Intellectual Capital Disclosure and *Green Accounting* on Stock Prices with *Return on Assets* (ROA) as a Moderating Variable (Study of Companies Listed on *the Jakarta Islamic Index* for the Period 2018-2023)

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ABSTRAK

Jakarta Islamic Index (JII) as the first sharia-based stock index and an indicator to show the price movement of a group of selected sharia stocks. Stock price evaluation is something that investors need to pay attention to because high stock prices reflect increased market demand for company shares, and vice versa. This study aims to identify the effect of *intellectual capital* and *green accounting* on stock prices moderated by ROA in companies listed on JII 30. The method used is quantitative. The study population includes all companies listed on JII 30, with sampling using *purposive sampling techniques* . The research period 2018-2023 uses *annual report data* from selected companies then processed with *E-views 12 software* . The results of the study show that simultaneously VACA, VAHU, STVA, *green accounting* , and ROA have a positive and significant effect on stock prices. While partially only VACA, VAHU, STVA, and ROA have a significant effect on stock prices. In addition, ROA only moderates the effect of VAHU on stock prices, but does not moderate the effect of VACA, STVA, and *green accounting* on stock prices.
Keywords: *Intellectual Capital* , *Green Accounting* , Stock Prices, *Return on Assets*

ABSTRACT

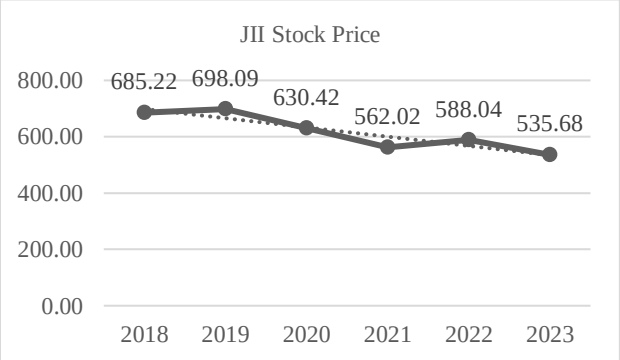
The Jakarta Islamic Index (JII) is the first sharia-based stock index and is an indicator to show price movements of a group of selected sharia stocks. Evaluation of share prices is something that investors need to pay attention to because high share prices reflect an increase in market demand for company shares, and vice versa. This research aims to identify the influence of intellectual capital and green accounting on share prices which are moderated by ROA in companies listed on JII 30. The method used is quantitative. The research population includes all companies registered on JII 30, with samples taken using purposive sampling techniques. The 2018-2023 research period used annual report data from selected companies and then processed it with E-views 12 software. The results of the research show that simultaneously VACA, VAHU, STVA, green accounting and ROA have a positive and significant effect on stock prices. Meanwhile, partially only VACA, VAHU, STVA and ROA have a significant effect on share prices. In addition, ROA only moderates the effect of VAHU on stock prices, but does not moderate the effect of VACA, STVA, and green accounting on stock prices.
Keywords: *Intellectual Capital, Green Accounting, Stock Price, Return on Assets*

Introduction

One of the efforts to encourage economic growth is to develop the investment sector in real activities, financial assets or securities in the capital market (Rera & Suminar, 2022) . Along with the development of Islamic banking and Islamic insurance in Indonesia, the Islamic capital market also participates in economic growth through its main activity, namely Islamic investment, which is based on the principles of morality and justice as the basis of values (Hartati., 2021) . This is realized through the inauguration of *the Jakarta Islamic Index* (JII) as the first sharia-based stock index on the Indonesia Stock Exchange (IDX) and is an indicator to show the price movement of a group of selected Islamic stocks based on certain criteria by the Financial Services Authority (OJK).

Stock price evaluation is the most important thing and needs to be considered by investors before investing. High stock prices reflect increased market demand for the company's shares, and vice versa (Rofiah, 2020) . Therefore, companies will try to increase their stock prices at a certain level in the hope that investors will be interested in investing. The development of sharia stock prices on JII can be seen in the following graph:

Graph 1.
JII Stock Price 2018-2023



Source: *Yahoo Finance website* , www.finance.com (data processed 2023)

The movement of JII stock prices as seen through graph 1 has experienced a downward *trend* from 2018-2023. This is certainly inseparable from the market situation that continues to change over time. Not a few investors are worried when stock prices experience a drastic decline. One of the phenomena of declining stock prices experienced by JII constituents in 2022, namely PT Unilever Indonesia (UNVR), which weakened by 14.6% *year-to-date* (ytd) due to increasingly tight market competition and the pandemic in the previous year. The decline in Unilever's stock price has even occurred since 2018 and caused its performance to drop by 64% (quoted from www.cnbcindonesia.com , 2022).

