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ESG SCORE AND SHARIA COMPLIANCE AS DETERMINANTS OF FOREIGN INVESTMENT FLOWS INTO SHARIA STOCKS: A MULTINATIONAL PANEL ANALYSIS 2019-2024

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Abstract

This study analyzes the influence of ESG Score and sharia compliance on Foreign Portfolio Investment (FPI) in Indonesia and Malaysia during the 2019–2024 period. Using a panel data approach on the JII and FBMHS indices, the results indicate that ESG Score has a significant positive effect on FPI, highlighting the growing importance of sustainability performance for global investors. Sharia compliance, represented by the Debt-to-Asset Ratio (DAR) and Islamic Income Ratio (IIR), also significantly affects FPI, suggesting that adherence to Islamic financial principles strengthens foreign investor confidence in Islamic capital markets. Simultaneously, the integration of ESG performance and sharia principles emerges as an important determinant of cross-border investment decisions. However, this study operationalizes sharia compliance using limited financial ratio proxies, which may not fully capture the multidimensional characteristics of Islamic screening standards. Broader aspects such as business activity screening, non-halal income purification, and Islamic governance mechanisms were not included in the analysis. Therefore, future studies are encouraged to incorporate more comprehensive qualitative and governance-related indicators of sharia compliance to better explain foreign investor behavior in Islamic capital markets. These findings provide strategic implications for regulators and issuers to strengthen the competitiveness of Islamic capital markets through more standardized sustainability and sharia governance reporting.

Keywords: ESG Score, Sharia Compliance, Foreign Portfolio Investment, Sharia Stocks, Panel Data, Foreign Investment

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INTRODUCTION

Global investment trends indicate a growing shift in investor preferences toward non-financial factors that reflect corporate sustainability and governance quality. Institutional investors increasingly integrate Environmental, Social, and Governance (ESG) criteria into portfolio allocation decisions as part of long-term risk management strategies. ESG is no longer viewed merely as a reputational factor, but as an indicator of corporate transparency, governance stability, and firm resilience. Empirical studies show that firms with stronger ESG performance tend to exhibit higher stock liquidity, lower capital costs, and greater attractiveness to international investors (Luo, 2022). Cross-country evidence also confirms that higher ESG disclosure is associated with increased foreign ownership, particularly in transparent governance environments (Temiz et al., 2023).

Despite the rapid development of ESG-based investment, global capital flows into ESG products have fluctuated significantly in recent years due to macroeconomic uncertainty, inflationary pressure, and monetary policy tightening. These fluctuations suggest that the relationship between ESG performance and investment flows is not always stable, particularly in emerging markets where governance structures and market risks differ from developed economies. Consequently, understanding the role of ESG in attracting foreign portfolio investment (FPI) remains an important issue in international finance research.

FPI represents an important indicator of financial market integration because foreign investors generally evaluate governance quality, transparency, liquidity, and long-term stability before allocating capital. In this context, ESG can function as a positive signal that reduces information asymmetry and strengthens investor confidence (Temiz et al., 2023). However, in Islamic capital markets, investment decisions may also be influenced by sharia compliance mechanisms that regulate business activities and financial structures. Islamic stocks listed in the Jakarta Islamic Index (JII) in Indonesia and the FTSE Bursa Malaysia Hijrah Shariah Index (FBMHS) in Malaysia are screened based on specific sharia criteria, including restrictions on interest-based debt and non-halal business activities. These characteristics may create a distinct risk and governance profile that is relevant for foreign investors seeking stable and ethically screened investments.

Previous studies generally examine ESG and Islamic finance separately. Research on ESG mainly focuses on firm performance, sustainability reporting, or foreign ownership in conventional markets, while studies on Islamic stocks

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often emphasize comparisons with conventional stocks or market resilience during economic uncertainty (Usman et al., 2024). Empirical studies integrating ESG performance and sharia compliance simultaneously as determinants of foreign portfolio investment remain limited, especially in emerging Islamic capital markets such as Indonesia and Malaysia. This gap indicates the need for a more comprehensive framework that explains how sustainability and Islamic screening jointly influence foreign investor preferences.

The 2019–2024 period provides an important context for analysis because it covers the pre-pandemic phase, the COVID-19 crisis, and the global monetary tightening period, all of which significantly affected international capital flows. Therefore, this study aims to examine the influence of ESG scores and sharia compliance on foreign portfolio investment in Islamic stocks in Indonesia and Malaysia during the 2019–2024 period using a cross-country panel data approach. The study contributes to the sustainable finance and Islamic finance literature by developing an integrative framework that simultaneously evaluates ESG and sharia compliance as determinants of foreign investment decisions in Islamic capital markets.

LITERATURE REVIEW

Modern Portfolio Theory (MPT) in the Context of Sustainable and Sharia Investment

Modern Portfolio Theory (MPT), introduced by Markowitz, emphasizes that rational investors maximize returns at a given level of risk by diversifying assets with imperfect correlation. As it has evolved, portfolio efficiency no longer relies solely on conventional macroeconomic variables but has begun to integrate non-traditional risks such as environmental, social, and governance (ESG) factors. Idiosyncratic risk tends to be lower in companies with sound sustainability practices, providing greater resilience during periods of crisis (Albuquerque et al., 2019). This broadens the interpretation of risk in MPT by incorporating ESG dimensions as an additional determinant in optimizing capital allocation.

