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The Impact of ESG on Financial Performance of Top 100 Companies of Pakistan

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Abstract
The objective of this study is to investigate the impact of ESG on financial performance. The present study is accounting-based research, i.e. ROE and ROA are used to measure the financial performance of companies. Data for the study is taken from financial statements for the period of 2018 to 2022 from the top 100 companies of Pakistan, which are listed on PSX. Results which are extracted from the Random Effects model determine that ESG has a significant effect on ROA and ROE. The findings of this study are important to management and for formulating policies of companies. According to the findings of this research study, to improve a company's financial performance over the long term, companies need to allocate their resources and invest in activities that are related to (ESG).
Keywords: Environmental Factors, Social Factors, Governance Factor, Return on Assets, Return on Equity, Firms Size, Firms Age, Firms Leverage

1. Introduction

The development of environmental, social, and governance (ESG) factors has resulted in increased value for environmentally responsible investments in the financial markets (Dmuchowski *et al*., 2023). Investments that take ESG considerations into account can go by other names, like ethical investing, impact investing, socially responsible investing, or sustainable investing. Both companies and investors need to pay attention to the ESG factors appraisal phenomenon's due diligence (DD) is the procedure by which a corporation is evaluated on ESG factors. Various reports provide stakeholders with information on ESG material aspects and concerns compiled and evaluated using a process called ESG-DD (Ullah et al., 2024; Olsen & Enbusk, 2023).

Previous studies provide a description of the procedure and method of research known as DD, which is used to pinpoint essential business transactions and operational duties. On the other hand, this procedure has been used in mergers and acquisitions to determine the price of the target company as well as its value as well as any inherent hazards (Hitt *et al*., 2012). Part of the Environmental, Social, and Governance (ESG) framework, environmental aspects highlight issues related to natural and climatic change. Concerns about water and air pollution, greenhouse gas emissions, and resource efficiency in waste management are examples of environmental factors (Maaz et al., 2024; Kaygusuz, 2009). Concerns about basic human rights, the provision of high-quality goods and services, the health and safety of consumers, and the attainment of maximum employment benefits are examples of social factors (Renouard & Ezvan, 2018).Concerns about the integrity and accountability of the board of directors, the equity and benefits of shareholders and financial disclosure (Khan et al., 2024; Ma et al., 2023).

Increasingly, stakeholders are concentrating their attention on non-financial measures like as ESG performance (environmental, social, and governance) as a reaction to the global financial crisis and the impact it has had on development and advancement (Hoang, T. (2018). Although environmental, social, and governance is given importance in wealthy countries, it has recently made its way to developing countries such as Pakistan. All businesses were required to submit reports on environmental, social, and governance (ESG) factors in 2009 (Baier *et al*., 2020).

Investors views on the significance of ESG factors impact their Pakistan Stock Exchange investment decisions, as demonstrated by the study's research aims. In addition to being uniquely written, research papers primarily aim to contribute fresh information. The results update our understanding of the elements that impact investors' decisions and add to the current body of information on the subject (Manzoor et al., 2024; Pompian, 2012). It raises investor knowledge of emerging market investment opportunities. It predicts ESG total impact on investor's investment choices and compares a variable's consequences. ESG performance-based studies help organizations coordinate investors' project investments. The outcomes also improved their selections based on company nonfinancial facts. Finance surveys must be subjectivisms considerations should be considered alongside financial metrics, according to the report. Testing the hypothesis based on literature review, research design, results, and discussion meets study requirements.

