Does Sharia Intellectual Capital Enhance the Share Prices of Mining Sector Companies Listed on the Indonesian Sharia Stock Index?

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A B S T R A C T

This study aims to examine the effect of sharia intellectual capital on the stock prices of mining sector companies listed on the Indonesian Sharia Stock Index (ISSI). Value-added human capital, structural capital value-added, and value-added customer capital are used as indicators to measure Islamic intellectual capital. This study uses a quantitative approach. The type of data used is secondary data in the form of annual reports and audited financial statements of mining companies for the 2016-2020 period. By using a purposive sampling technique, 85 samples were selected from the total financial statements of all mining sector companies. The documentation method is used as the main data collection technique in this study. The data analysis technique used multiple linear regression analysis. The results of multiple linear regression analysis show that value-added human capital and structural capital value added partially have a significant effect on sharia stock prices, while value-added customer capital has no significant effect on sharia stock prices.

A B S T R A K

Penelitian ini bertujuan untuk menguji pengaruh intellectual capital syariah terhadap harga saham perusahaan sektor pertambangan yang terdaftar di Indeks Saham Syariah Indonesia (ISSI). Value added human capital, structural capital value added dan value added costumer capital digunakan sebagai indicator untuk mengukur intellectual capital syariah. Penelitian ini menggunakan pendekatan kuantitatif. Jenis data yang digunakan adalah data sekunder berupa laporan tahunan dan laporan keuangan perusahan pertambangan yang telah diaudit periode tahun 2016-2020. Dengan menggunakan teknik purposive sampling, terpilih 85 sampel dari total seluruh laporan tahunan dan laporan keuangan perusahaan sektor pertambangan. Metode dokumentasi digunakan sebagai teknik pengumpulan data yang utama dalam penelitian ini. Teknik analisis data menggunakan analisis regresi linier berganda. Hasil analisis regresi linier berganda menunjukkan bahwa value added human capital dan structural capital value added secara parsila berpengaruh signifikan terhadap harga saham syariah, sedangkan value added costumer capital tidak berpengaruh signifikan terhadap harga saham syariah.

INTRODUCTION

In the increasingly competitive business world, rapidly evolving information technology and modern business innovations have elevated knowledge assets as a critical component of intangible assets with a strategic role. These developments have influenced shifts in business strategies, where business actors prioritize innovation, organizational and human resource management, and information systems over the ownership of tangible assets.The implementation of knowledge management, characterized by a science-based approach, is believed to foster corporate prosperity. Consequently, the management of intangible assets, particularly knowledge assets, has become a central focus for companies. In a knowledge-based economy, the creation of added value represents a primary objective. This added value can be quantified by establishing appropriate metrics related to intellectual potential, encompassing employees' abilities and competencies, as well as physical capital in the form of financial resources. According to Pulic, et al. (2004), Intellectual Capital is measured indirectly by using the main components of iB-VAIC which are sourced from 3 main components of company resources, namely human capital (iB-VAHU - Value added human capital), physical capital (iB-VACA- value added customer capital), and structural capital (iB-STVA- structural capital value added).

Ali (2018) stated that the concept of measuring Islamic intellectual capital is a relatively modern concept that is currently relevant, continues to develop, and is dynamic due to changes in the business environment. Current business dynamics make knowledge-based assets an important element included in financial statements in addition to physical assets. The importance of disclosing Islamic intellectual capital in financial statements is also related to information asymmetry where the relevance of financial statements which are the main source of information for investors is questioned so that measuring the company's added value through disclosure of Islamic intellectual capital is needed.

Disclosure of Sharia intellectual capital is related to Sharia stock prices, where through the signaling theory approach, disclosure of Sharia intellectual capital can be a signal to investors about the company's financial performance which is estimated to have an impact on the company's added value so that disclosure of sharia intellectual capital can be a benchmark or basis for stakeholders' investment decision making, which can ultimately have an impact on increasing stock prices. The meeting between supply and demand for securities occurs in the capital market, which is a place where business entities or individuals who have excess funds invest in securities. The price per share is related to the level of fluctuation or rise and fall of stock prices. The level of demand and supply of shares in the capital market can determine the price per share. High demand or interest in buying shares can increase stock prices, and conversely, high interest in selling shares can decrease stock prices. The objectives of this study are to determine the effect of Sharia intellectual capital as measured by value-added human capital, value-added structural capital, and value-added customer capital on Sharia stock prices in mining sector companies listed on the Indonesian Sharia Stock Index for the period 2016-2020.