The integration of ESG factors reflects a shift in investor preferences toward a multidimensional approach. Several studies report that high ESG scores are associated with lower volatility, improved liquidity, and stronger investor confidence (Luo, 2022). However, empirical findings remain inconclusive across emerging markets. Some studies indicate that ESG performance does not consistently improve firm valuation or portfolio stability due to differences in disclosure quality, regulatory environments, and market maturity. In less transparent markets, ESG reporting may function more as symbolic legitimacy

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than as an effective indicator of long-term performance. These mixed findings suggest that the effectiveness of ESG integration within MPT remains context-dependent.

Within the Sharia framework, MPT operates through sectoral constraints and strict financial ratios. While Sharia compliance is often associated with conservative capital structures and lower speculative exposure (Narayan et al., 2022), several scholars argue that sectoral exclusions may reduce diversification efficiency and potentially limit portfolio optimization. The exclusion of highly leveraged industries and conventional financial institutions may create concentration risks in certain sectors, particularly during periods of market stress. Nevertheless, other studies suggest that Sharia-compliant assets may demonstrate defensive characteristics during crises because of their lower exposure to speculative activities. Therefore, the relationship between Sharia screening and portfolio efficiency remains debated within the literature.

This theoretical development demonstrates that modern MPT has evolved from a framework focused solely on variance optimization toward one that increasingly incorporates sustainability, ethical considerations, and governance risks. However, the extent to which ESG and Sharia compliance improve international portfolio performance remains empirically unsettled, particularly in emerging Islamic capital markets.

Signaling Theory in the Context of ESG and Sharia Compliance

Signaling theory explains that in conditions of information asymmetry, internal parties in a company send signals in the form of credible information to reduce uncertainty for external investors (Amel-Zadeh & Serafeim, 2018). In international capital markets, foreign investors often face limited access to information and geographic distance, which increases perceived risk. ESG (Environmental, Social, and Governance) disclosure serves as a quality signal that reflects a company's commitment to transparency and systematic risk governance. Global institutional investors now strategically use ESG data as a basis for initial screening to mitigate regulatory and reputational risks (Krueger et al., 2020).

In emerging markets like Indonesia and Malaysia, ESG signals are crucial for overcoming the stigma of high governance risk. Companies with strong sustainability performance tend to attract more foreign ownership due to their perceived long-term stability and low litigation risk (Dyck et al., 2019; Albuquerque et al., 2019). Furthermore, strong governance signals protection for

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minority shareholders through effective oversight mechanisms, which in turn increases stock liquidity (Luo, 2022).

Sharia compliance acts as an additional ethical signal, ensuring conservative financial and operational discipline (Bahloul et al., 2017). Through a rigorous screening process, Sharia status validates a company's integrity, free from excessive speculative activity. The integration of ESG scores and Sharia compliance creates a "double signal" that strengthens a company's credibility in the eyes of global investors with a preference for ethical investment. During the volatile period of 2019–2024, consistent signals related to sustainability and ethical compliance were crucial factors in maintaining foreign portfolio investment. Therefore, these non-financial disclosures serve as a key mechanism for reducing information asymmetry and building market trust across borders.

Theory of Capital Market Integration and Foreign Portfolio Investment

Global capital market integration reflects the interconnectedness of financial markets across borders, facilitating the free flow of capital based on return opportunities and risk preferences. Foreign Portfolio Investment (FPI) is a key indicator of this integration, where investors allocate capital across borders without direct involvement in company management (Forbes & Warnock, 2012). In integrated markets, global investors compare risk-adjusted returns across countries, making differences in macroeconomic stability, institutional quality, and regulation key determinants of capital flows (Ahmed & Zlate, 2014).

FPI dynamics are highly sensitive to global volatility. During periods of uncertainty, investors tend to flee to safety by withdrawing funds from risky markets (Forbes & Warnock, 2012). In this context, micro-company factors such as liquidity and transparency play a crucial role in mitigating perceived risk. High ESG scores have been shown to improve liquidity and governance quality, which in turn lowers transaction costs for foreign investors (Luo, 2022). For *emerging markets* like Indonesia and Malaysia, ESG performance serves as a risk-mitigation mechanism for concerns about transparency and operational stability.

Sharia compliance provides an ethical dimension that enhances investment attractiveness through a conservative capital structure and restrictions on speculative sectors. These characteristics result in lower volatility during market turmoil compared to conventional stocks (Narayan et al., 2022). The integration of ESG into Sharia-compliant stocks creates a unique defensive investment profile for international diversification. By reducing information asymmetry through ESG disclosure and verification of official Sharia indices, companies' credibility in the eyes of global investors increases. This theoretical synthesis suggests that FPI flows are the result of the interaction between global macro sentiment and

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companies' micro-strengths in sustainability and Sharia compliance, which are crucial for capital market competitiveness in the 2019–2024 period.

