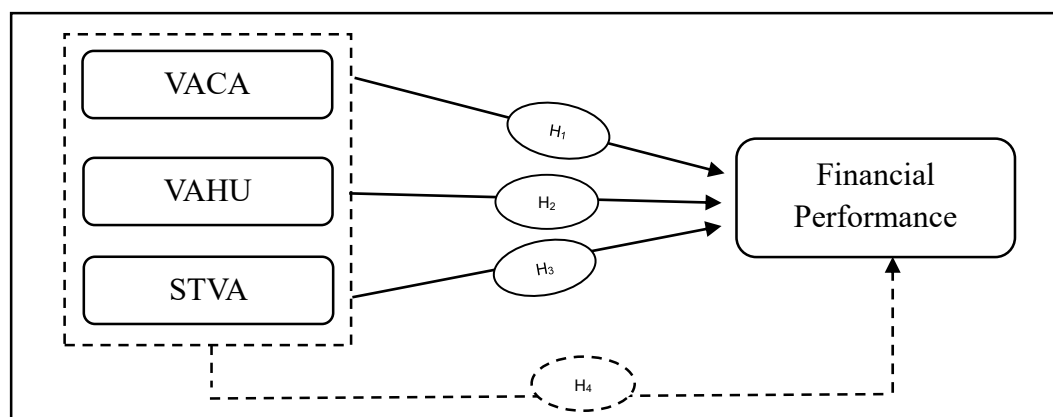


Figure 2: Theoretical Framework
 Source: (Processed by the researchers, 2025)

Hypothesis Development

Relationship between Value Added Capital Employed and Financial Performance

Value Added Capital Employed (VACA) reflects a firm's efficiency in managing capital to generate added value. Efficient capital management is expected to enhance operational effectiveness and, consequently, improve financial performance. Prior studies, including those by Extevanus & Habiburahman (2024), Habibah & Riharjo (2016), and Surbakti & Suzan (2020), have documented a significant positive relationship between VACA and financial performance. Based on this evidence, the following hypothesis is proposed:

H₁ : Value Added Capital Employed has a significant effect on financial performance in secondary manufacturing companies listed on the IDX during 2021-2023

Relationship between Value Added Human Capital and Financial Performance

Value Added Human Capital (VAHU) measures the extent to which human resources contribute to creating added value for the company. A greater contribution of human capital to corporate output is expected to enhance efficiency and, consequently, financial performance. Prior studies by Muchlis & Suzan (2020) and Surbakti & Suzan (2020), highlight the significant role of human capital in improving financial outcomes. Based on this evidence, the following hypothesis is proposed:

H₂ : Value Added Human Capital has a significant effect on financial performance in secondary manufacturing companies listed on the IDX during 2021-2023

Relationship between Structural Capital Value Added and Financial Performance

Structural Capital Value Added (STVA) reflects the efficiency of a company's internal systems, processes, and infrastructure in generating added value. Effective structural capital enhances operational efficiency and supports the achievement of financial objectives. Sukmana & Fitria (2020), highlight the significant role of STVA in strengthening overall organizational performance. Based on this premise, the following hypothesis is formulated:

H₃ : Structural Capital Value Added has a significant effect on financial performance in secondary manufacturing companies listed on the IDX during 2021-2023

Relationship between Value Added Capital Employed, Value Added Human Capital, and Structural Capital Value Added on Financial Performance

Collectively, VACA, VAHU, and STVA are expected to significantly influence the financial performance of secondary manufacturing companies by enhancing efficiency and value creation. They represent the firm's capacity to manage capital, human resources, and organizational structures effectively. Previous studies by Extevanus & Habiburahman (2024) and Muchlis & Suzan (2020), confirm that effective Intellectual Capital management improves corporate performance. Hence, the following hypothesis is proposed:

H₄ : Value Added Capital Employed, Value Added Human Capital dan Structural Capital Value Added simultaneously Added have a significant effect on financial performance in secondary manufacturing companies listed on the IDX during 2021-2023

3. Method

This study employs a quantitative approach using an associative research design with a causal relationship framework. The objective is to examine the effect of Intellectual Capital on the financial performance of secondary manufacturing companies listed on the Indonesia Stock Exchange (IDX) during the 2021–2023 period.

