Impact of Sharia Inclusion and Financial Ratios on Stock Price: An Analysis of Companies Listed in The Sri-Kehati Index (2014-2023)

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ABSTRACT: This study aims to analyze the impact of Sharia inclusion and financial ratios on the stock performance of companies listed in the SRI-Kehati Index during the period 2014-2019. The SRI-Kehati Index reflects companies committed to socially and environmentally responsible investment. Using panel data regression methods, this study evaluates how financial ratios such as the DAR, P/E, and ROE affect stock prices. Macroeconomic variables like Gross Domestic Product (GDP) and inflation are used as control variables. The results indicate that being Sharia-compliant doesn't significantly impact stock prices. Similarly, the DAR didn't have a significant effect. On the other hand, the return-on-equity ratio had a positive significant impact on stock prices, showing that good management and strong financial health boost investor confidence and market performance. Conversely, the P/E ratio had a negative significant impact, likely because high P/E ratios raise concerns about overvaluation and the sustainability of high stock prices relative to earnings

KEYWORDS: Financial Ratios, Sharia Inclusion, Stock Performance, SRI-Kehati Index, DAR, P/E, ROE

INTRODUCTION

Environment factors offer a framework centered on ethical, environmental, and governance issues, while Islamic finance applies a religious ethical code to investment decisions through mechanisms like Sharia stock indexes. Both approaches seek sustainable and ethical investment outcomes, though they arise from different philosophical backgrounds. This convergence reflects a broader trend towards responsible investing.

Sharia stock indexes are integral to Islamic finance, adhering to Shariah law principles. These indexes identify securities for investment and provide Islamic investors with Shariah-compliant versions of popular benchmarks, showing high correlation with conventional counterparts (S&P Global, 2023). Indonesia, despite not being officially a Muslim country, has a significant Muslim population of 240.62 million as of 2023, representing 86.7% of its total population of 277.53 million (databoks, 2023). This majority profoundly influences the country's financial market and the development of Sharia-compliant financial instruments, making Indonesia a prime location for studying Sharia stock index performance.

Recent statistical data from the Indonesian Financial Services Authority (OJK) and the Directorate General of Financing and Risk Management (DJPPR) indicates a significant increase in the market for Sharia-compliant assets in Indonesia. By 2023, Sharia stocks (Saham Syariah) have had a growth of 15.40%, while Corporate Sukuk (Sukuk Korporasi) have increased by 5.88%. However, Islamic Mutual Funds & ETFs have seen a tiny decline of -0.73%. On the other hand, Government Sharia Securities (SBSN) have shown a growth of 5.13%. Furthermore, there has been a consistent and favorable increase in the number of Sharia-compliant securities over the past seven years. As of December 2023, there were 637 Sharia equities listed in the Sharia Securities List (Daftar Efek Syariah, DES) according to the OJK (2023).

The rising trend of Sharia-compliant investments aligns the establishment of the JII or Jakarta Islamic Index the third of July in 2000, marked a milestone, introducing the first Sharia stock index in Indonesia's capital market. The JII includes the 30 most liquid Sharia-compliant stocks that are listed in the national stock exchange (Bursa Efek Indonesia or BEI), providing a critical framework for investors navigating the Islamic financial landscape.

Multiple studies have conducted comparisons between the performance of Shariah stock indexes and conventional ones, as well as sustainable stock indexes and conventional ones. According to Asutay et al. (2021), Islamic indices demonstrated a considerable performance advantage over conventional indexes in four worldwide marketplaces [1]. The research conducted by Rejeb & Arfaoui (2019) and Abduh (2020) has determined that Islamic stocks outperform their non-Islamic counterparts in terms of both return and risk performance [2][3]. According to Sharma et al. (2021), traditional investors have the potential to enhance their financial returns

by actively participating in or monitoring sustainable indices [4]. Jain et al. (2019) observed that sustainable investments have the potential to generate superior financial returns, while the relationship between sustainable and conventional indices can change over time [5].

A study in Indonesia compared the performance of SRI-KEHATI, a sustainable and responsible investment (SRI) index, to the Shariah and Liquid indices [6]. The study found that SRI-KEHATI outperformed other indices in average risk and returns, likely due to a preference for stocks or indices aligning with financial and ethical values. The study also revealed that the performance of the SRI-KEHATI was impacted by significant investments in four prominent banks, suggesting a strategy of selective investment in high-performing stocks.

The Indonesian capital market is evolving with a strong focus on integrating Sharia principles and ESG values. The Financial Services Authority (OJK) has outlined a strategic plan for 2023-2027 to develop Sharia-compliant investment instruments incorporating ESG values. This initiative reflects Indonesia's commitment to promoting sustainable and ethical investing, aligning with global trends while respecting local cultural and religious practices. The OJK's plan aims to create a robust framework for Sharia-compliant ESG investments, enhancing the attractiveness of the Indonesian capital market for ethical investors.

