



THE EFFECT OF SHARIA STOCK STATUS AND THE COMPANY'S NON-SHARIA DEBT RATIO ON ESG SCORE

PENGARUH STATUS SAHAM SYARIAH DAN RASIO UTANG NON-SYARIAH PERUSAHAAN TERHADAP SKOR ESG

Rumi Raniri^{1*}, Evony Silvino Violita²

^{1,2} Universitas Indonesia

*Corresponding author: rumiraniri34@gmail.com

INFO ARTIKEL	ABSTRACT
<i>Histori Artikel: Tanggal Masuk 3 Juli 2025</i> <i>Revisi Diterima 19 Agustus 2025</i> <i>Tanggal Diterima 19 September 2025</i> <i>Tersedia Online 30 September 2025</i> Keywords: ESG, Sharia Stock Index, Sharia Compliance, Non-Sharia Loan	<i>Daftar Efek Syariah (DES) does screening to create Indeks Saham Syariah Indonesia (ISSI). Following Sharia values, it is necessary to see whether it can also reflect better non-financial reports. This study examines whether the ESG performance of sharia-compliance companies is higher. Unlike previous studies, this study also tests whether non-sharia debt ratio (that also reflect sharia compliance) affects the ESG score instead of leverage. This study uses Ordinary Least Square (OLS) regression with fixed effect analysis to compare the ESG score among Indonesian companies. The results prove that, while non-sharia debt ratio affects ESG scores especially the environmental and social pillars, DES screening affects ESG scores especially the social pillar only. This finding enriches studies on ESG and sharia compliance. This study broadens the perspective of stakeholders in Indonesia who pay attention to maqashid sharia and provides implications for DES to integrate ESG dimensions in determining sharia-compliant companies.</i>
Kata Kunci: ESG, Indeks Saham Syariah, Kepatuhan Syariah, Utang Non-Syariah	ABSTRAK <i>Daftar Efek Syariah (DES) menentukan penyaringan dalam pembentukan Indeks Saham Syariah Indonesia (ISSI). Sesuai nilai Syariah, perlu dilihat juga apakah penyaringan yang dilakukan juga dapat mencerminkan laporan non-finansial yang lebih baik. Penelitian</i>

ini menguji apakah kinerja ESG perusahaan yang masuk ISSI lebih tinggi. Berbeda dengan studi sebelumnya, penelitian ini juga menguji apakah rasio utang non-syariah (yang juga mencerminkan kepatuhan syariah) memengaruhi skor ESG daripada leverage. Penelitian ini menggunakan analisis regresi *Ordinary Least Square* (OLS) dengan *fixed effect* untuk membandingkan tingkat kepatuhan ESG di antara perusahaan Indonesia. Hasil penelitian membuktikan bahwa, walaupun rasio utang non-syariah mempengaruhi skor ESG terutama pilar lingkungan dan sosial, penyaringan DES hanya mempengaruhi skor ESG terutama pilar sosial saja. Penemuan ini memperkaya studi tentang ESG dan kepatuhan syariah. Studi ini memperluas perspektif pemangku kepentingan di Indonesia yang memperhatikan maqashid syariah dan memberikan implikasi untuk DES untuk mengintegrasikan dimensi ESG dalam menentukan perusahaan yang taat syariah.

Berkala Akuntansi dan Keuangan Indonesia p-ISSN: 2459-9581; e-ISSN 2460-4496

DOI: 10.20473/baki.v10i2.75338

Open access under Creative Common Attribution-Non Commercial-Share A like 4.0 International Licence

(CC-BY-NC-SA) 

1. Introduction

Consumers are aware and choose to buy products from companies that match their values in a responsible way (La Torre et al., 2019). Consumer pressure is driving changes that are increasingly supported by regulations oriented towards the creation of reports related to the multidimensional impact of companies. This thinking has driven the need to report and assess companies not only through financial indicators, but also non-financial ones through social and environmental metrics (Tamimi & Sebastianelli, 2017) to make positive and negative externalities visible and measurable (Hartwig et al., 2019). For all these reasons, in recent years, many service providers have developed measurement frameworks for non-financial reporting and ESG assessment (Berg et al., 2022). Thomson Reuters has introduced an ESG score calculation method measuring the level of ESG information reporting of a company (Sikacz & Wolczek, 2018). As an investment concept to evaluate the sustainable development of enterprises, the three basic factors of ESG are important points to be considered in the process of investment analysis and decision-making (Li et al., 2021). This is supported by stakeholder theory relevant to companies that promote efforts to help protect the environment, seek to improve social welfare and community relations, and often adhere to value-maximizing governance practices. Corporate managers are accountable to shareholders and all other stakeholders (Freeman, 2023). The company cannot carry out its long-term operations if it does not get recognition and support or legitimacy from parties with an interest in the company (Matuszak et al., 2019).

This is in line with the need for non-financial reporting where companies must make non-material reports. ESG for multidimensional corporate objectives can be part of their compliance with maqashid syariah (Sairally, 2015). The protection of the soul, mind, and offspring is related to the social value in ESG and the environmental value in ESG itself is also intended to protect the

soul (especially to keep the environment healthy so that the human body does not get sick), mind, and provide an environment that can still be occupied comfortably by our descendants. Thus, companies that have Islamic values and pursue *maqashid sharia* should be indicated by the company's high ESG value (Ramadhan, 2019). Therefore, there should be efforts to align business activities with *maqashid sharia* values through ESG assessments that raise the non-financial issues of companies from those that have so far focused more on the welfare/wealth (mal) aspect.

ESG principles are seen as aligned with Islamic teachings, which overall encourage ethical and sustainable behavior (Hashim et al., 2023). ESG reports can be used to measure the fulfillment of several *maqashid sharia* components by companies. Life protection can be assessed through the fulfillment of Environmental indicators. Reducing environmental risks and promoting clean practices directly contribute to maintaining human health and well-being. Protection of intellect and offspring can be assessed through fulfillment of the Social indicator. Fair and transparent practices increase stakeholder trust and contribute to the intellectual well-being of policymakers. In addition, strengthening communities through social initiatives ensures family well-being and promotes social cohesion. Finally, the protection of Assets can be assessed through the fulfillment of Governance indicators. Responsible governance and sound investment strategies ensure wealth protection while adhering to ethical and sustainable principles (Mohd Zain et al., 2024).

Following the development of Islamic Economics, the Sharia Securities List (DES) has been published on the Indonesia Stock Exchange. In theory, Islamic products need to pay attention to *maqashid sharia*. Therefore, the screening of Islamic stocks theoretically needs to consider non-financial factors such as ESG so that Muslim investors know that they are investing in companies that can fulfill the indicators of *maqashid sharia*. The interest-based debt ratio also needs to be tested whether the variable affects ESG performance or not. Several previous studies have found a relationship between corporate debt ratio and corporate governance. Companies with poor governance have a large short-term debt ratio. Under the assumption that firms adjust to an optimal level of capital structure, it can be assumed that firms with high social capital have lower leverage levels. Since Islamic debt usually uses sukuk schemes where there is profit sharing from activities, it can be assumed that Islamic debt is usually done in the long term (Huang & Shang, 2019). A large short-term debt ratio indicates poor corporate governance where the company considers adverse selection from poor governance to be more severe than liquidity risk (Kim, 2015).