LITERATURE REVIEW

The failure of the capitalist economic system to face the crisis has made the rise and development of the Islamic economic system a hope for the global economic system. The development of the Islamic financial industry is also growing rapidly. Until now, Islamic finance is still led by the Middle East, namely the Gulf region or what is commonly called the GCC (Gulf Cooperation Council) which consists of six countries, namely Bahrain, Kuwait, Omam, Qatar, Saudi Arabia, and the UAE. Meanwhile, research in Indonesia on Islamic Intellectual Capital has previously been carried out a lot, one of which is the research of Prativi, et al. (2021) entitled The Impact of Disclosure of Islamic

Corporate Governance, Islamic Intellectual Capital, Zakat, Financial Performance (SCnP Model) & Islamic Ethical Identity for Sustainable Business. Theoretically, Islamic Corporate Governance, Islamic Intellectual Capital, Zakat, Financial Performance (SCnP), and Islamic Ethical Identity have a role in Sustainable Business. However, the results obtained in this study only Islamic corporate governance and Islamic intellectual capital influence Sustainable Business. Research that focuses on discussions related to sustainable business is still rare. Another study that discusses Islamic intellectual capital is the study of Aisyah, et al. (2021) on the Influence of Islamic intellectual capital, corporate social responsibility disclosure, and corporate governance on the performance of maqashid sharia with reputation as a moderating variable. The results of this study found empirical evidence that Islamic intellectual capital is not one of the factors that can affect the performance of maqashid sharia. This is because the intellectual property of Islamic banking in Indonesia has not been optimally developed and managed to improve the performance of maqashid Islam or to win the competition (competitive advantage). In addition, the majority of companies prioritize improving short-term financial performance rather than investing in intellectual property to improve company performance.

Companies in general are not fully aware that the intellectual capital contained in the company can be a competitive advantage for the company. Optimizing the management of intellectual capital, especially human resources, can increase the company's added value. Intellectual capital in the form of knowledge-intensive services and innovation can increase the company's profitability (Hanif, 2018). There are many measurement methods to measure intellectual capital, one of which is compiled by Ulum (2013) who reconstructed the measurement of intellectual capital with Islamic intellectual capital (IIC), the measurement of IIC is adjusted to the income and also expenses for sharia companies.

According to research by Harianto & Syafruddin (2013), it shows that the higher the value of the company's IC, the higher the company's performance and its impact on stock prices will increase in the future, so logically the IC growth rate will also correlate with future performance. Research predicts a positive influence between intellectual capital and company performance in Sharia companies.

RESEARCH METHODOLOGY

The population in this study is all mining sector companies listed on the Indonesian Sharia Stock Index in 2016-2020. The sample was determined using the purposive sampling method, with the following criteria:

1. Mining sector companies listed on the ISSI publish audited financial statements and annual reports during the observation year, namely from 2016-2020, and contain data related to the variables used in this study.

2. Companies that do not carry out restructuring/acquisitions and stock splits during the study period because it is feared that it could affect stock prices unfairly.

In 2016, the mining industry was one of the largest contributors to Non-Tax State Revenue (PNBP) from natural resources. Although oil and coal prices have fallen in the last five years, the mining sector is still a mainstay of the Indonesian economy. In 2016, this industry was one of the largest contributors to Non-Tax State Revenue (PNBP) from natural resources. The contribution of oil, natural gas, minerals, and coal reached IDR 90 trillion or covered 95% of natural resource revenue. International consulting firm Wood Mackenzie estimates that oil and gas investment in Indonesia will rise in 2018 and 2019 due to the offering of new cooperation schemes. Improvements in several aspects, such as technology, politics, and banking interest rates are needed to encourage growth in the mining sector.