This research aims to examine the impact of incorporating Sharia values on the companies' stock that are included in the SRI-KEHATI index, considering financial ratios that might affect stock prices. Utilizing financial ratios such as DAR, P/E ratio, and ROE to evaluate index performance is well-documented. Additionally, macroeconomic variables like inflation and GDP will be used as control variables to assess external economic influences on index performances.

The hypothesis of this study asserts that inclusion in the Sharia index for companies listed in the sustainable index can contribute to increasing stock prices. This theory is grounded on the concept of financial well-being, as reflected through selected financial ratios, combined with a robust response to economic changes, could add value to companies listed in the sustainable index. The objective is to provide a detailed analysis of specific financial and economic variables influence the stock price of the sustainable index, offering critical insights for investors prioritizing sustainability and ethical considerations in their investment choices.

The Indonesian capital market is transforming, embracing Sharia principles and ESG (Environmental, Social, and Governance) values as integral components. This shift is driven by the Financial Services Authority (OJK), which has actively promoted the development of sharia investment instruments that align with these ethical and sustainable standards. Reflecting Indonesia's commitment to responsible investing, this paper seeks to explore the effect of Sharia inclusion on the stock prices of companies listed on the SRI-KEHATI index. Specifically, it will focus on examining crucial financial ratios like the DAR, P/E ratio, and ROE to gauge index performance. Additionally, the analysis will consider macroeconomic indicators such as inflation and GDP growth as control variables to ensure a thorough understanding of the broader economic context.

Although sustainable indices such as SRI-KEHATI, which adhere to Environmental, Social, and Governance (ESG) standards, are known to have advantages, there is a significant dearth of understanding on the precise financial structures and overall economic conditions that contribute to their superior performance. The absence of comprehensive comprehension constitutes a significant void in both the literature and practical implementation. The analysis of precise financial ratios such as debt-to-asset, P/E ratio, and ROE, in conjunction with macroeconomic factors such as inflation and GDP growth, has not been adequately conducted. These ratios can provide insights into the financial health and operational efficiency of sustainable indices. Therefore, addressing this gap is imperative not only for enhancing the attractiveness and viability of sustainable indices but also for informing strategic decisions by investors and policy frameworks by regulators. This will enable a more informed alignment of investment strategies with both performance metrics and sustainability objectives, thus optimizing the impact and reach of sustainable investment practices.

This research will focus on the Indonesian stock market, particularly analyzing the companies in the sustainable index namely SRI-Kehati and the Sharia index, Jakarta Islamic Index also to understand the compliance between green and Sharia-compliant stock listings. However, it's important to take into account, this study is subject to certain limitations: it will only utilize data and information that is publicly available up to the current date, and its analysis will be specifically limited to the aforementioned indices as the sample, reflecting the unique aspects of the Indonesia market also the constraints posed by data accessibility. Furthermore, the dynamic and evolving standards of ESG and Sharia inclusion present an additional challenge, potentially limiting the broader applicability of the research findings outside the nations' context. In addition to that, this study will examine the trends of companies listed in the indices from its inception in 2014 up to 2023. This duration is selected to provide a broad view of varying economic conditions during this period.
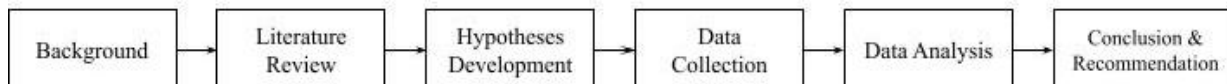
METHOD

Figure 1. Research Design

To achieve its research goals, this study starts with a clearly defined research question outlined in Chapter 1. It focuses on firms in Indonesia that have been consistently listed on the SRI-Kehati Index from 2014 to 2023. This continuous listing is a key inclusion criterion for selecting companies to analyze. Any companies lacking complete financial reports will be excluded from the analysis.
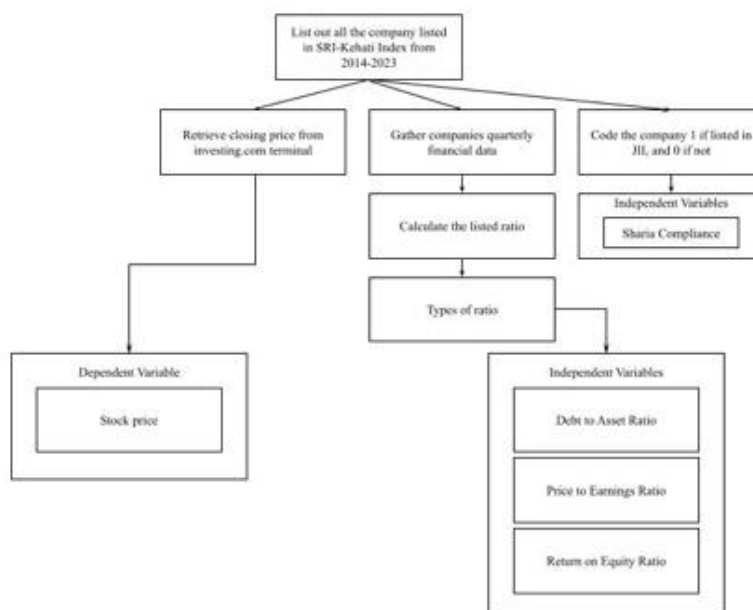