The main objective of this study is to see whether companies that pass the screening conducted by DES have higher ESG values or not. The Indonesia Stock Exchange established an index of sharia-categorized stocks (DES) called ISSI. As described above, companies that are

included in the ISSI are expected to have a higher ESG assessment compared to companies that are not included in the ISSI. In addition, this study also tests whether the variable of non-sharia debt ratio used in screening sharia stocks affects ESG performance or not. This study looks at how companies follow sharia rules from two sides. One way is by checking if a company is part of the ISSI, which shows it meets sharia standards. The other way is by looking at how much non-sharia debt a company has, which goes against sharia principles. This shows that a company might appear to follow sharia rules on the surface by being in the ISSI, but still break sharia rules in practice because of the way it handles debt. If the results show this result, then this study can be an appeal for companies to reduce the use of non-sharia debt to be more Sharia compliant since being in the ISSI only means the company is deemed Sharia compliant by DES. This study aims to find out the following things: First, does Sharia Compliance, as shown by being included in the ISSI, result in better ESG performance? Second, does non-Sharia debt ratio, have a negative effect on ESG? Third, do these two factors work together to influence different parts of ESG?

Previous research generally only discusses the differences between the shares of sharia-compliant companies and those that are not. Previous studies used leverage in the form of the ratio of total debt per total assets used as an independent variable. In this study, the ratio of non-sharia debt will be the independent variable tested in place of leverage. This is a novelty because previous studies have only discussed the relationship between ESG and sharia stocks but have not discussed the relationship between ESG and non-sharia debt.

2. Literature Review

2.1. ESG

Thomson Reuters has introduced an ESG score calculation method measuring the level of ESG information reporting of a company (Sikacz & Wołczek, 2018). The company's investment activities by considering non-financial factors such as environmental, social, and governance allow the creation of better, transparent, objective conditions in optimizing investment. With the issues of environmental degradation getting worsening, ESG aspects are quickly taking center stage, as more and more investors, regulators, and stakeholders are becoming aware of the importance of ESG. investors, regulators and other stakeholders are now aiming to conduct business in a way that contributes to environmental aim to conduct business in a way that positively contributes to the resolution of these issues. As a result, ESG has become a globally recognized consideration in investment decision-making and is increasingly at the center of companies' strategic and operational agendas (Li et al., 2021).

2.2. Sharia Stock and ESG

ESG principles are seen as aligned with Islamic teachings, which overall encourage ethical and sustainable behavior (Hashim et al., 2023). The Islamic financial system strongly upholds moral and ethical standards in its regulatory structure. This unique feature has an environmental core, as Islamic financing has several principles associated with ESG investments, especially in terms of the stewardship it upholds towards the environment and society at large. It is not unlikely that the Islamic stock market will have a strong dynamic relationship with the carbon market, whose objectives are geared towards environmental health (Asl et al., 2022). Corporate governance that is aligned with maqasid is broader and more complete as it addresses behavior and not just the nature of the desired relationship and all stakeholders of the company, including customers, employees, shareholders, suppliers, competitors, and the communities in which the company operates (Lieberman, 2018). Therefore, people who are familiar with maqashid values can understand corporate governance better because they understand more stakeholders.

Companies included in the Indonesia Sharia Stock Index, on paper, have business activities that do not conflict with Islamic sharia values. That way, with business activities that are in line with sharia values, companies that are included in the Indonesian Sharia Stock Index pay attention to maqashid sharia values. Therefore, companies that are included in the Indonesian Sharia Stock Index theoretically have a higher ESG value because these companies pay attention to sharia maqashid values. Thus, the following hypothesis can be made:

H1a: The ESG performance of companies included in the Sharia Stock Index is higher than companies that are not included in the Sharia Stock Index.

Consideration of the environmental pillar will result in the competitive advantage of environmentally friendly products and services (Dragomir & Dragomir, 2020). Islamic financial system strongly upholds moral and ethical standards in its regulatory structure. Islamic stocks promote a cleaner environment due to their adherence to ethical and moral standards that prioritize environmental stewardship. Islamic financing principles encourage a dynamic relationship with the carbon market to enhance environmental sustainability due to the principle of reducing or eliminating mudharat (harm or damage). Thus, it is not unlikely that the Islamic stock market will have a strong dynamic relationship with the carbon market, whose objectives are geared towards environmental health (Asl et al., 2022). Therefore, the following hypothesis is made:

H1b: The environmental performance of companies in the Islamic Stock Index is higher than that of companies not in the Islamic Stock Index.

The social pillar addresses themes related to discrimination and diversity, respect for employment issues and worker participation, relations with trade unions, enhancing the value of human capital, workplace safety and health, relations with consumers and their impact on the

most vulnerable, research capacity and responsible markets, and finally relations with local communities and support for their development (Becchetti et al., 2022). The fundamental foundations of Islam have similarities with conventional ethical thinking and philosophy. One prominent manifestation of business ethics is corporate social responsibility (CSR). CSR in Islam implicitly suggests that business owners who embed sharia values will embody these principles in managing the company. As a result, companies feel compelled to prioritize CSR to attract and retain investment (Cheong et al., 2019). Therefore, the following hypothesis is made:

H1c: The social performance of companies in the Shariah Stock Index is higher than companies not in the Shariah Stock Index.

The Governance pillar encourages the adoption of transparent accounting standards, the implementation of procedures that give voice to all shareholders, the mitigation of conflicts of interest in the design of decision-making processes, and of course, combating illegal and unethical practices throughout the production chain (Khan et al., 2016). ESG interpretations can be fully implemented and help companies create value in a sustainable manner if the corporate governance analysis and governance mechanism attributes found are incorporated into the company's organization (Monteiro et al., 2021). Conventional corporate governance tends to focus on relationships with shareholders and sometimes relationships with employees. Guidance from maqasid is broader and more complete as it addresses behavior and not just the nature of the desired relationship and all the company's stakeholders, including customers, employees, shareholders, suppliers, competitors, and the communities in which the company operates. This broader perspective encourages more responsible corporate behavior. Additionally, the Islamic Principles require transparency and accountability in business operations. Companies are encouraged to disclose financial information and corporate practices honestly (Lieberman, 2018). Thus, people who are familiar with maqashid values can understand corporate governance better because they are more aware of more stakeholders. Therefore, the following hypothesis is made:

H1d: Governance performance of companies included in the Sharia Stock Index is higher than companies that are not included in the Sharia Stock Index.

2.3. Short-Term Loan Effect to ESG

In general, the use of short-term debt forces companies to sacrifice long-term strategies. This has a negative impact on the sustainability of the company. A large short-term debt ratio indicates poor corporate governance where companies consider adverse selection from poor governance more severe than liquidity risk (Kim, 2015). Corporate leverage and short-term debt ratios are negatively related to social pillars where companies that have large short-term debt are not trusted by lenders (Huang & Shang, 2019). This indicates a negative relationship between corporate debt and ESG value. In addition, corporate ESG performance can reduce the problem

of “short borrowing for long investment”, and help companies to increase their risk level and market value for companies that are willing to develop green technology even though it can only be done by companies with good governance (Liu, 2024).

