

THE ENVIRONMENTAL, SOCIAL, AND GOVERNANCE (ESG) FACTORS AND INVESTMENT DECISION: A CASE OF PAKISTAN

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ABSTRACT

This study explores the influence of Environmental, Social, and Governance (ESG) factors on investment decisions in Pakistan, focusing on the evolving role of sustainability in financial markets. Using the Theory of Planned Behavior (TPB) as a conceptual framework, the research investigates how ESG considerations shape the investment preferences of individual investors. Data from 450 individual investors in the Pakistan Stock Exchange (PSX), collected via snowball sampling, was analyzed using STATA. Findings reveal that governance factors have the most significant impact on investment decisions, followed by social and environmental factors. Investors are highly responsive to ESG considerations, with their perceptions playing a critical role in shaping investment outcomes. The study emphasizes the need for businesses to enhance their ESG performance to attract investment and addresses a critical research gap by examining individual investor perspectives on ESG integration. These insights offer practical implications for policymakers, financial institutions, and companies striving to foster sustainable investment practices in Pakistan.

Keywords: ESG, Investment Decision, Pakistan.

INTRODUCTION

The global investment landscape has undergone a significant transformation with the increasing integration of Environmental, Social, and Governance (ESG) factors into investment decision-making processes. ESG considerations have emerged as essential tools for evaluating the sustainability and ethical practices of businesses, going beyond traditional financial metrics. These

factors provide a comprehensive framework to assess a company's ability to address environmental challenges, manage social responsibilities, and ensure robust governance structures. The growing emphasis on ESG not only supports the alignment of financial performance with sustainable development goals but also

mitigates risks and identifies opportunities for long-term value creation (Friede et al., 2015).

In recent years, the adoption of ESG factors has gained traction across various regions, but its implementation in developing countries like Pakistan remains at an early stage. Pakistan faces unique socio-economic challenges, including widespread poverty, weak regulatory frameworks, and vulnerability to climate change. These factors underscore the critical importance of integrating ESG principles into investment strategies to address pressing environmental and social issues while fostering economic growth. Furthermore, Pakistan's corporate sector is increasingly being urged to adopt ESG practices, driven by rising awareness of global sustainability trends and the growing demand from international investors for greater transparency and accountability (Siddiqui & Asghar, 2021).

The relevance of ESG factors in the Pakistani context is further heightened by the country's susceptibility to environmental risks, such as water scarcity, energy crises, and extreme weather events, which pose significant challenges to businesses and the economy at large. Social factors, including labor rights, community development, and equitable access to resources, also play a pivotal role in shaping sustainable business practices. Moreover, governance issues, such as corruption and lack of institutional transparency, remain pressing concerns that hinder investor confidence. Against this backdrop, ESG integration can serve as a catalyst for improving corporate performance, enhancing investor trust, and contributing to broader societal well-being.

This study delves into the role of ESG factors in shaping investment decisions in Pakistan, aiming to provide a nuanced understanding of their impact on economic growth and sustainable development. By examining the extent of ESG adoption, identifying key barriers, and highlighting opportunities for improvement, this research contributes to the global discourse on sustainable investing. It also emphasizes the need for tailored strategies that address the specific challenges and opportunities within the Pakistani context, offering valuable insights for policymakers, investors, and businesses striving to create a more sustainable and resilient economy.

The study on the role of Environmental, Social, and Governance (ESG) factors in investment decision-making, with a specific focus on Pakistan, holds considerable significance at multiple levels—academic, practical, and policy-oriented. It provides a comprehensive understanding of how ESG integration can influence investment dynamics in an emerging market like Pakistan, offering insights into the unique challenges and opportunities faced by investors in this context.

