

The Effect of Environmental, Social, and Governance and Human Capital on Company Performance (Case Study of Healthcare Sector Companies Listed on the Indonesia Stock Exchange for the Period 2021 - 2023)

Sabilla Meisya Putriani^{1*}, Patria Prasetio Adi²

^{1,2}Faculty of Business Economics, Universitas Jenderal Achmad Yani, Cimahi, Indonesia

Email: ¹⁾ sabillameisya_21p146@ak.unjani.ac.id, ²⁾ patria.prasetio@lecture.unjani.ac.id

Received : 29 January - 2025

Accepted : 04 March - 2025

Published online : 07 March - 2025

Abstract

In an increasingly complex business environment, company success is influenced not only by financial factors but also by non-financial aspects such as Environmental, Social, and Governance (ESG) and human capital. ESG integrates environmental concerns such as better waste and emissions management, social responsibility towards employees and the community, and good corporate governance to ensure transparency and accountable decision-making, thereby increasing investor confidence, creating operational efficiency, and strengthening corporate sustainability. On the other hand, human capital focuses on managing human resources as intangible assets that have a central role in supporting the implementation of ESG values, through innovation, skills enhancement, and productivity. Companies with quality human capital tend to have better adaptability to industry changes, improve decision-making effectiveness, and strengthen innovation that contributes directly to improving company performance. This study examines the impact of ESG and human capital on company performance in the healthcare sector listed on the Indonesia Stock Exchange (IDX) for the period 2021–2023. Using a quantitative approach with multiple linear regression analysis, the research analyzes 11 purposively selected companies over three years, resulting in 33 data points. The findings indicate that ESG and human capital have a positive and significant partial effect on company performance. Simultaneously, ESG and human capital influence company performance, as evidenced by a high R Square value of 87.1%. This finding highlights the importance of integrating ESG principles and effective human capital management to support corporate sustainability.

Keywords: Environmental, Social, and Governance, Human Capital, Company Performance.

1. Introduction

The ever-increasing demand for goods and services in Indonesia has made the business world flourish. The demand is reflected in the growth of Gross Domestic Product or often abbreviated as GDP, which describes the overall goods and services produced by a country within one year. This creates increasingly fierce competition among business owners, thus forcing companies to maintain and improve their performance in order to remain competitive in the market. The coronavirus outbreak that broke out in 2020 has made economic development in Indonesia face a big challenge, because the impact is almost felt by all economic sectors (Mayasyifa, 2020).



Social restrictions, lockdowns, and shutdowns led to an economic contraction of 2.07% in 2020, reflecting the serious impact on businesses, purchasing power, and investment activities (Mayasyifa, 2020). But over time, hopes of economic recovery emerged in 2021. The Central Bureau of Statistics through its official website revealed that Indonesia's economic growth was recorded at 3.69%. Some sectors that were key pillars during the pandemic, such as healthcare and pharmaceuticals, showed significant growth. The pharmaceutical industry in particular recorded a growth of 9.6% in 2021, due to the high demand for health products such as medicines and vitamins which became a major necessity amid the pandemic. Various recovery measures were taken by the Government, such as mass vaccination programmes, economic incentives, and support for small and medium enterprises.

The economic recovery continued in 2022, with Indonesia's economic growth significantly increasing to 5.31%. To maintain the consistency of Indonesia's economic growth, companies must have the ability to increase productivity and adapt to industry changes. An essential factor to consider when assessing a company's success is its financial results (Antonius & Ida, 2023). One metric that can be utilised to evaluate financial performance is Return on Assets (ROA). ROA helps in determining how effectively a company is generating profits by utilizing its assets (Birken, 2021). The higher the ROA value created, the company is said to have succeeded in using its assets more effectively to manifest profits (Sutisnawinata, 2024). With this measure, companies hope that their performance will continue to improve, but in reality, not all sectors have managed to maintain their performance. The healthcare sector, especially companies that depend on pandemic-related products, started to experience major challenges after the transition to the post-pandemic period. This challenge was experienced by an issuer coded MEDS. In 2022, the company reported that it experienced a 50.2% decline in product sales compared to the previous year, which resulted in a drastic decline in its net profit (Laoli, 2023). This decline occurred due to the end of the pandemic which caused demand for health products such as masks and other protective equipment to decline sharply.

Similar phenomena also occurred in other issuers in the healthcare sector. With regard to information collected from the Stock Exchange, the average revenue of issuers providing health services fell by 10.59% in the first quarter of 2022, while the average net profit corrected sharply by 53.01% (Widodo, 2022). Several state-run enterprises are encountering significant difficulties in their financial operations. State-owned companies operating in the pharmaceutical industry, like PT Kimia Farma Tbk (KAEF) and PT Indofarma Tbk (INAF), have seen a downturn in their performance over various periods. KAEF reported a loss of Rp1.48 trillion in 2023, whereas INAF experienced a 54.2% decrease in revenue and a substantial increase in net loss compared to the previous year. This problem was exacerbated by the findings of the Supreme Audit Agency (BPK) regarding indications of fraud, such as fictitious transactions and manipulation of financial statements, which further eroded investor confidence (Tonce, 2024). Based on information reported on the indopremiere.com page, the decline in INAF's revenue has a significant impact on the company's return on assets (ROA). Indofarma experienced a very drastic decline in ROA value during the period 2021 - 2023. In 2021, the ROA value was recorded at (-1.87%), then fell sharply to (-30.89%) in 2022, and an even more extreme decline occurred in 2023 with an ROA value that reached (-94.89%). This indicates a major problem in the company's financial performance, which needs serious attention (Oktaviyana et al., 2023).

The decline in performance as described certainly raises doubts among investors (Salim, 2023). When profits fall, many investors take it as a sign of problems in management or corporate strategy, which in turn can lower confidence in the company and reduce interest in

investing. These doubts not only impact the value of the company's shares, but also disrupt relationships with other stakeholders such as creditors and suppliers who begin to question the stability and viability of the company. According to Oktaviyana et al. (2023) as a result, companies are in a negative cycle, where the doubts that arise worsen their financial condition, affect investment decisions, and worsen future business collaboration.

Based on some of the above phenomena regarding companies that cannot optimise the use of their assets, and result in a decrease in profits from year to year, the authors enhance this occurrence by analysing data from various healthcare companies included on the Stock Exchange during the years 2021 to 2023. They determine company performance by assessing the profitability ratio, specifically the return on assets (ROA), which is calculated by dividing total profit after tax by total assets.