1.1. Significance of the study

It is experienced an important growth in awareness regarding (CSR). Businesses required in order to acknowledge and mitigate the potential consequences they may have on the environment and society in which they operate (Epstein, 2018). Researcher has also given considerable emphasis to CSR. Stakeholders are currently expressing hesitation on how businesses address environmental, social, and governance (ESG) problems (Aldowaish *et al*., 2022). Hence, there is significant curiosity regarding the revelation of corporate social responsibility (CSR) initiatives. This study is relevant as it seeks to examine if such endeavors contribute to businesses attaining their financial objectives. The existing empirical literature on the subject of how top 100 Pakistani companies listed on PSX do financially in relation to their Environmental, Social, and Governance Performance (ESGP) has been greatly supplemented by this study. Since ESG considerations and (CSR) transcend economic, social, and human rights concerns, this study is important for developing countries. In light of the growing body of literature on the topic, the present study makes a substantial addition to our understanding of how ESG variables affect corporate sectors in developing economies like Pakistan's. This study provides academics with a foundation from which to launch future investigations into ESG in less developed nations throughout the world. This study's empirical findings expand our knowledge of whether ESG factors improve the operational financial performance of businesses in industrialized nations like Pakistan.

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The data of this study is collected from annual statements of companies for time period from 2018 to 2022. The present study delves the most influential ESG aspects on the financial performance of Pakistan's top 100 companies listed on PSX.

2. Literature Review

The current research investigates the ESG investment decision of stock market investors by gauging their propensity to pay a premium price, at the expense of return, and the proportion of their portfolios invested in firms with stringent ESG standards (Aldowaish *et al.*, 2022). Environmental factors are taken into account when making financial decisions. Issues pertaining to the environment include pollution, greenhouse gas emissions, climate change, nitrogen and phosphorus cycles, ocean acidification, land use, waste management, loss of biodiversity, ozone depletion, renewable energy, energy efficiency, and natural systems (Von Wallis & Klein, 2015).

2.1. Corporate Social Responsibility (CSR)

Every stakeholder, including consumers, employees, suppliers, and governments, has the same expectations of enterprises (Tsoi, J2010) Defines "The societal expectation that enterprises must fulfill." as "expectations in areas of economics, law, ethics, and charity." They also note that the commercial reason for CSR helps organizations achieve a competitive edge, which is good for everyone (even shareholders) (Galletta *et al.,* 2022; Jamali & Mirshak, 2007). (CSR) therefore encompasses any struggle made by companies make the planet better, society, and the lives of its employees. According to the definition provided by (McWilliams & Siegel, 2001), activities that are profitable to shareholders and activities that are useful to society are both components of corporate social responsibility.

2.2. Empirical Studies on ESG Factors

ESG elements are extremely important to the investment and decision-making processes of businesses, particularly when it comes to the management of long-term operations and the reduction of risk (Kotsantonis *et al.,* 2016). Managing financial crises and other significant difficulties in local and worldwide stock markets is the responsibility of the ESG's sustainable development framework, which is responsible for the formulation of action plans (Singhania *et al*., 2023). ESG comes into contact with the aspects of investing that include responsible behavior, responsible risk management, and sustainable returns (Bodhanwala *et al*., 2020).In a similar vein, the sustainability of businesses is essential to ensuring that environmental pollution is preserved and addressing concerns regarding the conservation of the planet's natural resources (Ahmad *et al*., 2022). It is true when considering a fact; climate change is a complex challenge for the global village of today. On the other hand, while discussing modern slavery, factors related to society are frequently brought up (Farley, 2022). A comprehensive analysis strengthens the connection between environmental, social, and governance (ESG) reporting and the investment choices made by investors in Pakistan.

2.3. Environmental Factors

In order to achieve the aim of sustainable development that was established in the Millennium Goals, it is necessary to incorporate the performance of the company with regard to environmental practices into the environmental information. Problems with the environment are inextricably linked to creative endeavors. This holds true for both ecologically beneficial items and creative methods that are being implemented in the environment (Heinrich *et al*., 2022). Businesses require creative solutions if they want to reduce their environmental impact. Investors are more worried about the environment than they have ever been, which ultimately impacts the financial performance of top 100 companies (Rooh *et al*., 2021). The nature of the company, the type of job available, as well as the natural environment and climate of the region all have an impact on the elements of the environment. These typically encompass things like emissions of greenhouse gases, changes in climate, management of waste, as well as water and air pollution (Kiehbadroudinezhad *et al.,* 2024).When it comes to making judgments on investments, environmental concerns are frequently taken into account. The voluntary disclosure of environmental, social, and governance information, which is contingent on an audit accountability framework, has a favorable effect on the perceptions of companies held by Italian investors (Monteiro *et al.,* 2023).