The decline in stock prices is considered worrying because it can affect the acquisition of profits in the form of dividends and *capital gains* that investors will receive from purchasing a number of shares. In addition, the decline in stock prices indicates a decrease in demand for the company's shares and a decrease in cash flow sources to carry out operational activities. The value of the company can also be represented by the high or low price of the shares. A high stock offering price indicates a high company value, while a low stock offering price indicates a low company value. Stock prices will fluctuate daily, monthly, and annually, adjusting the supply and demand values (Adikerta & Abundanti., 2020) . Fluctuating stock prices are influenced by several conditions that occur internally in the company, such as company profits, asset growth, liquidity, sales, and total assets (Rera & Suminar, 2022) . Total assets are defined as all assets or assets owned by a company or individual to be managed optimally in order to gain profits in the future (Kusumastuti & Sugiama, 2019) .

One type of asset that we know is intangible assets, which are assets owned by a company but cannot be seen or touched, but only rights that have value and benefits for the company. *Intellectual capital* is a company's resources in the form of intangible assets in the form of knowledge or information to improve company performance and encourage competitiveness (Wiryawati et al., 2023). The implementation of knowledge-based business can help companies manage their resources effectively and efficiently, and create added value to the

products and services they offer. That way, the company has a competitive advantage that cannot be imitated by competitors in achieving business success in the future. With this shift in business focus, *intellectual capital* as company knowledge becomes increasingly important to utilize (Farhanah & Mutasowifin, 2022) .

Companies that can utilize *intellectual capital* by disclosing it in annual reports are considered capable of outperforming their competitors in the financial performance barometer. According to (Ayun et al., 2022) *Intellectual capital* can be seen through *value added capital employed* (VACA), *value added human capital* (VAHU), and *structural capital value added* (STVA). Investors are more interested in companies that fully disclose *intellectual capital* , because it is a signal to evaluate the company's ability to generate profits, so it is used as a benchmark in investing their capital and will have an impact on the demand for the company's shares (Melvia et al., 2023) .

In addition to increasing competitiveness through *intellectual capital,* companies must also be able to compete through *green accounting disclosure* , namely an accounting system that considers environmental costs (Pratiwi & Rahayu, 2018) because environmental issues are important to pay attention to. Companies need to commit through the concept of *green accounting* which specifically takes into account all company activities that have an impact on the environment. Through the implementation of *green accounting,* companies will be considered responsible for the environment and the surrounding community. That way, companies can increase *stakeholder trust* which has a positive impact on profit growth and investment interest, so that demand for company shares becomes high and increases its share price (Elisabeth & Maria, 2022) .

Then, this study will test the interaction of profitability proxied by *return on assets* (ROA) between VACA, VAHU, STVA, and *green accounting* with stock prices. The reason for choosing ROA as a moderating variable shows the company's ability to generate profits from its operational activities through asset ownership (Tahir et al., 2021) . The importance of profitability reflected in ROA makes financial reports fundamental information (Setiawaty et al., 2022) . Investors are generally interested in investing in companies that have high profits, because they have better job prospects so that demand for their shares increases.

The research gap found related to the *intellectual capital component* in the study (Wardifa & Yanthi, 2022) shows that VACA, VAHU, and STVA have a positive and significant effect on stock prices of technology, *healthcare* and telecommunications companies listed on the IDX. This means that through the development of *intellectual capital,* it can bring companies to efficient management of their resources so that it has a positive effect on their financial performance. In contrast to research (Melvia et al., 2023) on mining sector companies in the Indonesian Sharia Stock Index, which shows that VAHU and STVA have a significant effect on sharia stock prices, meaning that human resources with good information, skills, and structure bring companies to achieve competitive advantage and increase financial performance so that their shares are in great demand by investors. Furthermore, (Guntoro & Arrozi, 2020) in their research on the creative industry listed on the IDX showed that VACA and VAHU does not have a significant influence on stock prices, while STVA has a positive and significant influence on stock prices.

The research gap for the *green accounting variable* in the study (Kustina & Asuntya, 2021) shows that *green accounting* disclosure has a positive effect on increasing the stock price of *food and beverage companies* on the IDX , meaning that the company is responsible for producing environmentally friendly products, with the advantage of improving the company's image among the public so that it will encourage public interest to buy and increase the number of sales. This affects the company's ability to generate profits. A positive image will attract investors to invest. An indicator of an increase in the number of investors is an increase in the stock price of a company due to increased demand for shares. Research (Liu, 2023) proves that *green accounting* does not affect the stock price of mining sector companies on the IDX.

The *research gap* that shows the role of

ROA in moderating the independent variable on the dependent variable is research (Ayun et al., 2022) on banking companies listed on the IDX showing that only VACA and VAHU can be moderated by ROA, meaning that with adequate technology and capital assets and good employee skills in carrying out company activities will increase the value of the company. Optimizing the company in managing its resources encourages investors to invest their capital. Research (Kustina & Asuntya, 2021) shows that ROA moderates the effect of *green accounting on the stock price of food and beverage* companies on the IDX, meaning that the high profitability achieved through *green accounting disclosure* encourages investors to invest and allows companies to increase their stock prices.