Table 2. Operationalization of Variables

Variable	Indicator	Measurement	Scale	Reference
Intellectual Capital	VACA	$\frac{VA}{CE}$	Ratio	Heryustitriaputri & Suzan (2019)
	VAHU	$\frac{VA}{HC}$	Ratio	
	STVA	$\frac{SC}{VA}$	Ratio	
Financial Performance	Asset Turnover	$\frac{\text{Net Sales}}{\text{Total Assets}}$	Ratio	Sari (2022)

Source: (Data processed by the researcher, 2025)

This study uses secondary data obtained from companies' annual financial statements. Data were collected through documentation by accessing annual reports and audited financial statements available on the official website of the Indonesia Stock Exchange (www.idx.co.id) and the respective corporate websites. The analytical stages include descriptive statistics to summarize data characteristics, followed by classical assumption tests such as normality, multicollinearity, heteroscedasticity, and autocorrelation to ensure the validity of the regression model. Hypothesis testing is conducted using multiple linear regression analysis, complemented by t-tests, F-tests, and the coefficient of determination (R^2) to examine the effect of the independent variables—Value Added Capital Employed (VACA), Value Added Human Capital (VAHU), and Structural Capital Value Added (STVA)—on the financial performance indicator, Asset Turnover (ATO).

4. Result and Discussion

Results

Research Sample

The research object comprises secondary manufacturing companies listed on the Indonesia Stock Exchange (IDX) during the 2021–2023 observation period. The sample was determined using a purposive sampling technique with specific inclusion criteria. From a total population of 253 companies, 114 companies met the criteria and were selected as the research sample. Over three years of observation, this should have resulted in 342 data points; however, after screening and removing outliers, 239 observations were deemed suitable for analysis. The sampling criteria for the secondary manufacturing companies are presented in the following table:

Table 3. Population and Sampling Criteria

	Criteria	Total
1.	Secondary manufacturing companies listed on the Indonesia Stock Exchange	253
2.	Companies that did not publish complete annual reports	(15)
3.	Companies presenting financial statements in currencies other than Rupiah	(40)
4.	Companies experiencing losses during the observation period	(84)
5.	Number of companies included in the sample (per year)	114
6.	Total units of analysis (three-year observation)	342
7.	Outlier data	(103)
	Valid research sample	239

Source: (Data processed by the researcher, 2025)

Descriptive Statistics

Table 4. Descriptive Statistics Results

	N	Minimum	Maximum	Mean	Std. Deviation
VACA	239	-,23	,98	,3759	,22000
VAHU	239	1,37	7,78	3,5462	1,44739
STVA	239	,27	,87	,6676	,13565
ATO	239	,07	1,99	,9371	,39311
Valid N (listwise)	239				

Source: (SPSS Output, processed by the researcher, 2025)

The descriptive analysis results show that the mean value of Value Added Capital Employed (VACA) is 0,3759 with a standard deviation of 0,22000, a minimum of –0,23, and a maximum of 0,98. Value Added Human Capital (VAHU) records a mean of 3,5462 and a standard deviation of 1,44739, with values ranging from 1,37 to 7,78. Structural Capital Value Added (STVA) has a mean of 0,6676 and a standard deviation of 0,13565, with a minimum of 0,27 and a maximum of 0,87. Meanwhile, Asset Turnover (ATO) shows a mean value of 0,9371 and a standard deviation of 0,39311, with values ranging between 0,07 and 1,99. Across all variables, the standard deviation is lower than the mean, indicating that the data distribution is relatively homogeneous

Classical Assumption Tests

Table 5. Normality Test Results

		Unstandardized Residual
N		239
Normal Parameters ^{a,b}	Mean	0E-7
	Std. Deviation	,36108761
Most Extreme Differences	Absolute	,065
	Positive	,064
	Negative	-,065
Kolmogorov-Smirnov Z		,998
Asymp. Sig. (2-tailed)		,272

Source: (SPSS Output, processed by the researcher, 2025)

The normality test was conducted using the Kolmogorov–Smirnov method to assess whether the residuals of the regression model were normally distributed. The SPSS output shows an Asymp. Sig. (2-tailed) value of 0,272, which exceeds the 0,05 significance threshold. This result indicates that the residuals are normally distributed; therefore, the normality assumption is fulfilled and the model is appropriate for subsequent analysis

Multicollinearity Test

The multicollinearity test was carried out by examining the Tolerance and Variance Inflation Factor (VIF) values. The decision criteria are as follows:

- If the Tolerance value < 0.10 and/or the VIF > 10, multicollinearity is indicated.
- If the Tolerance value > 0.10 and VIF < 10, multicollinearity is not present.