2.4. Social Factors

(Afeef & Kakakhel, 2022). During the course of the conversation, issues about human and indigenous peoples' rights, as well as concerns regarding child and forced labor, are brought up (Mardini, 2022). In addition, concerns regarding health, safety, and the environment (HSE) are included in the category of social issues. According to Rooh *et al.* (2021), the Consumer Staples industry places a high priority on the sale of consumer goods that are free of harmful substances. They must guarantee that no potentially dangerous substances are used during production. The method in which companies handle personally identifiable information (such as customer's names, addresses, and credit card numbers) also has a societal impact (Hamilton, *et al.*, 2023).

2.5. Governance factors

Investors consider the principles of corporate governance of a company to be an essential management system and an essential indicator of the company's ability to continue running successfully (Hasanudin, 2023). Corporate governance is a structure that aims to protect the rights of various stakeholders, with a focus on shareholders, and guide management decisions in the best interest of the company. In addition to this, it is subject to agency difficulties, which manifest themselves whenever different ownership and control authorities are utilized (Yang *et al.,* 2022). In accordance with Walsh *et al*. (2009), this is a typical practice. It's possible that concerns regarding governance include things like trying to conform to social and environmental standards. Businesses should only form partnerships with governments and institutions that are committed to combating bribery (ISCA, 2017). It is also the responsibility of the governance mechanism to ensure that the firm is equipped with an efficient internal control system. This system helps the company to achieve both its financial and its non-financial goals for the company. The findings of the survey indicate that when it comes to making decisions regarding their investments, 64 percent of respondents take into consideration concerns that are associated with corporate governance (Lewellen *et al.*, 2022).

2.6. Corporate Sustainability – Triple bottom line, ESG

Since 2000, the phenomenon known as "Corporate Sustainability" (Vermeulen & Witjes, 2016) has been extensively utilized in the field of academic research pertaining to business. In the context of the concept of sustainable development, this phrase came into being (Muriithi *et al*., 2021). According to Demetriades and Auret (2014), there has been a more recent trend towards holding corporations accountable for the social and environmental consequences of their actions (Wadham, 2009). All enterprises, good and bad, have effects on the local community and the environment (Milu, 2020) Sustainable development goals (SDOs) emphasize economic growth, social welfare, and "environmental governance," all of which CS indicates the company is actively working to achieve (Milu, 2020). Businesses may be able to improve society while both benefiting the environment and increasing profits through sustainable practices. It has been suggested that by focusing on sustainability, companies can benefit society, the environment, and their profit line (Demetriades & Auret, 2014). (Muriithi *et al.*, 2021) found that the majority of companies merely plan ecologically responsible activities to comply with regulatory requirements or to calm public outcry, while some utilize it to hide their destructive business practices (Sikacz & Wolczek, 2018). Corporate social responsibility, on the other hand, takes into account the influence that environmental, social, and governance concerns have on the success of a company over the course of both the short term and the long term.

2.7. Firm Financial Performance

The progress of a company financially serves as the focus of this research. Assets, liabilities, equity, costs, revenue, and profitability are only few of the variables used to evaluate a company's financial health (Vuković *et al.*, 2022). Corporate Finance Institute staff members, Companies that are publicly traded are required by law to release an annual report detailing the company's financial performance for anyone interested in viewing it (Rajan *et al.*, 2023). The amount of publicly available information about monetary performance was found to vary. This means that financial statements of any publicly traded company are open to scrutiny. Therefore, the company's financial performance may form part of the research. There are many different ways to measure a business's financial health. One measure of a company's health is the profit it generates after deducting all of its operational costs from sales. The term "return on assets" (ROA) in this research refers, ratio of net profit before interest expenses to total assets. It is imperative for corporate management to give priority to the expansion of cash flow in state-owned enterprises, as indicated by (Laghari *et al.*, 2023). Return on equity (ROE) is a metric that quantifies the profitability of a company in relation to the initial investment made by its owners.