This study aims to determine the effect of Sharia intellectual capital as measured by value-added human capital, value-added structural capital, and value-added customer capital on Sharia stock prices in mining sector companies listed on the Indonesian Sharia Stock Index for the period 2016-2020. The research framework can be seen in the following figure:

Figure 1: Research Model
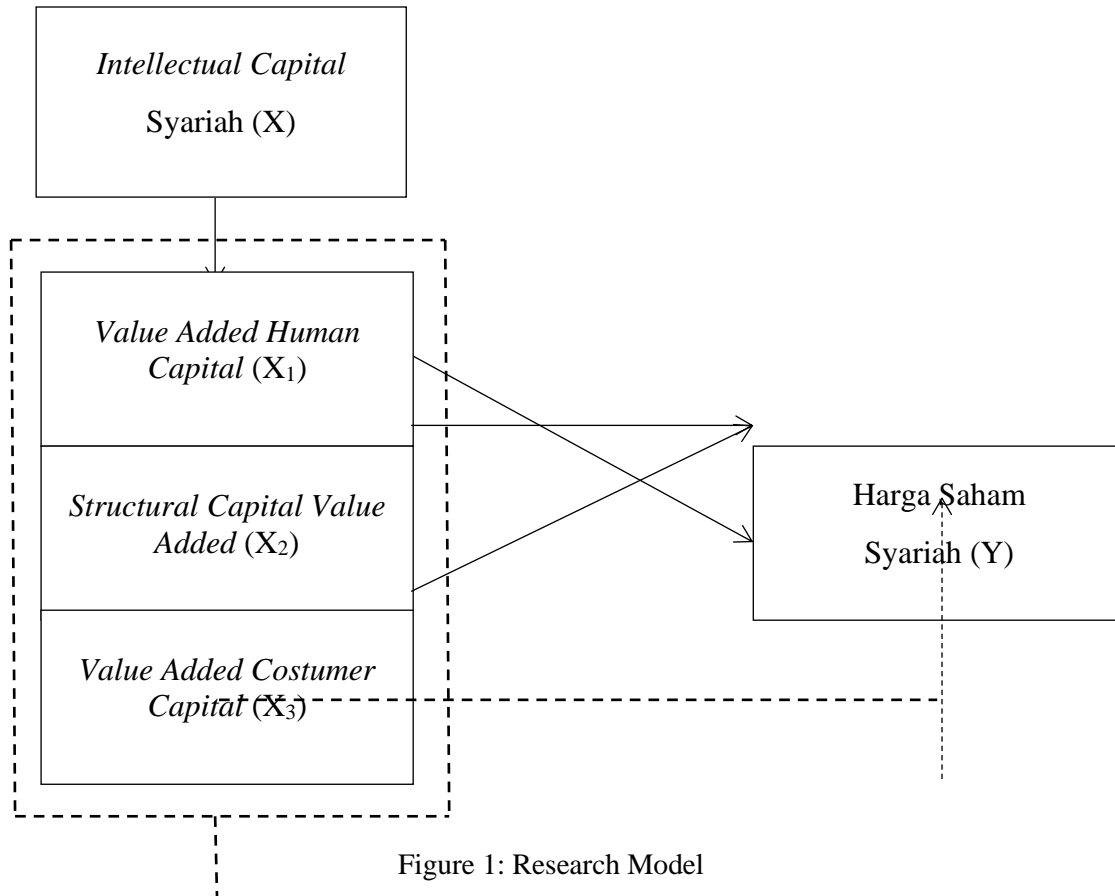
Operational Definition of Variables
Dependent Variable (Y)

The dependent variable is a variable that is influenced or that is the result of the independent variable, called the dependent variable because this variable is influenced by the independent variable. In this study, the dependent variable is the Sharia Stock Price. The dependent variable in this study is the sharia stock price as measured by Price to Book Value (PBV). The calculation is as follows:

Stock Price can be concluded as the price of a stock on the stock exchange determined by market players and the demand and supply of the stock in the capital market.

$$BV = \frac{Total\ Equity}{Number\ of\ shares\ outstanding}$$

$$PBV = \frac{Stock\ price}{BV}$$

Note:
BV   : Book Value

PBV   : Price Book Value

Independent Variable (X)

The independent variable is a variable that influences or causes changes or the emergence of the dependent variable. The independent variables in this study are value-added human capital, structural capital value, and value-added customer capital.