In this research, it is necessary to see whether the criteria used in screening Islamic securities are also directly proportional to ESG performance. In this study, the screening criteria to be tested is the company's non-sharia debt ratio because the criteria for non-sharia income can be seen from the business sector of the company being tested. According to the screening criteria, it is assumed that the ratio of non-sharia debt is inversely proportional to ESG performance. Therefore, the following hypothesis is made:

H2a: ESG performance will be higher for companies that have a lower non-Shariah debt ratio.

Companies that focus on short-term debt prioritize immediate payments over long-term investments in sustainable practices. This often leads to underinvestment in green technologies or initiatives. A focus on short-term financial metrics can result in negligence in complying with environmental regulations and lead to fines, penalties, or reputational damage. Companies end up engaging in only superficial sustainability efforts to appear environmentally friendly to secure funding or improve market perception, without making substantial changes to their practices (Liu, 2024). However, events in China show that companies with good ESG can make long-term investments with short-term debt because they have a good reputation (Xu et al., 2023). Therefore, the following hypothesis can be made:

H2b: Environmental Score will be higher if the low ratio of non-Shariah debt owned by the company is lower.

Longer-term debt can reduce reliance on frequent refinancing, allowing companies to strengthen their relationships with local stakeholders and develop social networks. Companies with long-term debt commitments signal stability and commitment to their stakeholders, thereby increasing their social capital. Companies with longer debt maturities can allocate resources to community projects, which can increase social capital by fostering trust and collaboration with local communities. In contrast, short-term debt pressures companies to prioritize immediate financial gains, which can lead to risky behavior that negatively impacts social capital (Huang & Shang, 2019). Thus, the following hypothesis can be made:

H2c: Social Score will be higher if the low ratio of non-Shariah debt held by the company is lower.

Debt reduces the agency costs of free cash flow and financial intermediaries play an important role in mitigating adverse selection problems and moral hazards. However, in companies with short-term debt, management may prioritize short-term profits over long-term value creation. This can result in decision-making that is detrimental to shareholder interests. This

misalignment may highlight weaknesses in governance, prompting stakeholders to push for change. Conversely, a governance structure that prioritizes long-term debt can help mitigate the risks associated with refinancing and extending debt. Strong governance can ensure that companies have proper risk assessment and management strategies (Kim, 2015). Thus, the following hypothesis can be made:

H2d: Governance score will be higher if the low ratio of non-Shariah debt owned by the company is lower.

3. Research Method

This study conducted Ordinary Least Square (OLS) with fixed effect time to see whether companies listed in ISSI really have higher ESG performance and whether the ratio of non-sharia debt affects ESG performance. The study uses data from Indonesian companies with ESG scores from 2018 to 2022. The five-year timeframe was chosen to capture developments in ESG reporting practices in Indonesia, while ensuring data availability and consistency. Of course, before using this method, they also mentioned that there are three assumptions that need to be tested before using the OLS method. First, the dependent variable used in the model must be homoskedastic. The variance in each independent variable used in this study is uniform. Second, there is no multicorrelation between each dependent variable. The independent variables used in this study do not affect other dependent variables. Finally, there is no autocorrelation in the model used. In this way, the remaining errors from this research model do not affect the dependent variable.

To test the hypothesis, this study adopts the equation from Umar (2021) referring to Hayat and Hassan (2017) as follows:

$$ESG_{i,t} = \beta_0 + \beta_1 ISSI_{i,t} + \beta_2 TA_{i,t} + \beta_3 ROA_{i,t} + \beta_4 MTB_{i,t} + \beta_5 BT_{i,t} + \beta \sum Year + \varepsilon_{i,t} \quad (\text{Model 1.a})$$

$$E_{i,t} = \beta_0 + \beta_1 ISSI_{i,t} + \beta_2 TA_{i,t} + \beta_3 ROA_{i,t} + \beta_4 MTB_{i,t} + \beta_5 BT_{i,t} + \beta \sum Year + \varepsilon_{i,t} \quad (\text{Model 1.b})$$

$$S_{i,t} = \beta_0 + \beta_1 ISSI_{i,t} + \beta_2 TA_{i,t} + \beta_3 ROA_{i,t} + \beta_4 MTB_{i,t} + \beta_5 BT_{i,t} + \beta \sum Year + \varepsilon_{i,t} \quad (\text{Model 1.c})$$

$$G_{i,t} = \beta_0 + \beta_1 ISSI_{i,t} + \beta_2 TA_{i,t} + \beta_3 ROA_{i,t} + \beta_4 MTB_{i,t} + \beta_5 BT_{i,t} + \beta \sum Year + \varepsilon_{i,t} \quad (\text{Model 1.d})$$

Furthermore, to test the effect of non- Sharia debt ratio on ESG performance, the ISSI variable will be replaced by the variable "Non- Sharia Debt to Asset" (NSDTA) so that the model to be tested is as follows:

$$ESG_{i,t} = \beta_0 + \beta_1 NSDTA_{i,t} + \beta_2 TA_{i,t} + \beta_3 ROA_{i,t} + \beta_4 MTB_{i,t} + \beta_5 BT_{i,t} + \beta \sum Year + \varepsilon_{i,t} \quad (\text{Model 2.a})$$

$$E_{i,t} = \beta_0 + \beta_1 NSDTA_{i,t} + \beta_2 TA_{i,t} + \beta_3 ROA_{i,t} + \beta_4 MTB_{i,t} + \beta_5 BT_{i,t} + \beta \sum Year + \varepsilon_{i,t} \quad (\text{Model 2.b})$$

$$S_{i,t} = \beta_0 + \beta_1 NSDTA_{i,t} + \beta_2 TA_{i,t} + \beta_3 ROA_{i,t} + \beta_4 MTB_{i,t} + \beta_5 BT_{i,t} + \beta \sum Year + \varepsilon_{i,t} \quad (\text{Model 2.c})$$

$$G_{i,t} = \beta_0 + \beta_1 \text{NSDTA}_{i,t} + \beta_2 \text{TA}_{i,t} + \beta_3 \text{ROA}_{i,t} + \beta_4 \text{MTB}_{i,t} + \beta_5 \text{BT}_{i,t} + \beta \Sigma \text{Yeart} + \varepsilon_{i,t} \quad (\text{Model 2.d})$$

To ensure clarity, several points need to be highlighted. First, the status of sharia stocks is used as an indicator of sharia compliance. Companies receive a score of 1 if their shares are listed on the ISSI, and 0 if they are not. The ISSI reflects the official screening mechanism for sharia compliance. It reflects sharia compliance according to DES. Second, the non-sharia debt ratio (NSDTA) is calculated as the proportion of interest-bearing debt to total company assets. This reflects the company's dependence on debt that does not comply with sharia. Lastly, the dependent variables consist of the ESG scores and its three pillars. These indicators are taken from Eikon Refinitiv, which is one of the most widely used global ESG database with comprehensive coverage and consistent methodology, allowing comparability across firms and over time. Table 1 briefly describes the operationalization of variables in this study. This table shows the variables used, the notation used to refer to these variables, how the variables are measured, and where the variables are obtained from.