2.8. Conceptual Framework

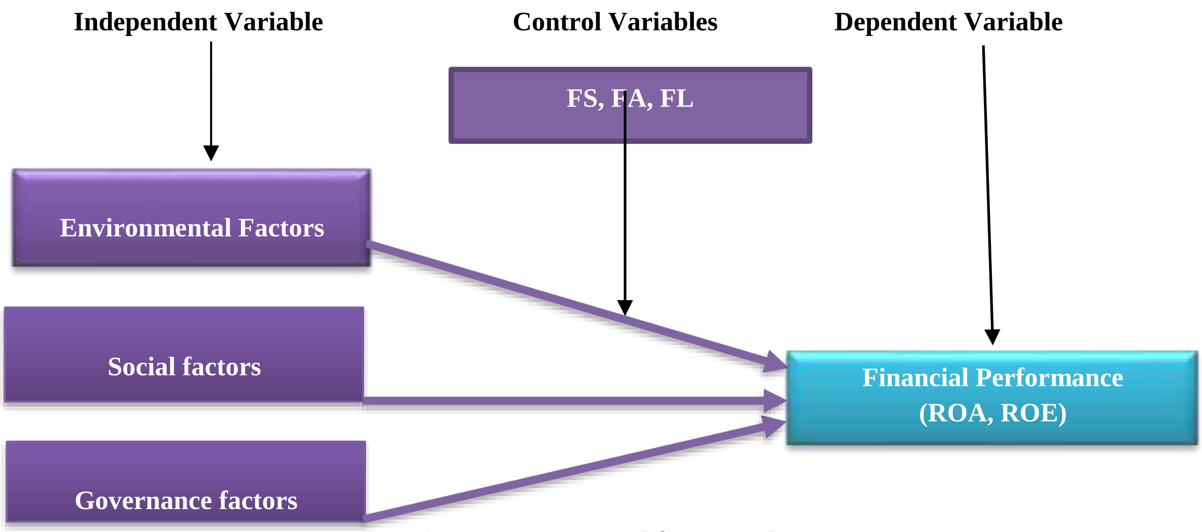

Figure 1: Conceptual framework

Where;
ROA= Return On Assets
ROE= Return On Equity
EF =Environmental Factors
SF= Social Factors
GF= Governance Factors
FS =Firms Size
FA= Firms Age
FL =Firms Leverage

3. Research Design

The research design addresses the method of study to be conducted in order to provide answers to the research questions and to place facts in accordance with the research framework. It provides a comprehensive and in-depth overview of all sides of research, including all of the principles of the field. This research is organized in the same order as the well-known onion model of research (Oberholzer *et al.*, 2023). Research design is like architecture generally used to assist researchers answer questions as correctly as feasible (Leavy *et al.*, 2022). Research design, which complements the research objective, is also important. This research design is appropriate when scientists seek to record “quantitative or numeric description of trends, opinions of a population by studying a sample of that population (Gravlee, 2022).

3.1. Data Collection

The collection and analysis of relevant data is an essential step in the process of doing any kind of research. The type of data that is required for the research that is being conducted is dependent on the study. The term "primary data" refers to information that has not been utilized in a study in the past but is currently being gathered for the very first time for the purpose of doing research. The information was obtained from the annual statements of the top 100 corporations in Pakistan that are both listed on the Pakistan stock exchange.

3.2. Population and Sampling

The entirety of the population that is being investigated in this study is comprised of Pakistan public listed companies that are registered on the PSX. As of 2019, there were a total of 534 public listed companies on the PSX. An investigation into the influence of environmental, social, and governance (ESG) factors on the financial performance of the top 100 firms in Pakistan that are listed on the Pakistan Stock Exchange (PSX) will be carried out as part of the research project. The sample size composed of top 100 Public listed companies of Pakistan. After determining the size, the study will adopt convenience sampling in accessing the required to collection data from secondary source i-e, Companies Annual Report. The research describes the data collection period from 2018 to 2021.

3.3. Statistical Analysis

As author know that statistical analysis is used for mathematics dealing with collection, organization, analysis, interpretation and presentation of data.