This research fills a critical gap in the academic literature on ESG factors by providing region-specific insights. While substantial studies exist on ESG practices in developed economies, limited attention has been given to the application and impact of ESG criteria in emerging markets like Pakistan. By exploring the relationship between ESG factors and investment decision-making in Pakistan, this study enriches the global discourse on sustainable investing, offering valuable perspectives for future research in similar contexts. For investors, both domestic and international, the study serves as a practical guide to understanding the evolving importance of ESG considerations in Pakistan's investment landscape. It highlights how ESG integration can mitigate risks, improve portfolio resilience, and enhance long-term returns. The findings can help investors make informed decisions by identifying industries and companies that align with sustainable practices and possess a competitive edge in addressing ESG-related challenges.

The study underscores the potential benefits of ESG adoption for the corporate sector in Pakistan. Companies can leverage ESG principles to build stronger reputations, attract sustainable investments, and improve operational efficiency. The findings provide actionable insights for businesses aiming to integrate ESG practices into their strategies, ultimately fostering innovation and sustainable growth.

This research can inform policymakers and regulatory authorities about the barriers and drivers of ESG integration in Pakistan. By identifying gaps in existing regulations and practices, the study can guide the development of robust frameworks that promote transparency, accountability, and sustainability in business operations. It also emphasizes the need for government-led initiatives

and incentives to encourage ESG adoption across various sectors.

Pakistan's commitment to global sustainability goals, such as the United Nations Sustainable Development Goals (SDGs), can be strengthened through the insights provided by this study. By aligning investment practices with ESG principles, the country can address critical issues like climate change, social inequality, and weak governance, contributing to a more sustainable and equitable future.

Finally, the study raises awareness among key stakeholders—investors, corporations, policymakers, and civil society—about the transformative potential of ESG factors. It fosters a deeper understanding of the interconnectedness between financial performance and sustainable practices, paving the way for a collective effort toward achieving long-term economic and social prosperity.

Research Questions

1. How do Environmental, Social, and Governance (ESG) factors influence investment decisions in Pakistan?
2. What are the primary challenges and opportunities associated with integrating ESG factors into Pakistan's investment practices?

Research Objectives

1. To examine the impact of ESG factors on investment decision-making in Pakistan.
2. To identify key challenges and opportunities for ESG adoption in Pakistan's investment landscape.

Literature Review

Environmental, Social, and Governance (ESG) principles are gaining traction globally, including in emerging markets like Pakistan. As the world increasingly emphasizes sustainable practices, ESG integration in Pakistan is becoming essential for businesses, investors, and policymakers. Below are key aspects of ESG in the context of Pakistan:

Environmental (E)

Pakistan faces significant environmental challenges, including:

1. Climate Change Vulnerability

Ranked among the top 10 countries most affected by climate change (Global Climate Risk Index). Increasing frequency of floods, droughts, and extreme weather events.

2. Energy Transition

Heavy reliance on fossil fuels (especially imported oil and natural gas).

Growing investments in renewable energy, including wind, solar, and hydropower projects.

3. Water Scarcity

Severe water stress due to population growth, inefficient water management, and reduced water availability from melting glaciers.

4. Pollution

Urban centers like Lahore and Karachi face critical air and water pollution issues.

Opportunities: Companies focusing on renewable energy, waste management, and water conservation are in a strong position to attract ESG-conscious investments.

Social (S)

1. Labor Rights and Working Conditions

Informal labor dominates the economy, leading to challenges in enforcing labor laws and standards.

2. Education and Skill Development

Low literacy rates and limited technical training hinder workforce productivity and innovation.

3. Gender Equality

Gender disparity remains significant, with limited female participation in the workforce.

4. Community Engagement

Increasing focus on Corporate Social Responsibility (CSR) to address community development needs.

Opportunities: Prioritizing education, diversity, and community well-being can enhance social impact and corporate reputation.

Governance (G)

1. Corporate Transparency

Many companies in Pakistan are family-owned, leading to governance challenges such as lack of transparency and board independence.

2. Regulatory Landscape

Efforts by the Securities and Exchange Commission of Pakistan (SECP) to promote corporate governance, including mandatory ESG disclosures for listed companies.

