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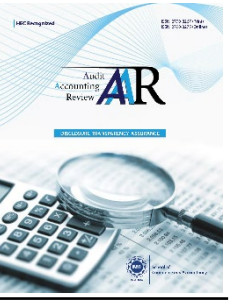

Title:	**Screening Strategies and Fund Type as Drivers of Socially Responsible Investment: Evidence from Asset Management Companies in Pakistan**
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Screening Strategies and Fund Type as Drivers of Socially Responsible Investment: Evidence from Asset Management Companies in Pakistan

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Abstract

There has been a strong surge of socially responsible investment (SRI), globally. However, the adoption of such initiatives remains under investigated in the financial institutions (FIs) of vulnerable economies (e.g., Pakistan). More specifically, such contexts lack empirical evidence regarding the impact of screening strategies and fund type on SRI adoption. Therefore, the current research examines these factors for asset management companies (AMCs) as sampled FIs in Pakistan. For this purpose, unbalanced panel data (2008-2024) of 29 AMCs from Pakistan is collected. The estimation methods include static panel techniques such as fixed effects (FE), random effects (RE), and pooled ordinarily least square (OLS). The outcome variable is SRI ratio, while the input variables are SRI screening and fund types. Similarly, the control variables include firm size, return on equity (ROE), book to market (B/M) ratio, leverage, and environmental, social, and governance (ESG) score. The results indicate that positive screening and equity-based funds play a critical role in enhancing the SRI ratio in Pakistani AMCs. Moreover, fund type strengthens the impact of positive screening on SRI ratio for such AMCs. The findings related to positive screening and equity-based fund type support the application of the SRI theory. This result highlights a number of practical implications for regulators and fund managers in FIs. For example, policymakers should consider positive screening and promote equity-based SRI funds in their FIs. Finally, the findings of this study are novel due to addressing the problem in the under-examined context of a vulnerable economy like Pakistan.

Keywords: financial institutions, fund type, screening strategy, socially responsible investment, vulnerable economies

JEL Codes: G11, G23, M14, Q56, O16

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Introduction

The financial world is witnessing a powerful transformation from the traditional financial model to a more sustainable financial model, globally. This indicates an integration of environmental, social, and governance (ESG) concerns into financial decision-making to bring about structural change. Financial Institutions (FIs) are moving beyond the traditional goal of shareholder primacy towards ESG considerations. FIs have adopted sustainability-oriented and responsible principles to align their assets and investment goals. According to Alda (2021), socially responsible investment (SRI) may be defined as an investment strategy that considers ESG-related impacts along with financial returns.

Similarly, SRI is an important part of global transformation in both vulnerable and non-vulnerable regions. It plays a vital role in driving sustainable transformation around the globe. The amount of SRI has grown to a total of $30.3 trillion in asset under management (AUM) since 2020 (Global Sustainable Investment Alliance [GSIA], 2025). It includes $8.4 trillion in AUM from USA alone. Furthermore, SRI outside the USA (Europe, Canda, Japan, and New Zealand) has reached $21.9 trillion in AUM which shows a 20% growth during 2020-22. This indicates a significant global momentum in responsible investing. This expansion is due to increased environmental and social awareness, as well as changing legislation and investor preferences for sustainable methods (Alda, 2021; Cardillo & Harasheh, 2023; GSIA, 2025; Naseer et al., 2024).

FIs play a significant role in initiating SRI in the corporate sector in any economy (Jarrett et al., 2019). FIs include commercial banks, investment companies/banks, investment holdings, insurance firms, mutual funds/asset management firms, and pension funds. They provide critical services that help organizations and people to access the funds necessary to sustain their daily operations, investments, expansion, and other financial activities (Haini, 2020). Furthermore, FIs directly influence corporate sustainability practices. Without them, it would be difficult for firms and individuals to gain access to the capital they require to finance their operations, which would impair economic growth and stability (Olaniyi & Adedokun, 2022). Hence, FIs can impact corporations through channelling resources towards sustainable projects, such as investment made while considering a positive impact on ESG issues in the economy (Akomea-Frimpong et al., 2022; Fu et al., 2023; Minhas et al., 2024). Moreover, recent evidence indicates that

sustainable investment improves long-term value, accountability, and transparency (Jaiswal et al., 2025; Yu et al., 2024). Additionally, FIs which adopt sustainable investment practices play a critical role in improving economic resilience and also help to achieve sustainable development goals (Principles for Responsible Investment [PRI], 2024).