Table 1
Variables Explanation

Variable	Notation	Measurement	Source of Data
ESG Score	ESG	Measuring a company's ESG performance.	Data obtained directly from Eikon Refinitiv.
Environmental Score	E	Measuring a company's Environmental performance.	Data obtained directly from Eikon Refinitiv.
Social Score	S	Measuring a company's Social performance.	Data obtained directly from Eikon Refinitiv.
Governance Score	G	Measuring a company's Governance performance.	Data obtained directly from Eikon Refinitiv.
ISSI	ISSI	Shows whether the company is included in the calculation of the Indonesian Sharia Stock Index (ISSI) or not	Data obtained from IDX reports.
Non-Sharia Debt ratio	NSDTA	Measures the company's interest-bearing debt per total company assets.	Data obtained by dividing non-shariah debt by total company assets from data obtained from Eikon Refinitiv.
Total Assets	TA	Measuring the company's total assets in rupiah.	Data obtained directly from Eikon Refinitiv.
Return of Asset ratio	ROA	Measures the ratio of income/profit after tax per total company assets.	Data obtained directly from Eikon Refinitiv.
Market-to-Book ratio	MTB	Measures the ratio of market capitalization per total equity of the company.	Data is obtained by dividing market capitalization by total company equity from Eikon Refinitiv.
Board Tenure	BT	Measures the average length of time a person has served as a member of a company's board of directors	Data obtained directly from Eikon Refinitiv.

4. Result

Descriptive statistics show the results of data collection. Table 3 shows the average value (mean), minimum value (min), and maximum value (max) of all variables used. The table is also divided into 3 sections, namely the total observations section, the observations section that are included in ISSI (samples that have ISSI variable = 1), and the observations section that are not included in ISSI (samples that have ISSI variable = 0). In accordance with the research model, the table shows the descriptive statistics of ESG score (ESG), environmental score (E), social score (S), governance score (G), total company assets (TA), market-to-book ratio (MTB), return of assets ratio (ROA), board tenure (BT), and non-Sharia debt per asset ratio (NSDTA). Table 3 presents descriptive results regarding the differences between companies whose shares are included in the ISSI index and those that are not. Judging from the descriptive table, the ESG scores of companies that are included in the ISSI Index are higher than those that are not. However, keep in mind that these results could have been generated from the control variables tested. Apart from total assets, the average of all control variables of companies that are included in the ISSI Index is higher than those that are not. Without looking at the control variables, the difference in ESG scores between companies that enter the ISSI Index and those that do not is only seen in the social and governance pillars. The difference in the environmental pillar does not appear to be different according to the accepted significance limit.

Table 2
Descriptive Statistics

Variable	All Observations				ISSI		Non-ISSI	
	Obs	Mean	Min	Max	Obs	Mean	Obs	Mean
ESG	228	47.7536	10.0496	85.8183	164	49.7974	64	42.5165
E	228	40.2224	0.0000	87.5443	164	41.5138	64	36.9131
S	228	52.4484	5.1406	95.8848	164	54.5138	64	47.1557
G	228	47.5506	2.9773	94.0134	164	49.7263	64	41.9754
NSDTA	228	0.2639	0.0005	0.7852	164	0.2300	64	0.3507
TA	228	6.01x10 ¹³	3.89 x10 ¹¹	4.13 x10 ¹⁴	164	5.62 x10 ¹³	64	7.00 x10 ¹³
ROA	228	0.0828	-0.2029	0.5570	164	0.0967	64	0.0471
MTB	228	4.5005	0.1730	242.6347	164	5.0677	64	3.0473
BT	228	7.2680	1.0000	20.6875	164	7.4796	64	6.7258

Source: Eikon Refinitiv data processed with STATA, 2024

Table 2 presents descriptive results regarding the differences between companies whose shares are included in the ISSI index and those that are not. Judging from the descriptive table, the ESG scores of companies that are included in the ISSI Index are higher than those that are not. However, it is important to keep in mind that these results could have resulted from the control variables tested. Apart from total assets, the average of all control variables of companies that are included in the ISSI Index is higher than those that are not. Without looking at the control variables, the difference in ESG scores between companies that enter the ISSI Index and those

that do not is only seen in the social and governance pillars. The difference in the environmental pillar does not appear to be different according to the accepted significance limit.

Table 3
Correlation Table

	ESG	E	S	G	ISSI
ESG	1.000	-	-	-	-
E	0.8319*	1.000	-	-	-
S	0.8941*	0.6948*	1.000	-	-
G	0.7964*	0.4819*	0.5626*	1.000	-
ISSI	0.1798*	0.0899	0.1611*	0.1556*	1.000
NSDTA	-0.2496*	-0.3084*	-0.1726*	-0.1532*	-0.2952*
TA	0.1028	0.1543*	0.1279	-0.0679	-0.094
ROA	0.3874*	0.4497*	0.2957*	0.2684*	0.2316*
MTB	0.1364*	0.1878*	0.0829	0.0617	0.052
BT	-0.2686*	-0.2073*	-0.4150*	-0.0448	0.0784
	NSDTA	TA	ROA	MTB	BT
NSDTA	1.000	-	-	-	-
TA	0.1293	1.000	-	-	-
ROA	-0.3236*	-0.0369	1.000	-	-
MTB	-0.0563	-0.0587	0.0405	1.000	-
BT	-0.1493*	-0.0717	0.0107	-0.106	1.000

“*” indicates a correlation with significant value of 5%

Source: Eikon Refinitiv data processed with STATA, 2024

The results shown in the Correlation Table indicate that the main independent variables are statistically significant to the dependent variables ESG, S, and G. First, the ISSI variable has a positive and significant coefficient which is consistent with the assumption that companies that enter ISSI have higher ESG, Social, and Governance performance compared to conventional companies, although the Environmental dimension does not show a significant relationship. Second, the NSDTA variable is statistically significant to the dependent variables ESG, E, S, and G. The results in Correlation Table are only preliminary evidence. Meanwhile, hypothesis testing with OLS is needed to provide more accurate evidence to test the hypotheses described in the previous section.

Before regression is performed, there are several classic assumption tests that needs to be fulfilled. The classic assumption tests that need to be met include normality test, heteroscedasticity test, aotocorrelation test, and multicollinearity test. The classic assumption test is carried out so that the research model does not have heteroscedasticity (the presence of independent variables that have different distributions), autocorrelation (the presence of variables that are included in the model and are still part of the error), and multicollinearity (there is a strong correlation between two independent variables).