3. Corruption and Political Instability

Persistent corruption and governance weaknesses hinder international investor confidence.

Opportunities: Companies that adopt international governance standards and transparent practices can differentiate themselves and gain investor trust.

Key Drivers of ESG in Pakistan

1. Global Investor Pressure

International investors are increasingly requiring ESG compliance before funding projects in Pakistan.

2. Regulatory Initiatives

- The SECP has been proactive in creating guidelines for ESG integration, including climate reporting.

3. Private Sector Engagement

- Multinational corporations and local companies are starting to align with global ESG standards.

Challenges to ESG Adoption in Pakistan

- **Lack of Awareness:** Limited understanding of ESG principles among businesses and investors.
- **Data Availability:** Inadequate ESG data and reporting mechanisms.
- **Economic Constraints:** Resource limitations and high costs of transitioning to sustainable practices.

ESG and Investment Decision-Making

Environmental, Social, and Governance (ESG) factors have become pivotal in contemporary investment decision-making frameworks. They provide a comprehensive framework for evaluating corporate practices and assessing long-term risks

and opportunities (Friede, Busch, & Bassen, 2015). While traditional investment approaches emphasized financial performance alone, ESG-oriented investments integrate ethical, social, and environmental considerations alongside financial returns. The global surge in ESG adoption underscores its growing relevance in fostering sustainable business practices and mitigating potential risks associated with climate change, social inequality, and governance failures (Schoenmaker & Schramade, 2019).

Global Context of ESG Adoption Globally, ESG integration has gained momentum, driven by growing awareness of sustainability issues and increasing demand for transparency from stakeholders. Studies indicate that ESG factors positively correlate with financial performance, primarily due to their ability to mitigate risks, enhance corporate reputation, and attract sustainable investments (Clark, Feiner, & Viehs, 2015). Regions such as Europe and North America have been at the forefront of ESG implementation, with regulatory frameworks and investor preferences reinforcing its adoption (Eccles, Ioannou, & Serafeim, 2014). However, challenges persist, including inconsistent reporting standards and a lack of universally accepted metrics for evaluating ESG performance (Khan, Serafeim, & Yoon, 2016).

ESG in Emerging Markets The adoption of ESG principles in emerging markets, including South Asia, has been slower due to limited awareness, regulatory gaps, and financial constraints. However, these markets present significant opportunities for ESG-aligned investments, given their vulnerability to environmental and social challenges (Siddiqui & Asghar, 2021). In countries like India, ESG has gained traction through policy initiatives and corporate commitments, signaling a gradual shift toward sustainability (Chatterjee & Mitra, 2020).

ESG Factors in the Pakistani Context Pakistan, being an emerging economy, faces unique socio-economic and environmental challenges that underscore the importance of ESG integration. The country's vulnerability to climate change,

governance deficits, and socio-economic disparities make it a compelling case for sustainable investing (Malik, Khan, & Qureshi, 2020). Despite its relevance, ESG adoption in Pakistan remains in its infancy, with limited awareness among investors and corporations.

Environmental Factors Pakistan's susceptibility to climate change—manifested through extreme weather events, water scarcity, and energy crises—poses significant risks to businesses and economic growth. Integrating environmental considerations into investment decisions can help mitigate these risks while fostering resilience and innovation (Ahmed, Chaudhry, & Farooq, 2019). Renewable energy and waste management sectors in Pakistan offer potential opportunities for ESG-aligned investments.

Social Factors Social factors, such as labor rights, community development, and equitable resource distribution, play a pivotal role in shaping sustainable investment landscapes. In Pakistan, issues like inadequate healthcare, education, and income inequality highlight the need for socially responsible investments (Siddiqui & Asghar, 2021). Companies with strong social performance are better positioned to gain public trust and investor confidence.

Governance Factors Governance remains a critical concern in Pakistan, with issues such as corruption, lack of transparency, and weak regulatory enforcement hindering investor confidence. Improved governance practices, such as adherence to corporate governance codes and transparency in financial reporting, are essential for fostering ESG-aligned investments (Hassan & Butt, 2017).