A number of studies reveal that SRI is initiated in FIs due to strong ESG considerations (Narula et al., 2025; Wahab et al., 2024). FIs promote ethical behaviour and sustainable practices in their corporate decision-making. Organizations that consider ESG principles in managing their operations, risks, and controlling carbon emissions are better able to perform financially in the long-term (Soratana, 2025). For instance, companies from Europe, USA, and UK are less vulnerable to market changes due to their high ESG scores and low cost of capital (Cardillo & Harasheh, 2023; Naseer et al., 2024). It proves that ESG integration has a number of tangible financial benefits. Moreover, principles of responsible investment (PRI) is an important initiative which brings ESG practices into the mainstream (United Nations [UN], 2024). It promotes governance, accountability, and transparency around the globe. Such initiatives also shape the potential of SRI to safeguard against ESG challenges and enhance financial returns around the globe.

To provide a strong conceptual foundation for this study, Stakeholder Theory and Legitimacy Theory are used as key theoretical lenses. Stakeholder Theory, as proposed by Friedman (1984), explains how investors respond to evolving social and environmental expectations. Whereas, Legitimacy Theory, as proposed by Dowling and Pfeffer (1975), clarifies why firms and FIs adopt ESG-aligned practices to maintain societal approval.

SRI has been confined traditionally to developed markets, such as Europe, the UK, and the USA. Times are changing though, with emerging and developing economies slowly but surely becoming integral players in this growing movement. However, many emerging and vulnerable economies lag behind despite facing severe ESG challenges. Therefore, vulnerable economies of developing regions require urgent attention towards SRI initiatives because ESG concerns in their corporate sector have been deteriorating over the years. Various studies highlight a substantial imbalance in global SRI engagement.

A group, with the name of Vulnerable 20 (V20), was formed in Peru in 2015 to represent economies that are highly vulnerable to ESG and economic issues. At present, there are 70 member nations of V20. These represent regions where ESG-related risks have been rapidly intensifying. Additionally, these vulnerable economies represent 1.7 billion of world population, with 5% share in global emission and $3.8 trillion as GDP value (V20, 2024). It underscores their economic significance despite limited emission contribution. Global Shield Fund (GSF), formed by V20 and G7 nations, has declared seven economies as highly vulnerable out of the 70 members, which require highly significant attention towards SRI initiatives through FIs during COP 27 (Sangomla, 2022). These economies require urgent intervention to strengthen their financial resilience through sustainable investment. These seven highly vulnerable economies include Senegal, Philippines, Pakistan, Ghana, Fiji, Costa Rica, and Bangladesh. They offer a unique landscape where the interplay between investment and social responsibility has become increasingly important. These economies are deteriorating in terms of their ESG and economic concerns over the years more rapidly as compared to other vulnerable economies. Being reliant on external funds and global aid, they face a complex mix of financial and developmental challenges.

