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"IMPACT OF SUSTAINABILITY PRACTICES ON THE FINANCIAL PERFORMANCE OF THE FIRMS: EVIDENCE FROM THE PAKISTAN'S FIRMS"

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Abstract

This study is intended to explore the impact of sustainability practices (social, environmental, and governance) on the financial performance of the firms in Pakistan. The data set used for this study ranges from 2016 to 2021 for 85 different firms verified by the Pakistan Stock Exchange. This study argues that a higher score on sustainability (environmental, social, and governance) shows a better performance of the financial firms that those whose firm has a low score on sustainability. The financial performance of the firm is measured by the accounting-based variables and market-based variables. For this study, panel regression is applied and the Hausman test analyzes whether a fixed-effect model or random-effect model is appropriate. The value of the Hausman test analyzes that the fixed-effect model is more appropriate for this study. The findings show both the positive and negative impact of sustainability practices on the financial firms of Pakistan. The results show a negative relationship between sustainability practices and financial performance but there is a positive relationship between one of the sustainability factors (governance) and the dependent variable (ROA). The accounting literature finds that there is a risk for financial firms to adopt sustainability practices. It is also studied that the positive relationship between financial performance and governance also helps the regulators and researchers other than the companies. The researcher understands the positive impact of governance practices on the performance of the firms. A firm's growth decreases the chances of risk and there is a direct relation between leverage and chances of risk. An increase in leverage means there are more chances of risk in the firm.

Keywords: Sustainability practices, Financial Performance, ESG

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Chapter 1

1. Introduction

Environmental, Social, and governance practices turn out to be powerful in the market for gaining competitive advantages. In recent years, the financial disaster, and its negative impact on the firms around the world have increased the interest of stakeholders in environmental, social, and governance practices. Now companies are showing a more positive approach to involving ESG practices in the management system of companies. In these ways, it brings benefits to the reputation of the firm, building trust, the loyalty of customers, and managing the risk. (Ferrero-Ferrero et al., 2019). The direct relationship between corporate social responsibilities and corporate financial performance has encouraged much research over the year. Many of the studies show the positive effect on the firms by adopting ESG practices in the management of the firm. (Semenova & Hassel, 2016)

Discussion of the impact of corporate activities on the internal and external environment has been greatly discussed for a couple of years. The corporation started realizing the importance of sustainability issues. In the past, the sustainability activities are the liability of the firm that causes the hurdle in boosting the profitability of the firm.

The evolution of sustainability practices has evolved in the early 90's conferences. The first conference was held in 1972 which discuss the concept of sustainability development. These conferences were aimed to develop the concept the sustainability and resolve the policy issues related to the practices of the sustainability

Now after some decades, the top management considers the sustainability activities as an opportunity for boosting the profitability rather than an obligation or an issue for the firms. (Bäckström & Karlsson, 2019). The short-term practice of ignoring the factors of sustainability causes many barriers for the different corporations to invest in more long-term sustainability practices activities (Bansal, 2014). It is getting more difficult to get away from the unethical issues in the business. Apart from that, the scope of sustainability practices in the firms is increasing rapidly, and now easier to evaluate the policies of companies based on sustainability practices. (KPMG, 2017).

The sustainability practices of firms are assessed by three different factors that are environmental, social, and governance. Sustainability practices have gained a lot of attention in recent years and now the customers, stakeholders, and shareholders are showing their interest more in social, environmental, and governmental practices in the firm rather than the short-term financial focus (Alshehhi et al., 2018). ESG is the combination of the performance of the firm's environmental, social, and governmental practices. Investors and shareholders are attracted to those firms that have good financial returns. It was found that environmental, social and governance practices are helpful at the low level for the firms. (Ahmad, Mobarek, & Roni, 2021)

The concept of sustainability and expansion of sustainability has become catchphrase. Nowadays, it is difficult to explain these terms from a unique perspective. This section discusses the different definitions elaborated in the literature review and the summary of each.

In the early 90'90sthere is a link between sustainability and environmental concerns. In 1992, a program was actioned and established by the UN for sustainable development, and it is called global action for the development of sustainability. Agenda twenty-one was one of the main outcomes which provided the guideline for sustainability development.(Drexhage & Murphy, 2015)

This study shows the relationship by looking into three different components of ESG with the financial performance of the firm. We explore this relationship both as a group and as a separate component. Many studies show that these three ESG components are associated with each of them and the combination of these three strengthen the management practices and the performance of the firm. Many of the research shows focus on one of the three components of ESG and financial performance.(Rahi et al., 2022)

Global issues in society (poverty, environmental deprivation, and social exclusion) are resolved and cured by sustainability. The different activities of sustainability fit for different purposes in the various departments of the companies like finance, HRM, marketing, etc., and all these show a different perspective on the activities of sustainability.

As there is a change in the circumstances of society, the corporations are forced to react accordingly and consider their societal role. This leads the corporations to readjust their goals, decision-making, strategies, and reporting. Many companies are now announcing their involvement in the sustainability practices activities and moving toward disclosure of the sustainability. (Simnett, 2012; Mock et al., 2013)

Policymakers in different countries have already promoted the concept of corporate social responsibility in the corporate sector. Corporate governance and sustainability are a “triple bottom line” approach(Elkington, 2016). In the triple bottom line approach, all the economic, social, and environmental measurements are considered equally. These behaviors are considered in the businesses to get a competitive advantage and compete in the market. The triple bottom line is one of the approaches that payoffs the firm a competitive advantage by practicing the environmental, social, and governance activities

Sustainability practices in the organization make their CSR criteria high. It was noticed in the previous studies that the firms having higher sustainability scores perform in the market than those having fewer sustainability scores. This study further explores and enlightens this debate by examining the impact of sustainability practices on the financial performance of the firms.

The remaining of this study continues as follows. The next section discusses the objective of this study and the research gap. The next chapter highlights the literature review, hypothesis, and methodology. In the end, we conclude with a discussion of the results.