Figure 2. Data Collection Diagram for Dependent and Independent Variables
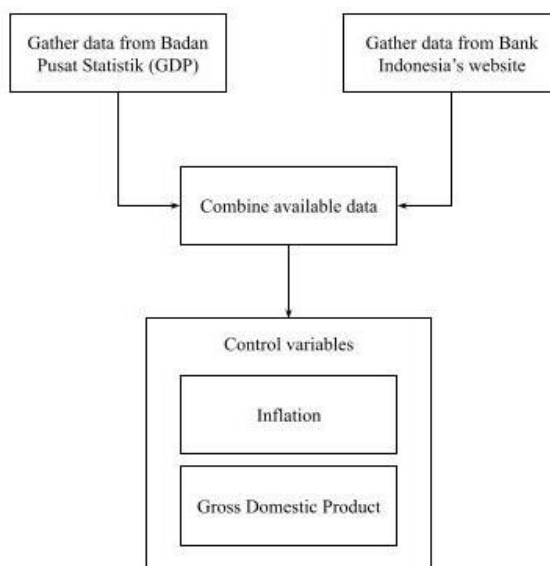

Figure 1. Data Collection Diagram for Control Variables Variables

Once the parameters such as variables, sample size, and timeframe have been defined, the study builds its theoretical framework to guide the hypothesis development. Following this, the secondary data collected is processed as shown in figure 3 and figure 4 and examined thoroughly

In order to ensure the strength and reliability of our conclusions, we included control variables in our study. These control variables serve to mitigate the influence of other factors that may have an impact on the dependent variable, enabling us to isolate and gain a clearer understanding of the effects of the independent variable. Through meticulous control of these supplementary parameters, our objective is to develop a more dependable relationship between the variables under study. Here is a concise breakdown of the variables utilized in this research to provide a comprehensive insight of our analytical framework.

For this study, the writer diligently gathered data from multiple trustworthy platforms to guarantee the accuracy and significance of our findings. The data utilized in this study is sourced from secondary sources, which refer to data that has been gathered and examined by other organizations. The stock price, which served as the dependent variable, was collected from Investing.com. This accessible terminal provides current financial data, and we specifically utilized quarterly data for the latest stock prices. To determine our independent variables, namely DAR, Price to Earnings (PE) ratio, and ROE, we referred to the publicly available quarterly financial records published by the companies under study. This methodology enables us to conduct our study using reliable and well documented financial indicators. Meanwhile a dummy variable is used to code the sharia inclusion of a company, assuming that the company adheres to sharia principle if it was listed in the Jakarta Islamic Index. Moreover, we've sourced our control variables, GDP and inflation, from highly credible public sources. We obtained inflation data from Bank Indonesia's website, which provides a thorough snapshot of the country's economic performance. GDP data was collected from Badan Pusat Statistik, Indonesia's central statistics agency, known for its comprehensive and reliable economic statistics. These sources enhance the robustness of our study by providing a solid foundation of economic indicators specific to Indonesia.

In this study, the data analysis method is well prepared to ensure reliable insights. It is started by processing the data, cleaning it, and standardizing formats to facilitate effective analysis. Using regression models, we explore the relationship of variables such as DAR, Price to Earnings (PE) ratio, and ROE to stock prices, taking into account factors like GDP and inflation. This study adheres to the Best Linear Unbiased Estimator (BLUE) standards under classical regression assumptions to guarantee that our estimates are accurate. Finally, hypothesis testing is conducted to statistically validate the significance of the findings, ensuring our conclusions are robust and credible.

Panel data regression involves the utilization of three distinct models. The models mentioned include the Common Effect Model, Fixed Effect Model, and Random Effect Model. The following provides additional elucidation for each individual model:

1. **Common Effect Model**

   The Common Effect Model takes a conservative approach as it only combines time series and cro nss-sectional data (Zulfikar, 2018). Gujarati (2004) argued that this approach fails to consider the dimensions of time and individuals, and assumes that the data remains consistent throughout multiple time periods.

2. **Fixed Effect Model**

   The Fixed Effect Model demonstrates varying intercepts among people, which remain constant throughout time (Gujarati, 2004). This model incorporates dummy variables in the dataset. Thus, it is commonly referred to as the least-squares dummy variable (LSDV) technique (Zulfikar, 2018).

3. **Random Effect Model**

   The Random Effect Model is referred to as the Error Component Model due to a specific cause (Gujarati, 2004). The Random Effect Model adjusts for the difference in intercepts by taking into account the error terms across the data (Zulfikar, 2018). An advantage of this model is that it disregards heteroscedasticity (Menegaki, 2011).