The promised financial support as per COP 27, 28, and 29 has not been provided to these economies to tackle their ESG and economic issues. This has created a widening gap between climate finance needs and available financial support. However, it has been suggested in COP 27, 28, and 29 that these economies need to actively monitor their FIs to play an active role in implementing SRI initiatives in their corporate sector. Furthermore, during COP29 held between 11-22 November, 2024, the UN climate conference agreed to triple the finance for developing countries (especially for highly vulnerable economies) from USD 100 billion to USD 300 billion per year by 2035. It stressed the role of FIs to initiate SRI at a large scale in these vulnerable economies. However, initiating such SRI activities at such large scale requires significant motivation for FIs. Therefore, it is crucial to understand what motivates the FIs in these selected vulnerable economies, especially Pakistan, to consider SRI initiatives. The existing literature from developed regions indicates that screening criteria and fund type are the important factors that impact SRI (Beisenbina et al., 2023; Daugaard et al., 2023; Gangi et al., 2021; Helliar et al., 2022; Oehmke & Opp, 2025). Although, the literature lacks empirical evidence on how screening criteria

and fund type impact SRI in Asset Management Companies or AMCs in vulnerable economies, such as Pakistan.

The current study aims to examine how different screening strategies influence SRI by FIs (e.g., AMCs) in Pakistan. Specifically, it investigates whether AMCs employ positive screening to allocate a greater portion of their portfolios to SRI funds, as compared to those using negative screening. Additionally, this research also examines whether equity-based funds are related to a higher SRI ratio than fixed-income funds. Finally, the research requires to investigate whether the impact of positive screening on SRI ratio varies by fund type. The study objectives are clearly aligned with the hypotheses required for empirical testing. To address these objectives, this research seeks to answer the following questions.

- Does positive screening help to enhance SRI ratio?
- Do equity-based funds positively affect SRI ratio?
- Do equity funds moderate the effect of positive screening on SRI ratio?

This study contributes novel empirical evidence for AMCs for an underexamined economy (e.g., Pakistan). This economy is characterised by institutional weaknesses, ESG deterioration, and financial instability in shaping the behaviour of FIs (Mohammad et al., 2025). Furthermore, the findings also highlight practical implications for FIs considering sustainable financial practices. Additionally, the study identifies contextual factors that shape sustainable investment decisions. Consequently, it fills a critical literature gap, in general for sustainable finance and in particular for SRI practices adopted in FIs. More importantly, it addresses how and why FIs introduce SRI funds in a vulnerable economy, such as Pakistan.

Literature Review

The existing literature indicates fund-related, institutional, and macroeconomic factors that impact SRI adoption in different contexts. These factors include CSR initiatives, regulatory compliance, and financial literacy that play a robust role in enhancing SRI (Birindelli & Palea 2023). Additionally, ESG score, profitability, and firm size also indicate a stronger impact in SRI adoption (Alda, 2021; Aydoğmuş et al., 2022; Bhatia et al., 2023; Bolibok, 2024; Sahu et al., 2025). Moreover, financial returns, expense ratios, and fund age have proved to be fund level determinants of SRI initiatives (Tosun & Moon, 2025). These findings are restricted to non-

vulnerable regions and developed economies. Indeed, some of major and pioneer studies in this domain are from North America, Europe, and UK (Badía et al., 2021; Hornuf & Yüksel, 2024). These studies bring forth that the majority of evidence in the existing literature is from developed or non-vulnerable regions. Therefore, existing literature lacks evidence for SRI adoption and its driving factors from vulnerable economies.

Recent studies from developed regions emphasize the role of screening criteria and fund type in shaping SRI decisions (Beisenbina et al., 2023; Daugaard et al., 2023; Gangi et al., 2021; Helliar et al., 2022; Oehmke & Opp, 2025). These studies highlight the need to start SRI initiatives through FIs in vulnerable economies on an urgent basis due to the growing concerns of climate change in this region.

Although the existing literature provides significant evidence for SRI adoption, certain limitations still remain visible. The majority of research focuses on developed geographical regions, such as Europe and North America, with developing and vulnerable economies being underrepresented. Most studies focus on firm-level financial metrics and ESG scores, while ignoring competitive dynamics, policies on innovation, and subtle institutional factors, including regulatory effectiveness, political stability, and corruption control. These are highly volatile and differently shape financial behaviour in vulnerable economies. Furthermore, not all fund-level features and SRI screening criteria are thoroughly investigated, with limited empirical work available on strategies for screening - both positive and negative - and their impact on SRI results with reference to asset management. The literature also fails to take into consideration how asset-class allocations between equities and fixed income influence the SRI ratio within vulnerable economies, as comprehensive evidence remains missing. Similarly, screening and fund type are established drivers in developed markets. However, their efficacy, interaction, and relative importance in the distinct institutional settings of a vulnerable economy like Pakistan remain unverified.