3.3.1. Econometrical Model

$$F.P = \beta + \beta_1 EF + \beta_2 SF + \beta_3 GF + \beta_4 FS + \beta_5 FA + \beta_6 FL + e$$

Where;
ROA= Return On Assets
ROE= Return On Equity
EF =Environmental Factors
SF= Social Factors
GF= Governance Factors
FS =Firms Size
FA= Firms Age
FL =Firms Leverage

4. Results

4.1. Descriptive analysis

The objective of this analysis is to provide a representation of the features of the data that is acquired especially for the dependent and independent variables. This is accomplished by supplying those characteristics, which is the same thing that descriptive analysis attempts to accomplish. Finding patterns and relationships within the data that is being analyzed is the objective of descriptive analytics, which aims to accomplish this very goal. In the following step, it would be necessary to locate sections that provide specific information regarding the dependent and independent variables of the study, such as their means, standard deviations, minimum and maximum values.

Table 1: Descriptive analysis

S. No	Var	Var. Type	Min	Max	M	Std Dev.
1	ROA	Dep	9.10213	20.013415	14.45231	2.56343
2	ROE	Dep	03.12650	34.05614	19.05634	20.8752
3	EF	Indep	11.67411	195.11642	1.046751	691.867
4	SF	Indep	0.86451	0.19562	0.256311	0.07344
5	GF	Indep	11.05674	201.70123	60.32563	701.5611
6	FS	Cont	12.5634	19231.45	4810.54	7931.451
7	FA	Cont	15.6532	29.56012	17.4574	1.034674
8	FL	Cont	12.7845	76.4534	16.452	2.05441

4.2. Correlation analysis

One way to see the connection between two variables is to do a correlation analysis. The following sections illustrate how ESG factors relate to ROA and ROE.

4.2.1. Relationship between ESG and ROA

Table 2: Correlation

Variables	ROA	EF	GF	SF	FA	FL	FS
ROA	1						
EF	0. 139	1					
GF	- 0.08	0.211	1				
SF	0. 212	0.085	0.169	1			
FA	0.19	- 0483	-0.069	- 0.219	1		
FL	- 0.148	- 0.219	0.009	0.211	0.281	1	
FS	0.190	- 0.291	0.254	- 0.291	0.187	0.298	1

4.2.2. Relationship between ESG and ROE

Table 3: Correlation

Variables	ROE	EF	GF	SF	FA	FL	FS
ROE	1						
EF	.1491	1					
GF	-.2191	-.5231	1				
SF	.3191	-.6431	.3151	1			
FA	.0671	-.3451	.0578	.2101	1		
FL	.3911	.4531	-.6741	-.0639	-.6512	1	
FS	-.9811	-.5631	-.4561	.0067	.3101	.3641	1

4.3. Multicollinearity

Table 4: Multicollinearity

Variable	Coefficient Variance	Centered VIF
C	0.2934654	0.035312
SF	0.1034531	1.134671
GF	0.2430562	1.645872
EF	21.045211	2.056341
FA	50012451.	1.045834
FL	21034563.	2.093445
FS	0.1745341	1.845231

Table 5: Hausman Test1

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	18.845	6.9453	0.0894

4.3.1. Regression1 for ESG and ROA (Random Effect Model)

The given table presents the results of the regression analysis that is carried out with the random effect model.

Table 6:Regression1 for ESG and ROA (Random Effect Model)

Dependent Variable: RETRUN ON ASSET				
Method: Least Squares				
Sample: 2018 2022				
Variable	Coefficient	Std. Error	t-Statistic	Prob
C	16.103	29.451	0.601	0.534
EF	9.230	15.630	2.56	0.003
SF	10.243	16.482	2.94	0.004
GF	-7.341	0.0031	-2.41	0.031
FA	0.00453	1.4311	-0.0	0.874
FL	-0.45823	0.7634	-2.74	0.009
FS	-8.453	0.0031	-0.64	-0.942
R-squared	0.358248	Mean dependent var		15.5748
Adjusted R-squared	0.304381	S.D. dependent var		3.872767
S.E. of regression	4.905408	Akaike info criterion		6.279680
Sum squared resid	96.25211	Schwarz criterion		6.532886
Log likelihood	-27.53824	Hannan-Quinn criter		6.120069
F-statistic	0.372156	Durbin-Watson stat		2.131808
Prob(F-statistic)	0.01652			