ESG and Sharia Compliance in the Conceptual Framework of Research

This research's conceptual framework integrates Modern Portfolio Theory (MPT), Signaling Theory, and capital market integration theory to explain the dynamics of Foreign Portfolio Investment (FPI). The expanded MPT positions **Environmental, Social, and Governance** (ESG) and Sharia compliance as non-financial preferences in international portfolio construction. Meanwhile, *Signaling Theory* positions disclosure as a mechanism to reduce information asymmetry for global investors.

The ESG score in this model serves as a quantitative indicator of sustainability quality. Companies with high scores are assumed to have lower regulatory and reputational risks, as well as greater transparency, thus increasing their attractiveness to foreign investors (Luo, 2022). Similarly, **Sharia compliance** represents the ethical dimension and conservative financial structure. The debt ratio limitation within Sharia criteria effectively reduces financial risk and enhances company credibility through additional evaluation (Narayan et al., 2022).

The integration of these two variables creates a "double filter" that strengthens a company's reputation in the international market. The research's focus on the 2019–2024 period provides crucial context regarding market volatility due to the pandemic and monetary uncertainty, where non-financial variables become determinants of asset stability. The use of Indonesia and Malaysia as research subjects—through the Jakarta Islamic Index and the FTSE Bursa Malaysia Hijrah Shariah Index—provides institutional legitimacy for cross-country testing.

Empirically, ESG and Sharia compliance are positioned as the primary independent variables influencing FPI as the dependent variable, supported by control variables such as firm size and profitability. This approach aims to demonstrate whether the synergy of global sustainability standards and Islamic ethics can optimize foreign investment allocation by strengthening reputational signals.

RESEARCH METHOD

This study employs a quantitative explanatory approach using cross-country panel data to examine the influence of ESG Score and Sharia compliance on foreign portfolio investment (FPI). A quantitative design was selected because

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it enables objective testing of causal relationships through statistical estimation, while panel data analysis captures both inter-firm and inter-temporal variation and controls for unobserved heterogeneity (Creswell & Creswell, 2018; Baltagi, 2021). The study focuses on firms listed in the Jakarta Islamic Index (JII) and the FTSE Bursa Malaysia Hijrah Shariah Index (FBMHS) during the 2019–2024 period. Indonesia and Malaysia were selected because both countries represent relatively developed Islamic capital markets in Southeast Asia and exhibit significant participation by foreign investors (Narayan et al., 2022).

The sample was determined using purposive sampling based on the consistency of index membership and the availability of ESG, foreign ownership, and Sharia compliance data. This approach ensures data completeness and consistency for panel estimation; however, it may also introduce survivorship bias because firms removed from the indices during the observation period are excluded from the sample. Consequently, companies experiencing financial distress, governance deterioration, or declining ESG performance may not be fully represented, potentially affecting the estimated relationship between ESG, Sharia compliance, and FPI. Therefore, the findings should be interpreted within the limitations of firms that consistently met index and disclosure requirements throughout the study period.

The study uses secondary data obtained from Refinitiv or Bloomberg, the Indonesia Stock Exchange, Bursa Malaysia, annual reports, and company financial statements. The dependent variable is FPI, proxied by the percentage of foreign ownership, while the independent variables include ESG Score, Debt-to-Asset Ratio (DAR), and Interest Income Ratio (IIR). Control variables include firm size, leverage, and profitability (Friede et al., 2015; Ahmed & Zlate, 2014). Data analysis was conducted using panel regression techniques with supporting statistical procedures such as t-tests, F-tests, and coefficients of determination (Gujarati & Porter, 2009).

Prior to hypothesis testing, classical assumption tests were conducted, including normality, multicollinearity, heteroscedasticity, and autocorrelation tests, to ensure that the regression model satisfied the BLUE criteria (Wooldridge, 2010; Field, 2018). The analysis stages consisted of data cleaning, panel dataset construction, descriptive statistical analysis, and regression estimation. Operational definitions were quantitatively developed to maintain consistency across all indicators, including ESG Score (0–100 scale), DAR, IIR, and the control variables SIZE, LEV, and ROA.

Although the study adopts a cross-country approach, institutional and regulatory differences between Indonesia and Malaysia may influence the

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relationship between ESG, Sharia compliance, and foreign investment behavior. However, these country-specific characteristics were not explicitly modeled through country dummy variables or interaction effects in the current estimation framework. As a result, the findings primarily reflect general patterns within the selected Islamic capital markets rather than fully capturing institutional heterogeneity across countries. Therefore, caution is required when generalizing the results to broader emerging-market contexts outside Indonesia and Malaysia.

The 2019–2024 observation period, which covers the pandemic and post-crisis phases, provides an opportunity to examine foreign investor sensitivity to changes in global risk conditions and sustainability-related information. Despite its limitations, this methodological design is expected to provide empirical insights into the interaction between ESG performance, Sharia compliance, and foreign portfolio investment within the context of Islamic capital markets.