A notable empirical and contextual gap arises from the underrepresentation of vulnerable economies, such as Pakistan. The current research fills this gap by examining factors, such as SRI screening criteria and fund type (equity, fixed income). It provides a concise and relevant framework for FIs operating in a vulnerable economy such as Pakistan by addressing these factors. Further, it adds to sustainable finance literature in

general and SRI literature in particular by providing evidence for vulnerable economies using the global SRI framework. The study offers actionable insights for policymakers, fund managers, and investors seeking to promote sustainable finance practices in the AMCs of Pakistan. Additionally, it requires to test three hypotheses by contributing towards the research gap identified in the literature. The following are the hypotheses tested in this study.

H1: AMCs employing screening exhibit a positive SRI ratio.

H2: Equity-based funds have a positive impact of SRI ratio.

H3: The positive impact of screening of SRI ratio becomes stronger for equity-based funds.

Methodology

The study uses objective data to examine the factors that motivate FIs to consider SRI in AMCs in Pakistan. Therefore, it remains quantitative by nature and follows positivism as the research philosophy. It is a structured, hypothesis-driven approach consistent with empirical testing and observable financial indicators (Rao, 2019). The target population of the study are the FIs of Pakistan, while the sample comprises AMCs from Pakistan. The final sample includes the AMCs using SRI funds to address the ESG concerns in the target economy. A total number of 29 AMCs were included in this study with an unbalanced data from 2008-2024. It represented the complete set of AMCs in Pakistan for which consistent SRI-related data were available during the study period. Currently, Pakistan has 35 licensed AMCs; however, only 29 of them possess complete, reliable, and publicly accessible information on SRI-related funds during the study period, justifying their inclusion in the analysis. Secondary sources were used for the collection of data. The study utilized the databases for the extraction of data, extracted from Refinitiv/DataStream and WRDS. Additionally, annual reports, sustainability reports, and CSR disclosures available on AMC websites were used to supplement missing or qualitative information relevant to screening and fund-type classification. Furthermore, the research also used financial statements, annual reports, sustainability reports, and CSR reports from the relevant website of each AMC. The sample period was 2008-2024. The AMCs in the dataset follow a June fiscal year-end. Therefore, the report's complete annual financial statements were

labelled as 'Year ended June 2024'. Accordingly, the 2024 values represent the finalized and publicly available financial information.

The dependent variable of the study as per the objectives and relevant hypotheses is SRI ratio. It is operationally defined as follows:

$$SRI\ Ratio = \frac{SRI\ Funds}{Total\ Funds}$$

The above formula clarifies that the SRI ratio captures the proportion of the total fund offerings allocated to SRI funds. Furthermore, it ensures consistent operationalization with exiting research (Alda, 2021). Table 1 provides the detailed operationalization and literature source of both the independent and control variables.

Table 1
Variable Measurement

Variables	Measurements	Reference
Dependent Variable		
SRI Ratio	SRI fund to Total Fund	(Alda, 2021)
Independent Variables		
Screening	Negative = 0, Positive = 1	(Hoepner & Schopohl, 2020)
Fund type	Fixed Income = 0, SRI Equity = 1	
Moderating Variable		
Contingency	Screening × Fund Type	
Control Variables		
Firm's Size	Natural Log of Total Assets	(Siedschlag & Yan, 2023; Yao et al., 2021)
ROE	Proft after tax to Shareholder's Equity	
B/M Ratio	Book value to market value of equity	
Leverage	Total Debt to shareholder's equity	
ESG score	Composite ESG score	