Table 1. Declining Return on Assets (ROA) of Healthcare Companies (2021–2023)

No	Code	Company Name	Year	ROA
1	MIKA	Mitra Keluarga Karyasehat Tbk.	2021	19,84%
			2022	15,81%
			2023	13,57%
2	SIDO	Industri Farmasi dan Jamu Farmasi Sido Tbk.	2021	30,99%
			2022	27,07%
			2023	24,43%
3.	BMHS	Bunda Medik Tbk.	2021	12,60%
			2022	4,39%
			2023	0,53%
4.	RSGK	Kedoya Adyaraya Tbk.	2021	5,61%
			2022	2,91%
			2023	3,03%
5.	DGNS	Diagnos Laboratorium Utama Tbk.	2021	26,57%
			2022	5,28%
			2023	-5,03%
6.	KAEF	Kimia Farma Tbk.	2021	1,63%
			2022	-0,64%
			2023	-10,36%
7.	SRAJ	Sejahtera dan Anugrahjaya Tbk.	2021	3,40%
			2022	-0,75%
			2023	-1,22%

Source: Data processed 2024

Based on Table 1, it can be seen that the seven companies experienced a decrease in Return on Assets (ROA) from year to year. The issuer MIKA recorded a decrease in ROA, from 19.21% in 2021 to 15.81% in 2022, and again fell to 13.57% in 2023. Meanwhile, the issuer SIDO has a higher ROA than MIKA, but is also experiencing a downward trend, from 30.99% in 2021 to 27.07% in 2022, and back down to 24.43% in 2023. Similar conditions occurred with BMHS and RSGK, which also recorded a decrease in ROA. Compared to other issuers, the decline in ROA in DGNS, KAEF, and SRAJ is more significant, even reaching negative values.

Investor confidence in a company is not only measured by its financial performance, but also by the company's commitment to addressing sustainability issues, especially those related to environmental, community and governance perspectives. The implementation of ESG reflects the company's responsibility towards these sustainability issues, as well as providing benefits such as operational efficiency, improving the company's image, and strengthening

investor confidence (Mudzakir & Pangestuti, 2023). Therefore, ESG is a strategic element that supports sustainable corporate performance. In Indonesia, ESG implementation still faces a number of challenges, including lack of understanding, limited information, and high implementation costs (Ahdiyat, 2022). Nevertheless, interest in ESG-based investments continues to increase, both nationally and globally (Ahdian, 2022). This is also supported by regulations such as POJK No. 51/POJK.03/2017 that encourage transparency and sustainability reporting. According to Syahriar (2022) the healthcare sector has a significant impact on society and the environment, making it one of the key sectors encouraged to implement ESG consistently.

In addition to considering ESG factors, human capital management is also crucial in determining a company's success. Effectively managing human capital can provide lasting benefits to the company in the long run (Tjahjanto, 2024). In 1997, Public introduced the Value Added Human capital (VAHU) indicator to assess the impact of employee contribution on corporate value relative to the investment in them. Studies examining the effects of environmental, social, and governance (ESG) factors and human capital on corporate performance have been extensively undertaken in Indonesia. Research results by (Littahayu & Sulistiyoningsih, 2023) the identified disclosed that ESG factors have a beneficial impact on the overall performance of businesses. But in contrast to the findings (Okalesa et al., 2024) which reveals that ESG has no influence on company performance. Meanwhile Panjaitan et al. (2023) found no evidence to suggest that the skills and knowledge of employees affect the success of a business. This contradicts the commonly held belief that investing in human capital leads to improved company performance (Azis et al., 2022) which reveals that human capital affects company performance. The author is intrigued by the opportunity to conduct a study in light of the inconsistent findings of previous research. This particular investigation was carried out within the healthcare industry due to signs of underperformance within multiple companies within the sector. This study aims to examine the extent to which Environmental, Social, and Governance (ESG) and human capital can influence the performance of companies in the healthcare sector listed on the Indonesia Stock Exchange (IDX) for the period 2021–2023.

2. Literature Review

2.1. Legitimacy Theory

Legitimacy theory emphasises the importance of society's acceptance and recognition of policies, decisions or activities carried out by companies. This theory underlines that legitimacy is a crucial factor for the sustainability of company operations. Failure to achieve legitimacy for the company could lead to conflicts or 'legitimacy gaps' emerging due to differences between the company's values and societal norms. This mismatch has the capability to jeopardize the long-term viability of the company (Safriani & Utomo, 2020). To gain legitimacy, companies need to align their actions and policies with the values and social norms of society, as their responsibility for their operations.

2.2. Resource Based View (RBV) Theory

Resource-based view is the name given to the theory that places emphasis on using resources effectively in order to gain a competitive advantage. Thus this theory emphasises the importance of managing the company's resources, both tangible and intangible, in order to create sustainable competitive advantage (Wardifa & Yanthi, 2022). RBV states that a firm can only compete effectively if it has adequate, high-quality, and efficiently managed resources.

These resources must fulfil four main criteria: (a) have value to support the company's activities, (b) are rare so that they are not owned by many companies, (c) are difficult to imitate by competitors, and (d) do not have comparable substitutes (Wardifa & Yanthi, 2022). Intangible assets such as human capital are considered strategic resources because they have a long life, are rare, difficult to replicate, and cannot be replaced. If managed properly, these resources will generate additional benefits for the company and ultimately contribute to the company's performance.

2.3. Environmental, Social, and Governance (ESG)

ESG is a concept that focuses on sustainable development, investment, and business practices by taking into account three important aspects, namely environmental aspects, social aspects, and also corporate governance aspects. The concept assesses the non-financial impact of companies and ensures sustainability and social responsibility in business (IEC, 2023). The environmental aspect discusses the company's impact on the natural environment during its operations. This includes various matters such as the use of clean energy resources, waste management, efforts to reduce pollution, and resource conservation practices. The social aspect emphasizes the company's relationship with external parties, including communities, society, suppliers, customers, media, and other entities that interact with the company. Meanwhile, the governance aspect focuses more on the relationship with external stakeholders and emphasizes how the company is internally organized and managed. This aspect includes company policies, corporate standards, corporate culture, transparency levels, audit processes, and compliance (IEC, 2023).