Table 7: Hausman Test2

Test Summary	**Chi-Sq. Statistic**	**Chi-Sq. d.f.**	**Prob.**
Cross-section random	14.401	6.560	0.07845

4.4. Regression2 for ESG and ROE (Random Effect Model)

Table 8: Regression2 for ESG and ROE (Random Effect Model)

Dependent Variable: RETURN ON EQUITY				
Method: Least Squares				
Sample: 2018 2022				
Variable	Coefficient	Std. Error	t-Statistic	Prob
C	41.34	51.56	0.2184	0.0452
EF	11.45	30.45	3.5691	0.019
SF	167.56	31.56	6.2356	0.0051
GF	-15.56	49.45	-4.5441	0.0346
FA	21.45	65.56	0.87452	0.3194
FL	4153.563	14.45	2.45673	0.0564
FS	1.56934	0.4104	-2.453	0.04321
R-squared	0.358248	Mean dependent var		15.5748
Adjusted R-squared	0.304381	S.D. dependent var		3.872767
S.E. of regression	4.905408	Akaike info criterion		6.279680
Sum squared resid	96.25211	Schwarz criterion		6.532886
Log likelihood	-27.53824	Hannan-Quinn criter		6.120069
F-statistic	0.372156	Durbin-Watson stat		2.131808
P(F-statistic)	0.01763			

4.5. Discussion

This study examine the correlation between environmental, social, and governance (ESG) and financial performance in Pakistan. (Constantinescu *et al*., 2021; Donkor *et al*., 2023; Fatemi *et al*., 2018; Fatemi & Fooladi, 2020; Friede *et al*., 2015) supports and aligns with these findings. (Maqbool & Bakr, 2019) based on his study these contributions are only recognized if a specific level has been exceeded. (Tyagi, 1978) advocate for a perspective that prioritizes attaining success by engaging in ethical and responsible behaviors. According to this concept, firms that undertake measures to enhance water quality generally see a favorable effect on their financial performance. Furthermore, the results align with research suggesting that corporations should design corporate social responsibility policies that address significant issues in order to gain sustainable benefits (Lee *et al*., 2018). Research has demonstrated a clear correlation between social standing and financial prosperity among companies operating in developed countries. (Donkor *et al*., 2023) state that the African mining industry faces a significant deficiency in crucial water logistics infrastructure. Similarly, the results regarding environmental concerns align with those of (Friede *et al*., 2015) study, which revealed that surpassing the prescribed environmental benchmarks or regulations resulted in a more substantial improvement in a company's financial performance. (Friede *et al*., 2015) study found that investors view environmental initiatives as a potential expense or punishment, which ultimately harms a company's performance. (Lioui, 2018) found that focusing on environmental corporate social responsibility (CSR) initiatives had a beneficial effect on a company's innovative capacities, ultimately resulting in improved financial performance.

5. Conclusion

The objective of this study is to investigate the impact of ESG on financial performance. The present study is accounting-based research, i.e ROE and ROA are used to measures financial performance of companies. Data for the study is taken from financial statements for the time period of 2018 to 2022 from top 100 companies of Pakistan, which are listed on PSX. Results which are extracted from Random Effects model determines that ESG have significant effect on ROA and ROE. The findings of this study are important to management and for formulating policies of companies. According to the findings of this research study, in order to improve company’s financial performance over a long term, companies need to allocate their resources and invest in activities that are related to (ESG). Based on the scope of the investigation, a quantitative research strategy and a descriptive design are selected for this particular study. Both of these research approaches are adequate for the inquiry. Population for this study is constituted of non-financial companies which are registered and listed in Pakistan Stock Exchange. This was done in order to ensure that the objectives of this study is met. Based on the data, it was determined that E and S variables are a considerable beneficial effect on the return on assets and return on equity of the firms. In contrast, the governance component was having a large and detrimental effect on both the return on assets and the return on equity. Indicating that the findings are compatible with the conclusions that are obtained by the earlier research, the findings aligned with those conclusions. It is also important for persons who are in positions of authority within businesses and the government, such as those who are in charge of making decisions. They invest their money in projects that are good to the environment, society, and governance at the same time that they take responsibility for their current financial status. Over the course of time, they will see an improvement in the results of their financial operations.