1.1.Theoretical Background

Certain different articles discuss the relationship between social practices and the financial performance of the firms. It was noticed that the involvement of Environmental, social, and governance practices positively affects the stakeholders and stockholders of the company. This statement is supported by the stakeholder theory. The stakeholder theory states that the interest of stakeholders, employees, shareholders, and society is managed by the top management and makes sure that there is an existence of the organization(Mishra & Modi, 2013). The goals of an organization are affected by the interests of the stakeholders. By improving the environmental, social, and governance performance and meeting the needs and expectations of the stakeholders, companies can develop their reputations.

Authors suggest that the negative events in the companies are reduced by practicing the different CSR activities. These activities can help to reduce and avoid sudden decisions that cause a negative impact and badly affect the interests of different shareholders. The adoption and regulation of CSR activities in the firm can reduce the environmental and other risks for the firm. The socially irresponsible companies are riskier than those that are socially responsible.

The performance of different factors of sustainability practices (environmental, social, and governance) influences the risk profile of the firms. In the literature, it was identified that the non-sustainability adds more risk to the profile of the firms (Manescu, 2011). ESG ratio is a parameter to the non-sustainability risk and environmental risk which also lead to the work quality and legal action risk.

More awareness of sustainability risk leads to a higher non-sustainability premium. Shareholders attract to those businesses that have high profitability. The attention should not be given only to corporate social responsibility but also to the mechanisms, and strategies driving this corporate social responsibility.

(Faleye et al., 2006) find that the companies expect a greater profit that gives importance to the welfare of the labor and also gives importance to social responsibility and disclosing the information. Earlier studies also found that companies performing environmental, social, and governmental practices have the chance for great operational performance including financial performance in every dimension.

Fewer negative situations have been caused in the business plans of the companies in terms of environmental, social, and good governance. It was also found that investing in the corporate social responsibility of the firm adds more value to the firm. (Davis, 2018)

Two important models used for this study as theoretically are stakeholder theory and agency theory. The relationship between sustainability and financial performance is not explained by any definite theory. The relationship between these two is explained by the different theories. (Wood 2019)

According to the stakeholder theory, companies with good social responsibility have better performance whereas agency theory explores the risk between the agent and the principle. The agent performs the business activities, makes the decisions on the behalf of the principal, and achieves the required goals. Apart from these two, no other theory explained the relationship between sustainability practices and financial performance.

Companies can achieve higher profitability by gaining a competitive advantage, maintaining good relations with the stakeholders, and increasing the goodwill of the corporation as suggested by the stakeholder theory and agency theory.

Preston and O’Bannon 1997 argued that the by fulfilling needs and desires of stakeholders of the company, the firms can achieve favorably and moderate results. It was also argued that not fulfilling the needs can bring the risk in the market for the firms and decrease their performance of the firms. The increase in risk in the market can lower the cost of the firms. But it was also noticed in the previous studies that filling the needs of stakeholders is beneficial for many firms. For some managers, it is the key indicator for their businesses. Solomon (2007) identified that some businesses faced a loss in profitability by not fulfilling the needs and desires of the stakeholders. He argued that the companies in which the stakeholders are involved and fully engaged have good management systems in those companies where there is no involvement of the stakeholders.

1.2.Research Gap

Numerous studies have been done about the factors that cause the risk in the firms. But it is still debated how the activities of sustainability affect the risk of the firms. This study finds out the relationship between sustainability and the financial performance of the firms in Pakistan that is the impact of sustainability practices on the financial performance (ROE, ROE, and EPS)

The study takes the firm’s size and leverage as a control variable. This study represents 85 different firms in Pakistan i.e., chemical, cement, automobile assemblers, textile, and a few other sectors. The previous studies conducted examined the effect of sustainability practices on the financial performance within the Nordic region of financial(Rahi et al., 2022). The research was for the business year 2015-2019. This study will be conducted for the different sectors of Pakistan listing on the Pakistan Stock Exchange by considering the business year 2016-2021 to test the effect of environmental, social, and governance practices on the performance of the financial industries.

1.3.Research Objective

In this study, we have tried to explore the effect of sustainability practices (Social, Environmental, and Governance) on the financial performance of some of the financial industries of Pakistan. There is possibly the influence of sustainability practices on financial performance in Pakistani industries as this has been seen in the Nordic financial industry.

- To identify the impact of sustainability practices on the financial performance of Pakistan industries.

- To recognize the strength of the relationship between sustainability practices and financial performance.

1.4. Problem Statement

The prior research was on the Nordic financial industry that how sustainability practices affect financial performance. There is few recent research on the impact of sustainability practices on the financial performance of Pakistan financial firms. Some studies show a positive relationship, and some variables show a harmful impact on the financial performance of firms. The previous studies conducted examined the effect of sustainability practices on the financial performance within the Nordic region of financial firms(Rahi et al., 2022). The research was for the business year 2015-2019. This study will be conducted for the different sectors of Pakistan listing on the Pakistan Stock Exchange by considering the business year 2016-2021 to test the effect of environmental, social, and governance practices on the performance of the financial industries.

This study finds out the relationship between sustainability and the financial performance of the firms in Pakistan that is the impact of sustainability practices on the financial performance (ROE, ROE, and EPS). The study takes the firm's size and leverage as a control variable. This study represents 85 different firms in Pakistan i.e., chemical, cement, automobile assemblers, textile, and a few other sectors.

1.5. Research Questions

This study investigates the relationship between sustainability practices and financial performance. The study assumes that there is less risk with the sustainability activities in the firm. Apart from that sustainability adds value to the company. The major question in this study is one that to find the link between sustainability and performance of the risk.

It is theorized that maintaining the sustainability practices in the company i.e., social, environmental, and governance has a significant impact on the performance of the firm that is on the accounting-based variables and market-based variables.

1. How do sustainability practices impact the financial performance of Asian financial industries?
2. What is the relationship between sustainability practices and financial performance? Is there a direct relationship?

1.6.Significance of Study

The significance of this study is that many financial institutions, investors, and stakeholders get benefit from this study and came to know how the productivity of firms increases by implementing and practicing the environmental, social, and governance measures. This study also increases the concern of stakeholders for managing socially responsible practices in firms.