2.4. Human Capital

The term human capital refers to the collection of knowledge, competencies, skills, and capacities that a person possesses and makes him or her an important asset for the company. The concept emphasises the economic value generated by workers' contributions, such as ideas, innovation, energy, and commitment to their tasks (Ismiyati, 2020). Human capital is also related to the development, training, and transfer of knowledge that can improve the performance and productivity of the company. As part of intellectual capital, human capital plays a key role in creating sustainable added value for the organisation, so that even if employees leave the company, their knowledge and skills remain a useful asset for the continuity of the company (Hidayah, 2023).

2.5. Company Performance

The performance of a company refers to the comparison between the actual results achieved by individuals or teams within the company and the previously set plans or targets (Syahputra & Arfah, 2022). Financial performance is a common indicator used to assess how well a company is doing. It signifies how effectively the company is using its resources to generate profits. Typically, financial performance is measured on a scale of proportions. Profitability ratios are often utilised to gauge the company's capability to generate profits from different sources, including sales, assets, and capital. Performance measurement can also be done externally by investors who want to evaluate the prospects and risks of the company, or internally by management to evaluate the performance of each unit or division (Mekari Talenta, 2023).

2.6. Prior Research

The influence of Environmental, Social, and Governance (ESG) and human capital on company performance has been widely studied in Indonesia. However, previous studies have produced conflicting findings, highlighting a research gap that needs further exploration.

Littahayu & Sulistiyoningsih (2023) found that ESG has a positive and significant impact on firm performance, suggesting that integrating ESG principles enhances financial outcomes. They argued that ESG disclosure aims to create a positive perception of the company, which in turn attracts investors to support its operations. This support from stakeholders helps the company secure funding, thereby increasing working capital and operational efficiency, ultimately leading to higher profits. Their study highlights that companies with well-documented ESG strategies tend to attract more investors and experience higher financial stability. In contrast, Okalesa et al. (2024) reported that ESG factors have no significant effect on company performance, raising questions about the consistency of these findings across different industries and time periods. They defined ESG as corporate activities related to ecological surroundings, social interactions, and internal control systems, aiming to achieve company goals while meeting stakeholder needs. Their perspective aligns with Agency Theory, which suggests that agents (managers) and owners (shareholders) have different objectives, agents prioritize personal benefits such as reputation, while owners focus on profit maximization. As a result, companies tend to minimize expenditures related to environmental practices and instead allocate resources to maximize profits for shareholders. Their study proposed that in certain industries, ESG initiatives may be perceived as cost burdens rather than value-enhancing factors.

Regarding human capital, Azis et al. (2022) indicated that human capital positively affects firm performance. They argued that companies investing in employee training and continuous development programs experience better financial performance. Their findings suggest that skill enhancement and professional development initiatives lead to increased productivity, innovation, and overall firm efficiency. On the other side, Panjaitan et al. (2023) found no significant relationship between human capital and financial performance. They questioned the direct link between human capital investment and profitability, proposing that organizational culture and leadership play a moderating role in determining the true impact of human capital. Their study suggested that without strong leadership and an adaptive corporate culture, investments in human capital may not yield substantial financial benefits.

This study aims to bridge these research gaps by analyzing the combined effects of ESG and human capital on company performance in Indonesia's healthcare sector. Given the recent fluctuations in financial performance and investor confidence in this sector, understanding how ESG and human capital contribute to sustainability and profitability is essential. By clarifying these relationships, this study provides empirical evidence to guide corporate decision-making and policy development in sustainable business practices.

2.7. Framework of Thought

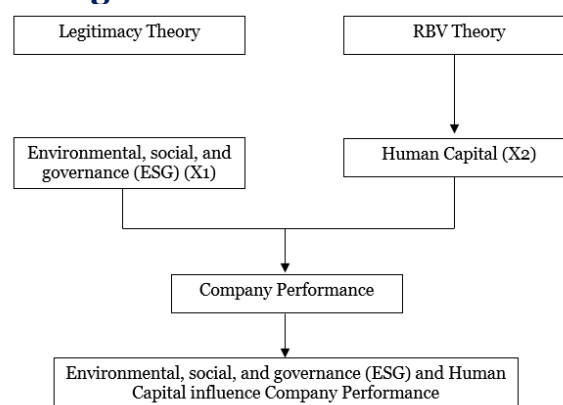


Figure 1. Framework of Thought

3. Methods

The research utilises quantitative techniques with pre-analysed secondary data accessible in official sources like financial statements and corporate sustainability reports. This data contains numerical details that can depict specific values or factors. Environmental, Social, and Governance (ESG) and Human Capital (HC) are the independent variables in this investigation, while company performance represented by Return on Assets (ROA) serves as the dependent variable. Collection of data involved documentation and review of existing literature. To test the hypotheses, the study employs multiple linear regression analysis to evaluate the impact of ESG and human capital on company performance, individually and collectively. In order to validate the regression model, it is necessary to carry out classical assumption tests such as normality, multicollinearity, heteroscedasticity and autocorrelation tests. Descriptive statistical tests were also used to give a snapshot of the research data. Hypothesis testing was performed using the t-test to examine the impact of individual independent variables and the F-test to examine the combined impact of both variables on company performance.

3.1. Place and Time of Research

The study was carried out on healthcare industry firms that are registered on the IDX between 2021 and 2023. These companies had to satisfy specific requirements, including having audited financial records and making data accessible on their official website or www.idx.co.id. This research lasted for approximately 3 months, from November 2024 to January 2025.

3.2. Population

Population is a set of elements in the form of events, objects, or individuals that have similar characteristics and are the centre of attention in a study. In short, the population includes all elements involved in the research. This research focuses on examining 34 healthcare companies listed on the Indonesia Stock Exchange from 2021 to 2023.