References

Ahmad, F., Saeed, Q., Shah, S. M. U., Gondal, M. A., & Mumtaz, S. (2022). Environmental sustainability: challenges and approaches. *Natural Resources Conservation and Advances for Sustainability*, 243-270.

Aldowaish, A., Kokuryo, J., Almazyad, O., & Goi, H. C. (2022). Environmental, social, and governance integration into the business model: Literature review and research agenda. *Sustainability*, *14*(5), 2959.

Aldowaish, A., Kokuryo, J., Almazyad, O., & Goi, H. C. (2022). Environmental, social, and governance integration into the business model: Literature review and research agenda. *Sustainability*, *14*(5), 2959.

Baier, P., Berninger, M., & Kiesel, F. (2020). Environmental, social and governance reporting in annual reports: A textual analysis. *Financial Markets, Institutions & Instruments*, *29*(3), 93-118.

Bodhanwala, S., & Bodhanwala, R. (2020). Relationship between sustainable and responsible investing and returns: a global evidence. *Social Responsibility Journal*, *16*(4), 579-594.

Dmuchowski, P., Dmuchowski, W., Baczewska-Dąbrowska, A. H., & Gworek, B. (2023). Environmental, social, and governance (ESG) model; impacts and sustainable investment–Global trends and Poland's perspective. *Journal of Environmental Management*, *329*, 117023.

Epstein, M. J. (2018). *Making sustainability work: Best practices in managing and measuring corporate social, environmental and economic impacts*. Routledge.

Farley, M. (2022). Making the connections: resource extraction, prostitution, poverty, climate change, and human rights. *The International Journal of Human Rights*, *26*(6), 1032-1055.

Gaa, J. C. (2009). Corporate governance and the responsibility of the board of directors for strategic financial reporting. *Journal of Business Ethics*, *90*(Suppl 2), 179-197.

Gravlee, C. C. (2022). Research design and methods in medical anthropology. *A companion to medical anthropology*, 67-92.

Hamilton, G., Williams, M., & Khan, T. M. (2023, March). Securing Personally Identifiable Information (PII) in Personal Financial Statements. In *Future of Information and Communication Conference* (pp. 709-728). Cham: Springer Nature Switzerland.

Hasanudin, H. (2023). Applying the principles of good corporate governance in corporate financial management. *MAR-Ekonomi: Jurnal Manajemen, Akuntansi Dan Rumpun Ilmu Ekonomi*, *1*(02), 49-55.

Heinrich, F., & Kørnøv, L. (2022). Art and higher education for environmental sustainability: a matter of emergence?. *International Journal of Sustainability in Higher Education*, *23*(3), 728-747.

Hitt, M. A., King, D. R., Krishnan, H., Makri, M., Schijven, M., Shimizu, K., & Zhu, H. (2012). Creating value through mergers and acquisitions: Challenges and opportunities.

Hoang, T. (2018). The role of the integrated reporting in raising awareness of environmental, social and corporate governance (ESG) performance. In *Stakeholders, governance and responsibility* (pp. 47-69). Emerald Publishing Limited.

Kaygusuz, K. (2009). Energy and environmental issues relating to greenhouse gas emissions for sustainable development in Turkey. *Renewable and Sustainable Energy Reviews*, *13*(1), 253-270.

Khan, A. H., Mansoor, R., Ullah, S., & Ullah, R. (2024). Leading with Humility: Servant Leadership on Knowledge Sharing Via Organizational Citizenship Behavior and Trust in Private Organization. *Qlantic Journal of Social Sciences*, 5(3), 39-50.