As there is an important role of environmental, social, and governmental practices information in the financial markets, so this information is useful to the investors and society. As the ESG and CSR information is beneficial in increasing the value of the firm so, the information on ESG and CSR is recognized by the investors, stakeholders, and the firm's managers. A firm's value can be increased by implementing different ESG practices in the firm's strategies. (Ahmad, Mobarek, & Roni, 2021)

1.7.Plan of the Study

This study is composed of five main chapters. Chapter 1 focuses on the introduction of the topic including the theoretical background, gap analysis, research questions, problem statement, research objective, and hypothesis. Chapter 2 explains the deep investigation of the topic that is some theoretical background on the sustainability practices and financial performance. Chapter 3 explains the methodology of the study which refers to the research design, research techniques, unit of analysis, time horizon, type of study, and choices of variables. Chapter 4 emphasizes the analysis of the data using different models and explains the findings of the study. Chapter 5 explains the recommendations, future predictions, and the conclusion of the results.

Chapter 2

2. Literature Review

The literature review of this study is explained in this study. The impact of the sustainability practices on the financial performance of the firms is discussed in this whole chapter. The performance of the firm is measured by the accounting-based variables (Return on Assets and Return on Equity) and market-based variables (Earnings per share). Some analyze the relation between sustainability and performance by the control variables which are the firm's size and the firm's leverage.

There is not a single definition of sustainability that can be accepted. In the early 1990s, this term is used as a synonym for the capability of the firm to persist in the environmental, social, and governance pressure. Whereas The World Business Council for Sustainable Development (WBCSD) used the word "eco-efficiency" to explain the sustainability practices. In 1997, DeSimone and Popoff said that it is a substance of "higher Efficiency". But some disagreed and said that it is much more than that. King and Welford stated that for practicing sustainability in the approach of doing the business we need to do some important changes. (Hussain, 2015)

In 2011, Kocmanova defined the term sustainability from a business perspective. It is defined as a plan or approach that enhances the firm's growth, competence, and performance and gave the firm a competitive advantage by doing some environmental, social, and governance practices in the management of the firm. This definition places a requirement that every organization is accountable or responsible for its ESG practices (et al., 2017). Some authors defined sustainability as meeting our desires today without negotiating the ability of future generations to meet theirs. Sustainability practices are about increasing the bottom line of the finance department by performing the different social, environmental, and governmental practices.(Alshehhi et al., 2018)

2.1.Defining Sustainability and Sustainable Development

The concept of sustainability and expansion of sustainability has become a catchphrase. Nowadays, it is difficult to explain these terms from a unique perspective. This section discusses the different definitions elaborated in the literature review and the summary of each.

In the early 90s, there is a link between sustainability and environmental concerns. In 1992, a program was actioned and established by the UN for sustainable development, and it is called global action for the development of sustainability. Agenda twenty-one was one of the main outcomes which provided the guideline for sustainability development (Drexhage & Murphy, 2010)

Staying in the business is the business sustainability according to Doane and MacGillivray (2001). The entire world is contributing to the debate on the concerns of sustainability. If we talk from the entrepreneurial perspective, sustainability is the willingness of the corporations and the capacity of the management in terms of financial performance.

The three major pillars of sustainability cover different areas of the development of the corporations. The three pillars are environmental, social, and governmental practices. The management and the leaders need to be aware of these three pillars and the interactions among these pillars. Only because of these, firms can act socially responsibly and ensure their actions at the international level.

The concept of sustainable development came into origin over 50 years ago. In 1969, for the initial time, this concept was approved by different African countries under IUCN (Uribe et al., 2018). The law that was made by NEPA explained sustainable development as providing many benefits to society without harming natural resources.

Everyone wonders how sustainability is different from the term sustainable development. But the sustainability is considered a long-term organization whereas sustainable development refers to the several purposes and strategies that benefit the environment which include advancement in technology, construction of community without destruction, and maintaining well-structured governance. (UNESCO, 2020).

According to the (Dobson, 1996), the terms are explained in the different ways (Elkington 1998) and Crane and Matten (2007) explained that the term of sustainability is only defined in the context of environmental practices. It is also interpreted in the context of economic and social. In his study, it was explained that the Triple Bottom Line evaluated the idea that the companies have different goals that is the goals of companies include the economic, social, and environmental values. The studies of different authors explained that by effectively using the resources of the environment so that they are preferable for the future is one of the main concerns of environmental practices.

2.2.Advancement of Corporate Sustainability Practices

The evolution of sustainability practices has evolved in the early 90's conferences. The first conference was held in 1972 which discuss the concept of sustainability development. These conferences were aimed to develop the concept the sustainability and resolve the policy issues related to the practices of sustainability.

2.3.Sustainability Practices & ESG information

ESG as a sustainability practice is defined as those procedures and reports that provide some basis for the decision-making process related to some non-financial facts and figures. Environmental practices involve the use of renewable energy sources, how to handle waste management, and some of the pollution issues arising from the operation of the company. From the social aspect of ESG, one of the key relationships for the company is its relationship with its employees e.g. is the employee getting fair pay? Is the employee provided with other perks and benefits? And apart from that some of the work policies are also considered. In the governanceof ESG, it is noted how the company is regulated and managed by the top management which includes executive management and the board of directors. (Vipond, 2016)

2.4. Sustainability Practices & Financial Performance

Financial performance is the firm's complete evaluation in different classifications such as assets, liabilities, equity, expenses, revenue, and overall productivity of a company. These are measured through different formulas and give us perfect detail about the effectiveness of the company. Even though many studies show examples of a positive relationship between sustainability practices (Environmental, Social, and Governance) and financial performance there is much research that shows that their results are uncertain i.e., some shows positive relationships, some shows the negative relationship, and some studies show that there is no relationship at all.(Rahi et al., 2022)

In 1991, Wood classified some of the principles of social responsibility and social responsiveness as data and said that the financial performance of a firm was one of the components of social performance. Some of the research took place in the 1980s and burst out some contradictory views between social responsibility and financial performance. The views are that firms earn costs and get profit from these socially responsible actions. (Ameer & Othman, 2012)