ANALYSIS & RESULT

A. Data Summary

The dataset includes 320 observations, offering a detailed look at various metrics such as the Debt-to-Asset ratio, ROE, and Inflation, all expressed as percentages. Additionally, it examines numerical values like Close Price and GDP. To improve the quality and interpretability of the analysis, natural logarithm transformations were applied to the Close Price and GDP data. This transformation helps normalize the data, making it more suitable for subsequent statistical analyses. The following summary

highlights the central tendencies, variability, and ranges of these variables, providing valuable insights into their distributions and underlying patterns.

Table 1. Summary Statistic

Variable	Observation	Mean	Std. Dev.	Min	Max
Sharia	320	0.5	0.5007831	0	1
Close Price	320	4862.023	5053.456	240	27511.33
Debt-to-Asset	320	9.189926	9.536555	0	50.5705
P/E	320	31.9561	63.25875	3.5714	473.149
ROE	320	28.17705	33.69973	-58.5025	144.6388
GDP	320	2603116	290219.8	2058585	3139085
Inflation	320	0.03375	0.0143138	0.0133	0.0726
ln Close Price	320	8.10846	0.8342221	5.480639	10.22235
ln GDP	320	14.76592	0.1129097	14.53753	14.95944

Source: Stata Output

B. Classical Assumption Analysis

1. Normality Assumption

The Shapiro-Wilk test is a statistical procedure developed in 1965 Shapiro & Wilk (1965) to test the normality of data [7]. This test has been widely used in various fields such as veterinary surgery (Evans, 2023), dental care (Ramirez, 2023), forestry (Kim et al., 2018), and biogas characterization (Hernández et al., 2021) [8][9][10][11]. It has been employed to assess normality in different contexts, including verifying model assumptions (Evans, 2023), evaluating height growth models (Kim et al., 2018), and checking data normality and homoscedasticity (Souza, 2023) [12] .

Table 2. Shapiro-wilk test for normal data

Variable	Obs	W	V	z	Prob>z
resid	320	0.93401	14.888	6.359	0.0000

Source: Stata Output

The Shapiro-Wilk test is a statistical test used to assess the normality of a dataset. The hypotheses for this test are defined as follows: the null hypothesis (H0) states that the data follows a normal distribution, while the alternative hypothesis (H1) posits that the data does not follow a normal distribution. The Shapiro-Wilk test was performed on the residuals to assess their normality. The p-value, which is 0.0000, indicates that the residuals significantly deviate from normality since it is less than the conventional alpha level of 0.05. The z-value of 6.359, derived from the test, further supports this conclusion, showing a significant departure from the mean. Overall, these results suggest that the data exhibit statistically significant deviations from a perfectly normal distribution.

The Central Limit Theorem (CLT) is a fundamental principle in statistics that states that when a large number of independent, identically distributed random variables are summed or averaged, their distribution tends to approach a normal distribution. This holds true regardless of the original distribution of the variables (Kataria et al., 2009; Oberfeld & Franke, 2012; Sawada, 2021). When the sample size is sufficiently high (usually defined as greater than 30), the Central Limit Theorem (CLT) permits the assumption of normality, even if the underlying population distribution is not normal (Oberfeld & Franke, 2012). Therefore, for the purpose of this paper, it is assumed that the data follows a normal distribution.

2. Heteroscedasticity Assumption

The Modified Wald test was conducted to assess groupwise heteroskedasticity in a fixed effects regression model. The null hypothesis (H0) states that the variability of the mistakes remains the same for all groups. The test findings produced a chi-squared (chi2) statistic of 208.68, along with a p-value of 0.0000. Due to the remarkably small p-value, we can confidently reject the null hypothesis, which suggests strong evidence of heteroskedasticity in the data.

Table 3. Heteroscedasticity Assumption

chi^2	Prob>chi^2
208.68	0.0000

Source: Stata Output

This result suggests that the error variances differ across groups in the dataset. The nature of the data that could cause this outcome may include varied economic or financial conditions across different entities or time periods, leading to differences in variability. Researchers frequently utilize robust standard error estimation strategies to mitigate heteroscedasticity in panel data. One possible strategy is to use robust standard errors in panel regressions to address cross-sectional dependence. This approach was proposed in 2007 by Hoechle (2007). The specified standard error estimates are robust against heteroskedasticity as well as other forms of cross-sectional and temporal dependency [12].

3. Autocorrelation Assumption

Wooldridge test was performed to detect first-order autocorrelation in panel data. The null hypothesis (H0) states that there is no first-order autocorrelation in the data. The test produced an F-statistic of 1332.312, indicating a strong statistical significance, with a p-value of 0.0000. The exceptionally small p-value results in the rejection of the null hypothesis, suggesting compelling evidence of first-order autocorrelation in the panel data.