3.3. Sample

A sample is part of a population consisting of a number of members that represent the population. Sampling is essential as it is often impractical to study the entire population. This research utilises a purposive sampling technique by establishing specific criteria. A total of 11 companies were selected as samples with a 3-year observation period, generating 33 data points. Based on this sampling method, the researcher sets the sample criteria as follows:

Table 2. Research Sample

No	Criteria	Number of Companies
1.	Healthcare sector companies listed on IDX for the period 2021–2023	34
2.	Healthcare sector companies that did not publish financial reports consecutively for the period 2021–2023	(8)
3.	Companies that did not publish sustainability reports consecutively for the period 2021–2023	(9)
4.	Companies that did not report the GRI index in the sustainability report for the period 2021–2023	(6)
Total research sample		11

Source: Data processed 2024

3.4. Operational Definition of Variables

The definitions, signs, and measurement of the factors to be examined are established through operational variables, allowing for accurate hypothesis testing. The research comprises of two factors that are not influenced by each other, and one factor that is influenced by the other two. The operational chart for these factors is provided below:

Table 3. Operational Variables

Variable	Concept	Indicator	Scale
Independent Variable (X1) ESG	The ESG concept refers to non-financial factors used to evaluate a company's performance in terms of its impact on the environment, its engagement in social issues, and the quality of its governance. ESG is often used as a framework to assess a company's impact and sustainability in responsible environmental, social, and governance aspects (Event, 2023).	$ESG\ Score = \frac{Disclosure}{Index}$ Explanation: The index measurement for each dimension is calculated by dividing the company's disclosure value by the total expected disclosure (esgi.ai.com, 2023)	Ratio
Independent Variable (X2) Human Capital	Human capital refers to a set of knowledge, skills, abilities, and expertise that make an individual a valuable asset to a company.	$VAHU = VA/HC$ (Lubioks & Ovami, 2020) Explanation: - Value Added (VA) = Total sales and other revenues, then deducted by input costs and expenses (excluding employee expenses). - Human Capital (HC) = Employee expenses or labor costs incurred by the company (total salary, wages, and employee allowances, including training).	Ratio
Dependent Variable (Y) Company Performance	Company performance is a measurement that involves comparing actual results achieved with expected results. One of the key aspects in assessing company performance is its financial performance, which in this case is measured using Return on Assets (ROA).	$Return\ On\ Asset = \frac{EAT}{Total\ Asset}$ (Birken, 2021)	Ratio

Source: Data processed 2024

3.5. Data Collection Technique

Data for this research was collected through literature study and documentation. Literature study refers to books, journal articles, previous research, websites, and other writings related to the variables under study. Meanwhile, documentation involves examining relevant documents, either from the findings of the literature study or other online sources, to obtain the necessary information. The documents used include financial statements distributed by the company throughout the period.

3.6. Research Instruments

The quantitative data were processed using Microsoft Excel 2019 and IBM SPSS 27 for statistical data processing.

4. Results and Discussion

4.1. Research Result

4.1.1. Descriptive Statistics

Descriptive statistical tests were conducted to gain a better understanding of the data relating to the variables studied. For ESG (X₁), Human Capital (X₂), and Company Performance (Y), the data analysed includes standard deviation, mean value, smallest value, and largest value. Below are the findings from the descriptive statistical analysis of the research, following the data being analysed with IBM SPSS 27.

Table 4. Descriptive Statistics Results

	N	Minimum	Maximum	Mean	Std. Deviation
ESG	33	.41	.96	.6647	.14397
Human Capital	33	.26	5.16	2.0335	1.08192
ROA	33	-.10	.31	.0895	.09127
Valid N (listwise)	33				

Source: IBM SPSS 27 output (Data processed 2024)

According to the information in table 4, the ESG variable showed a range of values from 0.41 to 0.96, with an average of 0.6647 and a standard deviation of 0.14397. The human capital variable, on the other hand, ranged from 0.26 to 5.16, with an average of 2.0335 and a standard deviation of 1.08192. In comparison, the company performance variable had values ranging from -0.10 to 0.31, with an average of 0.0895 and a standard deviation of 0.09127. This means that the data is presented with a variety, and the deviation rate of company performance is high on average.

4.1.2. Classical Assumption Test

Table 5. Classical Assumption Test Results

No	Classical Assumption Test	Results	Decision
1.	Data Normality Test	Asymp.sig. (2-tailed) 0.200	Residual data is normally distributed.
2.	Multicollinearity Test	Tolerance value : ESG and Human Capital = 0.967 > 0.10 VIF value : ESG and Human Capital = 1.034 < 10 From the plot distribution, there is no clear pattern, and the data is said to be scattered and not concentrated at a single point.	There is no multicollinearity between variables in the regression model.
3.	Heteroscedasticity Test	Durbin - Watson value = 2.092	Data does not experience heteroscedacity.
4.	Autocorrelation Test		There is no positive or negative autocorrelation.

Source: IBM SPSS 27 output (Data processed 2024)

4.1.3. Multiple linear regression analysis

In this study, a multiple linear regression analysis was conducted to investigate how ESG factors (X₁) and the human capital (X₂) of healthcare companies listed on the Indonesia Stock

Exchange impact their performance (Y) from 2021 to 2023. The population criteria were fulfilled for the observation period. The outcomes of the regression model testing are outlined below:

Table 6. Multiple Linear Regression Analysis Results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-.125	.029		-4.306	<.001
ESG	.090	.042	.143	2.143	.040
Human Capital	.076	.006	.897	13.480	<.001

a. Dependent Variable: ROA

Source: IBM SPSS 27 Output

According to the data in table 6, it is evident that the multiple linear regression equation can be expressed in the following manner:

$$Y = -0.125 + 0.090X_1 + 0.076X_2 + \epsilon$$

The equation for multiple linear regression showcased above can help assess the impact of the two independent variables on the dependent variable, which is the performance of the company. The breakdown of the impact of each variable using the equation above is as follows:

- The fixed value of -0.125 represents the impact of ESG and human capital on the performance of health sector companies listed on the Indonesia Stock Exchange during the 2021-2023 period. Without the independent variable, the dependent variable will undergo alterations.
- With a regression coefficient (X_1) of 0.090, the ESG factor is shown to have a significant and beneficial effect on company performance. An increase of one per cent in the ESG variable corresponds to a 0.090 increase in company performance, assuming no other variables are being considered in this research.
- The human capital regression coefficient value (X_2) of 0.076 suggests a positive relationship between human capital and company performance. A one per cent rise in human capital leads to a 0.076 increase in the company's performance coefficient, assuming other variables are not part of the study.