The study requires panel data modelling for AMCs in Pakistan. The model applied to meet the study's objectives is as follows:

$$SRI\ Ratio_{it} = \beta_0 + \beta_1\ (Screenig)_{it} + \beta_2(Fund\ Type)_{it} + \beta_3(Screening\ \times Fund\ Type)_{it} + \beta_4\ \sum_n^i(Controls)_{it} + \mu_{it}$$

Panel data estimation methods are used to test the hypotheses. The methods of estimation included fixed effects, random effects, and pooled OLS, as suggested in the previous literature examining fund-level determinants of SRI- and ESG-related investments (Alda, 2021; Hoepner & Schopohl, 2020). These methods of estimation were selected because using static panel estimators (FE/RE) are appropriate when the primary interest lies in cross-sectional differences and time-invariant institutional characteristics, rather than dynamic adjustments (Baltagi & Pesaran, 2007). The sample size (N = 29 AMCs) is not sufficiently large to support dynamic GMM methods, which require a large N for reliable estimation. Hausman test was used to determine the suitability of FE vs. RE models. Pooled OLS was included for comparison, as recommended in the SRI literature analysing screening and fund-type determinants.

All control variables were measured contemporaneously with the SRI ratio. The timing reflected the firm's financial and sustainability conditions within the same reporting year. Using contemporaneous financial controls is appropriate because sustainability ratings typically reflect annual firm performance. Therefore, it aligns with financial indicators for the same fiscal year. This approach is consistent with prior studies that used same-year accounting variables to control for financial performance (Amy et al., 2023). Reverse causality is a potential concern. However, contemporaneous measurement is unlikely to materially bias the results (Whited et al., 2022). The reason is that sustainability assessments are generally based on past and ongoing practices throughout the year, rather than immediate changes in financial indicators.

Results

Descriptive statistics including mean and standard deviation for all variables were calculated. The table indicates that AMCs in Pakistan have an average of 15% SRI ratio, with a moderate fund to fund variation (M = 0.15, and SD = 0.05). Further, the table also reports a balanced use of positive screening in AMCs with little variation from fund to fund (M = 1.37, SD = 0.48). The interaction term (such as Screening × Fund Type) indicates an average value of 2.08 due to combined effect (SD = 1.22). Moreover, the value of firm size (M = 0.53, SD = 0.19) and leverage (M =

0.51, *SD* = 0.18) show moderate variability. However, ROE (*M* = 0.14, *SD* = 0.05) and the B/M ratio (*M* = 0.64, *SD* = 0.14) remain quite stable across AMCs for the given data. The mean value of the ESG score is 0.53 (*SD* = 0.12), indicating that ESG performance remains in the middle range for firms on average. Based on these results, descriptive statistics reflect adequate dispersion among variables. Therefore, these variables are suitable for further correlation and regression analyses.

Table 2

Descriptive Statistics (N =400)

Variable	Mean	Std. Dev.	Min	Max
SRI ratio	0.15	0.05	0.05	0.35
Screening	1.45	0.50	1	2
Fund Type	1.37	0.48	1	2
Screening * Fund Type	2.08	1.22	1	4
Firm's Size	0.53	0.19	0.01	1.00
ROE	0.14	0.05	0.02	0.30
B/M ratio	0.64	0.14	0.31	1.00
Leverage	0.51	0.18	0.11	0.99
ESG Score	0.53	0.12	0.22	0.89