Table 4. Autocorrelation Assumption

f-stat	Prob> f-stat
1332.312	0.0000

Source: Stata Output

The presence of autocorrelation implies that the residuals (errors) from one period are correlated with the residuals from previous periods. This can occur due to various reasons inherent to the nature of panel data. For instance, economic or financial time series data often exhibit patterns where past values influence current values, such as in stock prices, GDP growth rates, or inflation rates. Autocorrelation can also arise from omitted variables that have a persistent effect over time or due to the inertia in economic processes and business cycles. The detection of autocorrelation highlights the need to adjust the regression model to account for this serial correlation to ensure robust and accurate estimation of the model parameters. Because heteroscedasticity and autocorrelation is detected, this study will use the GLS approach to treat the regression model. Studies have highlighted the benefits of using GLS to overcome the challenges posed by heteroscedasticity and autocorrelation in panel data analysis (Wang et al., 2019; , Lu et al., 2021; , Haider et al., 2022) [13]. The GLS method is particularly useful in situations where the assumptions of ordinary least squares models are violated due to the presence of autocorrelation and heteroskedasticity in the data [14][15].

4. Multicollinearity Assumption

The correlation matrix examines the possibility of multicollinearity among the variables lnCloseprice, Sharia, DAR , Price to Earning Ratio (PE), ROE , lnGDP, and Inflation, using a dataset of 320 observations. Multicollinearity arises when the independent variables in a regression model exhibit a high degree of correlation, leading to a distortion in the coefficient estimates.

Table 5. Multicollinearity Test Result

	ln Close Price	Sharia	DAR	PE	ROE	lnGDP	Inflation
lnClose Price	1						
Sharia	0.1379	1					
DAR	-0.3378	0.3221	1				
PE	-0.3244	0.252	0.6414	1			
ROE	0.3152	0.3292	-0.1523	-0.0776	1		
lnGDP	0.1816	0	0.1842	0.1852	-0.0723	1	
Inflation	-0.1006	0	-0.0969	-0.0138	0.0267	-0.4437	1

Source: Stata Output

In this analysis, none of the correlations between the variables exceed the 0.8 benchmark. The highest correlation observed is between DAR and PE (0.6414), which is below the threshold but still notable. Other significant correlations include Sharia with DAR (0.3221), PE (0.2520), and ROE (0.3292); lnCloseprice with ROE (0.3152) and lnGDP (0.1816); and Inflation with lnGDP (-0.4437). These correlations do not reach the level that typically signifies severe multicollinearity.

C. Coefficient of Determination

The random-effects GLS regression yields measurements of the coefficient of determination for the model. The within-group R-squared value is 44.63%, indicating that the variation in the dependent variable is accounted for by the independent factors within each organization. The intergroup R-squared value is 22.56%, indicating that the model explains the variation between various groups. The R-squared value is 0.2001, indicating that the independent factors account for 26.9% of the total variation in the dependent variable over all observations and groups.

Table 6. Coefficient of Determination

	R-squared
Within	0.4463
Between	0.2256
Overall	0.2690

Source: Stata Output

D. Regression Result

When selecting the most suitable model for panel data regression, several tests can be employed to ensure the model's appropriateness and accuracy. One of the primary tests is the Chow test, which helps determine whether a pooled regression model or a fixed effects model is more appropriate. The Chow test evaluates if there are significant differences in the coefficients across different groups or time periods within the panel data.

The Chow test results show an F-statistic of 248.29 and a p-value of 0.0000. This very low p-value indicates that we can confidently reject the null hypothesis, which suggests that there are no differences in the regression coefficients across different groups or time periods. In simpler terms, this means that the fixed effects model, which accounts for individual-specific effects, is a better fit for our panel data than the pooled regression model.

Secondly, the Hausman test was conducted to determine whether the fixed effects model performs better than the random effects model for the nature of the data. The Hausman test was performed to determine whether the fixed effects model (FEM) or the random effects model (REM) is more appropriate for our panel data. The test compares the coefficients of both models and assesses whether there are systematic differences between them.

Table 7. Model Selection Summary Table

	Statistic	P-Values	Result
Chow Test	248.29	0.00	FEM
Hausman Test	0.9957	0.39	REM
LM Test	4047.64	0.00	REM

Source: Stata Output

The test results show a chi-squared (chi2) statistic of 00.9957 with a corresponding p-value of 0.39. The null hypothesis for the Hausman test is that the difference in coefficients between the fixed effects and random effects models is not systematic, implying that the random effects model is preferred. Given the very high p-value, we fail to reject the null hypothesis and proceed to use the random effects model

Thirdly, this study performs the Breusch and Pagan Lagrangian Multiplier (LM) test to check if a random effects model suits our panel data. This test assesses whether the variance of the effects (u) differs significantly from zero supporting the preference, for a random effects model over a pooled OLS model.

According to the results the variance of the effects (u) is 0.7792717, with a deviation of 0.8827637. The squared statistic for this test is 4047.64 yielding a p value of 0.0000. With such a p value we can reject the null hypothesis that states there is no variance in random effects. This implies that there exists variation among entities in our panel data making the random effects model more suitable for this analysis.