Table 4
Breusch–Pagan/Cook–Weisberg test for Model 1.a – 1.d and Model 2.a-2.d
(H0: Constant variance)

Model	Model 1.a	Model 1.b	Model 1.c	Model 1.d
Prob > chi2	0.2333	0.5302	0.0988	0.0661
Model	Model 2.a	Model 2.b	Model 2.c	Model 2.d
Prob > chi2	0.2686	0.2565	0.0684	0.3300

Source: Eikon Refinitiv data processed with STATA, 2024

After conducting the Breusch-Pagan and Cook-Weisberg tests to ensure homoskedasticity, no heteroskedasticity was found. All Breusch-Pagan and Cook-Weisberg test results show Prob > chi2 results above 5% so that the H0 statement where the variance between variables is constant cannot be rejected. This indicates that all variables used are homoscedastic and there is no heteroscedasticity in the model.

Table 5
Ramsey (RESET) test for Model 1.a – 1.d and Model 2.a-2.d
(H0: Model has no omitted variables)

Model	Model 1.a	Model 1.b	Model 1.c	Model 1.d
Prob > chi2	0.9277	0.5718	0.3364	0.4141
Model	Model 2.a	Model 2.b	Model 2.c	Model 2.d
Prob > chi2	0.6771	0.5112	0.1403	0.7454

Source: Eikon Refinitiv data processed with STATA, 2024

After conducting the Ramsey RESET test, no autocorrelation was found. All Breusch-Pagan and Cook-Weisberg test results show Prob> F results above 5% so that the H0 statement where the model does not have omitted variables cannot be rejected. This shows that all independent variables that can affect the dependent variable are omitted and mixed in the error variable so that it will not cause autocorrelation.

Table 6
VIF test for Model 1.a – 1.d and Model 2.a-2.d

Model 1.a-1.d		Model 2.a-2.d	
Variable	VIF	Variable	VIF
ISSI	1.08	NSDTA	1.17
TA	1.02	TA	1.03
ROA	1.07	ROA	1.14
MTB	1.03	MTB	1.03
BT	1.02	BT	1.04
Year		Year	
2019	1.80	2019	1.80
2020	1.86	2020	1.86

2021	2.02	2021	2.02
2022	1.98	2022	1.98
Mean	1.43	Mean	1.45

Source: Eikon Refinitiv data processed with STATA, 2024

After conducting VIF test to ensure that the independent variables are not correlated with each other, it was found that the VIF value for each independent variable is low (1.43 for the model with independent variable "ISSI" (Islamic stock status) and 1.45 for the model with independent variable "NSDTA" (non- Sharia debt ratio)). This indicates that the independent variables used have a low influence between one another.

After conducting a research model that meets the requirements for hypothesis testing with the OLS method, regression can be carried out. The regression results table shows the coefficient values of the independent variables which indicate how much the change in the independent variable is associated with the change in the dependent variable. shows the probability of the null hypothesis being true and is used to measure the significance of the test. As usual, it is assumed that the null hypothesis signifies that the independent variable does not affect the dependent variable.

Table 7
Regression Results for Model 1.a to 1.d

Variables	ESG (Model 1.a)	E (Model 1.b)	S (Model 1.c)	G (Model 1.d)
ISSI	5.285 (**)	0.819	6.711 (**)	5.147
TA	3.19x10 ¹⁴ (**)	5.92x10 ¹⁴ (***)	3.85x10 ¹⁴ (**)	-1.74x10 ¹⁴
ROA	71.299 (***)	111.198 (***)	60.254 (***)	59.285 (***)
MTB	0.091	0.199 (***)	0.028	0.042
BT	-1.115 (***)	-0.985 (***)	-1.984 (***)	-0.287
_cons	38.090	24.555	50.642	36.497
Time Fixed Effect	TRUE	TRUE	TRUE	TRUE
Adj r-squared	0.2574	0.3062	0.2800	0.0697

(*) indicates a significant value of 10%

(**) indicates a significant value of 5%

(***) indicates a significant value of 1%

Source: Eikon Refinitiv data processed with STATA, 2024

The regression results of model 1.a show that companies that are included in the ISSI stock index have a significantly higher ESG value compared to other companies that are not included in the ISSI stock exchange. From the regression result above, it can be seen from the coefficient of the ISSI variable which shows a positive and significant number at the 5% level. This indicates that companies that are included in the Sharia Stock Index (most likely) have a higher ESG score

than companies that are not included in the Sharia Stock Index. Therefore, the conclusion drawn in this study is that H1a is recognized because it has reached the appropriate benchmark.

The regression results of models 1.b, 1.c, and 1.d show that companies that are included in the ISSI stock index significantly have a higher Social value than companies that are not included in the ISSI stock exchange. On the other hand, in terms of environment and governance, companies that are included in the Islamic stock index do not significantly have a higher social value than companies that are not included in the ISSI stock exchange. From the regression result above, it can be seen from the coefficient of the ISSI variable which shows a positive number and is significant at the 5% level for model 1.c.. For models 1.b and 1.d, The regression result above only presents the coefficient of the ISSI variable which shows a positive number but does not present significance at the 5% level. This shows that companies that are included in the Sharia Stock Index (most likely) have a higher Social score than companies that are not included in the Sharia Stock Index. Therefore, the conclusion drawn in this study is that H1c is recognized because it has reached the appropriate benchmark. On the other hand, H1b and H1d are not recognized because they have not reached the appropriate benchmarks.

The results of the study show that ISSI has a positive effect on ESG scores, especially in the social pillar. From the perspective of Maqashid Syariah, this reflects protection of life because sharia companies tend to emphasize worker welfare, social responsibility, and community involvement. From Stakeholder Theory, ISSI companies are more sensitive to pressure from Muslim stakeholders who demand ethical values, transparency, and social advocacy. On the other hand, ISSI does not require environmental performance in the screening process. As a result, sharia companies can pass ISSI even though they are still low in environmental sustainability practices. Corporate governance is largely determined by OJK and IDX regulations, not ISSI status. Thus, ISSI only contributes weakly to governance improvement.

Table 8
Regression Results for Model 2.a to 2.d

Variables	ESG (Model 2.a)	E (Model 2.b)	S (Model 2.c)	G (Model 2.d)
NSDTA	-19.092 (***)	-28.999 (***)	-18.743 (***)	-8.650
TA	3.47x10 ¹⁴ (**)	6.74x10 ¹⁴ (***)	4.04x10 ¹⁴ (**)	-1.76x10 ¹⁴
ROA	64.945 (***)	94.028 (***)	55.604 (***)	59.277 (***)
MTB	0.087	0.184 (**)	0.026	0.043
BT	-1.192 (***)	-1.157 (***)	-2.047 (***)	-0.300
_cons	47.939	34.883	61.291	42.728
Time Fixed Effect	TRUE	TRUE	TRUE	TRUE
Adj r-squared	0.2740	0.3536	0.2841	0.0638

(*) indicates a significant value of 10%

(**) indicates a significant value of 5%

(***) indicates a significant value of 1%

Source: Eikon Refinitiv data processed with STATA, 2024

The regression results of model 2.a show that companies that have a low ratio of non-Shariah debt have a significantly higher ESG value compared to other companies that have a higher ratio of non-Shariah debt. From the regression result above, it can be seen from the coefficient of the NSDTA variable which shows a negative number and is significant at the 5% level. This indicates that companies that have a lower ratio of non-Shariah debt per asset (most likely) have a higher ESG score than companies that have a higher ratio of non-Shariah debt per asset. Therefore, the conclusion drawn in this study is that H2a is recognized because it has reached the appropriate benchmark.