RESULTS AND DISCUSSION

General Description of Research Object

This study uses companies listed on the Indonesia Stock Exchange (IDX) and Bursa Malaysia as research objects, using a quantitative approach based on secondary data and a cross-country comparative design. Purposive sampling was used to ensure that the selected companies met the criteria for consistent listing during the 2019–2024 period, had complete financial statements, annual reports, and sustainability reports, and provided data related to research variables such as Foreign Portfolio Investment (FPI), Environmental, Social, and Governance (ESG), Debt to Asset Ratio (DAR), Islamic Income Ratio (IIR), Size, Leverage (LEV), and Return on Assets (ROA). The purposive sampling approach in panel data-based research is considered appropriate because it ensures the sample's relevance to the research objectives and increases the empirical validity of the analysis (Sugiyono, 2022; Ghozali, 2021). These findings are also in line with previous research that used purposive sampling in ESG and financial performance studies of public companies in the capital market.

Based on these criteria, 26 companies were selected, consisting of 14 Indonesian and 12 Malaysian companies, with a total of 156 observations over six years. This composition reflects the use of balanced panel data, where all observation units are observed consistently throughout each study period. The use of panel data allows for a more comprehensive analysis because it captures variation between companies (cross-section) and over time (time series), making it relevant for examining the relationship between capital structure, foreign

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investment, sustainability, and corporate profitability (Widarjono, 2020; Gujarati & Porter, 2022). The sample companies predominantly come from strategic sectors such as energy, telecommunications, infrastructure, manufacturing, healthcare, and mining, which generally have high exposure to foreign investment, ESG issues, and financial efficiency pressures. This condition makes the research sample representative for examining the effect of independent variables on ROA as a proxy for financial performance.

The secondary data used comes from financial reports, annual reports, sustainability reports, and official publications from the IDX and Bursa Malaysia. The use of these data sources strengthens the reliability of the research because all information comes from verified sources and is officially published. Specifically for ESG variables, the use of sustainability reports is crucial because it reflects sustainability practices, governance transparency, and corporate social responsibility, which are increasingly considered by global investors. Meanwhile, the FPI variable represents foreign portfolio investment flows, DAR and LEV describe funding structure, IIR reflects Sharia-compliant revenue compliance, and Size indicates the company's scale of operations. ROA is used as a dependent indicator because it can illustrate a company's effectiveness in generating profits from its total assets (Brigham & Houston, 2022; Kasmir, 2021). ROA is also commonly used in ESG and leverage research on company performance.

In general, the description of the research objects indicates that the sample used has heterogeneous characteristics yet is relevant to support empirical testing. The presence of companies from two different exchanges provides comparative value in assessing differences in market characteristics, governance structures, and corporate responses to investment and sustainability factors. Therefore, the selection of research objects, the number of observations, and the characteristics of the sample companies provide an adequate basis to support the analysis of the influence of FPI, ESG, DAR, IIR, Size, and LEV on ROA in companies in Indonesia and Malaysia.

Descriptive Statistics

Descriptive statistics are used to provide a general overview of the characteristics of research data, including the minimum, maximum, average, and standard deviation values of each variable.

Table 1.
Descriptive Statistics

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Standard Deviation

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ESG	156	52	71	62.38	3,908
DAR	156	.11	.61	.3911	.12130
IIR	156	.00	.02	.0087	.00458
SIZE	156	23.53	26.82	25.4318	.85293
LEV	156	.19	2.21	.8153	.39963
ROA	156	.01	.22	.0987	.04202
FPI	156	.28	.56	.4263	.05750
Valid N (listwise)	156				

Source: processed with SPSS

The results of descriptive statistical analysis show that the number of research samples is 156 company observations. The ESG Score variable has a minimum value of 52 and a maximum of 71 with an average value of 62.38 and a standard deviation of 3.908. The Debt to Asset Ratio (DAR) variable has a minimum value of 0.11 and a maximum of 0.61 with an average of 0.3911, while the Islamic Income Ratio (IIR) has a minimum value of 0.00 and a maximum of 0.02 with an average of 0.0087. Other control variables, namely SIZE, have an average value of 25.4318, Leverage (LEV) of 0.8153, and Profitability (ROA) of 0.0987. Meanwhile, the dependent variable, namely Foreign Portfolio Investment (FPI), has a minimum value of 0.28 and a maximum of 0.56 with an average of 0.4263. This indicates that, in general, the sample companies have a fairly good level of ESG and Sharia compliance and are able to attract foreign investment flows into Sharia stocks.

Classical Assumption Test

Before conducting a regression analysis, the research model needs to fulfill the classical assumptions so that the resulting parameter estimates are Best Linear Unbiased Estimators (BLUE).

Normality Test

A normality test was performed to determine whether the residual data in the regression model was normally distributed. The test was performed using the Kolmogorov–Smirnov Test.

Table 2.
Normality Test

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		156
	Mean	.0000000

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Normal Parameters [a,b]	Standard Deviation	7.97998040
Most Extreme Differences	Absolute	.045
	Positive	.045
	Negative	-.036
Test Statistics		.045
Asymp. Sig. (2-tailed)		.200 [c,d]
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		
d. This is a lower bound of the true significance.		