Table 8. Regression Output Without Control Variables

ln Close Price	Coefficient	Std. Error	Z	P>|z|	[95% conf. interval]	
Sharia	0.1686081	0.49208	0.34	0.732	-0.7958509	1.133067
DAR	-0.0006348	0.0109883	-0.06	0.954	-0.0221715	0. 0209019
P/E	-0.0020727	0.0006419	-3.23	0.001	-0.0033309	-0.0008146
ROE	0.005914	0.005069	1.17	0.243	-0.004021	0. 015849
_cons	7.929587	0.1559755	50.84	0.000	7.62388	8.235293
Sigma u	0. 88212435		Number of observation	= 320		
Sigma e	0. 35975059		Number of groups	= 8		
rho	0. 85739793					

Source: Stata Regression Output

Table 8 presents the regression output without control variables, focusing on the dependent variable "Close Price." The analysis includes four independent variables: Sharia, Debt to Asset Ratio (DAR), Price to Earnings ratio (P/E), and Return on Equity (ROE). The coefficient for Sharia is 0.1686081 with a standard error of 0.49208, a Z value of 0.34, and a P-value of 0.732, indicating that Sharia has no significant effect on the close price. DAR shows a coefficient of -0.0006348 with a standard error of 0.0109883, a Z value of -0.06, and a P-value of 0.954, also indicating no significant effect. The P/E ratio has a coefficient of -0.0020727 with a standard error of 0.0006419, a Z value of -3.23, and a P-value of 0.001, showing a significant negative effect on the close price. ROE has a coefficient of 0.005914 with a standard error of 0.005069, a Z value of 1.17, and a P-value of 0.243, indicating no significant effect. It is important to note that these results do not consider the potential influence of GDP and inflation, which could provide additional insights into the determinants of the close price if included as control variables.

Table 9. Regression Output Using the Control Variables

ln Close Price	Coefficient	Std. Error	Z	P>|z|	[95% conf. interval]	
Sharia	0.155748	0.5213255	0.3	0.765	-0.8660311	1.177527
DAR	-0.0194084	0.0135295	-1.43	0.151	-0.0459258	0.007109
P/E	-0.0016082	0.000492	-3.27	0.001	-0.0025725	-0.0006439
ROE	0.011026	0.0038993	2.83	0.005	0.0033836	0.0186684
lnGDP	1.996698	0.8258134	2.42	0.016	0.3781335	3.615263
Inflation	-0.9188981	1.866097	-0.49	0.622	-4.576381	2.738585
_cons	-21.50242	12.19892	-1.76	0.078	-45.41187	2.407031
Sigma u	0.8827637		Number of observation	= 320		
Sigma e	0.2903197		Number of groups	= 8		
rho	0.90239729					

Source: Stata Regression Output

Table 10. Regression Result Summary

	Decision	Significance	Relationship
Sharia	Accept H0	Not significant	Positive
DAR	Accept H0	Not significant	Negative
PE	Reject H0	Significant	Negative
ROE	Reject H0	Significant	Positive
lnGDP	Accept H0	Significant	Positive
Inflation	Accept H0	Not significant	Negative

Source: Stata Regression Output

E. Discussion

1. Relationship between ROE on Stock Price

The significant positive relationship between ROE and stock prices for companies listed on the sustainable stock index can be attributed to several factors. High ROE indicates efficient management and strong financial health, which boosts investor confidence. Additionally, companies on the sustainable index are known for their commitment to environmental, social, and governance (ESG) principles. The ability to achieve strong financial performance while adhering to sustainable practices makes these companies particularly attractive to socially conscious investors.

2. Relationship between Gross Domestic Product on Stock Price

The significant positive influence of GDP on stock prices can be explained by several interconnected factors. First, GDP growth indicates a robust economy, which typically translates into higher corporate earnings as businesses benefit from increased consumer spending, higher investment, and greater economic activity. This improvement in corporate performance boosts investor confidence and drives up stock prices. Additionally, positive GDP growth fosters a favorable economic environment, enhancing investor sentiment and leading to greater investment in stocks. As GDP rises, consumer spending increases due to higher disposable incomes, resulting in higher sales and profits for companies, which in turn raises stock prices. Economic growth also encourages businesses to expand and innovate, improving future profitability and attracting investors. Lower unemployment rates associated with GDP growth mean more consumers with disposable income, further stimulating the economy and benefiting companies. Sustained GDP growth signals economic stability, reducing the perceived risk of investing in the stock market and encouraging more investment. Finally, strong GDP growth can lead to favorable fiscal and monetary policies, creating a conducive environment for business operations and further positively impacting stock prices.

3. Relationship between P/E Ratio on Stock Price

This analysis discovered highly substantial inverse correlations between the PE ratio and stock prices. The observed inverse correlation indicates that greater P/E ratios, which indicate higher stock values in comparison to earnings, are linked to lower closing prices. This unexpected outcome could be ascribed to market apprehensions regarding excessive valuation. High PE ratios sometimes indicate that stock prices have significantly increased compared to the company's earnings, causing concern among investors that the stocks may be overvalued. This assertion is corroborated by the research conducted by Darami et al. (2022) and Ali (2013), which posits that there are instances in which the price-to-earnings ratio increases while the share price remains unchanged, and the earnings per share decrease [16][17].