This research is important to do because stock prices show an indicator of management's success in managing the company. High stock prices will increase the company's value and reflect an increase in shareholder wealth as investors (Zurriah, 2021) . This study aims to find out what the effect of *intellectual capital* and *green accounting disclosures* on stock prices is by including *return on assets* as a moderating variable. It is hoped that this study can provide information and knowledge for readers who want to study the factors that affect a company's stock price, especially related to *intellectual capital* and *green accounting* moderated by ROA.

Theoretical Review

1. *Signaling theory*

Signaling theory was first presented by Spence (1973) in his research entitled *"Job Market Signaling* (Setiawaty et al., 2022) . Spence stated that the signal is used to provide a signal. The signal sender (information holder) tries to provide informative data to the recipient. Then the recipient will adjust their behavior according to how they interpret the signal. Signal theory explains how a company should convey messages to *stakeholders* . This signal comes in the form of information about management efforts to realize the wishes *of stakeholders* . The signal is in the form of progress or other data that a company is ahead of its competitors. In this study, the signals given by the sender are described through the disclosure of *intellectual capital* as one of the company's strategies in increasing its competitiveness, the disclosure of *green accounting* as a form of the company's commitment to participating in protecting the environment in its business activities, and ROA as information to determine the company's ability to gain profit from its operational activities through the assets it owns. In signal theory, the information conveyed by the company is very important for investment decision making because it is the main element for investors and entrepreneurs in viewing past, present, and future records (Guntoro & Arrozi, 2020) .

2. *Resource Based Theory*

Resource Based Theory (RBT) explains that companies can achieve competitive advantage by relying on resources to maintain their business continuity (Guntoro & Arrozi, 2020) . The main approach of resource-based theory is to understand the relationship between assets, capabilities, and productivity as instruments to maintain competitive advantage over time. This theory was first proposed by Wernerfelt (1984) in *"A Resource-based view of the firm"* and Barney (1991) in *"Firm Resource and Sustained Competitive Advantage"* that company assets help increase the effectiveness and efficiency of company operations (quoted from https://binus.ac.id , 2021). Resource-based theory explains companies that have the ability to optimally manage *intellectual capital owned, namely human capital , capital employed* , and *structural capital* to generate added value for the company. The assumption is how the company creates added value through resource management according to its capabilities. The creation of *added value* affects the value of the company which will then have an impact on its stock price (Guntoro & Arrozi, 2020) .

3. Intellectual Capital

Intellectual capital refers to intangible assets *such* as information, experience, and technology that are utilized. *Intellectual capital* contains data and information that can be applied in the world of work to create added value. *Intellectual capital* as knowledge to form innovation and experience that is utilized to create wealth (Guntoro & Arrozi, 2020) . According to (Ayun et al., 2022) *Intellectual capital* is seen from the company's resources, namely:

a) *Value added capital employed* (VACA), which is the company's capacity to manage resources in the form of capital. Proper management and utilization of capital can affect the company's financial performance, because the better the capital management, the lower the operational costs and increase the company's added value (Melvia et al., 2023) .
b) *Value added human capital* (VAHU), is defined as a set of employee values, behaviors, and skills to provide added value to the company in order to compete with other companies. Human resources increase if the company manages its employees' knowledge well.
c) *Structural capital value added* (STVA) is the company's operational capability through a structure that supports employee efforts to achieve optimal business implementation, such as company systems, production processes, and organizational culture, so that the company will operate well because it also has good structural capital.

4. *Green Accounting*

Green accounting is a type of environmental accounting that explains the actions taken by companies in combining environmental benefits and costs as important information for decision making (Nabila & Arinta, 2021) . Companies can use *green accounting* to attract investment, control costs, use environmentally friendly technologies, and encourage environmentally friendly product processes. *Green accounting* is very useful for better environmental cost management, business strategy formulation, more accurate production cost calculations, and finding new opportunities to reduce environmental costs. In the study (Pratiwi & Rahayu, 2018) explained that according to Hansen and Mowen (2016) environmental costs are grouped into:

a) *Environmental* prevention costs, namely costs used to prevent the occurrence of waste during the production process.
b) *Environmental detection costs* (biayadeteksi Lingkungan), costs arising from activities aimed at ensuring that products and other processes meet ecological standards.
c) *Environmental internal failure costs* (environmental internal failure costs), the costs of reducing the amount of waste and garbage so that it does not exceed the provisions, thus preventing waste leaks and work accidents.
d) *Environmental external failure costs* (environmental external failure costs), costs that arise after waste is discharged into the environment.