Source: processed with SPSS

A normality test was performed using the Kolmogorov-Smirnov Test to determine whether the residual data in the regression model was normally distributed. The test results showed an Asymp. Sig. value of 0.200, which is greater than 0.05. This indicates that the residual data is normally distributed, thus the regression model in this study meets the assumption of normality and can be used for further analysis.

Multicollinearity Test

The multicollinearity test aims to determine whether there is a high correlation between independent variables in the regression model.

Table 3.
Multicollinearity Test

Coefficients [a]								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.440	.111		-3,971	.000		
	ESG	.005	.001	.314	4,053	.000	.602	1,662
	DAR	.261	.068	.550	3,850	.000	.176	5,675
	IIR	.042	.836	.075	1,896	.043	.811	1,234
	SIZE	.020	.005	.298	3,671	.000	.547	1,827
	LEV	.071	.021	.492	3,487	.001	.174	5,757
	ROA	.340	.092	.248	3,691	.000	.797	1,255
a. Dependent Variable: FPI								

Source: processed with SPSS

The results of the multicollinearity test show that all variables have a tolerance value greater than 0.10 and a VIF value less than 10. For example, the ESG variable has a tolerance of 0.602 and a VIF of 1.662, while the DAR variable

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has a tolerance of 0.176 and a VIF of 5.675, and other variables are also within the permissible limits. This indicates that there is no multicollinearity among the independent variables in the research model.

Heteroscedasticity Test

The heteroscedasticity test is carried out to determine whether there is inequality in the residual variance in the regression model.

Table 4.
Heteroscedasticity Test

Coefficients [a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	23,660	12,492		1,894	.060
	ESG	-.056	.128	-.045	-.439	.662
	DAR	8,391	7,642	.208	1,098	.274
	IIR	-50,460	94,282	-.047	-.535	.593
	SIZE	-.729	.617	-.127	-1,182	.239
	LEV	-.117	2,336	-.010	-.050	.960
	ROA	19,333	10,373	.166	1,864	.064
a. Dependent Variable: ABS						

Source: processed with SPSS

The heteroscedasticity test results indicate that all independent variables have a significance value greater than 0.05, namely ESG at 0.662, DAR at 0.274, IIR at 0.593, SIZE at 0.239, LEV at 0.960, and ROA at 0.064. This indicates that there is no heteroscedasticity in the regression model, thus the research model has met the classical assumptions of heteroscedasticity.

Autocorrelation Test

The autocorrelation test is carried out to determine whether there is a correlation between the residuals in one period and another period in the regression model.

Table 5.
Autocorrelation Test

Model Summary [b]

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Model	R	R Square	Adjusted R Square	Standard Error of the Estimate	Durbin-Watson
1	.681 [a]	.463	.442	.04296	1,973

a. Predictors: (Constant), ROA , SIZE , IIR , LEV , ESG, DAR
b. Dependent Variable: FPI

Source: processed with SPSS

The autocorrelation test results showed a Durbin-Watson value of 1.973. This value ranges from 1.5 to 2.5, thus concluding that there is no autocorrelation in the regression model. Therefore, the regression model used in this study can be considered suitable for analysis.

Results of Multiple Linear Regression Analysis

Multiple linear regression analysis was used to test the effect of **ESG Score, sharia compliance, and control variables on foreign portfolio investment** .

Table 6.
Multiple Linear Regression Analysis

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.440	.111		-3,971	.000
	ESG	.005	.001	.314	4,053	.000
	DAR	.261	.068	.550	3,850	.000
	IIR	.042	.836	.075	1,896	.043
	SIZE	.020	.005	.298	3,671	.000
	LEV	.071	.021	.492	3,487	.001
	ROA	.340	.092	.248	3,691	.000

Source: processed with SPSS

Based on the results of multiple linear regression analysis, the following regression equation was obtained:

FPI=–0.440+0.005ESG+0.261DAR+0.042IIR+0.020SIZE+0.071LEV+0.340ROA

The explanation of the regression equation is:

a. The constant of -0.440 indicates that if all independent variables are considered constant, the value of foreign investment flows into sharia shares is -0.440.
b. The ESG coefficient of 0.005 indicates that an increase in the ESG Score will increase foreign investment flows into sharia stocks.

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c. The DAR coefficient of 0.261 indicates that an increase in the debt to asset ratio can influence an increase in foreign investment flows.
d. The IIR coefficient of 0.042 indicates that the higher the level of sharia compliance of a company, the greater the opportunity for the company to attract foreign investment.
e. The SIZE coefficient of 0.020 indicates that larger companies tend to be more attractive to foreign investors.
f. The LEV coefficient of 0.071 indicates that leverage has a positive relationship with foreign investment flows.
g. The ROA coefficient of 0.340 indicates that companies with high levels of profitability are more attractive to foreign investors.

Thus, the findings suggest that ESG Score and certain dimensions of Sharia compliance may influence foreign investment flows into Islamic stocks, although the magnitude and stability of the effects vary across variables.

Hypothesis Testing

t-test

The t-test is used to determine the effect of each independent variable on the dependent variable partially.