The study includes the P/E ratio as one of the observed variables because it provides a concise representation of how the market assesses the worth of a company. Nevertheless, the findings of this study contradict the results of other research conducted by Basarda et al. (2018), which demonstrated a favorable influence of P/E ratios on stock prices, and Ghimire, Ramesh & Mishra, Deepashree (2018), who noticed a noteworthy positive effect in the Nepalese market. The contradictory results emphasize that although the P/E ratio is generally considered a simple measure of corporate valuation, its influence on stock prices can differ greatly depending on market conditions and investor perspectives [18]. The P/E ratio typically exhibits an inverse correlation with stock prices in companies listed on a sustainable index due to several significant factors. The companies included in these indices are dedicated to upholding rigorous standards in environmental, social, and governance (ESG) activities. This dedication frequently

results in increased operational expenses as they allocate more resources towards sustainable operations, adhere to stringent standards, and diligently strive to minimize their ecological footprint.

Companies that promote sustainability may experience slower growth in revenues compared to non-sustainable organizations. Investors may be less willing to pay higher prices for these companies, resulting in decreased PE ratios. Additionally, investors may perceive these companies as more risky due to future regulatory and environmental changes, resulting in lower P/E ratios.

4. Relationship between Sharia inclusion on Stock Price

Companies included in the Sharia index are expected to demonstrate resilience and maintain stakeholder relationships, including through good sustainability performance during crises [19]. Being included in the Sharia index has been shown to have a positive influence on the demand for companies' stocks in the capital market [20]. Additionally, Sharia-compliant companies are known for having low debt levels, which may indicate financial stability and responsible financial management [21]. This study proposes that being listed on the Sharia index influences the stock prices of companies that are also on the sustainable index. The Sharia index has a requirement for companies to maintain a maximum DAR, which could indicate financial stability and responsible financial management. The hypothesis is that these attributes make a company more attractive to investors, leading to an increase in stock price. By showcasing both financial prudence and high ESG standards, these companies could become even more appealing to a wider range of investors, potentially enhancing their market performance. A study by Amala & Jahja (2022) suggests that the DAR can be used as a substitute for good governance, meanwhile this study implies that this leverage combined with a good ESG value would increase the performance of the company stock price [21].

The GLS regression result for the Sharia inclusion shows a high p-values of 0.803 which means null hypothesis is rejected. The inclusion of Sharia values, as shown by a company's listing on the Sharia index, doesn't significantly influence the stock prices of companies listed on the sustainable index. This means that following Sharia principles, which focus on ethical and socially responsible investing, doesn't make a big difference in the financial performance of companies that are also committed to sustainability. Investors seem to view the financial health and potential of sustainable companies as separate from their Sharia inclusion. Therefore, both Sharia-compliant and non-compliant companies can thrive in the sustainable investment space without major differences in their stock performance. This shows that ethical and sustainable investment criteria can work together in the broader market.

While the inclusion of Sharia values does not exhibit a significant relationship with the stock prices of companies listed on the sustainable index, this does not negate the potential benefits of establishing a sustainable Sharia index. Such an initiative could provide additional investment portfolio alternatives for investors seeking to align their financial activities with both sustainability and Sharia inclusion. By offering a platform that integrates ethical, socially responsible, and religious principles, a sustainable Sharia index can attract a more diverse investor base. This dual adherence to sustainability and Sharia values can enhance the appeal of investment portfolios, ensuring that investments are not only ethically and sustainably sound but also in accordance with religious beliefs. Consequently, this initiative supports the growing demand for investment options that are both financially prudent and aligned with personal values, fostering a more inclusive and diversified market.

5. Relationship between Debt-to-asset Ratio on Stock Price

The DAR is a crucial financial metric that can have a significant impact on stock prices. Several studies have explored the relationship between DAR and stock prices, shedding light on the implications of this ratio in the context of financial markets. The analysis indicates that the Debt to Asset Ratio (DAR) has a negative but insignificant effect on stock prices, suggesting that an increase in DAR does not significantly impact stock prices, although the trend is negative. This finding aligns with the theoretical context that the debt to asset ratio is a crucial financial measure reflecting the proportion of a company's assets financed through debt. A high DAR can signal increased financial risk, potentially deterring investors and leading to lower stock prices. This is supported by Amanda (2024), who found that a higher debt-to-asset ratio negatively impacts stock prices.

In the current analysis, the insignificance of DAR's effect implies that other factors might be more influential in determining stock prices within the studied context. Alongside, the study is aligned with findings by Siagian et al. (2021), who reported that DAR, alongside ROE and the Current Ratio, positively affected stock prices in the pharmaceutical sector on the Indonesia Stock Exchange. This suggests that in certain industries, a higher DAR may be associated positively with stock prices, indicating industry-specific dynamics where higher leverage is viewed favorably.