The regression results of models 2.b, 2.c, and 2.d show that companies with low non-Shariah debt ratios have higher Environmental and Social values compared to other companies with higher non-Shariah debt ratios. On the other hand, in terms of Governance, companies that have a low non-Shariah debt ratio do not have a significantly higher value compared to other companies that have a higher non-Shariah debt ratio. From the regression result above, it can be seen from the coefficient of the ISSI variable that shows a negative number and is significant at the 5% level in models 2.b and 2.c. For model 2.d, The regression result above only presents the coefficient of the NSDTA variable which shows a negative number but does not present significance at the 5% level. This indicates that companies that have a lower ratio of non-Shariah debt per asset (most likely) have a higher Environmental and Social score than companies that have a higher ratio of non-Shariah debt per asset. Therefore, the conclusion drawn in this study is that H2b and H2c are recognized because they have reached the appropriate benchmark. On the other hand, H2d is not recognized because it has not reached the appropriate benchmarks.

The finding that non-sharia debt ratios have a negative impact on ESG (particularly environmental and social aspects) is in line with Maqashid Syariah, especially protection of wealth. Interest-based debt is considered to violate sharia principles and increase risks for companies and stakeholders. From the perspective of Stakeholder Theory, the use of non-sharia debt sends a negative signal to stakeholders because companies are more focused on meeting the interests of creditors than social and environmental interests. Agency Theory can explain the ambiguity of results for governance. Debt is often considered a disciplinary tool to reduce agency conflicts between managers and shareholders. However, if interest-based debt is too high, it increases financial and reputational risk, due to usury and stakeholders may view it negatively. This explains why there is a strong negative relationship with the environment and society, which are sensitive to short-term costs, but not a significant relationship with governance, which is more influenced by external regulations.

5. Robustness Test

After testing models 1.a to 1.d using the ISSI variable, the robustness test in this study will use a one-year lag to test hypotheses 1.a to 1.d. It is possible that the effect of ISSI on ESG scores is not felt immediately but can only be seen in the following year. The one-year lag of the ISSI variable will then be referred to as the ISSIt-1 variable. The ISSIt-1 variable is calculated by looking at whether the company was included in the ISSI from December of the previous two years to December of the previous year. For example, if company A is on the list of companies that entered ISSI in the December 2018 and December 2019 reports, then ISSIt-1 = 1 in 2020. Therefore, the next sensitivity test in this study will use this OLS model:

$$ESG_{i,t} = \beta_0 + \beta_1 ISSI_{i,t-1} + \beta_2 TA_{i,t} + \beta_3 ROA_{i,t} + \beta_4 MTB_{i,t} + \beta_5 BT_{i,t} + \beta \Sigma Year + \varepsilon_{i,t} \quad (\text{Model 3.a})$$

$$E_{i,t} = \beta_0 + \beta_1 ISSI_{i,t-1} + \beta_2 TA_{i,t} + \beta_3 ROA_{i,t} + \beta_4 MTB_{i,t} + \beta_5 BT_{i,t} + \beta \Sigma Year + \varepsilon_{i,t} \quad (\text{Model 3.b})$$

$$S_{i,t} = \beta_0 + \beta_1 ISSI_{i,t-1} + \beta_2 TA_{i,t} + \beta_3 ROA_{i,t} + \beta_4 MTB_{i,t} + \beta_5 BT_{i,t} + \beta \Sigma Year + \varepsilon_{i,t} \quad (\text{Model 3.c})$$

$$G_{i,t} = \beta_0 + \beta_1 ISSI_{i,t-1} + \beta_2 TA_{i,t} + \beta_3 ROA_{i,t} + \beta_4 MTB_{i,t} + \beta_5 BT_{i,t} + \beta \Sigma Year + \varepsilon_{i,t} \quad (\text{Model 3.d})$$

In addition, after testing models 2.a to 2.d using the Non- Sharia Debt to Asset ratio, the robustness test in this study will use the Islamic Debt to Asset (SDTA) ratio to replace the NSDTA variable to test hypotheses 2.a to 2.d. As one of the Islamic financial products, Islamic Debt does not use usury to seek profits like Non- Sharia Debt but uses a profit-sharing system. That way, the profit sharing of Islamic Debt makes the return received by the lender influenced by the company's performance so that the lender has more incentive to make the company more profitable. Unlike the NSDTA variable, SDTA is expected to be directly proportional to the ESG score and its pillars. Therefore, the robustness test in this study will use this model:

$$ESG_{i,t} = \beta_0 + \beta_1 SDTA_{i,t} + \beta_2 TA_{i,t} + \beta_3 ROA_{i,t} + \beta_4 MTB_{i,t} + \beta_5 BT_{i,t} + \beta \Sigma Year + \varepsilon_{i,t} \quad (\text{Model 4.a})$$

$$E_{i,t} = \beta_0 + \beta_1 SDTA_{i,t} + \beta_2 TA_{i,t} + \beta_3 ROA_{i,t} + \beta_4 MTB_{i,t} + \beta_5 BT_{i,t} + \beta \Sigma Year + \varepsilon_{i,t} \quad (\text{Model 4.b})$$

$$S_{i,t} = \beta_0 + \beta_1 SDTA_{i,t} + \beta_2 TA_{i,t} + \beta_3 ROA_{i,t} + \beta_4 MTB_{i,t} + \beta_5 BT_{i,t} + \beta \Sigma Year + \varepsilon_{i,t} \quad (\text{Model 4.c})$$

$$G_{i,t} = \beta_0 + \beta_1 SDTA_{i,t} + \beta_2 TA_{i,t} + \beta_3 ROA_{i,t} + \beta_4 MTB_{i,t} + \beta_5 BT_{i,t} + \beta \Sigma Year + \varepsilon_{i,t} \quad (\text{Model 4.d})$$

Table 9
Breusch–Pagan/Cook–Weisberg test for Model 3.a – 3.d and Model 4.a-4.d
(H0: Constant variance)

Model	Model 3.a	Model 3.b	Model 3.c	Model 3.d
Prob > chi2	0.1768	0.5178	0.0620	0.0558
Model	Model 4.a	Model 4.b	Model 4.c	Model 4.d
Prob > chi2	0.4956	0.8480	0.8105	0.9733

Source: Eikon Refinitiv data processed with STATA, 2024

Table 10
Ramsey (RESET) test for Model 3.a – 3.d and Model 4.a-4.d
(H0: Model has no omitted variables)

Model	Model 3.a	Model 3.b	Model 3.c	Model 3.d
Prob > chi2	0.8396	0.3245	0.5774	0.3434
Model	Model 4.a	Model 4.b	Model 4.c	Model 4.d
Prob > chi2	0.7058	0.1029	0.4369	0.4235

Source: Eikon Refinitiv data processed with STATA, 2024

Table 11
VIF test for Model 3.a – 3.d and Model 4.a-4.d

Model 3.a-3.d		Model 4.a-4.d	
Variable	VIF	Variable	VIF
ISSI _{t-1}	1.07	SDTA	1.11
TA	1.01	TA	1.01
ROA	1.06	ROA	1.04
MTB	1.03	MTB	1.06
BT	1,03	BT	1.04
Year		Year	
2019	1.80	2019	1.80
2020	1.85	2020	1.85
2021	2.02	2021	2.02
2022	1.98	2022	1.99
Mean	1.43	Mean	1.44

Source: Eikon Refinitiv data processed with STATA, 2024

Once again, before regression is performed, there are several classic assumption tests that needs to be fulfilled. Breusch–Pagan/Cook–Weisberg test, Ramsey (RESET) test, and VIF test for Model 3.a-3.d and Model 4.a-4.d show that there are no homoskedasticity, autocorrelation, and multicorrelation in Model 3.a-3.d and Model 4.a-4.d.