According to Ulum (2013) in Islamic Intellectual Capital, VA is built from Sharia income accounts that are net income for Sharia activities and non-sharia operational income. Intellectual capital is considered the most important strategic asset for a company's success. According to A. Pulic, et al. (2004) the main goal of a knowledge-based economy is to create VA. To be able to create a VA requires the right size of physical capital and intellectual potential. calculating iB-Value Added (iB-VA). IB-VA is calculated using the following method:

$$iB\text{-}VA = OUT - IN$$

Description:

OUT (Output): Total income, obtained from Net income from sharia activities = main operating income from sharia activities + other operating income - third party rights to profit sharing and temporary partnerships Value added (iB-VA) can also be calculated from the company accounts as follows:

$$iB\text{-}VA = OP + EC + D + A$$

Description:

OP   : operating profit (operating profit/business profit)
EC   : employee costs (employee costs)
D   : depreciation
A   : amortization

The calculation is as follows:
How to calculate value-added human capital

$$iB - VAHU \ = \frac{VA}{HC}$$

Description:

iB-VAHU   : Value added human capital: ratio of iB-VA to HC
iB-VA   : Value added
HC   : Human Capital

How to calculate structural capital value added

$$iB - STVA \ = \frac{SC}{VA}$$

Description:

STVA   : Structural capital value added: ratio of SC to iB-VA
SC   : Structural capital: iB-VA – HC
iB-VA   : Value added

How to calculate value-added customer capital

$$iB - VACA \ = \frac{VA}{CE}$$

Description:

iB-VACA : Value added capital employed: ratio of iB-VA to CE
iB-VA : Value added
CE : Capital employed funds

Multiple linear regression direct interaction model (multiple regression analysis)

The analysis model used in this study is Multiple Regression Analysis (MRA). Multiple regression analysis is conducted to test the effect of two or more independent variables on one dependent variable:

$$Y = \alpha + \beta 1 X1 + \beta 2 X2 + \beta 3 X3 + \varepsilon$$

Description:

Y : Sharia stock price
α : Constant
β : regression coefficient
X1 : Human capital
X2 : Structural capital
X3 : Costumer capital
ε : Error term

Statistical Testing

Descriptive statistics that describe the sample data profile consist of a description of the maximum value, minimum value, mean, and standard deviation of all research variables. This study uses Microsoft Excel and SPSS as data processing tools. The description of the sample data profile is grouped based on the disclosure of Sharia stock prices and Sharia intellectual capital (Human capital, Structural capital, and Costumer capital).

RESULTS AND DISCUSSION

Descriptive statistics that describe the sample data profile can be seen in Table 1. Descriptive statistical analysis aims to determine and compare the maximum value, minimum value, standard deviation, and average value of the research sample. The dependent variable in this study is the price of sharia stocks (Y), while the independent variables are value-added human capital (X1), value-added structural capital (X2), and value-added customer capital (X3).

Table 1: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Human capital	85	133.00	9174.00	1634.3059	1719.95291
Structural capital	85	8.00	891.00	271.2353	262.38551
Costumer capital	85	29.00	3682.00	639.8471	835.30954
Harga saham syariah	85	1.00	8397.00	1314.6471	2143.89288
Valid N (listwise)	85				

Source: data processing output using SPSS, 2022

Descriptive statistics of all research variables as listed in Table 1 are as follows:

a. The value-added human capital variable shows a minimum value of 133.0 which indicates the strength of intellectual capital originating from the company's human resources, namely

competent, committed, motivated employees who work and are loyal to the company. The maximum value of this variable indicates the strength of intellectual capital originating from the company's human resources, namely competent, committed, motivated employees who work and are loyal to the company, amounting to 9.174. The average value indicating the strength of intellectual capital originating from the company's human resources, namely competent, committed, motivated employees who work and are loyal to the company, is 1.634.