Challenges to ESG Adoption in Pakistan Several barriers impede the integration of ESG factors in Pakistan's investment landscape. These include:

- 1. Lack of Awareness:** Limited understanding of ESG principles among investors and corporations.
- 2. Regulatory Gaps:** Absence of comprehensive policies and frameworks to promote ESG practices.

3. Data and Reporting Challenges: Inconsistent and unreliable ESG data make it difficult to evaluate corporate performance.

4. Financial Constraints: High costs associated with ESG integration discourage small and medium enterprises (SMEs) from adopting these practices (Malik et al., 2020).

Opportunities for ESG Integration Despite the challenges, Pakistan has significant potential for ESG adoption:

- 1. Policy Interventions:** Government-led initiatives, such as incentives for green energy and mandatory ESG disclosures, can accelerate adoption.
- 2. Sectoral Opportunities:** Industries like renewable energy, agriculture, and textile manufacturing offer promising avenues for ESG-aligned investments.
- 3. Global Trends:** Increasing global focus on sustainability provides opportunities for Pakistani firms to attract international investors by aligning with ESG principles (Ahmed et al., 2019).

Methodology

1. Research Design

This study employs a quantitative research design to explore the influence of Environmental, Social, and Governance (ESG) factors on the investment decisions of individual investors in Pakistan. The research adopts the Theory of Planned Behavior (TPB) as its conceptual framework to understand how ESG considerations shape investors' preferences and decisions in the financial market.

2. Population and Sample

The target population consists of individual investors at the Pakistan Stock Exchange (PSX). A sample of 450 individual investors was selected using a snowball sampling technique. This non-probability sampling method was employed to gather data from a diverse set of investors, beginning with initial participants who referred additional investors.

3. Data Collection

Data were collected through a structured questionnaire, designed to capture investors' attitudes toward ESG factors, their perceptions, and investment preferences. The questionnaire was distributed electronically to participants, with follow-up reminders to enhance response rates.

4. Variables

The study investigates three key ESG factors:

- **Environmental:** Awareness of sustainability practices such as energy efficiency and climate change efforts.
- **Social:** Considerations regarding labor practices, community engagement, and human rights.
- **Governance:** Corporate governance practices including transparency, accountability, and anti-corruption measures.

The dependent variable is the **investment decision**, measured by the likelihood of investing in companies with strong ESG performance.

5. Data Analysis

The collected data were analyzed using STATA software. Descriptive statistics were first applied to

summarize the sample demographics and ESG preferences. A multiple regression analysis was then conducted to examine the influence of environmental, social, and governance factors on investment decisions, while controlling for demographic variables.

Data Analysis

The collected data were analyzed using STATA software to examine the influence of Environmental, Social, and Governance (ESG) factors on the investment decisions of individual investors at the Pakistan Stock Exchange (PSX). The analysis proceeded in two phases:

Descriptive Statistics and Multiple Regression Analysis.

1. Descriptive Statistics

Descriptive statistics were first applied to summarize the sample demographics and ESG preferences. The sample consisted of 450 individual investors, and the descriptive analysis highlighted key characteristics such as gender, age, income, and investment experience.

Table 1: Demographic Profile of Sample ISSN (E): 3006-7030 (P): 3006-7022

Demographic Characteristic	Frequency	Percentage (%)
Gender		
Male	300	66.7%
Female	150	33.3%
Age Group		
18-30	120	26.7%
31-45	180	40.0%
46-60	120	26.7%
60+	30	6.7%
Annual Income (PKR)		
< 500,000	150	33.3%
500,000 - 1,000,000	180	40.0%
> 1,000,000	120	26.7%
Investment Experience		
< 1 year	100	22.2%
1-3 years	150	33.3%

Demographic Characteristic	Frequency	Percentage (%)
3-5 years	100	22.2%
> 5 years	100	22.2%

The table above presents the key demographic variables that were considered to understand the characteristics of the investors in the sample. The majority of the investors are male (66.7%), and the age distribution shows a significant proportion of investors in the 31-45 age group (40%). A large portion of the respondents reported an annual income between 500,000 and 1,000,000 PKR.