Table 12
Regression Results for Model 3.a to 3.d

Variables	ESG (Model 3.a)	E (Model 3.b)	S (Model 3.c)	G (Model 3.d)
ISSI _{t-1}	6.255 (**)	3.283	7.536 (***)	5.397
TA	3.04x10 ¹⁴ (*)	5.95x10 ¹⁴ (***)	3.65x10 ¹⁴ (**)	-1.90x10 ¹⁴
ROA	70.932 (***)	108.966 (***)	60.171 (***)	59.580 (***)
MTB	0.111 (*)	0.207 (***)	0.052	0.060
BT	-1.134 (***)	-1.010 (***)	-2.004 (***)	-0.298
_cons	37.532	23.006	50.192	36.393
Time Fixed Effect	TRUE	TRUE	TRUE	TRUE
Adj r-squared	0.2637	0.3099	0.2851	0.0706

(*) indicates a significant value of 10%

(**) indicates a significant value of 5%

(***) indicates a significant value of 1%

Source: Eikon Refinitiv data processed with STATA, 2024

The regression results of model 3.a show that companies that are included in the ISSI stock index in the previous year have a significantly higher ESG value compared to other companies that are not. From the regression result above, it can be seen from the coefficient of the ISSIt-1 variable which shows a positive number and is significant at the 5% level. This proves again hypothesis H1.a that companies that are included in the Sharia Stock Index (most likely) have a higher ESG score than companies that are not included in the Sharia Stock Index.

The same can be seen from models 3.b to 3.d where, in accordance with the regression results of models 1.b to 1.d, only the social pillar is influenced by the ISSIt-1 variable. The regression results of model 3.c show that companies that are included in the ISSI stock index in the previous year significantly have a higher Social value compared to other companies that are not. This proves again hypothesis H1.c that companies that are included in the Sharia Stock Index (most likely) have a higher Social score than companies that are not included in the Sharia Stock Index.

Table 13
Regression Results for Model 4.a to 4.d

Variables	ESG (Model 4.a)	E (Model 4.b)	S (Model 4.c)	G (Model 4.d)
SDTA	6.255 (**)	3.283	7.536 (***)	5.397
TA	3.04×10^{14} (*)	5.95×10^{14} (***)	3.65×10^{14} (**)	-1.90×10^{14}
ROA	70.932 (***)	108.966 (***)	60.171 (***)	59.580 (***)
MTB	0.111 (*)	0.207 (***)	0.052	0.060
BT	-1.134 (***)	-1.010 (***)	-2.004 (***)	-0.298
_cons	37.532	23.006	50.192	36.393
Time Fixed Effect	TRUE	TRUE	TRUE	TRUE
Adj r-squared	0.2637	0.3099	0.2851	0.0706

(*) indicates a significant value of 10%

(**) indicates a significant value of 5%

(***) indicates a significant value of 1%

Source: Eikon Refinitiv data processed with STATA, 2024

The regression results of model 4.a to 4.b shows that the Sharia debt ratio has a positive influence on ESG scores and the three ESG pillars. From the regression results, it can be seen from the coefficient of the SDTA variable that shows a positive number and is significant at the 5% level for models 4.a to 4.d. This indicates that companies that have a higher ratio of Islamic debt per asset (most likely) have higher ESG scores and Environmental, Social, and Governance scores than companies that have a lower ratio of Islamic debt per asset. However, the regression

results with the SDTA variable alone are not enough to prove that Islamic Debt can replace Non-Sharia Debt so that there is an increase in the company's ESG score.

This result reemphasizes that the use of Non-Sharia Debt has a negative influence on ESG scores. Judging from the regression results of model 4.a to 4.b, we can say that Islamic Debt can be used to replace the use of Non-Sharia Debt for better ESG scores. Not only that, the use of Islamic Debt as a substitute for Non-Sharia Debt has a positive influence on ESG scores.

6. Conclusion

This study discusses how screening in the Indonesia Shariah Stock Index relates to ESG values. From the results, while ISSI-listed companies have higher overall ESG scores, separate research found that ISSI-listed companies significantly score higher on the social pillar only, not on the Environment and Corporate Governance pillars. Most of the Indonesia's population is Muslim, so sharia companies are more focused on social responsibility and relationship which is more in line with the community expectation as Muslim. This is in line with protection of life, which are easier to achieve through social activities than through governance. However, sharia compliance does not guarantee practices that are oriented towards sustainability and good governance because sharia compliance is mostly focused on financial compliance and halal business which do not have much thing to do with environment and corporate governance. Unlike non-sharia debt ratio, sharia compliance can not really show company focus on long-term investment. In addition, agency theory explains that debt can serve as a disciplinary tool for management, so the relationship between governance and sharia compliance is not always consistent.

On the other hand, as hypothesized, the smaller the non-shariah debt owned by the company, the greater the company's ESG performance. This is not only evident from the aggregate ESG score but also from the Environmental and Social scores respectively. The same relationship is not evident from the Governance score. This result shows that the non-Islamic debt ratio is negatively related to the corporate social score. High non-sharia debt ratio encourages companies to focus on short-term profits, neglecting investment in environmental and social initiatives. High non-sharia debt ratio demonstrates the priority given to creditors over other stakeholders and violates the principle of wealth protection by increasing the usury-based risks and has the potential to damage social and environmental aspects due to short-term financial pressures. However, lower levels of non-sharia debt do not guarantee practices that are oriented towards good governance where, in theory, debt can reduce agency costs and impose discipline on management. Governance practices are influenced by regulations, not corporate debt. Therefore, the effect on governance is relatively weak.

The screening of Islamic stocks conducted by DES is still unable to include the environmental effects created by companies. Therefore, there is a recommendation to integrate the principles of environmental protection and sustainable responsible investment in the view of maqashid sharia in the selection process of Islamic stock indices. The combination of maqashid sharia and stock index selection process will enable the creation of a new sharia stock index or reshuffle the existing sharia stock index in Indonesia to include indicators of sharia maqashid fulfillment. This research also suggests that the Sharia Securities Council should start applying the maqashid sharia principle more deeply in the stock selection process for the Sharia stock index to incorporate ESG values into the ISSI so that the companies included in the ISSI are companies that can fulfill maqashid sharia.