b. The structural capital value added variable shows a minimum value of 8.00 which indicates structural capital that includes all knowledge in the company other than knowledge in human capital, including databases, organizational charts, manual processes, strategies, routines, and something that is of higher value than material value, thus if there is a good structure, the company can operate well too. The maximum value of 891.0 in this variable indicates structural capital that includes all knowledge in the company other than knowledge in human capital, including databases, organizational charts, manual processes, strategies, routines, and something that is of higher value than material value, thus if there is a good structure, the company can operate well too. The average value in this variable is 271.2 which indicates structural capital that includes all knowledge in the company other than knowledge in human capital, including databases, organizational charts, manual processes, strategies, routines, and something that is of higher value than material value, thus if there is a good structure, the company can operate well too.

c. The variable value-added customer capital has an average value of 639.8 which shows the level of the company's ability to manage resources in the form of capital assets, with good capital management and utilization, the company can improve financial performance, company growth, and market value. The minimum value is 29.00 which shows the level of the company's ability to manage resources in the form of capital assets, with good capital management and utilization, the company can improve financial performance, company growth, and market value. The maximum value is 3.682 which shows the level of the company's ability to manage resources in the form of capital assets, with good capital management and utilization, the company can improve financial performance, company growth, and market value.

d. The variable sharia stock price shows the maximum value in this variable is the highest achievement of the company's ability to generate profits by utilizing its total assets of 8.397. The minimum value is 1.00 which is the lowest value of the company's ability to generate profits. Overall, the companies in this study had an average value of 1.314, which shows the average ability of the company to generate profits by utilizing the total assets it owns by utilizing the net profit it has.

Hypothesis Testing

A hypothesis is a temporary answer that must be tested. The test aims to prove whether the hypothesis is accepted or rejected. The hypothesis serves as a framework for researchers, provides direction for work, and makes it easier to compile research reports.

Table 2: Results of Partial Significance Test (t-Test)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		

1	(Constant)	1668,589	420,272		3,970	,000
	Human capital	,554	,268	,445	2,066	,042
	Structural capital	-5,441	1,824	-,647	- 2,983	,004
	Costumer capital	,098	,282	,038	,347	,729

Source: data processing output using SPSS, 2022

Intellectual capital is the only valuable company asset (appreciable). Other assets such as buildings, factories, equipment, machinery, and the like must be depreciated once the asset is used, while intellectual capital increases once it is used. Human capital is the largest and most important intangible asset in an organization. Human capital can fulfill the goods or services needed by customers and can also provide solutions to customer problems. This measurement shows how much-added value can be generated from one monetary unit invested in employees.

Hypothesis 1: Value-Added Human Capital on Sharia Stock Prices

The first hypothesis (H1) proposed in this study is that value-added human capital has a significant effect on sharia stock prices. The results of the analysis show that the significance level of 0.042 is smaller than 0.05, so H1 is accepted. This means that value-added human capital has a significant effect on sharia stock prices. This is in line with what Massie (2013) did, stating that human capital is an intangible asset owned by the largest and most important company for an organization or company that will generate quite high profitability if optimized properly by the company so that it will have an impact and influence on increasing the price of sharia shares. This measurement shows how much-added value can be generated.

Human capital (HC) which describes human resources with superior knowledge, skills, and competencies, can automatically improve the company's financial performance so that it can achieve corporate excellence and achieve competitive advantage. Included in human capital are education, experience, skills, creativity, and attitude. This is in line with the resource-based theory which discusses the utilization of unit resources owned by a company that can provide added value to the company itself. This means that the company can maximize knowledge, expertise, and networks to create value and this can also benefit shareholders because management can manage the organization for their interests, thus it can affect the price of the company's sharia shares.