4.1.4. Coefficient of Determination Analysis

Table 7. Coefficient of Determination Analysis Results

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.934 ^a	.871	.863	.03380

a. Predictors: (Constant), HUMAN_CAPITAL, ESG
b. Dependent Variable: ROA

Source: IBM SPSS 27 Output

According to the data in the table, the unique square R-squared value is 87.1%. This suggests that the ESG and human capital variables in the research can forecast company

performance by 87.1%, whereas other factors not analysed in this study impact the remaining variables.

4.1.5. Partial Hypothesis Test (t test)

Table 8. T-test results

Coefficients ^a					
Model		Unstandardized Coefficients		Standardized Coefficients	Sig.
		B	Std. Error	Beta	
1	(Constant)	-.125	.029		<.001
	ESG	.090	.042	.143	.040
	HUMAN_CAPITAL	.076	.006	.897	<.001

a. Dependent Variable: ROA

Source: IBM SPSS 27 Output

According to the information provided in the table, it can be inferred that the t table utilizes the formula $(\alpha/2; nk-1)$ with $df = nk-1$, where 'n' represents the quantity of data and 'k' represents the number of independent variables. Calculating df for this specific scenario ($33 - 2 - 1 = 30$), the resulting t table value is as follows.

$$t_{\text{table}} = t(0,05/2; 33-2-1) = 2,042$$

After considering the findings from the preliminary hypothesis examination (t test) mentioned earlier, it is possible to infer that:

- In the table given, the ESG variable (X1) has a t value of 2.143 and a t table value of 2.042, showing that t count exceeds t table. This result leads to rejecting H_0 and accepting H_1 . Since the significance value is 0.040, lower than 0.05, we can infer that the ESG variable positively and significantly impacts company performance.
- The human capital variable (X2) depicted in the table has a t value of 13.480 and a t table value of 2.042, indicating that the t value surpasses the t table. Consequently, H_0 is disregarded in favour of accepting H_1 . The significance value of 0.000, below 0.05, suggests that the human capital variable has a constructive and notable influence on company performance.

4.1.6. Simultaneous Hypothesis Test (Test f)

The comparison between the calculated f value and f table is used to assess the f statistical test. This particular test aims to evaluate the accuracy of the research regression model and the impact of independent variables on the dependent variable at the same time. Rejection of H_0 and acceptance of H_1 occurs when f count exceeds f table, suggesting a combined influence of ESG and human capital variables on company performance. Conversely, acceptance of H_0 and rejection of H_1 happens when f count is less than f table, indicating no significant relationship between independent variables and the dependent variable. The results of the f test statistical test can be found in the table below.

Table 9. F Test Results

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.232	2	.116	101.676	<.001 ^b
	Residual	.034	30	.001		
	Total	.267	32			
a. Dependent Variable: ROA						
b. Predictors: (Constant), HUMAN_CAPITAL, ESG						

Source: IBM SPSS 27 Output

4.2. Discussion

4.2.1. The Effect of ESG on Company Performance

The findings revealed that ESG practices have a favourable impact on the performance of companies. This is evident from the statistical significance level of 0.040, which is below the conventional threshold of 0.05, leading to the acceptance of hypothesis H1. These outcomes align with previous studies conducted by Littahayu and Sulistiyoningsih (2023), which states that ESG has a significant positive effect on firm performance. The positive impact of ESG on company performance can be explained through several mechanisms. First, from the environmental aspect, such as company policies in reducing carbon emissions, increasing energy efficiency, and managing waste properly can reduce operational costs and increase production efficiency. Good environmental management can also prevent companies from regulatory risks or fines due to violations of environmental regulations, thereby reducing unnecessary costs and increasing profitability. Second, from the social aspect, companies that implement employee welfare policies, have good relationships with clients, and pay attention to workers' rights tend to produce a more productive and loyal workforce. This factor will have a direct impact on improving company performance, as a satisfied and motivated workforce is more likely to produce innovations and improve work efficiency. In addition, a good relationship with the surrounding community can also improve the company's reputation, which in turn attracts more investors and customers. Third, from the aspect of corporate governance, transparency and accountability in decision-making, as well as compliance with regulations, can increase investor and other stakeholder confidence. Companies that have good governance are more trusted by investors and have easier access to funding.

Based on the results of this study, in essence, ESG disclosure aims to make the company have a positive value, where the positive thing will attract investors to support the company's operations. Thus, stakeholders can help the company in supporting funds so that it can increase working capital and operations which have an impact on increasing profits (Littahayu & Sulistiyoningsih, 2023). ESG also supports the importance of information transparency related to sustainability reporting. Revealing information is crucial in building stakeholder confidence as well as aiding in the integration of ESG data into investment analysis models, offering a more detailed understanding of a company's sustainability performance (Sekar Sari & Widiatmoko, 2023). The findings are in line with some previous research (Inawati & Rahmawati, 2023; Antonius & Ida, 2023; Merici et al., 2023; Nugroho & Hersugondo, 2022; Inggri et al., 2017; Liu, 2022; Agustin et al., 2023; Hamdi et al., 2022; Sekar Sari et al., 2023; Mahmut Aydogmus, Guzhan Gulay, 2022; Mulzaki & Yulianti, 2024) which states that ESG has a significant positive effect on company performance.

4.2.2. The Effect of Human Capital on Company Performance

In the table provided, the variable representing human capital (X2) displays a t count of 13.480, exceeding the t table value of 2.042. This indicates that the null hypothesis (H₀) is rejected, and the alternative hypothesis (H₁) is accepted. The significance level of 0.000, lower than 0.05, suggests that human capital positively and significantly impacts company performance. These findings align with previous research by Azis et al. (2022) with the results showing that human capital affects company performance.

Human capital acts as a strategic asset that is the main driver in the creation of corporate value. The company's competitive advantage is not only determined by physical and financial assets, but also by the quality of human resources who manage and optimise these assets. Good human capital management will contribute to improving efficiency, innovation, and adaptation to market changes, which ultimately have an impact on the profitability and financial performance of the company. Highly skilled and continuously trained employees are more productive and able to create innovations that improve the efficiency of business processes. Companies with a competent workforce can more quickly adjust to changes in technology and industry trends, thus remaining competitive in a dynamic market. In addition, quality human capital allows companies to manage resources more optimally. Highly competent employees can reduce work inefficiencies, minimise errors in operational processes, and increase quality output. This ultimately contributes to increased cost efficiency and profitability. Furthermore, companies that invest in human capital development tend to be more attractive to investors. Investors see companies that have a quality workforce as having a good sustainability strategy, making them more stable in the long run. Transparency in HR management and talent development also enhances the company's reputation, which contributes to increasing investor confidence and firm value.