Table 3 reports the Pearson correlation coefficients among all the study variables. As can be seen, the SRI ratio is significantly correlated with several key predictors. Specifically, SRI ratio is negatively correlated to screening strategy ($r = –.10$, $p < .05$) - indicating that AMCs using positive screening (coded 1) tend to report a higher SRI ratio than those using negative screening (coded 2). Similarly, SRI ratio is negatively correlated to fund type ($r = –.25$, $p < .001$) - suggesting that equity-based funds (coded 1) are associated with a higher SRI intensity, as compared to fixed-income funds (coded 2). As for the control variables, SRI ratio shows a high positive correlation with both ROE ($r = .53$, $p < .001$) and ESG score ($r = .30$, $p < .001$) - suggesting that the higher the profitability and ESG performance of the fund, the higher the share allocated to socially responsible investments. Conversely, SRI ratio is negatively correlated to leverage ($r = –.21$, $p < .001$), which suggests that higher debt ratios are associated with lower SRI intensities. The association between SRI ratio and firm size ($r = .10$, $p < .05$) and B/M ratio ($r = .20$, $p < .001$) is positive but modest in magnitude. The correlations between independent and control variables are mostly below |.40|, indicating no serious multicollinearity concerns. The highest observed

correlation involves that between screening and fund type (r= –.41, p < .001), which is at a moderate and acceptable level for multiple regression analysis. It supports the robustness of subsequent regression estimates.

Table 3

Pearson Correlation

	SRI	SCR	F-Type	F-Size	ROE	B/M	Lev	ESG
SRI	1							
SCR	-0.101*	1						
	0.0435							
F-type	-0.254*	-0.408*	1					
	0.0001	0.0001						
F-Size	0.1049*	-0.170*	-0.054	1				
	0.0359	0.0001	0.28					
ROE	0.5284*	0.1091*	-0.200*	-0.0692	1			
	0.0001	0.0292	0.0001	0.1674				
B/M	0.2033*	0.0471	-0.073	-0.032	0.0583	1		
	0.0001	0.3473	0.1447	0.5267	0.245			
Lev	-0.210*	0.1582*	0.130*	-0.161*	-0.057	0.0112	1	
	0.0001	0.0015	0.009	0.0013	0.2538	0.823		
ESG	0.304*	-0.168*	-0.01	-0.008	-0.311*	-0.0891	0.148*	1
	0.0001	0.0007	0.8427	0.8689	0.0001	0.0751	0.0031	

Panel regression was conducted to analyze the impact of screening strategy, fund type, and their interaction with SRI ratio, while controlling for firm size, ROE, B/M, leverage, and ESG score. The fixed effects model and random effects model were estimated and presented, as well as pooled OLS for comparison. The results are reported in Table 4. The Hausman test results, $\chi^2(7) = 395.52$, p =.118, do not reject the null hypothesis of no systematic difference between FE and RE estimates, thus supporting the application of an RE model (p >.05). The RE model is, therefore, treated as the preferred specification for interpretation. The overall value of R^2 =.627 indicates that about 63% of the variation in the SRI ratio is explained by predictors. The Wooldridge test results do not indicate significant autocorrelation, $F(1, 28) = 2.17$, p =.15, as reported in Table 4.

Table 4

Panel Regression (Static Panel)

	FE	RE	POLS
Screening	-0.0611***	-0.0203***	-0.0483***
	(0.00582)	(0.00294)	(0.0130)

	FE	RE	POLS
Fund type	-.0083***	-0.0401***	-0.0921***
	(0.00170)	(0.00454)	(0.0174)
F-type × Screening	0.0332**	0.0202**	0.0452***
	(0.0128)	(0.00266)	(0.01000)
Firm Size	0.0854**	0.0890**	0.0270**
	(0.0102)	(0.0106)	(0.0115)
ROE	0.0588**	0.142**	0.383***
	(0.0058)	(0.0561)	(0.0560)
B/M	0.050**	0.0145***	0.0408**
	(0.0177)	(0.001)	(0.0163)
Leverage	-0.0473***	-0.0118***	-0.0500***
	(0.0112)	(0.0016)	(0.0139)
ESG score	0.0887**	0.0182*	0.0415**
	(0.0108)	(0.00982)	(0.0167)
Constant	0.0942***	0.184***	0.233***
	(0.0187)	(0.0526)	(0.0316)
Observations	400	400	400
Number of Firms	29	29	29
R-squared			
• Within	0.350	0.390	
• Between	0.762	0.792	
• Overall	0.521	0.627	0.6286
Prob > *F*	0.0097		0.0000
Hausman Test	$\chi^2(7) = 395.52$, $p>\chi^2 = 0.11756$		
Wooldridge test (Autocorrelation)	$F(1, 28) = 2.165$, $p > F = 0.1523$		