Hypothesis 2: Structural capital Value added has a significant effect on Sharia stock prices

The second hypothesis (H2) proposed in this study is that Structural capital Value added has a significant effect on Sharia stock prices. The results show that the structural capital value added variable has a significance level of 0.004, which is smaller than 0.05, so H2 is accepted. This means that structural capital value added has a significant effect on sharia stock prices. This is in line with research conducted by Bontis et al. (2000) which states that Structural Capital includes all knowledge in a company other than knowledge in human capital, including databases, organizational charts, manual processes, strategies, routines, and something that has a higher value than material value. Thus, with a good structure, the company can operate well too. This will increase the company's performance but will lower the price of sharia stocks. Structural capital is the ability of an organization or company to

fulfill the company's routine processes and its structure that supports employee efforts to produce optimal intellectual performance and overall business performance, for example: company operational systems, manufacturing processes, organizational culture, management philosophy and all forms of intellectual property owned by the company. This is also in line with the resource-based theory which discusses the utilization of added value owned by the company which is included in Islamic intellectual capital and structural capital value added is part of Islamic intellectual capital.

Hypothesis 3: Value-added customer capital does not have a significant effect on Islamic stock prices

Value-added customer capital does not have a significant effect on Islamic stock prices. The results of this study indicate that customer capital has a significance level of 0.729 which is greater than 0.05, so H3 is rejected. This means that customer capital does not have a significant effect on Islamic stock prices in a positive direction. The results of this study are not in line with the Signaling Theory which explains that when a company can utilize its physical capital optimally, the market will respond positively as indicated by an increase in the company's stock price. This means that when the company can utilize its physical capital to the maximum, the market does not respond to this, which is indicated by the fact that it has no significant effect on the price of Sharia shares.

Customer capital is the relationship that a company has with its partners, whether from suppliers, loyal customers, or from the company's relationship with the government or with the surrounding community. Customer capital can arise from various parts outside the company's environment that can add value to the company. For example, image, consumer loyalty, consumer satisfaction, relationships with suppliers, commercial strength, negotiation capacity with financial entities, and mutual understanding with the government and industry associations. Customer capital can be created through employee knowledge that is processed with structural capital which ultimately results in good relationships with external parties.

Table 3: Results of Simultaneous Significance Test (F Test)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regressio n	61032321.612	3	20344107.204	5.070	.003[b]
	Residual	325054917.800	81	4013023.677		
	Total	386087239.412	84			

Source: data processing output using SPSS, 2022

Hypothesis 4: Islamic intellectual capital, namely human capital, structural capital, and customer capital have a significant effect simultaneously on Islamic stock prices

Based on the SPSS output in Table 3, the test results show that the components of Islamic intellectual capital simultaneously have a significant effect on Islamic stock prices with a significant value of 0.003, which is smaller than 0.05 (sig. <0.05). The results of this study are in line with Lukman's research (2012) and are supported by signaling theory which states that Islamic intellectual capital has a significant effect on Islamic stock prices. This is because high Islamic intellectual capital indicates that the company has invested in these resources in running the company so investors will feel more

confident in investing their capital. Investors will value the company higher if the company also has high Islamic intellectual capital. Thus, the higher the Islamic intellectual capital, the higher the Islamic stock price.

CONCLUSION

The results of the partial significance test (statistic t-test) show that value-added human capital and value-added structural capital have a significant effect on Sharia stock prices; thus H1 and H2 are accepted; value-added customer capital does not have a significant effect on Sharia stock prices; thus H3 is rejected. The results of the simultaneous significance test (statistic F test) show that the components of Sharia intellectual capital, namely value-added human capital, value-added structural capital, value value-added customer capital simultaneously have a significant effect on Sharia stock prices. Thus H4 is accepted.

This study is limited to mining sector companies listed on the Indonesian Sharia Stock Index in the research year range from 2016 to 2020 so that the results of this study may not be generalized to companies in other sectors; This study only uses the factors of Human Capital, Structural Capital, Costumer Capital which are suspected of being able to influence Sharia Stock Prices. While stock prices can be influenced by various other factors.

The results of this study are expected to improve investor understanding of the importance of disclosure of Islamic intellectual capital which is statistically proven to affect stock price movements so that it can also be the basis for investor considerations in making economic decisions. Further researchers can expand the scope of the study by adding research samples from various industrial sectors and extending the research period by adding years of observation. In addition, further researchers can also consider adding independent variables or other factors that can affect stock prices.

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