An analysis of 2000 studies shows a positive relationship between ESG and financial performance. ESG has been seen as one of the indicators that increase the profitability of the firmand the trust of consumers. It is a key to competitive advantages for many firms, increasing productivity and decreasing systematic risk. (Rahi, Akter, & Johansson, 2020)

The relationship between the sustainability of firms and financial performance has become growing attention in the field of research. Content analysis and review by different researchers examined that more than 70% of publications show the positive result between sustainability practices of the organization and the financial performance of the firm. Most of the previous reviews focus on one or two dimensions of the sustainability practices and some of them focus on all three dimensions it was noticed that using a different methodology for research and the measurement of variable lead the relationship of variables to different views. (Alshehhi et al., 2018)

The performance of the firm is defined as that how well the company is performing over some time. It is defined in some of companies in terms of revenue. Powell (2005) argued that revenue is one of the main indicators of the firms. All the resources used by the different companies are generated from the environment either directly or indirectly. So, it is the responsibility of the firms to play an important part for the environment and society.

Theoretically discovering the different studies, it was found that the connection between ESG and financial performance is fascinating but the affiliation between CSR activities and the performance of the firm is diverse. It was found that a firm's size and different practices are interrelated, firms with larger size have a better understanding and capability to practice different environmental, social, and governance activities than the firm which is smaller in size and has less familiarity. In general, the resource-based theory accepts that larger firms have better performance in different sustainability practices. Most of the studies used the firm's size as the controlling variable. Conversely, the impact of firm size is more than the controlling variable between sustainability practices and the financial performance of the firms. The influence of firm size is very complicated. There are very rare studies that display a distinct consequence of firms' size on the financial performance of the firms. (Ahmad, Mobarek, & Roni, 2021)

In the empirical study of Sweden industries, the research indicates the optimistic association between sustainability practices and financial presentation. Sustainability is rapidly growing research. Sustainability development practices are triggered in many industries. In this respect, many companies are of these sustainable practices and other companies are moving towards the production that makes the environment friendlier and meets the social needs of the society (Pham et al., 2021). The authors recommended that to improve the financial performance of the firms, firms should prepare their financial reports according to the standards and the scores of sustainability in the firms.

The company that is involved in the activities of sustainability development have more expenses and can show positive a result in the financial performance. The one socially responsible element is showing the negative impact on the financial performance which involves managing the resources. There is an adverse effect of sustainability practices on the financial performance of the firms. The positive result means that the management reduces the social expenditure of the firm.

The study by Montabon et al. (2007) identifies the affiliation between these two dependent and independent variables. He identified that the environmental factor of sustainability is one of the measures that is related to the performance of the multiple firms. The findings of this study are supported by two major theories, slack resource theory, and good management theory.

2.5. CSR from Stakeholders' Perspective

In the 1960s, stakeholder theory has progressively established and then extended in the 1980s. Since it started to alter the model of selection of corporate governance and changed the management way of organizations. Stakeholder theory widens the concept of corporate social responsibilities, and the main point of this theory is that the firms should take more than one sustainability practice. So, now the company takes these socially responsible activities and considers the interest of stakeholders of firms. These stakeholders may include investors, executives, workers, creditors, contractors, vendors, consumers, management, community, etc. (Chen & Wang, 2011). It has been found that ESG practices lessen the downside risk of firms and high scores of ESG are linked with low risk of business whereas low ESG scores are linked with a high risk of business. Some of the shareholders explain the performance of ESG as the signal of risk modification. Apart from that, some studies indicate that there is a negative relationship and ESC does not impact managing risk. (Rahi, Akter, & Johansson, 2020)

2.6. Stakeholder Theory and Agency Theory

To identify the relationship between environmental, social, and governance practices and financial performance, we apply two theories which are stakeholder theory and agency theory.

Agency theory stated that firms should put the needs and expectations of shareholders first to increase their wealth. Whereas stakeholder theory stated that firms should capitalize on those projects that raise their profit rather than lessen their cost. (Rahi, Akter, & Johansson, 2020)

Preston and O'Bannon 1997, argued that the by fulfilling needs and desires of stakeholders of the company, the firms can achieve favorably and moderate results. It was also argued that not fulfilling the needs can bring the risk in the market for the firms and decrease their performance of the firms. The increase in risk in the market can lower the cost of the firms. But it was also noticed in the previous studies that filling the needs of stakeholders is beneficial for many firms. For some managers, it is the key indicator for their businesses. Solomon 2007 identified that some businesses faced a loss in profitability by not fulfilling the needs and desires of the stakeholders. He argued that the companies in which the stakeholders are involved and fully engaged have good management systems in those companies where there is no involvement of the stakeholders.

The question was arising by the Orlitzky (2001) that whether the size of the firm moderate the relationship between sustainability practices and the financial performance of the firms. The analysis of his study is conducted on the 41 different experimental studies. He determined in his study that firm's size is not the issue in the relationship between these variables, but the firm's size has a direct impact on the financial performance of the firm. The findings of his study show the positive relationship between sustainability and the show of the firms. The description of the relationship is based on the controlling variables.

Many studies used the firm's size as the controlling variables. Many authors found that there is more effect on variable firm's size than the controlling variable. The effect of the e firm's size is very complex.

The concept of sustainability and expansion of sustainability has become a catchphrase. Nowadays, it is difficult to explain these terms from a unique perspective. This section discusses the different definitions elaborated in the literature review and the summary of each.