On the other hand, it is significant that the smaller the non-shariah debt held by the company, the greater the company's ESG performance. This indicates that the use of non-Sharia debt provides a negative signal to other stakeholders. Therefore, companies pursuing a high ESG score are advised to minimize the use of non-Sharia debt. Additionally, the robustness test shows that the use of Islamic debt has a positive impact on ESG performance. This study shows that the use of Islamic debt can be used to improve ESG performance.

This study enriches ESG and Islamic finance literature by conceptualizing sharia compliance as a duality between compliance (ISSI) and non-compliance (non-sharia debt ratio). Findings show that sharia monitoring is socially driven, but not fully aligned with environmental and governance outcomes. For companies who want to be more sharia compliant, it is important to reduce non-sharia debt to improve ESG scores. Companies should integrate maqashid-oriented practices into their financing and operational strategies. For regulators like DES, this study can be a reminder that sharia monitoring mechanisms should integrate ESG dimensions, particularly environmental and governance aspects or something that can capture the essence of Maqashid Sharia.

One of the limitations of this study is that the object of research only comes from Indonesia. Indonesia's predominantly Muslim demographics may indicate that the results of this study will not produce the same results for other countries. In addition, previous studies have only discussed the effect of short-term debt on ESG performance. As part of the prerequisites of sharia stocks, there is not enough research on the impact of non-sharia debt on financial statements. Existing research has only discussed the status of companies in the available Islamic stock indices and not much has been done on the prerequisites of the Islamic stock indices themselves. In addition, the use of sukuk and Islamic debt in Indonesia is growing while there is still little research on it.

Future research can take a larger sample from various countries, especially from non-Muslim majority countries, either by adding additional variables to show the demographic

composition or not. More in-depth research needs to be done on the impact of non-shariah debt on ESG performance. Research on the prerequisites of an Islamic stock index can be conducted, especially for qualitative indicators. Research on the impact of sukuk on ESG performance should also be conducted. Going back to the prerequisites of the Islamic stock index, the use of sukuk and Islamic debt can reduce the use of non-sharia debt. In addition, from the reduced use of non-sharia debt, it is necessary to see whether the change in ESG value can be affected by sharia debt usage or not.

References

- Asl, M. G., Adekoya, O. B., & Oliyide, J. A. (2022). Carbon market and the conventional and Islamic equity markets: Where lays the environmental cleanliness of their utilities, energy, and ESG sectoral stocks? *Journal of Cleaner Production*, 351, 131523.
- Becchetti, L., Bobbio, E., Prizia, F., & Semplici, L. (2022). Going deeper into the S of ESG: a relational approach to the definition of social responsibility. *Sustainability*, 14(15), 9668.
- Berg, F., Koelbel, J. F., & Rigobon, R. (2022). Aggregate confusion: The divergence of ESG ratings. *Review of Finance*, 26(6), 1315–1344.
- Cheong, C. W. H., Salleh, N. I., & Yuan, F. C. (2019). The complementary effects of Islam and CSR: some empirical evidence. *Asian Journal of Finance & Accounting*, 11(1), 1–28.
- Dragomir, V. D., & Dragomir, V. D. (2020). Theoretical aspects of environmental strategy. *Corporate Environmental Strategy: Theoretical, Practical, and Ethical Aspects*, 1–31.
- Freeman, R. E. (2023). The politics of stakeholder theory: Some future directions. In *R. Edward Freeman's Selected Works on Stakeholder Theory and Business Ethics* (pp. 119–132). Springer.
- Hartwig, F., Kågström, J., & Fagerström, A. (2019). Sustainability accounting for externalities. *Sustainability: The Journal of Record*, 12(3), 158–162.
- Hashim, Y. Z. H.-Y., Samsudin, N., Ahmad, A. N., Al-saari, N., & Marzuki, Z. M. (2023). Perspective of Hadith in Halal Industry. *JOURNAL OF HALAL INDUSTRY & SERVICES*, 6(1).
- Huang, K., & Shang, C. (2019). Leverage, debt maturity, and social capital. *Journal of Corporate Finance*, 54, 26–46.
- Khan, M., Serafeim, G., & Yoon, A. (2016). Corporate sustainability: First evidence on materiality. *The Accounting Review*, 91(6), 1697–1724.
- Kim, H. (2015). Debt, maturity, and corporate governance: Evidence from Korea. *Emerging Markets Finance and Trade*, 51(sup3), 3–19.

- La Torre, M., Trotta, A., Chiappini, H., & Rizzello, A. (2019). Business models for sustainable finance: The case study of social impact bonds. *Sustainability*, 11(7), 1887.
- Li, T.-T., Wang, K., Sueyoshi, T., & Wang, D. D. (2021). ESG: Research progress and future prospects. *Sustainability*, 13(21), 11663.
- Lieberman, K. (2018). The Value of Islamic Guidance for Corporate Governance. *ICR Journal*, 9(2), 227–232.
- Liu, Y. (2024). Can corporate ESG performance mitigate short lending and long investment? *Advances in Economics and Management Research*, 10(1), 236.
- Matuszak, Ł., Róžańska, E., & Macuda, M. (2019). The impact of corporate governance characteristics on banks' corporate social responsibility disclosure: Evidence from Poland. *Journal of Accounting in Emerging Economies*, 9(1), 75–102.
- Mohd Zain, F. A., Muhamad, S. F., Abdullah, H., Sheikh Ahmad Tajuddin, S. A. F., & Wan Abdullah, W. A. (2024). Integrating environmental, social and governance (ESG) principles with Maqasid al-Shariah: a blueprint for sustainable takaful operations. *International Journal of Islamic and Middle Eastern Finance and Management*.
- Monteiro, G. F. A., Miranda, B. V., Rodrigues, V. P., & Saes, M. S. M. (2021). ESG: disentangling the governance pillar. *RAUSP Management Journal*, 56(4), 482–487.
- Ramadhan, M. (2019). MAQASID SYARI'AH DAN LINGKUNGAN HIDUP (Bahtsul Masa'il Sebagai Perlawanan Kaum Santri Terhadap Eksploitasi Pertambangan Emas Di Silo Jember). *Journal Analytica Islamica*, 8(2), 126–137.
- Sairally, B. S. (2015). Integrating environmental, social and governance (ESG) factors in Islamic finance: Towards the realisation of maqāṣid al-sharī'ah. *ISRA International Journal of Islamic Finance*, 7(2), 145–154.
- Sikacz, H., & Wołczek, P. (2018). ESG analysis of companies included in the RESPECT Index based on Thomson Reuters EIKON database. *Prace Naukowe Uniwersytetu Ekonomicznego We Wrocławiu*, 520, 115–127.
- Tamimi, N., & Sebastianelli, R. (2017). Transparency among S&P 500 companies: An analysis of ESG disclosure scores. *Management Decision*, 55(8), 1660–1680.
- Xu, L., Guo, P., & Wen, H. (2023). Increasing short-term lending for long-term investment under environmental pressure: Evidence from China's energy-intensive firms. *Environmental Science and Pollution Research*, 30(6), 14693–14706.