Table 6. Multicollinearity Test Results

Model		Collinearity Statistics	
		Tolerance	VIF
1	VACA	,977	1,024
	VAHU	,165	6,068
	STVA	,164	6,108

Source: (SPSS Output, processed by the researcher, 2025)

Based on the results, all variables show VIF values < 10 and Tolerance values above $> 0,10$, indicating that no multicollinearity symptoms are present in the regression model.

Heteroscedasticity Test (Glejser Test)

Table 7. Glejser Test Results

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,358	,099		3,613	,000
	VACA	-,031	,064	-,032	-,492	,624
	VAHU	-,016	,024	-,109	-,682	,496
	STVA	,003	,252	,002	,011	,991

Source: (SPSS Output, processed by the researcher, 2025)

The Glejser test results show that the significance value (Sig.) for the VACA variable is 0,624, while the Sig. values for VAHU and STVA are 0,496 and 0,991, respectively. Since all three significance values $> 0,05$. It can be concluded, based on the decision criteria of the Glejser test, that the regression model does not exhibit heteroscedasticity symptoms.

Autocorrelation Test

Table 8. Autocorrelation Test Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,395 ^a	,156	,145	,36339	1,912

Source: (SPSS Output, processed by the researcher, 2025)

The autocorrelation test results indicate that the Durbin–Watson (DW) value is 1,912. Referring to the Durbin–Watson table for 239 observations (n) and three independent variables (k), the lower limit (dL) is 1,738 and the upper limit (dU) is 1,779. Because the DW value falls between dU and $4 - dU$ ($1,779 < 1,912 < 2,221$), it can be concluded that the regression model does not exhibit autocorrelation.

Multiple Linear Regression Analysis

Table 9. Multiple Linear Regression Analysis Results

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,796	,169		4,716	,000
	VACA	,715	,108	,400	6,597	,000
	VAHU	,007	,040	,024	,165	,869
	STVA	-,226	,429	-,078	-,527	,599

Source: (SPSS Output, processed by the researcher, 2025)

The regression model applied in this study can be expressed as:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

In this specification, Y denotes Asset Turnover, α refers to the constant term, while β_1 , β_2 , and β_3 are the coefficients of the independent variables X1 (VACA), X2 (VAHU), and X3 (STVA), respectively. The symbol e captures the error term.

From the regression output, the estimated equation is formulated as follows:
 $ATO = 0.796 + 0.715VACA + 0.007VAHU - 0.226STVA + e$

Partial Hypothesis Testing (T-Test)

Table 10. Partial Hypothesis Testing (T-Test) Results

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,796	,169		4,716	,000
	VACA	,715	,108	,400	6,597	,000
	VAHU	,007	,040	,024	,165	,869
	STVA	-,226	,429	-,078	-,527	,599

Source: (SPSS Output, processed by the researcher, 2025)

Based on the t-test results presented in the table above, it can be concluded that:

1. Hypothesis Testing (H_1)

The regression coefficient for the Value Added Capital Employed (VACA) variable is 0,715 with a significance value of $0,000 < 0,05$ indicating a positive and statistically significant effect on financial performance. Therefore, Hypothesis H_1 is accepted. This finding aligns with the results of previous studies by Habibah & Riharjo (2016) and Muchlis & Suzan (2020).

2. Hypothesis Testing (H_2)

The Value Added Human Capital (VAHU) variable shows a regression coefficient of 0.007 with a significance value of $0,869 > 0,05$ indicating that VAHU does not have a significant effect on financial performance. Consequently, Hypothesis H_2 is rejected. This finding is consistent with previous studies by Natalia et al., (2020) and Extevanus & Habiburahman (2024).

3. Hypothesis Testing (H_3)

The regression coefficient for the Structural Capital Value Added (STVA) variable is -0,226 with a significance value of $0,599 > 0,05$ indicating that STVA does not have a significant effect on financial performance. Therefore, Hypothesis H_3 is rejected. This result is consistent with the studies conducted by Muchlis & Suzan (2020) and Natalia et al., (2020).