Table 7.
t-test

Coefficients [a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.440	.111		-3,971	.000
	ESG	.005	.001	.314	4,053	.000
	DAR	.261	.068	.550	3,850	.000
	IIR	.042	.836	.075	1,896	.043
	SIZE	.020	.005	.298	3,671	.000
	LEV	.071	.021	.492	3,487	.001
	ROA	.340	.092	.248	3,691	.000

Source: processed with SPSS

The Influence of ESG Score on Foreign Investment Flows

The test results show a t-value of 4.053 with a significance value of 0.000. This indicates that the ESG Score has a significant effect on foreign investment flows into Islamic stocks, meaning the higher a company's ESG performance, the greater the interest of foreign investors to invest.

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The Influence of Debt to Asset Ratio (DAR) on Foreign Investment Flows

The test results show a calculated t value of 3.850 with a significance value of 0.000, so it can be concluded that DAR has a significant effect on the flow of foreign investment into sharia shares.

The Influence of the Islamic Income Ratio (IIR) on Foreign Investment Flows

The test results show a t-value of 1.896 with a significance value of 0.043, indicating that IIR has a statistically significant relationship with foreign investment flows at the 5% significance level. However, the coefficient magnitude is relatively small and accompanied by a comparatively large standard error, suggesting that the estimated effect may be less stable than other explanatory variables in the model. This indicates that although Sharia-compliant income composition may be considered by foreign investors, its explanatory contribution to FPI appears relatively limited and should be interpreted cautiously.

The Influence of Company Size (SIZE) on Foreign Investment Flows

The test results show a t-value of 3.671 with a significance value of 0.000, which indicates that companies with larger sizes tend to be more able to attract foreign investment.

The Effect of Leverage (LEV) on Foreign Investment Flows

The test results show a t-value of 3.487 with a significance value of 0.001, which means that leverage also has a significant effect on foreign investment flows.

The Influence of Profitability (ROA) on Foreign Investment Flows

The test results show a t-value of 3.691 with a significance value of 0.000, which indicates that companies with a high level of profitability tend to be more attractive to foreign investors.

F test

The F test is used to determine whether all independent variables simultaneously influence the dependent variable.

Table 8.

F Test

ANOVA [a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.237	6	.040	21,442	.000 [b]
	Residual	.275	149	.002		
	Total	.513	155			
a. Dependent Variable: FPI						
b. Predictors: (Constant), ROA, SIZE, IIR , LEV , ESG, DAR						

Source: processed with SPSS

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The F-test results show a calculated F-value of 21.442 with a significance level of 0.000. This value is less than 0.05, thus concluding that the ESG Score and Sharia compliance together significantly influence foreign investment flows into Sharia-compliant stocks in the 2019–2024 period. Therefore, the regression model used in this study is suitable for further analysis.

Coefficient of Determination

The coefficient of determination is used to measure the ability of the independent variable to explain the variation in the dependent variable.

Table 9.
Coefficient of Determination

Model Summary [b]					
Model	R	R Square	Adjusted R Square	Standard Error of the Estimate	Durbin-Watson
1	.681 [a]	.463	.442	.04296	1,973
a. Predictors: (Constant), ROA, SIZE, IIR, LEV, ESG, DAR					
b. Dependent Variable: FPI					

Source: processed with SPSS

The coefficient of determination results show an R-square value of 0.463 and an adjusted R-square value of 0.442. This indicates that ESG Score, Sharia compliance proxies (DAR and IIR), and the control variables SIZE, LEV, and ROA explain approximately 44.2% of the variation in Foreign Portfolio Investment (FPI). Meanwhile, the remaining 55.8% is influenced by other factors outside the model.

These results suggest that the regression model has moderate explanatory power rather than fully explaining foreign investment behavior. Foreign portfolio flows are inherently complex and may also be influenced by broader macroeconomic and institutional variables that were not included in this study, such as exchange rate movements, interest rates, inflation, political stability, and global market volatility. Therefore, the findings should be interpreted with caution because omitted-variable effects may still exist within the estimation model.

Hypothesis Testing Results

Hypothesis testing was conducted using regression analysis with a significance level of $\alpha = 0.05$. The results showed that the ESG Score had a positive and significant effect on *Foreign Portfolio Investment* (FPI) with a *t -value* of 4.053 (*sig* . 0.000). This confirms that companies with good environmental, social, and

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governance performance are more attractive to international investors who prioritize sustainability (Boffo & Patalano, 2020).

Furthermore, Sharia Compliance, projected through *the Debt-to-Asset Ratio* (DAR) and *Islamic Income Ratio* (IIR), has been shown to significantly influence FPI. The DAR (sig. 0.000) and IIR (sig. 0.043) variables indicate that Sharia-compliant capital structure and income are positive signals for foreign investors in minimizing ethical and financial risks (Hassan et al., 2021).

Simultaneously, the F-test yielded a value of F = 21.442 (sig. 0.000), indicating that ESG Score and Sharia Compliance together significantly influence FPI. This finding confirms that the integration of Islamic ethical values and global ESG standards creates a synergy that strengthens the attractiveness of sharia stocks in the Indonesian and Malaysian capital markets for global investors (Sherif, 2020). Thus, all hypotheses (H1, H2, and H3) in this study are accepted.