This findings supports the result regarding the impact of sharia values on stock price, as the DAR being the financial metrics that differentiate both indices. One reason for this could be that investors are looking at a broader range of factors when making decisions. While a low DAR indicates financial prudence, investors might prioritize overall profitability, growth potential, and strong ESG values more heavily. This finding highlights the complexity of market dynamics, where a single metric like DAR may not be enough to drive stock prices. Instead, a combination of financial health, growth prospects, and sustainability credentials seems to play a more significant role in investor decisions. In essence, while Sharia inclusion emphasizes a conservative financial approach, it doesn't appear to significantly sway investor perception or stock performance in this context.

5. Relation between Inflation on Stock Price

This negative insignificant relationship between inflation on stock price contributes to the ongoing debate about how inflation impacts stock prices. It aligns with previous research that generally sees inflation as having a negative, albeit statistically insignificant, influence on stock markets. This perspective is aligned with the Fama's Proxy Theory (Fama,1981), also supported by Adusei (2014) and others, who found similar trends across various global markets [22] [23]. Essentially, these studies suggest that while inflation may affect how investors feel and what they expect, it doesn't always translate into clear-cut changes in stock prices. Conversely, certain studies have noticed distinct dynamics. Anari & Kolari (2001) observed that stock prices may increase in reaction to inflation over extended periods, indicating that markets may finally adapt to inflationary forces [24]. Luintel & Paudyal (2006) put forward the notion that there is a positive and direct correlation between stock returns and inflation, which contradicts the prevailing belief that the link is negative [25].

The relationship between inflation and stock prices for companies listed on the sustainable index shows a negative but insignificant trend, and the writer has several analyses for this. Firstly, these companies prioritize long-term stability and resilience by adhering to strong ESG practices, which help them manage inflation's adverse effects more effectively. They often have strong brand loyalty, allowing them to pass on increased costs to consumers without significantly impacting demand, which helps protect their profits from inflation. Moreover, investors tend to view sustainable companies as safer long-term bets due to their commitment to sustainable practices, which helps stabilize their stock prices even during periods of inflation. Together, these factors make the stock prices of sustainable companies less affected by inflation, leading to an insignificant statistical relationship.

CONCLUSION

The study investigated whether being included in the Sharia index, while taking into account its financial ratios such as DAR, return-on-equity ratio, and P/E ratio affected the stock performance of companies listed in the SRI-Kehati index from 2014-2023. It found that being Sharia-compliant doesn't significantly impact stock prices, suggesting that sharia values that a company has does not add to the value of the stock price of companies listed in the SRI-Kehati index. Similarly, the DAR didn't have a significant effect, indicating that while financial prudence is important, it isn't the sole driver of stock prices in this context. On the other hand, the return-on-equity ratio had a positive significant impact on stock prices, showing that good management and strong financial health boost investor confidence and market performance. Conversely, the P/E ratio had a negative significant impact, likely because high PE ratios raise concerns about overvaluation and the sustainability of high stock prices relative to earnings. These findings highlight the complexity of market dynamics and the multiple factors influencing stock performance in the SRI-Kehati index.

Being part of the Sharia index doesn't significantly affect the stock performance of companies in the SRI-Kehati index. This means that whether a company follows Sharia principles or not doesn't make a big difference in stock price that is listed in that index. This study suggests that diverse ethical standards can coexist without compromising financial returns. This opens up the investment space to a broader range of ethical criteria without hurting financial performance.

In addition to that, the DAR, which measures a company's leverage, does not have a significant impact on the stock performance of companies listed in the SRI-Kehati index. This indicates that while maintaining a low level of debt is important, it's not the only thing investors look at. A lower DAR indicates a higher level of security for the company, in contrast, a high DAR can increase the financial risk of a company, potentially leading to a higher return. Investors might also consider other factors like profitability, growth potential, and strong ESG practices. The finding suggests that investors take a holistic view when evaluating companies, and a single financial metric like debt level isn't enough to drive stock prices on its own. This underscores the complexity of investment decisions and the multifaceted nature of what drives stock performance.

Meanwhile, the return-on-equity ratio has a strong positive impact on the stock performance of companies in the SRI-Kehati index. This ratio, which measures how effectively a company uses its equity to generate profits, is a key indicator for investors. Companies with higher ROE are seen as more efficient and profitable, making them attractive to investors. This positive relationship suggests that companies which manage their equity well and generate solid returns are rewarded with higher stock prices. It reflects investor confidence in the company's management and financial health, highlighting ROE as an important metric for market performance.

Furthermore, P/E (PE) ratio shows a significant negative relationship with stock performance in the SRI-Kehati index. This observation may initially appear counterintuitive; however, upon closer examination, it is rational to conclude that an elevated P/E (PE) ratio typically indicates that a stock is priced high relative to its earnings. Investors may worry that these stocks are overvalued and could drop in price, leading them to be cautious about buying high PE stocks. This caution results in lower stock prices for companies with high PE ratios. The negative relationship highlights the market's concern with overvaluation and the importance of having a balanced PE ratio to maintain investor confidence and stable stock performance.

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