Simultaneous Hypothesis Testing (F-Test)

Table 11. Simultaneous Hypothesis Testing (F-Test) Results

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	5,747	3	1,916	14,507	,000 ^b
Residual	31,031	235	,132		
Total	36,779	238			

Source: (SPSS Output, processed by the researcher, 2025)

4. Hypothesis Testing (H_4)

The F-test result shows a significance value of 0,000, which is less than the 0,05 threshold. This indicates that Value Added Capital Employed (VACA), Value Added Human Capital

(VAHU), and Structural Capital Value Added (STVA) have a significant simultaneous impact on financial performance. Therefore, it can be concluded that H₄ is accepted.

Coefficient of Determination (R² Test)

Table 12. Results of Coefficient of Determination Test (R²)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,395 ^a	,156	,145	,36339

Source: (SPSS Output, processed by the researcher, 2025)

Based on the coefficient of determination presented in the table above, the R Square (R²) value is 0,145, indicating that 14,5% of the variation in the dependent variable can be explained by the independent variables included in the model. The remaining 85,5% is influenced by other factors not examined in this study.

Discussion

The Impact of Value Added Capital Employed on Financial Performance in Secondary Manufacturing Companies Listed on the Indonesia Stock Exchange in 2020–2023

According to the test results, the regression coefficient of Value Added Capital Employed is 0,715 with a significance value of $0,000 < 0,05$. This result indicates that VACA has a positive and significant effect on financial performance; therefore, the first hypothesis (H₁) is accepted. This suggests that the efficiency of capital utilization plays a crucial role in improving asset turnover and overall operational effectiveness. These findings are consistent with prior studies conducted by Extevanus & Habiburahman (2024) and Hasan et al (2024), which also confirmed a positive and significant relationship between VACA and financial performance.

The Impact of Value Added Human Capital on Financial Performance in Secondary Manufacturing Companies Listed on the Indonesia Stock Exchange in 2020–2023

According to the test results, the regression coefficient of Value Added Human Capital is 0,007 with a significance value of $0,869 > 0,05$. meaning that VAHU does not significantly affect financial performance. Accordingly, the second hypothesis (H₂) is rejected. This suggests that the contribution of human capital to improving asset utilization efficiency remains suboptimal. Although human capital is theoretically critical for companies, its direct impact on asset turnover efficiency has not been clearly demonstrated. These findings are consistent with studies by Dianty (2019) and Extevanus & Habiburahman (2024), which also reported no significant effect of VAHU on financial performance.

The Impact of Structural Capital Value Added on Financial Performance in Secondary Manufacturing Companies Listed on the Indonesia Stock Exchange in 2020–2023

According to the test results, the regression coefficient of Structural Capital Value Added (STVA) is -0,226 with a significance value of $0,599 > 0,05$. indicating that STVA does not significantly affect financial performance. Consequently, the third hypothesis (H₃) is rejected. This suggests that the presence of systems, internal processes, and organizational structures has not yet been effective in improving asset efficiency, possibly because structural capital has not been optimally integrated into day-to-day operations. These findings are consistent with the

studies of Muchlis & Suzan (2020) and Natalia et al., (2020), which also reported no significant effect of STVA on financial performance.

The Impact of Value Added Capital Employed, Value Added Human Capital, and Structural Capital Value Added on Financial Performance in Secondary Manufacturing Companies Listed on the Indonesia Stock Exchange in 2020–2023

The findings indicate that the three independent variables collectively obtained a significance value $0,000 < 0,05$. Signifying that Value Added Capital Employed (VACA), Value Added Human Capital (VAHU), and Structural Capital Value Added (STVA) simultaneously exert a significant influence on financial performance. Accordingly, the fourth hypothesis (H₄) is accepted. This outcome suggests that, although not all individual components show a significant effect when tested separately, their combined contribution enhances asset management effectiveness. This demonstrates that the integration of financial capital, human resources, and organizational structure is essential in driving operational efficiency within companies. These results are consistent with studies by Habibah & Riharjo (2016), Muchlis & Suzan (2020), Surbakti & Suzan (2020), Extevanus & Habiburahman (2024), which confirm that VACA, VAHU, and STVA simultaneously have a significant effect on financial performance.

5. Conclusions

Based on the results of the analysis, the study concludes that:

1. Value Added Capital Employed (VACA) positively and significantly affects financial performance, indicating that efficient capital utilization enhances asset efficiency.
2. Value Added Human Capital (VAHU) does not significantly affect financial performance, suggesting that the contribution of human resources to asset turnover remains limited.
3. Structural Capital Value Added (STVA) does not significantly affect financial performance, implying that internal systems and organizational structures have not yet optimized asset efficiency.
4. Simultaneously, VACA, VAHU, and STVA significantly affect financial performance, highlighting the importance of integrating capital, human, and structural resources to improve operational efficiency.