The Influence of ESG Score on Foreign Portfolio Investment

The results show that **the ESG Score** has a positive and significant effect on foreign portfolio investment in Islamic stocks in Indonesia and Malaysia for the 2019–2024 period. This is evidenced by a significance value of 0.000 (<0.05) and a regression coefficient of 0.005. This finding indicates that the higher a company's commitment to environmental, social, and governance aspects, the greater the inflow of foreign investment.

Theoretically, these results support Modern Portfolio Theory (MPT), where investors view ESG scores as an indicator of long-term stability that mitigates non-financial risks. Furthermore, based on Signaling Theory, ESG disclosure serves as a positive signal that reduces information asymmetry regarding the quality of corporate governance and social responsibility. This aligns with Luo's (2022) findings, which state that high ESG scores increase stock liquidity and reduce volatility, thereby increasing their appeal to global investors seeking portfolio security.

The Effect of Sharia Compliance on Foreign Portfolio Investment

Sharia compliance, proxied by DAR and IIR, shows a statistically significant relationship with FPI. However, the strength of the relationship differs between the two proxies. DAR demonstrates a relatively stronger and more stable coefficient, while the IIR variable exhibits a comparatively weaker statistical contribution. This may indicate that foreign investors pay greater attention to capital structure discipline than to the proportion of Islamic income itself.

In addition, the results should not be interpreted as evidence that Sharia compliance is the sole determinant of foreign investment decisions. Foreign portfolio investment is also highly sensitive to macroeconomic and global

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financial conditions, including exchange rate stability, interest rate movements, inflation, and international market volatility. Since these factors were not explicitly incorporated into the current regression model, the possibility of omitted-variable bias remains.

Simultaneous Influence of ESG Score and Sharia Compliance

Simultaneously, ESG Score and Sharia compliance significantly influence foreign portfolio investment (F-count 21.442; Sig. 0.000). The integration of these two factors creates a dual reputation effect that combines global sustainability standards with Islamic financial ethics. This combination provides layered validation for foreign investors who prioritize socially responsible investment. Companies that are able to synergize sustainable practices with Sharia principles have a competitive advantage in attracting international capital through increased credibility and transparency in emerging capital markets.

CONCLUSION

This study examines the influence of ESG Score and Sharia compliance on foreign portfolio investment (FPI) in Sharia-compliant stocks in Indonesia and Malaysia during the 2019–2024 period. Sharia compliance was proxied using the Debt-to-Asset Ratio (DAR) and Islamic Income Ratio (IIR), while company size (SIZE), leverage (LEV), and profitability (ROA) were included as control variables. Based on the results of multiple linear regression analysis, several conclusions can be drawn.

First, ESG Score demonstrates a positive and statistically significant relationship with foreign portfolio investment. The ESG variable shows a significance value of 0.000, indicating that firms with stronger sustainability performance tend to attract greater foreign investor participation. This finding suggests that international investors increasingly consider non-financial aspects such as governance quality, transparency, and environmental and social responsibility when allocating capital in Islamic capital markets.

Second, the results related to Sharia compliance show a more nuanced interpretation. Both DAR and IIR are statistically significant; however, the strength and stability of their effects differ. DAR exhibits a relatively stronger coefficient, whereas the contribution of IIR appears comparatively weaker and less stable due to its small coefficient magnitude and relatively large standard error. These findings indicate that not all dimensions of Sharia compliance contribute equally to foreign investment decisions.

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In addition, the positive relationship between DAR and FPI presents an interesting theoretical implication. Although Sharia principles are generally associated with conservative financial structures and lower dependence on debt, the positive DAR coefficient may suggest that foreign investors interpret moderate debt usage as an indicator of corporate expansion capacity, operational scale, or financial flexibility rather than purely as a risk factor. Therefore, the findings imply that the relationship between Sharia compliance and foreign investment is not entirely straightforward and may involve competing interpretations between financial conservatism and growth expectations.

Third, ESG Score and Sharia compliance simultaneously show a significant relationship with foreign portfolio investment. However, the findings suggest that ESG performance provides a relatively stronger and more consistent explanatory contribution compared to the Sharia compliance proxies used in this study. This indicates that sustainability-related information may currently play a more dominant role in shaping foreign investor preferences in Islamic capital markets, while Sharia compliance functions as an additional ethical and regulatory consideration.

Furthermore, the adjusted R-square value indicates that a substantial proportion of FPI variation remains unexplained by the current model. This suggests that foreign investment flows are also influenced by broader macroeconomic and institutional factors such as exchange rates, inflation, political stability, interest rates, and global market volatility, which were not explicitly included in this study. Therefore, the findings should be interpreted within the limitations of the research model and sample scope.

Overall, this study highlights that both ESG performance and certain dimensions of Sharia compliance are relevant in explaining foreign investor behavior in Islamic capital markets. However, their effects are not uniform and should be interpreted within broader financial, institutional, and macroeconomic contexts.