Moreover, the impact of employees' skills and knowledge on the success of a business can also be understood using the Resource-Based View (RBV) theory. This theory suggests that resources that are rare, hard to copy, and valuable can give a company a competitive edge. Human capital fulfils these characteristics because the skills, experience, and innovation possessed by the workforce cannot be easily replicated by competitors. Thus, companies that are able to manage and develop human capital well will have higher competitiveness than companies that only rely on physical assets or technology. The results of this study reinforce the view that investment in human capital management is not just an operational cost, but a long-term investment strategy that has a direct impact on improving the company's financial performance. With the development of a knowledge-based economy, companies need to adopt more innovative HRM strategies to improve their business effectiveness and efficiency. The findings are in line with previous research (Kustinah, 2022; Wardifa & Yanthi, 2022; Hatumena & Rachmawati, 2024; Alimy & Herawaty, 2020; Estiningtyas et al., 2022,; Agustia, 2021; Khodijah & Kusuma, 2022, Mochammad Ridwan; Ratnamiasih, 2022; Hasanah & Sunarti, 2022; Almekhlafi, 2022; Safriani & Utomo, 2020; Jayanti & Romli, 2023; and Rachmawati & Jayanti, 2023) who also discovered that the skills and knowledge of employees can greatly enhance the success of a business.

4.2.3. The Effect of ESG and Human Capital on Company Performance

According to the findings of the regression analysis, the R Square value is recorded as 0.871. This value suggests that 87.1% of the fluctuations in company performance, as determined by Return on Assets (ROA), can be clarified by the variables under consideration, including Environmental, Social, and Governance (ESG) and Human Capital. In contrast, the remaining 12.9% is influenced by factors not considered in this study. The substantial R Square value demonstrates the noteworthy impact that ESG and Human Capital have on

company performance. It highlights the importance of implementing effective ESG practices and efficient human capital management to enhance company performance.

From an ESG perspective, companies that implement sustainability policies well can improve their reputation, reduce operational risks, and attract sustainability-orientated investors. Commitment to environmental, social and governance aspects strengthens relationships with stakeholders and creates a more stable business ecosystem. Increased investor confidence has a direct impact on easy access to funding, which in turn can enlarge working capital and increase company profits. Meanwhile, from a human capital perspective, employee knowledge, skills, experience and competence are intangible assets that contribute to the company's competitive advantage. Highly competent employees supported by good training and management can improve work efficiency and generate innovations that support business growth. The effectiveness of HR management also has an impact on labour loyalty and productivity, which in turn increases the efficiency of asset use and the company's profitability.

The combination of ESG and human capital creates a synergistic effect in improving company performance. Companies that focus on sustainability and human capital tend to be more flexible in facing industry challenges and better able to optimise resources to achieve sustainable growth. With a balanced strategy between social and environmental responsibility and investment in human capital development, companies can minimise business risks, improve operational efficiency, and strengthen competitiveness in the market. These results are in line with research conducted by Antonius and Ida, (2023), which states that ESG and human capital affect firm performance. Thus, this study provides empirical evidence that ESG and human capital are important factors in supporting firm performance, as well as providing direction for management to prioritise investment in both aspects to achieve long-term sustainability.

From a practical standpoint, these findings suggest significant implications for managers and policymakers, particularly in the healthcare industry in Indonesia. To better integrate ESG practices, healthcare companies can adopt sustainable operational policies such as reducing medical waste, implementing energy-efficient technologies, and enhancing corporate governance transparency. Strengthening social responsibility initiatives, such as improving patient care standards and increasing community health programs, can further reinforce ESG implementation. Additionally, regulatory support from policymakers, such as incentives for sustainable healthcare initiatives, can encourage wider ESG adoption. In terms of human capital management, healthcare companies should invest in continuous training and development programs to enhance employee competencies. Providing competitive compensation, fostering a supportive work environment, and ensuring employee well-being can boost motivation and productivity. Moreover, adopting digital health solutions and AI-driven HR analytics can help optimize workforce efficiency. By implementing these strategies, healthcare firms can maximize the benefits of ESG and human capital, ensuring long-term business resilience and growth in a competitive market landscape.

Furthermore, collaboration between healthcare institutions, government agencies, and educational institutions can facilitate the development of specialized training programs tailored to the healthcare sector's needs. Establishing public-private partnerships can help bridge skill gaps and ensure a steady supply of skilled healthcare professionals. Additionally, companies can implement mentorship programs and leadership development initiatives to build a strong pipeline of future industry leaders. Policymakers can also play a crucial role by setting clear ESG guidelines and providing funding support for ESG-compliant healthcare projects. With these concerted efforts, the integration of ESG and human capital can lead to a

more sustainable and efficient healthcare sector that benefits both businesses and society as a whole.

5. Conclusion

After analyzing the data and reviewing the relevant theories, several key findings can be drawn. First, the average ESG score of healthcare companies declined in 2022 compared to 2021, from 33% to 32%. However, in 2023, the score increased to 35%. First, this indicates that healthcare companies experienced fluctuations in their ESG scores due to various factors, such as changes in operational efficiency, the adoption of environmentally friendly technology, and the level of awareness of corporate social responsibility. Second, The average VAHU (Value Added Human Capital) score of healthcare companies listed on the IDX during the 2021-2023 period showed a downward trend year by year. In 2021, the VAHU score reached its highest proportion at 39%, reflecting the company's strong focus on human capital management. However, it declined to 32% in 2022 and further decreased to 29% in 2023. This downward trend may indicate challenges or strategic changes that affect the efficiency and management of human resources. To address this issue, companies need to reevaluate their human capital strategies, such as enhancing employee training, investing in technology, and strengthening human resource management policies to improve VAHU scores in the future. Third, the average performance of healthcare companies during the 2021-2023 period, measured by the return on assets (ROA) indicator, showed a year-over-year decline. In 2021, ROA reached 47%, indicating the highest efficiency in utilizing company assets to generate profit. However, in 2022, ROA declined to 31%, reflecting reduced efficiency in asset utilization. This decline continued in 2023, with ROA dropping to 22%, the lowest figure in the period. This gradual decrease may indicate significant challenges, such as rising operational costs, declining revenue, or suboptimal asset management. Fourth, ESG has a positive and significant effect on company performance. Implementing ESG enhances transparency in sustainability reporting, builds a positive corporate image, and attracts investors. Investor support contributes to increased working capital, operational efficiency, and profitability. Second, human capital also has a significant positive effect on company performance. Effective resource management and employee development through training and skills enhancement improve operational efficiency and create added value, ultimately supporting financial stability. Third, ESG and human capital collectively influence company performance. Corporate success is determined not only by financial aspects but also by the application of sustainability principles and optimal resource management. The synergy between ESG and human capital strengthens efficiency, supports corporate objectives, and improves financial performance, including increased net income as reflected in financial statements.