5. Stock price

Stock price is the closing price during the observation period for each type of stock studied, so that investors can use it to get opportunities and company assets in various circumstances to obtain their rights (Guntoro & Arrozi, 2020) . High stock prices mean that the demand for company shares is increasing, this reflects the company's good performance so that it increases the trust of *stakeholders* , as a result each company will try to increase its stock price at a certain level (Liu, 2023) .

6. *Return on Assets* (ROA)

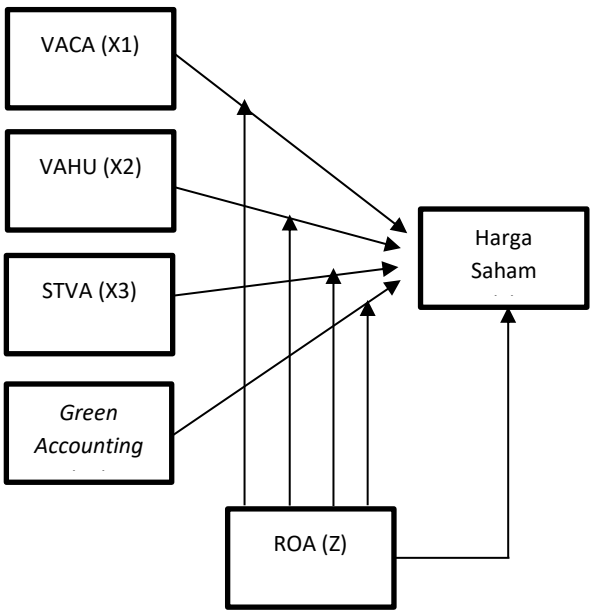
ROA shows the company's efficiency in

using all of its assets. The higher the ROA value, the higher the benefits that can be achieved with the same asset size (Zurriah, 2021) . In addition, a high ROA level also illustrates the amount of profit obtained by the company. If the company is in a profitable condition due to increasing profit growth, investors will not withdraw their capital, they consider the company to be able to achieve greater profits, so ROA is used to assess the company's operational effectiveness (Tahir et al., 2021) .

7. Research Framework

The results of the conceptual framework in the research that was built related to VACA, VAHU, STVA, and green accounting on stock prices with ROA as a moderating variable, are as follows:

Figure 1.
Research Framework



Hypothesis:
H 1 VACA has an effect on stock prices
H 2 VAHU influences stock prices
H 3 STVA has an effect on stock prices
H 4 *Green accounting* affects stock prices
H 5 ROA has an effect on stock prices
H 6 ROA moderates the effect of VACA on stock prices
H 7 ROA moderates the effect of VAHU on stock prices
H 8 ROA moderates the effect of STVA on stock prices
H 9 ROA moderates the effect of *green accounting* on stock prices

Method

The method used in this study is a quantitative method. The research population is all companies listed on JII 30, with sampling using *purposive sampling technique* and 12 companies were selected. The research period is from 2018-2023 using *annual report data* on www.idx.co.id which is then processed with the help of E-views 12 *software* .

Results and Discussion

1. Research result

Table 1.
Descriptive Statistical Test Results

	X1	X2	X3	X4	Y	Z
Mean	0.961806	1.515556	1.722500	0.875000	8.412917	11.88583
Median	1.030000	1.570000	1.740000	1.000000	8.310000	10.60000
Maximum	1.150000	1.940000	1.820000	1.000000	10.72000	46.30000
Minimum	0.000000	0.000000	0.000000	0.000000	5.140000	0.600000
Std. Dev.	0.233927	0.266341	0.208163	0.333040	1.159967	8.904921
Skewness	-2.866132	-3.295340	-8.026684	-2.267787	-0.394286	1.477434
Kurtosis	10.22961	17.47471	66.96722	6.142857	3.207104	5.668029
Jarque-Bera	255.3782	758.8625	13048.55	91.34694	1.994210	47.54886
Probability	0.000000	0.000000	0.000000	0.000000	0.368946	0.000000
Sum	69.25000	109.1200	124.0200	63.00000	605.7300	855.7800
Sum Sq. Dev.	3.885265	5.036578	3.076550	7.875000	95.53209	5630.130
Observations	72	72	72	72	72	72

Source: *E-views* 12 data processing results

Table 1 shows the number of samples used, which is 72 samples. The independent variable VACA (X1) has an average value of 0.961806 with the highest value of 1.150000 and the lowest value of 0.000000. VAHU (X2) has an average value of 1.515556 with the highest value of 1.940000 and the lowest value of 0.000000. STVA (X3) has an average value of 1.722500 with the highest value of 1.820000 and the lowest value of 0.000000. green *accounting* (X4) has an average value of

0.875000 with the highest value of 1.000000 and the lowest value of 0.000000.

Meanwhile, the dependent variable stock price (Y) has an average value of 8.412917 with the highest value of 10.72000 and the lowest value of 5.140000.

In the moderation variable ROA (Z) has an average value of 11.88583 with the highest value of 46.30000 and the lowest value of 0.600000.