REFERENCES

Abbes, M. B., & Trichilli, Y. (2015). Islamic stock markets and diversification benefits. *Borsa Istanbul Review, 15*, 93–105. https://doi.org/10.1016/j.bir.2015.03.001

Ahmed, S., & Zlate, A. (2014). Capital flows to emerging market economies: A brave new world? *Journal of International Money and Finance, 48*, 221–248. https://doi.org/10.1016/j.jimonfin.2014.05.015

Vol. 6 No. 2, 2026, 2448 –2468 e-ISSN 2798-0170

Albuquerque, R., Koskinen, Y., & Zhang, C. (2019). Corporate social responsibility and firm risk: Theory and empirical evidence. *Management Science, 65*(10), 4451–4469. https://www.jstor.org/stable/48760764

Amel-Zadeh, A., & Serafeim, G. (2018). Why and how investors use ESG information: Evidence from a global survey. *Financial Analysts Journal, 74*(3), 87–103. https://doi.org/10.2469/faj.v74.n3.2

Bahloul, S., Mroua, M., & Naifar, N. (2017). The impact of macroeconomic and conventional stock market variables on Islamic index returns under regime switching. *Borsa Istanbul Review, 17*, 62–74. https://doi.org/10.1016/j.bir.2016.09.003

Baltagi, B. H. (2021). *Econometric analysis of panel data* (6th ed.). Springer. https://doi.org/10.1007/978-3-030-53953-5

Broadstock, D. C., Chan, K., Cheng, L. T. W., & Wang, X. (2021). The role of ESG performance during times of financial crisis: Evidence from COVID-19 in China. *Finance Research Letters, 38*, 101716. https://doi.org/10.1016/j.frl.2020.101716

Brooks, C. (2019). *Introductory econometrics for finance* (4th ed.). Cambridge University Press. https://doi.org/10.1017/9781108524872

Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.

Dyck, A., Lins, K. V., Roth, L., & Wagner, H. F. (2019). Do institutional investors drive corporate social responsibility? International evidence. *Journal of Financial Economics, 131*(3), 693–714. https://doi.org/10.1016/j.jfineco.2018.08.013

El Ghoul, S., Guedhami, O., Kim, H., & Park, K. (2018). Corporate environmental responsibility and the cost of capital: International evidence. *Journal of Business Ethics, 149*(2), 335–361. https://doi.org/10.1007/s10551-015-3005-6

Fadoua, J., & Ghmari, I. E. (2026). Financial stability in dual banking systems: A theoretical comparison between conventional and Islamic banks. *International Journal of Strategic Management and Economic Studies, 5*, 100–117. https://doi.org/10.5281/zenodo.18506014

Forbes, K. J., & Warnock, F. E. (2012). Capital flow waves: Surges, stops, flight, and retrenchment. *Journal of International Economics, 88*(2), 235–251. https://doi.org/10.1016/j.jinteco.2012.03.006

Friede, G., Busch, T., & Bassen, A. (2015). ESG and financial performance: Aggregated evidence from more than 2000 empirical studies. *Journal of Sustainable Finance & Investment, 5*(4), 210–233.

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https://doi.org/10.1080/20430795.2015.1118917

Gujarati, D. N., & Porter, D. C. (2009). *Basic econometrics* (5th ed.). McGraw-Hill Education.

Hsiao, C. (2014). *Analysis of panel data* (3rd ed.). Cambridge University Press. https://doi.org/10.1017/CBO9781139839327

Isbahi, M. B., Zuana, M. M. M., & Toha, M. (2024). The Multi-Social Relation of the Cattle Industry in the Plaosan Subdistrict Animal Market of Magetan Regency. *Malacca: Journal of Management and Business Development*, *1*(1), 31–46. https://doi.org/10.69965/malacca.v1i1.51

Krueger, P., Sautner, Z., & Starks, L. T. (2020). The importance of climate risks for institutional investors. *Review of Financial Studies, 33*(3), 1067–1111. https://doi.org/10.1093/rfs/hhz137

Lins, K. V., Servaes, H., & Tamayo, A. (2017). Social capital, trust, and firm performance during the financial crisis. *The Journal of Finance, 72*(4), 1785–1824. https://doi.org/10.1111/jofi.12505

Luo, D. (2022). ESG, liquidity, and stock returns. *Journal of International Financial Markets, Institutions and Money, 78*, 101526. https://doi.org/10.1016/j.intfin.2022.101526

Reuters. (2024, November 21). Global climate funds set for first annual outflows, Morningstar says. *Reuters*. https://www.reuters.com/sustainability/sustainable-finance-reporting/global-climate-funds-set-first-annual-outflows-morningstar-says-2024-11-21/

Temiz, H., Boumparis, P., & Florackis, C. (2023). ESG disclosure, foreign ownership, and the role of information and governance environments. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.4392694

Usman, B., Hasnam, M. G., Nurazi, R., Baihaqi, & Aujirapongpan, S. (2024). Exploring investor attention in Shariah markets, macroeconomic influences, and corporate performance: Insights from Indonesia. *Social Sciences & Humanities Open, 10*, 101015. https://doi.org/10.1016/j.ssaho.2024.101015

Wooldridge, J. M. (2010). *Econometric analysis of cross section and panel data* (2nd ed.). MIT Press.