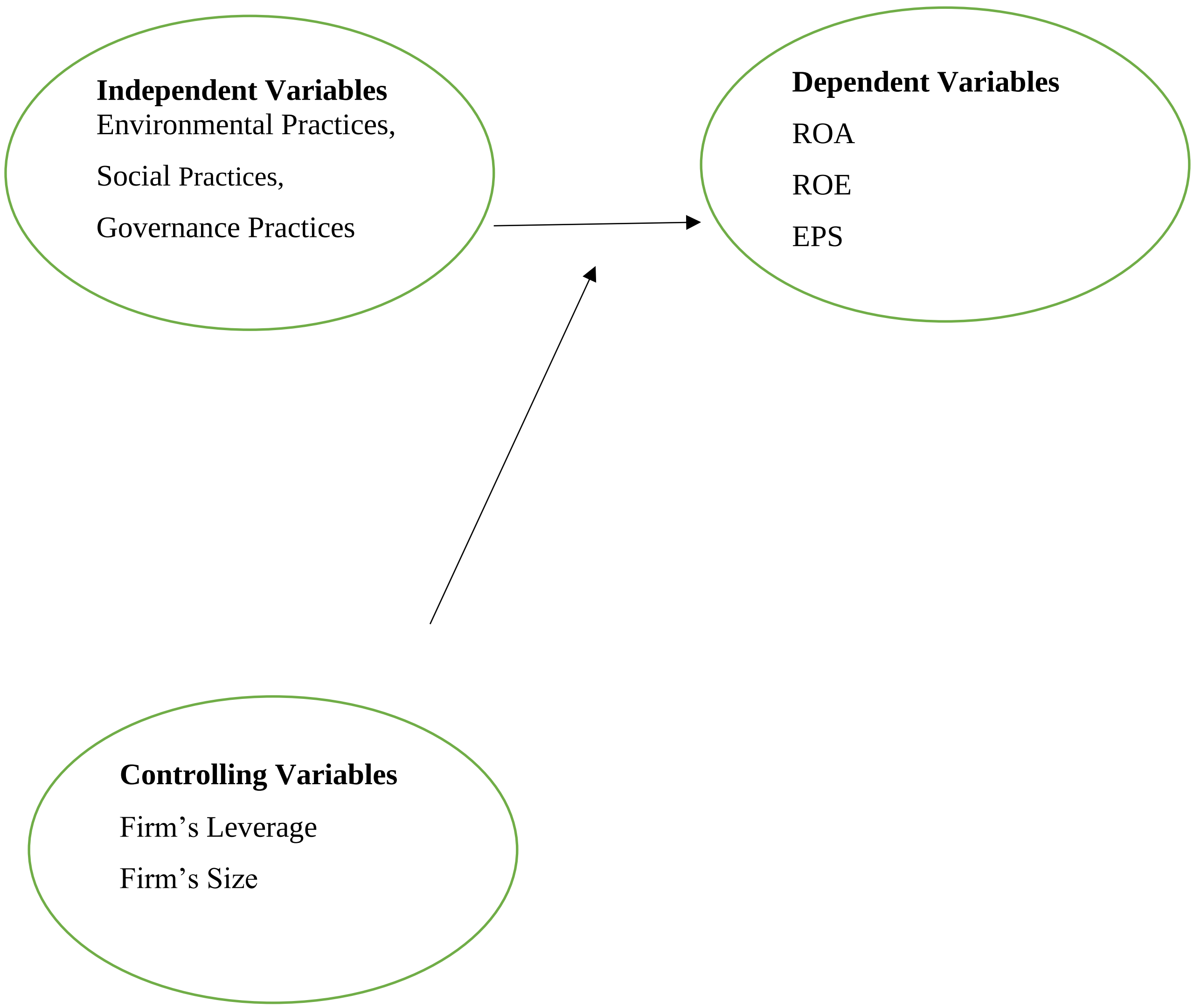
In the early 90s, there is a link between sustainability and environmental concerns. In 1992, a program was actioned and established by the UN for sustainable development, and it is called global action for the development of sustainability. Agenda twenty-one was one of the main outcomes which provided the guideline for sustainability development. (Drexhage & Murphy, 2010)

2.7. Value of Sustainability

The various studies show the importance of sustainability for the organizations and the stakeholders of the firms. There are so many benefits for the organization of adopting sustainability activities. The firms not only increase their revenue by adopting these practices but also benefit the society and environment at a large level. It was identified in the study by (Epstein & Roy, 2001) that there is a decrease in the company's profit and the operating cost. This study was continued and the recent study it was found a positive result between adopting the sustainability practices and the profitability of the firm. So, this is the direction of the relationship between the different companies.

In the Schaltegger and Synnestved (2002) theoretical framework, it was explained that for the protection of the environmental resource's companies should apply strict rules and regulations. Goals and the actions of the companies should be properly defined and aligned. This will help the company to make a new and attractive profile for the environment and this will result in cost-saving for the company. The companies that can make the products and technology that are friendly and beneficial to the environment can also improve the economic performance of the company. There may be differences in the economic outcomes of the companies because of the difference in the marginal cost. By reviewing the different articles, it was found that the performance of the environmental practices should increase the sales of companies, reduce the cost and improve the profitability. EMS is a system that helps the companies to identify systems the measures, management and the restriction of the environment. (Epstein & Roy, 2001)

2.8. Theoretical Framework



In this study, there are 3 independent variables, 3 dependent variables, and 2 controlling variables.

2.8.1. Independent Variables

The three variables we chose as independent variables for this study are environmental practices, social practices, and governance practices. Multiple previous studies have utilized. ESG scores as a measure of a firm's ESG performance (Wang, Dou, & Jia, 2015; Galbreath, 2013; Gerard, 2019; Ahmad, Mobarek, & Roni, 2021). ESG scores have been continually developed across the years following the financial crisis, with increasing amounts of data and research being compiled to assess companies on their ESG performance (Kjellberg, Pradhan, & Kur, 2019). ESG scores are a measure used to quantify the overall performance of a firm's activities relative to the pillars of ESG (Environmental, Social, and Governance) (Duque-Grisales & Aguilera-Caracuel 2021). The scores are calculated based on performance in a variety of areas subordinate to each of the three pillars (ibid). In the Refinitiv ESG scoring framework, for example, the Environmental pillar is made up of such categories as emissions, whilst an example of a category for the social pillar is human rights (Refintiv, 2021).