Note. Robust standard errors in parentheses
*** $p<0.01$, ** $p<0.05$, * $p<0.1$

The results of the RE model (preferred specification) show that screening strategy significantly but negatively affects the SRI ratio ($B = -0.0203$, $SE = 0.0029$, $p < .001$). Given that positive screening was coded as 1 and negative as 0, this suggests that AMCs using a positive approach have a higher SRI ratio as compared with those using a negative approach. This finding supports H_1. Similarly, fund type is negatively correlated to the SRI ratio ($B = -0.0401$, $SE = 0.0045$, $p < .001$). Given that equity funds were coded as 1 and fixed-income funds were coded as 0, the result implies that

equity-based funds exhibit higher SRI intensity. This finding supports H_2. It represents an economically meaningful increase in SRI allocation relative to fixed-income funds.

According to the table, the screening strategy-fund type interaction is positive and statistically significant (B = 0.0202, SE = 0.0027, $p < .01$), suggesting that the effect of screening strategy on SRI ratio depends on the fund type. More precisely, the positive coefficient suggests that the relative advantage of positive screening is stronger for equity-based funds than for fixed-income funds. This moderating effect supports the fact that equity-oriented SRI funds amplify the positive relationship between screening strategy and SRI intensity. Thus, H_3 is supported. The positive interaction indicates that positive screening has a stronger SRI-enhancing effect, specifically within equity-oriented funds, reflecting a contextually relevant dynamic for Pakistan's AMC sector. Of the controls, firm size (B = 0.0890, $p < .05$), ROE (B = 0.142, $p < .05$), B/M ratio (B = 0.0145, $p < .001$), and ESG score (B = 0.0182, $p < .05$) are positively correlated to the SRI ratio, suggesting that larger, more profitable, and higher-ESG-performing firms tend to allocate larger portions of their funds to SRI. These findings indicate that the AMCs which strictly comply with ESG and are financially strong allocate higher portions of their funds to SRI. This aligns with organizational expectations in vulnerable economies. Finally, the results indicate a significant but negative role of leverage for SRI ratio (β = –0.0118, $p < .001$). It infers that AMCs with a higher debt allocate a smaller portion of their funds to SRI.

Discussion

The findings of this study provide novel evidence for SRI adoption by FIs of Pakistan. The context is that of a vulnerable economy (Pakistan) from an underdeveloped region. The study addresses an important question regarding how SRI adoption is possible in a vulnerable economy with regulation and institutional uncertainty. To answer this question, the researcher analysed unbalanced panel data of 29 AMCs. The results confirmed that positive screening and equity-based fund play a strong role in enhancing the SRI ratio. The findings support H_1 and H_2 and also align with recent findings from a developed region. In economic terms, the findings indicate that those AMCs which prefer to use positive screening reflect a higher SRI ratio, as compared to those using negative screening. Furthermore, the findings also infer a proactive ethical criterion that

transforms financial resources into an investment which is sustainable and responsible. This is aligned with the arguments of a number of recent studies (Beisenbina et al., 2023; Daugaard et al., 2023; Gangi et al., 2021; Helliar et al., 2022; Oehmke & Opp, 2025). They stated that firms with solid sustainability frameworks and ESG integration allocate a higher proportion of their funds to SRI initiatives. Similarly, the finding that equity-based funds play a positive role to enhance the SRI ratio aligns with recent studies (Coelho et al., 2023; Ferrat et al., 2021; Zheng et al., 2025). These indicated that investor sentiments related ESG preference is better reflected through equity-based funds, rather than fixed income funds. This argument is also supported by a number of recent studies (Pasquino & Lucarelli, 2024; Tampakoudis et al., 2023; Wang, 2024). They reported that equity markets indicate higher investor engagement and greater disclosure due to robust ESG transmission.