Table 2.

Stationarity Test Results

No	Variables	*Probability Unit Root Test*	Information
1	VACA	0.0000	Stationary data at level level
2	VAHU	0.0000	Stationary data at level level
3	STVA	0.0000	Stationary data at level level
4	*Green Accounting*	0.0104	Stationary data at level level
5	Stock price	0.0000	Stationary data at level level
6	ROA	0.0000	Stationary data at level level

Source: *E-views* 12 data processing results

All variables passed the stationarity test at the level.

Table 3.

Regression Model Test Results

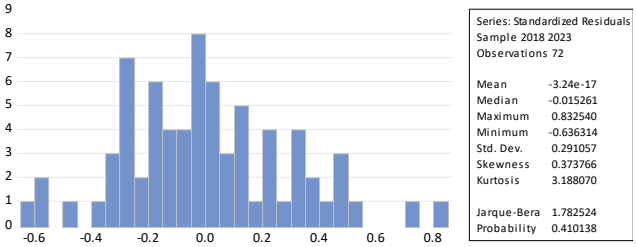
Test	*Probability*	Selected Models
Chow Test	0.0000	*Fixed Effect Model*
Hausman Test	0.0035	*Fixed Effect Model*

Source: *E-views* 12 data processing results

Table 3 shows the results of the selected model, namely *the Fixed Effect Model* (FEM).

Figure 2.

Normality Test Results



Source: *E-views* 12 data processing results

The test results in Figure 2 show that the *probability value* is 0.410138 > 0.05 so that the data in this study is normally distributed.

Table 4.

Autocorrelation Test Results

R-squared	0.937040	Mean dependent var	8.412917
Adjusted R-squared	0.918724	S.D. dependent var	1.159967
S.E. of regression	0.330693	Akaike info criterion	0.827638
Sum squared resid	6.014693	Schwarz criterion	1.365185
Log likelihood	-12.79499	Hannan-Quinn criter.	1.041637
F-statistic	51.16072	Durbin-Watson stat	1.501745
Prob(F-statistic)	0.000000		

Source: *E-views* 12 data processing results

The results of the autocorrelation test in table 4 with the selected model obtained a DW figure of 1.501745 (between -2 and +2), which means there is no autocorrelation.

Table 5.

Multicollinearity Test Results

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	1.720777	125.1713	NA
X1	0.366614	26.10879	1.439057
X2	0.281906	48.53533	1.434459
X3	0.324433	71.02864	1.008409
X4	0.127612	8.122300	1.015288

Source: *E-views 12 data processing results*

The results of the multicollinearity test in table 5 show that there is no multicollinearity problem in the study because the VIF value of each independent variable, namely VACA (X1), VAHU (X2), STVA (X3), and *Green Accounting* (X4) <10.

Table 6.
Heteroscedasticity Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.707106	0.649852	1.088103	0.2804
X1	-0.082714	0.299956	-0.275755	0.7836
X2	-0.145563	0.263030	-0.553408	0.5818
X3	0.380801	0.282172	1.349534	0.1817
X4	-0.273922	0.176969	-1.547855	0.1264

Source: ***E-views 12 data processing results***

The results of the heteroscedasticity test in table 6 using the Glejser test show that the *probability value* of each independent variable is > 0.05, so the data does not contain heteroscedasticity.

Table 7.
Hypothesis Test Results

Dependent Variable: Y
Method: Panel Least Squares
Date: 05/29/24 Time: 17:15
Sample: 2018 2023
Periods included: 6
Cross-sections included: 12
Total panel (balanced) observations: 72

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.088266	2.086153	-0.042311	0.9664
X1	4.547072	1.078305	4.216869	0.0001
X2	0.987363	0.485091	2.035418	0.0466
X3	0.744285	0.248993	2.989184	0.0042
X4	-0.001990	0.225002	-0.008844	0.9930
Z	0.113672	0.019612	5.796080	0.0000

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.937040	Mean dependent var	8.412917
Adjusted R-squared	0.918724	S.D. dependent var	1.159967
S.E. of regression	0.330693	Akaike info criterion	0.827638
Sum squared resid	6.014693	Schwarz criterion	1.365185
Log likelihood	-12.79499	Hannan-Quinn criter.	1.041637
F-statistic	51.16072	Durbin-Watson stat	1.501745
Prob(F-statistic)	0.000000		

Source: *E-views* 12 data processing results

The results of the t-test show that VACA (X1), VAHU (X2), STVA (X3), and ROA (Z) have a significant positive effect on stock prices, while *green accounting* (X4) has a negative and insignificant effect on stock prices.

The results of the f test show a coefficient value of 51.16072 and an F test value of 0.000000 <0.05, so all independent variables simultaneously or together have a positive and significant effect on the dependent variable, namely stock prices.