2.8.2. Dependent Variables

The dependent variables for this study are Return on Assets (ROA), Return on Equity (ROE), and Earning per Share (EPS). The accounting-based variables (ROA and ROE) measure the profitability of firms in Pakistan. The two accounting-based variables in this study are:

- **Return on Assets (ROA)**

Return on Assets (ROA) measures the firm's profitability. It can be calculated by using thefollowing formula:

ROA= Net Income / Total Assets

This ratio tells us how well the company is performing and if it is a higher return then it means that there is dynamic and well-organized management that is utilizing the resources.

- **Return on Equity (ROE)**

It is the annual return of the firm divided by the total shareholder's equity and calculated by theformula: (Vipond, 2016)

ROE= Net Income / Shareholder's Equity

If the ROE of the company is increasing this means that the company is making good decisions in reinvesting its earnings.

Apart from the accounting-based variables, the market-based variable in this study is:

- **Earnings Per Share (EPS)**

It tells us that to which extent a company is earning profit. It is calculated by

EPS= Net Profit / Total no. of outstanding shares

Greater the EPS, the higher the profit.

2.8.3. Controlling /Moderating Variables

To create the affiliation between dependent and independent variables, we introduce moderating variables for this study which are the firm's leverage and firm size. (Rahi, Akter, & Johansson, 2020)

- **Firm Size**

Firm size is the natural logarithm of the total assets of the firm. This variable is introduced as the controlling variable in this study.

Firm Size= Natural Logarithm f Total Assets

- **Leverage**

It is the ratio of a firm's total debt to the firm's total assets. This is the second controlling variable in this study.

Leverage= Total Debt/ Total Assets

2.9.Hypothesis

H1: Sustainability practices positively affect financial performance.

H2: The environmental practices significantly affect the financial performance of the firms.

H3: The social practices significantly affect the financial performance of the firms.

H4: The governance practices significantly affect the financial performance of the firms.

H5: Firm size controls the relationship between the ESG performance and financial performance of firms.

Chapter 3

3. Methodology

Research Methodology is the technique that the researchers used to perform the study and for the data collection. It is the process of introducing the methods and research design of the study. This chapter elaborates on how this study was performed and which firms we used for the study and the sample size and analysis of the data.

3.1. Research Strategy

The main objective of this study is to describe sustainability practices and financial performance. This study further investigates the impact of sustainability practices ESG (Social, Environmental, and Governance) on the financial enactment of the different sectors of firms in Pakistan. Accounting-based performance measures and market-based performance measures are used as dependent variables to examine the impact of sustainability practices.

3.2. Research Technique

The research technique used in this research study is the quantitative technique and it involves the quantitative analysis by collecting the secondary data from different websites. Quantitative observations are used to conduct this study. Mathematical and numerical analysis is used to find the quantitative observations.

3.3. Unit of Analysis

The unit of analysis in the research is the major object of the study that we are analyzing in the study. For our study, the unit of analysis is the different sectors of Pakistan (financial firms) listed on the Pakistan Stock Exchange. This study highlights the impact of sustainability practices (Social, Environmental, and Governance) on the financial firms of Pakistan.

3.4. Time Horizon

This study is based on panel data. Each panel comprising of 6 years from 2016 to 2021. It is the research design that involves different observations that are repeated with the same variable either for a small period or for a long period. The panel data are collected for the dependent variables (ROA, ROE, and EPS), independent variables, and the controlling variables (Firm’s size and Firm leverage).

3.5.Type of Study

The type of this study is causal study. This type of study defines what variations take place in the independent variable by changing the dependent variables. The study explores the effect of sustainability practices on the financial firms of Pakistan.

3.6.Choices of Variables

In this study, there are 3 independent variables, 3 dependent variables, and 2 controlling variables.

3.6.1. Independent Variables

The three variables we chose as independent variables for this study are environmental practices, social practices, and governance practices.

Environmental Pillars

- Resource usage and reduction
- Emissions and emissions reductions
- Product or process innovation

Social Pillars

- Employment quality
- Training
- Human rights
- Health and safety issues

Governance Pillars

- Board structure
- Board functions
- Shareholder rights
- CSR strategy

3.6.2. Dependent Variables

The dependent variables for this study are Return on Assets (ROA), Return on Equity (ROE), and Earning per Share (EPS). The accounting-based variables (ROA and ROE) measure the profitability of firms in Pakistan. The two accounting-based variables in this study are:

- **Return on Assets (ROA)**

Return on Assets (ROA) measures the firm's profitability. It can be calculated by using thefollowing formula:

ROA= Net Income / Total Assets

This ratio tells us how well the company is performing and if it is a higher return then it means that there is dynamic and well-organized management that is utilizing the resources.

- **Return on Equity (ROE)**

It is the annual return of the firm divided by the total shareholder's equity and calculated by theformula: (Vipond, 2016)

ROE= Net Income / Shareholder's Equity

If the ROE of the company is increasing this means that the company is making good decisions in reinvesting its earnings.

Apart from the accounting-based variables, the market-based variable in this study is:

- **Earnings Per Share (EPS)**

It tells us that to which extent a company is earning profit. It is calculated by

EPS= Net Profit / Total no. of outstanding shares

Greater the EPS, the higher the profit.

3.6.3. Controlling /Moderating Variables

To create the affiliation between dependent and independent variables, we introduce moderating variables for this study which are the firm's leverage and firm size. (Rahi, Akter, & Johansson, 2020)

- **Firm Size**

Firm size is the natural logarithm of the total assets of the firm. This variable is introduced as the controlling variable in this study.

Firm Size= Natural Logarithm f Total Assets

- **Leverage**

It is the ratio of a firm's total debt to the firm's total assets. This is the second controlling variable in this study.

Leverage= Total Debt/ Total Assets

3.7.Population and Sampling

The population is the large set of individuals that is the major focus of the study Due to the large population, researchers cannot test any single individual for the analysis because it is too time-consuming. The researchers choose the population to investigate and make the analysis. The population of this sample consists of different sectors listed on the Pakistan Stock Exchange.