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References

- Dewi, H. R., & Dewi, L. M. C. (2020). Modal intelektual dan nilai perusahaan pada industri jasa dan pertambangan di Indonesia. *Proceeding of National Conference on Accounting & Finance*, 2(2012), 132–143.
- Dianty, A. (2019). Pengaruh Intellectual Capital Terhadap Kinerja Keuangan. *In Search*, 18(1), 69–82. <https://doi.org/10.37278/insearch.v18i1.138>
- Extevanus, L., & Habiburahman, H. (2024). Pengaruh Intellectual Capital Terhadap Kinerja

- Kuangan Pada Perusahaan Manufaktur Sub Sektor Food And Beverage Yang Terdaftar di Bursa Efek Indonesia Tahun 2019-2022. *Journal of Information System, Applied, Management, Accounting and Research*, 8(1), 187.
<https://doi.org/10.52362/jisamar.v8i1.1440>
- Febriani, E. (2021). Pengaruh Penerapan Green Accounting & Kepemilikan Saham thdp Kinerja Keuangan serta Dampaknya pada Nilai Perusahaan (Studi Kasus 138 Perusahaan Penerima Penghargaan Green Industry 2019). *Jurnal Online Mahasiswa (JOM) Bidang Akuntansi*, 7(2).
- Habibah, B. N., & Riharjo, I. B. (2016). Pengaruh Intellectual Capital terhadap Kinerja Keuangan pada Perusahaan Manufaktur. *Jurnal Ilmu Dan Riset Akuntansi*, 5(7), 1–16.
- Hasan, W. A., Malik, E., & Rezky, U. F. (2024). Pengaruh Komponen Modal Intelektual Terhadap Kinerja Perusahaan. *Jurnal Menara Ekonomi : Penelitian Dan Kajian Ilmiah Bidang Ekonomi*, 10(1), 141–148. <https://doi.org/10.31869/me.v10i1.4708>
- Heryani, R. (2024). Pengaruh Intellectual Capital Terhadap Kinerja Keuangan Pada Perusahaan Sub Sektor Teknologi Yang Terdaftar di Bursa Efek Indonesia 2021-2023. (Vol. 15, Issue 1).
- Heryustitriputri, A., & Suzan, L. (2019). Analisis Intellectual Capital Dengan Metode Pengukuran Value Added Intellectual Coefficient (VAICTM) Terhadap Kinerja Keuangan. *Journal of Intellectual Capital*, 3(3), 149–166.
<https://doi.org/10.1108/14691930210424743>
- Irfani, A. S. (2020). *MANAJEMEN KEUANGAN DAN BISNIS; Teori dan Aplikasi* (Bernadine (ed.)). PT Gramedia Pustaka Utama.
<https://books.google.co.id/books?id=qln8DwAAQBAJ&lpg=PP1&hl=id&pg=PR4#v=onepage&q&f=false>
- Kemenkeu. (2023). IMF Proyeksikan Ekonomi Indonesia Tetap Solid di Tengah Perlambatan Global dan Eskalasi Risiko. In *Kementerian Keuangan Republik Indonesia*.
<https://www.kemenkeu.go.id/informasi-publik/publikasi/berita-utama/IMF-proyeksikan-ekonomi-Indonesia-tetap-solid>
- Kesaulya, F., & Cellvia, C. (2019). Pengaruh Intellectual Capital Terhadap Kinerja Keuangan. *In Search*, 18(1), 69–82. <https://doi.org/10.37278/insearch.v18i1.138>
- Kristianti, I. P. (2018). Analisis Pengaruh Struktur Modal Terhadap Kinerja Keuangan Perusahaan. *Jurnal Keuangan Dan Perbankan*, 2(1), 56–68.
<https://doi.org/10.26905/jkdp.v20i1.141>
- Muchlis, F., & Suzan, L. (2020). Pengaruh Intellectual Capital Terhadap Kinerja Keuangan (Studi Empiris pada Perusahaan Sub Sektor Properti dan Real Estate yang Terdaftar di Bursa Efek Indonesia Periode 2015-2018). *EProceedings of Management*, 8(75), 147–154.
- Nasution, I. R. (2019). Pengaruh Modal Intelektual, Ukuran Perusahaan, Dan Umur Perusahaan Terhadap Kinerja Perusahaan. *Sustainability (Switzerland)*, 5(1), 1–14.
- Natalia, M., Maimunah, M., Katolik, U., Charitas, M., Katolik, U., Charitas, M., & Keuangan, K. (2020). Pengaruh Intellectual Capital Terhadap Financial Performance Perusahaan (Perusahaan Manufaktur Food And Beverage 2018-2020). *Proceeding National Seminar on Accounting UKMC*, 1, 209–217.
- Nikmah, N., & Apriyanti, H. (2019). Pengaruh Intellectual Capital Terhadap Kinerja Keuangan Perusahaan Manufaktur Di Bursa Efek Indonesia. *Jurnal Akuntansi*, 6(1), 53–74.
<https://doi.org/10.33369/j.akuntansi.6.1.53-74>
- Pohan, E. S., Lestari, T., & Ramdhani, D. (2018). Pengaruh Intellectual Capital Terhadap Kinerja Keuangan: Studi Empiris Pada Sektor Teknologi Informasi dan Jasa. *Jurnal*