The results of the determination coefficient test ($R2^{)}$ show an *Adjusted R-squared value* of 0.918724, which means that the dependent variable, namely stock prices, can be explained by independent variables in the form of VACA, VAHU, STVA, and *green accounting* by 91.87% and the remaining 8.13% is explained by other variables outside the study.

Table 8.
MRA Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	7.793893	0.179008	43.53930	0.0000
X1_Z	0.051815	0.041493	1.248764	0.2169
X2_Z	-0.017534	0.007711	-2.274045	0.0268
X3_Z	0.035483	0.024509	1.447761	0.1533
X4_Z	-0.031824	0.017395	-1.829489	0.0727

Source: *E-views* 12 data processing results

The results of the MRA test show that ROA is only able to moderate the influence of VAHU (X2) on stock prices.

2. Discussion

a) VACA affects stock prices

VACA affects stock prices, if based on the approach of the signal theory, *intellectual capital disclosure* can be a good signal to the market about the company's financial performance which has an impact on added value so that it becomes a standard in investing and has an impact on high stock prices (Aprilia & Isbanah, 2019) . In addition, in the RBT theory, companies that can manage *intellectual capital* in the form of physical capital can generate added value and affect their stock prices (Guntoro & Arrozi, 2020) .

In this study, VACA describes the amount of added value generated from the physical capital used by the company. The market will give a higher value to companies with maximum use of capital, indicating that the company has invested these resources in running its operations (Setiawaty & Kusumawati, 2022) . *Stakeholders*, especially shareholders, expect the company to always strive to generate profits

as a source of their wealth and realize the company's ideals, thus affecting the bargaining power of stock prices and influencing investors to invest (Guntoro & Arrozi, 2020) .

The results of this study are in accordance with the RBT theory and signal theory, and in line with research by (Ayun et al., 2022) , (Wardifa & Yanthi, 2022) , and (Perdana, 2019) which prove that VACA has a positive and significant effect on stock prices where the creation of added value through physical capital affects the company's stock price. However, it is different from research by (Guntoro & Arrozi, 2020) and (Melvia et al., 2023) which prove that VACA does not have a significant effect on stock prices.

b) VAHU influences stock prices

The findings of this study indicate that the higher the added value of human resources (HR) generated through increased knowledge, mastery of information technology, skills, competence and creativity of employees in managing the business will increase the stock price. Companies that carry out their activities supported by HR so that they have a competitive advantage and produce added value will affect their stock price (Setiawaty et al., 2022) . In line with the RBT theory, companies that utilize HR can create added value that gives them an advantage and enables them to achieve good long-term performance. In addition, based on the signal theory, *intellectual capital disclosure* allows *stakeholders* to assess the company's ability to create added value through HR so that it has an impact on stock prices (Ayun et al., 2022) .

The results obtained are in accordance with the RBT theory and signal theory, and in line with research (Setiawaty et al., 2022) , (Aska & Kurniasih, 2022) , (Wato, 2019) proving that VAHU has a positive and significant effect on stock prices, where optimal HR quality will improve company performance and affect stock prices. Different results are shown (Bariyyah et al., 2023) namely VAHU does not have a significant effect on stock prices.

c) STVA affects stock prices

The existence of *structural capital* is very important in running business operations because it is related to the implementation of strategies, systems, and procedures used. With the development of digital technology, it helps companies to model their businesses and supports the formation of systems to facilitate data processing from manual to automatic. (Guntoro & Arrozi, 2020) . Companies with high STVA have the ability to perfect routine work that supports employee efforts to achieve optimal performance (Aska & Kurniasih, 2022) . This is in accordance with the RBT theory that the ability to optimally manage *intellectual capital in this case structural capital can create added value to increase the company's stock price* (Guntoro & Arrozi, 2020) . In addition, based on the signal theory, complete and relevant information regarding structural capital is needed by investors as an analytical tool before making investment decisions.

The results of the study are in accordance with the RBT theory and signal theory, as well as research conducted by (Ayun et al., 2022) , (Guntoro & Arrozi, 2020) , (Aska & Kurniasih, 2022) proving that STVA has a positive and significant effect on stock prices, all forms of system development can support employee routines in creating added value and explain its effect on increasing stock prices. In contrast to research by (Setiawaty et al., 2022) and (Bariyyah et al., 2023) which shows that STVA does not have a significant effect on stock prices.

d) *Green Accounting* has no effect on Stock Prices

This indicates that the extent to which a

company discloses *green accounting* does not necessarily affect the company's value as reflected in its stock price (Hakim & Aris, 2023) . Disclosure and charging of the company's environmental costs do not provide confidence to consumers and investors so that they do not affect the expected level of profit. In addition, disclosure of environmental costs has been included in the company's social responsibility activity report so that its presence or absence in the income statement does not affect the company's value (Sapulette & Limba, 2021) . In the capital market, *green accounting* practices have also not been fully accepted, resulting in a lack of market support for corporate sustainability initiatives (Munir et al., 2024) .