There are 36 different sectors listed on the Pakistan Stock Exchange. Some of the sectors which we chose for this study are Automobile Assemblers, Cement Industry, Fertilizers Industry, Textile Composite, and some other sectors. The sample size for this study is 85. The sample size is calculated by Slovin's formula. The Slovin's Formula is given as:

$$\text{Sample Size} = N / (1 + N*e^2)$$

Where,

N= Total Population

e = Margin of error

The total population for this study is 556 which is the total firms listed on the Pakistan Stock Exchange and the margin of error is 0.1 for this study. So, by using this formula for calculating the sample size, the sample size for this study is 85. This formula is the Taro Yamane method, the mathematical method used to calculate the sample size for the research about the population.

3.8.Data Collection Methods

Different methods are used for the collection of data to answer the research questions and hypothesis. The study permits us to emphasize the sources of information from where the data is collected and analyzed.

3.9.Sources of Data

The data collected for this data is the secondary data. The sources of data include the websites of financial firms, websites of firms, the Karachi Stock Exchange website includes, and the annual reports of different companies.

ESG scores were measured using the ESG Combined Scores sourced from the Eikon Refintiv database. There are multiple providers of ESG scores, however, the Refinitiv score was chosen due to a combination of availability and a large amount of coverage in terms of the number of companies that have scores provided by Refinitiv. A large number of scores is ideal to maximise the sample size of the study. The standard ESG score has a value between 0 and 100, with lower numbers indicating lower scores, and thus lower ESG performance (Refintiv, 2021). The standard ESG score is comprised of scores for the Environmental, Social, and Governance pillars, with varying weightings on each pillar, dependent on sector. The Refinitiv ESG Combined Score comprises the standard ESG Score weighted at 50% against an ESG controversy score. The ESG controversy score is a score based on a variety of metrics that measure the impact and severity of ESG controversies in which the firm was involved for a specific financial year. ESG controversy scores may only have a negative impact on the combined score, and thus the ESG Combined Score is equal to the standard ESG score if the ESG Controversy Score exceeds the standard ESG Score. The ESG Combined score was used to provide a more complete picture of the firm's ESG performance, since the score considers the performance of the firm for all of the three pillars of ESG, as well as controversies.

$$\text{Score} = \frac{\text{No. of companies with a worst value} + \dfrac{\text{No. of companies with the same value included the current one}}{2}}{\text{No. of companies with a value}}$$

3.10. Data Collection

The secondary data are collected for the dependent, independent, and controlling variables to analyze the relationship between different variables. The data for dependent variables (ROA, ROE, and EPS) and the controlling variables (Firm's size and leverage) is collected from the annual reports and the Karachi Stock Exchange website. The binary data is collected for the independent variables (Environmental, Social, and Governance), '1' is indicated as the presence of the sustainability practices in the firms and "0" represent that there are not any sustainability practices in the firm. Data is compiled for six years from 2016 to 2021. The presence of sustainability practices is evidence that there is a significant role between the sustainability practices and the financial performance of the firms.

3.11. Model Specification

The purpose of this study is to analyze the impact of sustainability practices on the financial performance of the firms in Pakistan. The financial performance of the firm is measured by the accounting-based variables (ROE, ROA) and the market-based variable (EPS). The fixed-effect model and random effect model of regression are finalized based on the Hausman test. Concerning control variables, the study found the literature and found many control variables that influence the results. The following models reflect the specification of the present study:

Financial performance (ROE, ROA, EPS) $=\alpha + \beta_1$ E $+ \beta_2$ S+ β_3G $+ \beta_4$ Firm's size+ β_5 Firm's Leverage + μ

Whereas,

α = Constant term

μ =Error term

3.12. Determining Factor of Accounting-Based Variables

The accounting-based variables used in this study are ROE and ROA.

- **Return on Assets (ROA)**

It is characterized as the percentage of net income paid on total assets. It measures the firm's profitability and a higher return means that the company is performing well. It also represents the ability of management.

- **Return on Equity (ROE)**

According to Hergert (1983), one of the most familiar measures is the return on equity (ROE). According to Teitelbaum (1996), it is commonly used in modern countries, as a comparative indicator of the firms' competitiveness and financial performance. ROE is used in quantitative research, and it enables to make better financial choices.

3.13. Determining Factor of Market-Based Variables

The market-based variable used in this study for the financial performance is:

- **Earnings per Share (EPS)**

The financial researcher used the EPS as an estimation of the business's success. EPS is considered a meaningful indicator for the evaluation of the market. EPS can be more suitable for the less unpredictable profit-driven company spending strategies.

3.14. Measurement of Variables: Operational Definitions

Table 1: Operational Definitions

Code	Variable name	Operational Definition's
Dependent variables		
ROA	Return on assets (%)	Net Profits after Tax/Total Assets
ROE	Return on equity (%)	Net income / Shareholder's equity
EPS	Earnings per share	Net income- preferred dividends/ average outstanding common shares
Independent Variables		
ESG	Environmental, Social, and Governance Practices	A binary variable: 1 indicates that the ESG has a direct relationship with the firm; 0 indicates otherwise
Control variables		
L_FSZ	Firm size	Natural logarithm of total assets

LVG	Leverage	Total liabilities/total assets

3.15. Model Estimation Technique

The following are the model estimation techniques used in this study.

- **Panel Data Analysis**

The panel data analysis is used by the researchers to measure the effects of sustainability practices on the financial performance of the firm. The usefulness of panel data is that it increases the number of measurements and reduces the three-dimensional variables which are called "multicollinearity" degree of freedom and consistency (Jensen, 1993). The two magnitudes of panel data are cross-sectional data represented by "n" and time-series data represented by "t". Panel data is the most common technique used by researchers in finance. It helps to reduce the that occur due to the merger of different groups into single time series t. Hausman test is used to decide whether the random effect model is more appropriate than or fixed-effect model.