Kiehbadroudinezhad, M., Merabet, A., & Hosseinzadeh-Bandbafha, H. (2024). Health impacts of greenhouse gases emissions on humans and the environment. In *Advances and Technology Development in Greenhouse Gases: Emission, Capture and Conversion* (pp. 265-291). Elsevier.

Kotsantonis, S., Pinney, C., & Serafeim, G. (2016). ESG integration in investment management: Myths and realities. *Journal of Applied Corporate Finance*, *28*(2), 10-16.

Laghari, F., Ahmed, F., & López García, M. D. L. N. (2023). Cash flow management and its effect on firm performance: Empirical evidence on non-financial firms of China. *Plos one*, *18*(6), e0287135.

Leavy, P. (2022). *Research design: Quantitative, qualitative, mixed methods, arts-based, and community-based participatory research approaches*. Guilford Publications.

Lewellen, J., & Lewellen, K. (2022). Institutional investors and corporate governance: The incentive to be engaged. *The Journal of Finance*, *77*(1), 213-264.

Manzoor, S. R., Ullah, R., Khattak, A., Ullah, M., & Han, H. (2024). Exploring tourist perceptions of artificial intelligence devices in the hotel industry: impact of industry 4.0. *Journal of Travel & Tourism Marketing*, *41*(2), 272-291.

Ma, X., Khattak, A., Ghani, B., & Huo, M. (2023). Perceived overqualification in higher education institutions: Enhancing employee innovative behavior via creative self-confidence and harmonious workplace climate. *Current Psychology*, 1-12.

Maaz, M., Ullah, H., Tahir, S., Aziz, H., Ullah, S., & Qazi, U. (2024). The Impact of Carbon Emission Reduction on Financial Performance: A Case Study of Toyota Motors. *International Journal of Contemporary Issues in Social Sciences*, 3(1), 2018–2028.

Monteiro, A. P., Pereira, C., & Barbosa, F. M. (2023). Environmental disclosure on mandatory and voluntary reporting of Portuguese listed firms: the role of environmental certification, lucratively and corporate governance. *Meditari accountancy research*, *31*(3), 524-553.

Oberholzer, M., & Buys, P. W. (2023). A Roadmap to Business Research. In *Business Research: An Illustrative Guide to Practical Methodological Applications in Selected Case Studies* (pp. 11-40). Singapore: Springer Nature Singapore.

Olsen, C., & Enbusk, H. (2023). *Can Private Equity Enhance Value Creation by Integrating ESG Considerations Throughout the Investment Life Cycle?* (Master's thesis, Norwegian University of Life Sciences).

Pompian, M. M. (2012). *Behavioral finance and wealth management: how to build investment strategies that account for investor biases* (Vol. 667). John Wiley & Sons.

Rajan, R., Ramella, P., & Zingales, L. (2023). *What purpose do corporations purport? Evidence from letters to shareholders* (No. w31054). National Bureau of Economic Research.

Renouard, C., & Ezvan, C. (2018). Corporate social responsibility towards human development: A capabilities framework. *Business Ethics: A European Review*, *27*(2), 144-155.

Singhania, M., & Saini, N. (2023). Institutional framework of ESG disclosures: comparative analysis of developed and developing countries. *Journal of Sustainable Finance & Investment*, *13*(1), 516-559.

Tsoi, J. (2010). Stakeholders' perceptions and future scenarios to improve corporate social responsibility in Hong Kong and Mainland China. *Journal of business ethics*, *91*, 391-404.

Ullah, S., Ullah, H., Rehman, H., & Asif, M. (2024). The Role of Corporate Governance in Firm's Exporting Decision: Case Study from the Textile Sector in Pakistan. Qlantic Journal of Social Sciences and Humanities, 5(3), 1-8.

Vuković, B., Peštović, K., Mirović, V., Jakšić, D., & Milutinović, S. (2022). The analysis of company growth determinants based on financial statements of the European companies. *Sustainability*, *14*(2), 770.

Yang, Y. S., Choi, T. Y., Carter, C. R., & Yin, R. (2022). Expanding the boundaries of buyer-supplier agency problems: Moving from dyad to triad. *Journal of Purchasing and Supply Management*, *28*(3), 100749.