The results of the study do not conform to the RBT theory and signal theory that the disclosure of a company's *green accounting will gain advantages and a positive image, thus affecting its stock price. In line with* (Liu, 2023) and (Salsabila & Widiatmoko, 2022) it is proven that *green accounting* has no effect on stock prices. This is different from the research of (Kustina & Asuntya, 2021) , (Elisabeth & Maria, 2022) , and (Qodratilah, 2021) that *green accounting* has a significant effect on stock prices.

e) ROA affects stock prices

ROA describes the company's ability to return invested capital through the use of owned assets. The higher the ROA value, the more effective it is in providing returns to investors because the more profit is generated (Dewi & Suwarno, 2022) . Since capital assets are the largest investment for many businesses, this rate of return is also considered a return on investment, the money or capital invested will be considered a capital asset and the rate of return is measured through the profit or gain obtained. This makes ROA affect the company's stock price (Khasanah et al., 2022) .

This study is in accordance with the RBT theory and signal theory that with asset ownership that is used effectively will produce added value in the form of increasing the company's ability to return assets through profit generation, thereby generating positive information for *stakeholders* . In line with research (Dewi & Suwarno, 2022) , (Khasanah et al., 2022) , and (Nur'aidawati, 2018) proves that ROA has a positive and significant effect on stock prices. In contrast to research (Al Umar & Nur Savitri, 2020) that ROA does not have a significant effect on stock prices.

f) ROA does not moderate the effect of VACA on Stock Price

Market valuation of a company is not based on physical capital ownership. The more funds allocated to support the company's operations, the less profit will be obtained, so the signals that appear are not always positive. Management must really pay attention to the capital issued as a form of company efficiency in returning profits on the capital used. VACA that does not affect stock prices indicates that every fund invested in physical capital does not produce the information needed by investors. The use of company asset efficiency is unable to generate added value so that it does not indicate the condition of the company or affect stock prices (Kurniasih & Heliantono, 2016) . Another reason is because current technological developments have made companies transition their business models to digital in order to support the effectiveness of company activities which are considered more time and cost efficient (Guntoro & Arrozi, 2020) .

The results of the study are not in accordance with the RBT theory and signal theory that disclosure of physical capital is a signal to show the company's competitive ability in optimizing intangible assets to obtain profits that can attract investors to invest their capital. In line with (Indira et al., 2023) and (Yustyarani & Yuliana, 2020) which prove that ROA does

not moderate the value of the company which is influenced by *intellectual capital* . Different results are shown by (Ayun et al., 2022) and (Setiawaty et al., 2022) that ROA is able to moderate the effect of VACA on stock prices.

g) ROA moderates the effect of VAHU on Stock Price

To create human resources that are able to provide added value, knowledge must be developed through training and education to improve employee expertise and skills. In addition, employee competency standards also need to be improved, both existing and those to be recruited. This will increase the costs incurred by the company because the greater the VAHU, the workforce burden also increases such as increases in employee salaries and benefits. As a result, investors are not so interested in the composition of human resources that can reduce company income when assessing stock prices because they will see the small profit that the company can generate (Loi et al., 2019). The next reason is that the VAHU value is not always presented in the financial statements so investors need to calculate it first.

The results of the study are in accordance with the RBT theory and signal theory that quality human resources are needed to create added value as measured by company performance through disclosure of financial reports as a signal to attract investor interest in investing, supported by research (Ayun et al., 2022) and (Setiawaty et al., 2022) proving that ROA moderates the effect of VAHU on stock prices.

h) ROA does not moderate the effect of STVA on Stock Price

Companies must launch new innovations using technologies such as *mobile banking (m-banking), internet banking, smart cards* , and others to optimize the management of structural capital in their activities. Companies cannot achieve added value if they do not facilitate employees in fulfilling business routines such as company operational systems, organizational culture, and information systems (Shulthoni & Rizkya, 2023) . The development of this technology will later make it easier for employees to carry out their activities, although this does not always have an impact on the high profits that the company will get. External parties often consider the technology used to be limited and inadequate. This means that *structural capital* does not always have an impact on increasing profits so that it does not affect its stock price .

The results of the study are not in line with the RBT theory that as long as the company has adequate resources, then that is the right time to compete as a form of developing competitive advantage. In line with research (Setiawaty et al., 2022) and (Ayun et al., 2022) prove that ROA does not moderate the effect of STVA on stock prices. Different results are shown (Sulistiyowati, 2021) that ROA moderates the effect of STVA on stock prices.

i) ROA does not moderate the effect of *Green Accounting* on Stock Prices

The implementation of *green accounting* by companies has not been fully considered as the main thing by the capital market, because investors consider corporate sustainability efforts as a consequence of activities that affect environmental quality. In addition, Law Number 23 of 1997 contains regulations governing *green accounting,* namely concerning Environmental Management and the obligation of everyone who carries out business activities to maintain, manage, and provide information about the environment that is correct and accurate (Arismaya, 2023) . With the profits or losses obtained, the company must continue to carry out its responsibilities towards the environment.