Furthermore, the findings indicate that fund type (e.g., equity) plays a significant moderating role in strengthening the impact of positive screening on SRI ratio, supporting H_3. It also infers that equities play a robust role in visualizing the SRI involvement. Moreover, equity financing provides more room to incorporate the ESG criteria, transparency, and flexibility. This is aligned with the findings of the moderating variable in this study. It is also aligned with the similar argument of Birindelli and Palea (2023). They stated that the effectiveness of a fund depends upon its asset class (e.g, equity or fixed income). If a fund is equity-based, it reflects a flexible context in terms of ethical performance and screening criteria. Consequently, these findings support H_1 to H_3 and fill an important gap in the existing literature by extending the analysis to a vulnerable economy. The results indicate an improving trend in the responsiveness of Pakistani AMCs to global norms on sustainability. Further, they also indicate the likelihood of positive screening and equity-oriented strategies to accelerate the embedding of SRI within a similarly developing financial ecosystem.

Conclusion

The current study investigates the influence of screening strategies and fund types on SRI in Pakistani AMCs. Accordingly, it finds that positive screening and equity-based funds enhance SRI, while their interaction strengthens it. These findings support all the three hypotheses, that is, H_1 to H_3. The study concludes that those AMCs which consider proactive screening and equity-based funds in their portfolio are more committed

towards responsible investment. These are very important and novel findings for a vulnerable economy like Pakistan. The findings also add to the existing literature related to SRI for a vulnerable economy like Pakistan. The study confirms that SRI adoption is determined with similar factors (such as screening and fund type) as prevailing in non-vulnerable economies for promoting such initiatives. The study also provides new insights and fills a critical gap in the existing literature in sustainable finance domain in general and SRI in particular. Whereas, the findings provide policy guidelines for Pakistani AMCs in particular and FIs in general.

The current study validates the impact of screening and fund type on SRI ratio for the target sample which ultimately confirms the application of SRI theory. It also demonstrates how equity-based fund type strengthens the impact of positive screening on SRI ratio. The study concludes with policy guidelines for regulatory authority, such as SECP in Pakistan. It indicates that the regulators should clarify the ESG disclosure practices for FIs in Pakistan. They should encourage the AMCs to adopt positive screening and equity-based funds in their investment portfolio. In this way, these AMCs would be in a better position to participate in SRI-related initiatives on a priority basis.

This study also has a number of limitations. Firstly, the dataset used for this study is related to AMCs in Pakistan. Therefore, the findings cannot be generalized to other sectors and contexts due to the specific regulatory environment and the nature of financing and investment in the country. Future studies may consider cross-country, as well as cross-sector, comparison using the same variables by controlling for regulatory framework and temporal variations. Moreover, future studies may also consider enforcement dynamics, investor sentiments, and managerial attitude as the qualitative factors to gain deeper insights. This study focused on screening criteria and fund type as fund level factors. Future studies may consider competitive dynamics, cultural factors, and macro-economic factors such as institutional quality and governance effectiveness. These factors can help to develop a unique framework to examine jointly the drivers of SRI ratio in vulnerable economies in future studies.

Author Contribution

Zahid Bashir: conceptualization, data curation, formal analysis, investigation, methodology, writing original draft, writing-review & editing. **Muhamamd Aamir:** supervision. **Muhammad Sabeeh Iqbal:** supervision.

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Conflict of Interest

The authors of the manuscript have no financial or non-financial conflict of interest in the subject matter or materials discussed in this manuscript.

Data Availability Statement

Data supporting the findings of this study will be made available by the corresponding author upon request.

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