Based on the research findings, several recommendations can be made. Companies should prioritize sustainability by strengthening ESG implementation and increasing transparency in disclosing ESG-related information to attract investor interest and improve performance. Additionally, investment in training, career development, and fostering an inclusive work environment should be enhanced to boost employee productivity and company competitiveness. Investors are advised to consider ESG and human capital as key factors in assessing non-financial risks that may impact future financial performance, ensuring more informed investment decisions. Future research should consider using samples from non-healthcare sectors listed on the IDX to provide broader insights. Furthermore, incorporating

additional variables beyond ESG and human capital can expand the scope of the study and offer a more comprehensive comparison.

6. References

- Agustia, D. (2021). *Intellectual Capital Terhadap Financial Performance Dan Sustainable Growth*. 2(2), 1–16.
- Agustin, O., Anwar, Y., & Bramana, S. M. (2023). Analisis Rasio Profitabilitas Terhadap Optimalisasi Laba Pada PT Grand Titian Residence. *Jurnal Media Wahana Ekonomika*, 20(1), 202–215. <https://doi.org/10.31851/jmwe.v20i1.9395>
- Ahdian, A. (2022). *Ini Tren Investasi ESG di Indonesia sampai 2021*. Katadata.Co.Id.
- Ahdiyat, A. (2022). *Banyak Perusahaan Kesulitan Terapkan ESG, Ini Kendala Utamanya*. Katadata.Co.Id.
- Alimy, J. I., & Herawaty, V. (2020). Pengaruh Intellectual Capital Terhadap Kinerja Keuangan: Dengan Variabel Moderasi Prospector Strategy Pada Perusahaan Manufaktur Yang Terdaftar Di Idx Periode 2016-2018. *Prosiding Seminar Nasional Pakar*, 1–9. <https://doi.org/10.25105/pakar.voio.6853>
- Almekhlafi, A. A.-G. S. (2022). *Human capital impact on organizational performance of commercial banks operating in Yemen*. [https://doi.org/10.21511/bbs.17\(2\).2022.15](https://doi.org/10.21511/bbs.17(2).2022.15)
- Antonius, F., & Ida, I. (2023). Pengaruh Environmental , Social , Governance (ESG) Dan Intellectual Capital Terhadap Kinerja Perusahaan. *Jurnal Ekobis : Ekonomi Bisnis & Manajemen*, 13(2), 126–138. <https://doi.org/http://orcid.org/0000-0001-5694-0745>
- Azis, S. N., Mide, N. Z., Sari, C. W., & Manabung, Y. I. (2022). *Pengaruh human capital, customer capital, structural capital, dan social capital terhadap kinerja perusahaan*.
- Deviyanti, I., & Syahriar, I. (2022). *Rumah Sakit Ramah Lingkungan untuk Masa Depan Lebih Sehat*. Who.Int.
- Estiningtyas, P., Andi, Y., & Noegroho, K. (2022). *Peranan Employee Stock Ownership Program Memoderasi Hubungan Intellectual Capital Terhadap Kinerja Perusahaan*. 6, 2941–2952.
- Event, A. (2023). Apa itu ESG dan CSR. *Agievent.Com*. <https://agievent.com/news/apa-itu-esg-dan-csr>
- Grace Lordita Hatumena, Titiek Rachmawati, N. R. (2024). Pengaruh Capital Employed, Human Capital, Structural Capital Terhadap Kinerja Keuangan Pada Perusahaan Manufaktur Yang Terdaftar Pada Bursa Efek Indonesia. *Ganec Suara*, 18(1), 147. <https://doi.org/10.35327/gara.v18i1.744>
- Hamdi, K., Guenich, H., & Saada, M. Ben. (2022). Does corporate financial performance promote ESG: Evidence from US Firms. *Cogent Business & Management*, 9(1). <https://doi.org/10.1080/23311975.2022.2154053>
- Hasanah, & Sunarti. (2022). *Human Capital as A Source Of Strategy For Achieving Organizational Performance*. 1854–1863.
- Hidayah, N. (2023). *Mengenal Human Capital dan Contohnya, Aspek Penting untuk Perusahaan*. Mekari.Com.
- IEC. (2023). *Mengenal ESG (Environmental, Social, and Governance)*. Environment-Indonesia.Com.
- Inawati, W. A., & Rahmawati. (2023). Dampak Environmental, Social, Dan Governance (ESG) Terhadap Kinerja Keuangan. *Jurnal Akademi Akuntansi*, 6(2), 225–241. <https://doi.org/10.22219/jaa.v6i2.26674>
- Inggri, E. C., Aren, Riyan, Riswaningtia, Y., & Riyadi, M. (2017). Etika Profesi Akuntan Dan Permasalahan Audit Studi Kasus Rekayasa Laporan Keuangan Pt Dcl. *Etika Profesi Akuntan Dan Permasalahan Audit Studi Kasus Rekayasa Laporan Keuangan Pt Dcl*,

ISBN : 978, 179–188.