So that investors do not make investments based on the allocation of funds used for the implementation of *green accounting* . The lack of market support for sustainability initiatives carried out by companies makes *green accounting* moderated by ROA have no effect on the company's stock price.

The results of the study are not in line with the RBT theory, where companies will gain an advantage when they pay attention to the impact of their business on the environment. Meanwhile, in the signal theory, adequate *green accounting disclosure will provide more reliable information to stakeholders* regarding their commitment to environmental conservation. These results are in line with research (Elisabeth & Maria, 2022) which proves that *green accounting* has a negative and insignificant effect on the company's stock price through profitability. This is different from research (Kustina & Asuntya, 2021) that ROA moderates the effect of *green accounting* on stock price growth.

Conclusion

Based on the results of the study, it can be concluded that *Value Added Capital Employed* **(** VACA) has a positive and significant impact on stock prices. Disclosure of a company's physical capital can provide investors with information about financial performance that has an impact on the company's added value. So that it becomes a standard for investors in investing their capital which will then affect stock prices.

Value Added Human Capital (VAHU) positive and significant impact on stock prices. The higher the VAHU generated through increased knowledge, mastery of information technology, skills, employee competence, employee creativity in managing the business will increase stock prices. Companies that carry out their activities supported by human resources so that they have a competitive advantage and generating added value will affect its share price .

Structural Capital Value Added (STVA) has a positive and significant impact on stock prices. In business operations, *structural capital* is very important because it is related to the implementation of company strategies, systems, and procedures. Companies with high STVA have the ability to improve routine work so that they support employees in achieving optimal business performance in order to provide added value to the company, thereby increasing stock prices .

Green accounting has a negative and insignificant impact on stock prices. Disclosure and charging of corporate environmental costs do not provide confidence to consumers and investors, so it does not affect the level of profit that makes investors interested in investing. In addition, disclosure of environmental costs has become part of the company's social responsibility activity report, so its presence or absence in the income statement does not affect stock prices.

Return on Assets (ROA) has a positive and significant impact on stock prices. ROA describes the company's ability to return invested capital through the use of assets. The higher the ROA value, the more effective it is in providing returns to investors because the more profit is generated. Capital assets are the largest investment for many businesses, this rate of return is also considered a return on investment, money or capital invested will be considered a capital asset and the rate of return is measured through the profit or gain obtained. This makes ROA affect the company's stock price.

Return on Assets (ROA) does not moderate the effect of VACA on stock prices. The VACA ratio that does not affect stock prices indicates that physical capital does not produce information that investors pay attention to because every fund invested in physical capital does not always generate profits for the company. The use of asset efficiency by the

company has not been able to create added value because current technological developments have made companies change their business models to digital, so that it does not provide a signal regarding the company's condition and does not affect the increase in stock prices.

Return on Assets (ROA) weakens the influence of VAHU on stock prices. To create human resources that are able to provide added value, knowledge must be developed through training and education to improve employee expertise and skills. This will increase the costs incurred by the company because the greater the VAHU, the workforce burden also increases such as increases in employee salaries and benefits. As a result, investors are not so interested in the composition of human resources that can reduce company income when assessing stock prices because they will see the small profit that the company is able to generate, so ROA weakens the influence of VAHU on stock prices.

Return on Assets (ROA) does not moderate the effect of STVA on stock prices. Optimization of *structural capital* in carrying out activities can be achieved through new innovations that prioritize technology. Companies cannot achieve added value if they do not provide the necessary infrastructure to support employee routines in producing optimal performance. The development of this technology will later make it easier for employees to carry out their activities, although this does not always have an impact on the high profits that the company will get. External parties often consider the technology used to be limited and inadequate. Therefore, *structural capital* does not always have an impact on increasing company profits so that it does not affect stock prices.

Return on Assets (ROA) is unable to moderate the effect of *green accounting* on stock prices. The implementation of *green accounting* has not been fully considered as the main thing by the capital market, because investors consider the company's sustainability efforts as a consequence of activities that affect environmental quality. With the profits or losses obtained , the company must continue to carry out its responsibilities towards the environment. So that investors do not make investments based on the allocation of funds used for the implementation of *green accounting* . The lack of market support for sustainability initiatives carried out by the company makes *green accounting* moderated by ROA have no effect on the company's stock price.

The limitations of the study only cover companies listed on JII 30 so that the findings cannot be generalized to companies outside the index. In addition, this study involves a limited sample and period so that it only obtains limited results. Further researchers are expected to be able to develop and refine future research using other objects and involving other variables that have not been explained in this study by 8.13% .

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