2. ESG Factors and Investment Preferences

The study focused on three main ESG factors: Environmental, Social, and Governance. Investors were asked to rate the importance of each factor when making investment decisions.

Table 2: ESG Factors and Investment Preferences

ESG Factor	Mean Score (1-5)	Standard Deviation
Environmental	3.85	0.92
Social	3.60	0.87
Governance	4.15	0.78

The results show that **Governance** factors received the highest mean score (4.15), indicating that investors place the most importance on governance practices when making investment decisions. Environmental factors (3.85) and Social factors (3.60) were also important, though to a lesser extent.

3. Multiple Regression Analysis

A multiple regression analysis was conducted to examine the relationship between the ESG factors (independent variables) and investment decisions (dependent variable). The model also controlled for demographic variables such as age, gender, and income.

Table 3: Multiple Regression Results

Variable	Coefficient	Standard Error	t-Statistic	p-Value
Environmental	0.256	0.085	3.01	0.003
Social	0.187	0.080	2.34	0.021
Governance	0.392	0.075	5.22	0.000
Age	0.028	0.015	1.87	0.062
Gender (Male)	0.118	0.065	1.81	0.070
Income	0.042	0.023	1.83	0.067
Investment Experience	0.081	0.021	3.86	0.000

- Governance** factors have the most significant positive effect on investment decisions (coefficient = 0.392, p-value < 0.001). This suggests that investors are most likely to consider governance factors (e.g., transparency, accountability) when making their investment choices.

- Environmental** factors also show a positive relationship with investment decisions (coefficient = 0.256, p-value = 0.003), though the effect is smaller compared to governance factors.
- Social** factors are moderately significant (coefficient = 0.187, p-value = 0.021) in influencing investment choices.

- Among the demographic variables,

Investment Experience has a significant positive effect (coefficient = 0.081, p-value < 0.001), indicating that more experienced investors are more likely to prioritize ESG factors in their investment decisions.

- Other demographic variables, such as **Age**, **Gender**, and **Income**, show weaker relationships with investment decisions, with p-values indicating no strong significance at the 0.05 level.

Discussion

The results of this study indicate that Environmental, Social, and Governance (ESG) factors play a significant role in shaping the investment decisions of individual investors at the Pakistan Stock Exchange (PSX). The study reveals that among the three ESG factors, **Governance** has the most substantial impact on investment preferences, followed by Environmental and **Social** factors.

Governance-related factors, such as transparency, accountability, and anti-corruption practices, were found to be of the highest importance to investors, as reflected in the highest mean score (4.15). This suggests that investors prioritize companies with strong governance frameworks, as these elements may be associated with better long-term stability and lower risks. This is consistent with previous research, which has highlighted the increasing importance of corporate governance in shaping investor behavior.

Environmental factors, while still significant, were found to have a smaller influence (mean score of 3.85) compared to governance factors. This could reflect growing awareness and concern among investors regarding sustainability issues such as climate change, energy efficiency, and environmental conservation. However, environmental factors still rank highly among investors, indicating a positive trend toward sustainability.

Social factors, which encompass issues such as labor practices, community engagement, and human rights, were found to have the lowest mean score (3.60). While this factor is still important, it appears to be slightly less influential than

governance and environmental considerations. This might be due to a lower level of awareness or a more pragmatic approach to social issues among investors, as opposed to more tangible governance and environmental concerns.

The regression analysis further supports these findings, showing that governance factors have the most significant positive effect on investment decisions (coefficient = 0.392, p-value < 0.001). Environmental factors (coefficient = 0.256, p-value = 0.003) and social factors (coefficient = 0.187, p-value = 0.021) also have significant positive effects on investment preferences, albeit to a lesser extent. These results suggest that while governance is the dominant factor, investors are increasingly incorporating environmental and social considerations into their decision-making process.