- Ismiyati. (2020). Dampak Human Capital pada Kinerja Organisasi. *Administrasi Dan Kesekretarian*, 5(1), 56–73.
- Jayanti, D., & Romli, R. (2023). The Influence of Intellectual Capital on the Performance of UMKM Tempe Craftsmen in Sukabumi City. *Journal of Economics, Finance and Accounting Studies*, 5(1), 16–25. <https://doi.org/10.32996/jefas.2023.5.1.2>
- Khodijah, A., & Kusuma, I. (2022). *Pengaruh Intellectual Capital Terhadap Kinerja Keuangan Dengan Competitive Advantage Sebagai Variabel Moderating*. 1(April), 168–182.
- Kustinah, S. (2022). *Influence of intellectual capital and managerial ownership on sustainability finance the influence of intellectual capital and managerial ownership on sustainability finance*. 4(7), 2838–2848.
- Laoli, G. (2023). Penerapan Pendampingan Dalam Meningkatkan Kompetensi Supervisi Akademik Kepala SMA Binaan di Wilayah Kabupaten Nias Barat. *Simpati*, 1(3), 113–124.
- Littahayu, N. C., & Sulistiyoningsih. (2023). Pengaruh Environmental, Social, dan Governance (ESG) terhadap Kinerja Perusahaan di Indonesia. *Prosiding ASIC 2022*, 2(1), 35–43.
- Liu, D. (2022). *The Impact of ESG on Financial Performance of Listed Companies - An Analysis Based on Corporate Reputation Perspective*. 20, 1258–1273.
- Mahmut Aydogmus, Guzman Gulay, K. E. (2022). *Impact of ESG performance on firm value and profitability*. May. <https://doi.org/10.1016/j.bir.2022.11.006>
- Mayasyifa, R. (2020). *Pengaruh Current Ratio dan Earning Per Share Terhadap Harga Saham Perusahaan Sub Sektor Farmasi yang Terdaftar di PT Bursa Efek Indonesia Tahun 2020-2022*. 19(2019), 2018–2020.
- Mekari Talenta. (2023). *Mengetahui Cara dan Contoh Pengukuran Kinerja Perusahaan*. Talenta.Co.
- Merici, A., Aboladaka, J., & Neonufa, G. F. (2023). Environmental, Social dan Governance (ESG) dan Kinerja Keuangan Perusahaan Publik di Indonesia. *Owner*, 7(2), 1186–1195. <https://doi.org/10.33395/owner.v7i2.1371>
- Mochammad Ridwan, Ina Ratnamiasih, B. S. (2022). *Sustainability fot Startup Business : The Role of Human Capital*. 21(2), 70–76.
- Mudzakir, F. U., & Pangestuti, I. R. D. (2023). Pengaruh Environmental, Social and Governance Disclosure Terhadap Nilai Perusahaan dengan ROA dan DER sebagai Variabel Kontrol. *Diponegoro Journal of Management*, 12(2), 1–13.
- Mulzaki, H., & Yulianti, E. (2024). Pengaruh Environmental Social Governance (Esg) Terhadap Kinerja Keuangan (Roa) Dengan Gender Diversity Sebagai Variabel Moderating Pada Perusahaan Yang Terdaftar Di Indeks Esg Leaders Periode 2020-2022. *Jurnal Kajian Pendidikan Ekonomi Dan Ilmu Ekonomi*, 8(2), 234–246.
- Nugroho, N. A., & Hersugondo, H. (2022). *Analisis Pengaruh Environmental , Social , Governance (ESG) Disclosure terhadap Kinerja Keuangan Perusahaan*. 15(2), 233–243.
- Okalesa, Raha, E., & Irman, M. (2024). *Pengaruh Pengungkapan Lingkungan, Sosial dan Tata Kelola (ESG) Terhadap Kinerja PERusahaan dan Struktur Modal PERusahaan pada Sub-sektor Bank yang Terdaftar di Bursa Efek Indonesia Periode 2017-2021*. 4(1), 30–39.
- Oktaviyana, D., Titisari, K. H., & Kurniati, S. (2023). Pengaruh Leverage, Likuiditas, Struktur Modal Dan Ukuran Perusahaan Terhadap Kinerja Keuangan. *Journal of Economic, Bussines and Accounting (COSTING)*, 6(2), 1563–1573. <https://doi.org/10.31539/costing.v6i2.5444>
- Panjaitan, R. K., Salim, U. H., & Firmansyah. (2023). Pengaruh Intelektual Kapital Terhadap Kinerja Keuangan Perusahaan. *Detikproperti*, 1(2), 119–121.
- Rachmawati, S., & Jayanti, D. (2023). Pengaruh Human Capital, Green Banking Disclosure

- dan Likuiditas terhadap Profitabilitas. *Portofolio: Jurnal Ekonomi, Bisnis, Manajemen, Dan Akuntansi*, 20(1), 1–15. <https://doi.org/10.26874/portofolio.v20i1.262>
- Safriani, M. N., & Utomo, D. C. (2020). *Pengaruh Environmental, Social, Governance (ESG) Disclosure Terhadap Kinerja Perusahaan*. 9, 1–11.
- Salim, S. (2023). Promoting Firm Performance via Board of Directors Effectiveness: A Study of Financial Services Companies in New Orleans. *Journal Of Management, Accounting, General Finance And International Economic Issues*, 3(1), 16–31. <https://doi.org/10.55047/marginal.v3i1.848>
- Sekar Sari, P., & Widiatmoko, J. (2023). Pengaruh Environmental, Social, and Governance (ESG) Disclosure terhadap Kinerja Keuangan dengan Gender Diversity sebagai Variabel Moderasi. *Jurnal Ilmiah Akuntansi Dan Keuangan*, 5(9), 2023.
- Sutisnawinata, K. (2024). *Return on Asset (ROA): Arti, Cara Menghitung, Fungsinya*. Asdf.Id.
- Syahputra, R., & Arfah, M. (2022). *Pengukuran Kinerja Perusahaan dengan menggunakan Metode Balance Scorecard Dan Importance Performance (Analisis di UD . Mini Top Medan Johor)*. 3814, 95–98.
- Tjahjanto, A. (2024). *Peran Human Capital dalam Mendukung ESG melalui Implementasi ISO di Sustainable Finance and Development*. Qubisa.Com.
- Tonce, D. D. (2024). *Deretan Masalah Indofarma (INAF) dan Anak Usaha Selain Terlilit Pinjol*. Bisnis.Com.
- Wardifa, I. K. S., & Yanthi, M. D. (2022). Kontribusi Intellectual Capital Terhadap Kinerja Keuangan, Nilai Perusahaan dan Harga Saham. *Jurnal Akuntansi Unesa*, 11(1), 11–24.
- Widodo, S. (2022). *Semua Alami Laba Turun, Simak Data Lengkap Kinerja 8 Emiten Kesehatan pada QI/2022*. Dataindonesia.Id.