- Akuntansi*, 6(2), 103–116. <https://doi.org/10.24964/ja.v6i2.643>
- Purwowidhu. (2023). Prospek cerah perekonomian Indonesia 2023. In *Kemenkeu.Go.Id*. <https://mediakeuangan.kemenkeu.go.id/article/show/prospek-cerah-perekonomian-indonesia-2023>
- Ramírez Gutiérrez, Z., & Gómez Sánchez, A. M. (2015). Degree of knowledge of the adjective “intangibles”, and its relationship with the identification, recognition, measurement, valuation and disclosure of “intangibles” in the accounting information of companies in Popayán. *Cuadernos de Contabilidad*, 16(40), 111–150. <https://doi.org/10.11144/javeriana.cc16-40.gcai>
- Sari, A. P. (2022). Pengaruh Total Asset Turnover dan Fixed Asset Turnover terhadap Harga Saham pada Perusahaan Makanan dan Minuman yang Terdaftar di Bursa Efek Indonesia Periode 2015 s/d 2019. 1–60. <https://repositori.uma.ac.id/handle/123456789/17167>
- Shella, S., & Wedari, L. K. (2016). Intellectual capital dan intellectual capital disclosure terhadap market performance pada perusahaan publik indeks LQ-45. *Jurnal Akuntansi & Auditing Indonesia*, 20(1), 27–36. <https://doi.org/10.20885/jaai.vol20.iss1.art3>
- Sukmana, R. J., & Fitria, A. (2020). Pengaruh Intellectual Capital Terhadap Kinerja Keuangan Perusahaan Astri Fitria Sekolah Tinggi Ilmu Ekonomi (STIESIA) Surabaya. *Jurnal Ilmu Dan Riset Akuntansi*, 15.
- Surbakti, S. K., & Suzan, L. (2020). Pengaruh Intellectual Capital Terhadap Kinerja Keuangan Perusahaan (Studi pada Perusahaan Manufaktur Sektor Industri Barang Konsumsi yang Terdaftar di Bursa Efek Indonesia Periode 2016-2018). 2507(February), 1–9.
- Tarigan, J., Listijabudhi, S., Hatane, S. E., & Widjaja, D. C. (2019). The Impacts of Intellectual Capital on Financial Performance: An Evidence From Indonesian Manufacturing Industry. *Indonesian Journal of Business and Entrepreneurship*, 5(1), 65–76. <https://doi.org/10.17358/ijbe.5.1.65>
- Wahyudi, I., & Lydia, E. H. (2023). Intellectual Capital and Transforming Business Banking. *Jurnal ASET (Akuntansi Riset)*, 15(1), 99–110. <https://doi.org/10.17509/jaset.v15i1.51788>
- Wijayani, D. R. (2017). PENGARUH INTELLECTUAL CAPITAL TERHADAP KINERJA KEUANGAN PERUSAHAAN PUBLIK DI INDONESIA (Studi Empiris Pada Perusahaan Manufaktur di BEI 2012-2014). *Jurnal Riset Akuntansi Dan Bisnis Airlangga*, 2(1), 97–116. <https://doi.org/10.31093/jraba.v2i1.23>
- Yusniawati, Y., & Romdioni, A. N. (2024). Pengaruh Intellectual Capital Terhadap Kinerja Keuangan. *Musamus Accounting Journal*, 6(2), 10–19. <https://doi.org/10.35724/maj.v6i2.6094>