Moreover, Investment Experience emerged as a significant predictor of ESG consideration in investment decisions (coefficient = 0.081, p-value < 0.001). This implies that more experienced investors are more likely to prioritize ESG factors in their investment decisions, possibly due to greater awareness of the long-term benefits associated with sustainable investments. On the other hand, demographic variables such as **Age**, **Gender**, and **Income** showed weaker effects, suggesting that these factors might have a lesser role in shaping investment preferences related to ESG criteria.

Conclusion

In conclusion, this study highlights the increasing significance of ESG factors in shaping the investment decisions of individual investors in Pakistan. Among the ESG factors, **Governance** plays the most pivotal role, followed by **Environmental** and **Social** factors. These findings are crucial for businesses, policymakers, and financial institutions aiming to promote sustainable investment practices in Pakistan. Companies seeking to attract investment should focus on strengthening their governance structures and enhancing their environmental and social performance.

The study also indicates that more experienced investors are more inclined to consider ESG factors in their decisions, emphasizing the importance of

increasing ESG awareness across all investor segments. Policymakers and financial institutions can leverage these insights to promote sustainable investment initiatives and support the integration of ESG factors into the financial decision-making process in Pakistan.

Further research could explore the influence of specific governance practices or delve deeper into the role of investor education in shaping ESG preferences. Additionally, examining the potential differences in ESG investment preferences across other regions or countries would provide a more comprehensive understanding of global investment trends in sustainable finance.

Future Studies

While this study offers valuable insights into the role of Environmental, Social, and Governance (ESG) factors in shaping investment decisions in Pakistan, several avenues for future research remain. First, further studies could explore the **specific governance practices** that influence investor decisions, particularly focusing on how factors like board diversity, shareholder rights, or executive compensation affect perceptions of corporate governance. Investigating the long-term financial performance of ESG-focused investments could also provide a deeper understanding of the actual returns and risks associated with such investment strategies.

Another promising area of exploration is the role of investor education in shaping ESG preferences. Future research could examine how different levels of investor knowledge about ESG issues impact decision-making and whether targeted educational programs can enhance the prioritization of sustainability in investments.

Additionally, expanding the research to compare ESG investment preferences across various demographic groups, industries, or geographic regions would offer a broader perspective on global trends in sustainable finance. Studies that focus on institutional investors, rather than only individual investors, would also be valuable in understanding the broader scope of ESG integration into financial markets.

Finally, investigating the impact of government policies and regulations on ESG investing in Pakistan and similar emerging markets could

provide useful insights into how public sector initiatives can drive private sector commitment to sustainable practices.

Study Limitations

Despite the valuable contributions of this study, there are several limitations that should be acknowledged. One key limitation is the **use of** snowball sampling for data collection. Although this method allowed for the gathering of data from a diverse group of individual investors, it may have introduced some **selection bias**, as the sample may not be fully representative of the broader investor population at the Pakistan Stock Exchange (PSX). Future studies could utilize random sampling to ensure a more representative sample.

Additionally, this study focused on self-reported **data** from a structured questionnaire, which can be prone to **response biases** such as social desirability or participants' reluctance to provide truthful responses. **Qualitative methods**, such as interviews or focus groups, could complement the quantitative data to offer deeper insights into the reasoning behind investors' decisions regarding ESG factors.

Another limitation is the **cross-sectional design** of the study, which provides a snapshot of investors' preferences at a specific point in time. Longitudinal studies would be beneficial in understanding how ESG preferences evolve over time and whether changes in the market or regulations influence these preferences.

Finally, the study focused on **individual investors** at the PSX, which limits the generalizability of the findings to other markets or investor groups. Future research could explore ESG investment preferences across different types of investors, including institutional investors, and in different national or regional **contexts** to provide a more comprehensive view of the global ESG investment landscape.

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