- **Random Effect Model**

The assumption about the intercept that it is unique across both cross-sectional and time series is followed by the random effect model. So, it is verified in this model. The general equation for the random effect model is:

$Y_{i.t} = \alpha + \beta(X)1_{i,\,t} + \beta(X)_{k,\,i,\,t} + (V + \mu_{i.t})$

- **Fixed Effect Model**

The fixed-effect model proposes that the intercept will not be the same for each cross-section, but it will be different. Fixed-effect model is used as the better model for prediction due to the variety of data. The general equation for the fixed-effect model is as follows:

$Y_{i,\,t} = \alpha + \beta_1(X)1_{i,\,t} + \beta_2(X)2_{i,\,t} + \beta_2(X)k_{i,\,t} + \mu_{i,\,t}$

- **Hausman Test**

The purpose of the Hausman test is to demonstrate the possibility of the fixed-effect model or random effect model, provided, that if the “p-value" was significant at a 5 percent confidence interval (0.05), then the fixed-effect model could be functional, but if the “p-value" was superior than 5 percent (0.05), the random-effect model is employed in the study and vice versa if “p-value" was not significant.

Chapter 4

4. Results & Analysis

4.1.Descriptive Analysis

Descriptive statistics show the behavior of all the data including dependent, independent, and control variables. The accounting-based indicators and market-based indicators are applied for financial performance. The variables used for the analysis presented in the descriptive include Return on Equity, Return on Asset, Earnings per share, environmental, social, and governance practices, and the firm's size and leverage as the controlling variables.

Mean and median give us the information about the average of variables. The range of variables is calculated by the maximum and minimum values. Standard deviation tells us about the measure of dispersion that how deviated from the value of the mean. Skewness signifies the deviation from the normal distribution. There is a positive and negative skewness. The positive skewness means that the right tail is long as compared to the left whereas the left skewness means that the left tail is long as compared to the right one. When there is a normal distribution, the skewness is "0".

The Peak ness of data is estimated and analyzed by the kurtosis. It measures whether the normal distribution is heavy-tailed or light-tailed. If the value of kurtosis is greater, this means that it has a heavy tail, and a smaller value of kurtosis refers to a light tail. The value of the kurtosis is also compared with the value of normal distribution which is equal to3.

The table shows the data for our sample firms. The scores for environmental are 40.812, 55.636 for social, and 52.669 for governance from the year 2016-2021. The financial firms of Pakistan show higher scores for social, and governance as compared to the scores the environmental. It is also noticed that there is a higher standard deviation for environmental than social and governance. The data of skewness and kurtosis for dependent variables shows that the data are normally distributed. Apart from that, financial performance shows a mean of 3.788 for ROE, 1.78 for ROA, and 4.523 for EPS.

	Mean	Median	Maximum	Minimum	Std. Dev.	Skewness	Kurtosis
ROE	3.788	3.98	7.539	1.233	1.52	0.354	0.867
ROA	1.78	2.50	4.512	1.113	0.7866	0.612	1.741
EPS	4.523	3.672	5.473	0.472	2.512	0.751	0.437
ENV	40.812	41.642	84.912	0.5122	20.098	0.331	-0.651
SOCIAL	55.636	55.600	82.800	4.600	18.077	-1.686	0.841
GOV	52.669	50.750	87.000	5.500	0.123	0.476	0.924
LVG	235.857	127.990	2010.120	0.950	349.339	2.717	8.332
FS	23.215	23.095	31.513	19.120	0.737	0.489	0.214

Table 2: Descriptive Statistics

4.2.Correlation Analysis

The strength of the relationship between variables is examined by the correlation statistics along with the positive and negative directions. The range is from +1 to -1 which shows the analysis of the correlation between variables. The "0" value indicates that there is no correlation among the variables. The positive sign shows the positive relationship among the variables. The perfect correlation among the variables is indicated by +1 and -1. There are fewer chances of multicollinearity in the panel data. For testing the multicollinearity, the formula for VIF is used to confirm whether there is any problem that exists in the data or not. The tables show the results of the correlation between dependent, independent, and control variables.

Table 3: Correlation Analysis

	ROE	ROA	EPS	ENV	SOCIAL	GOV	LVG	FS
ROE	1							
ROA	0.0369	1						
EPS	0.196	0.0042	1					
ENV	-0.132	-0.244	-0.033	1				
SOCIAL	-0.189	-0.190	0.179	0.6867	1			
GOV	-0.045	-0.091	-0.0926	0.3730	0.6803	1		
LVG	0.300	-0.599	0.106	0.176	0.148	0.273	1	
FS	0.028	-0.419	0.446	0.271	0.263	0.187	0.442	1

Significance levels for the dependent, independent, and controlling variables are 0.01 and 0.05 for the correlation. As the data are interdependent, there is moderate collinearity between the variables. The independent variables show a negative correlation with the dependent variables.

The environmental practices show the negative relation with the ROE, ROA, and EPS with the value of -0.132, -0.244 and -0.033. Similarly social practices also show the negative relationship with the ROE with value of -0.189, with ROA value of -0.190 and the there is also a negative relationship of governance practices with the dependent variables.

The dependent and control variables show a positive correlation with each other except for the relation between firm size (0.028) and leverage (0.300) with return on assets.

4.3.Hausman Test

The decision for the appropriate model between the random effect model and fixed-effect model is taken based on the Hausman test

Table 4: Hausman Test

Test Summary	Chi-Sq.	Prob.
Period random	5	0.0304

This test is carried out for the 85 financial firms for the period 2016-2021. The p-value of the random cross-section shows that the fixed-effect model is more appropriate than the random effect model.

4.4.Regression Analysis

After analyzing the result of the Hausman test, the fixed-effect model is appropriate to explore the impact of sustainability practices on the financial performance of the firms. The results of the fixed-effect model are described in the given table.

Table 5: Fixed- Effect Regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	59.135	48.352	-20.150	0.000
ENV	0.005	0.001	-7.981	0.025
SOCIAL	0.002	0.001	2.267	0.213
GOV	0.003	0.003	1.781	0.005
LVG	-0.049	0.002	-2.761	0.008
FS	0.013	0.000	22.745	0.000

R-squared	0.715	Durbin-Watson stat	2.1400
AdjustedR-squared	11.514		
Prob(F-statistic)	0.000		

The significance levels for the fixed-effect models are 0.01, 0.05 and 0.1.

Chapter 5

5. Conclusion

Ernst and Young says'90s that, "sustainability has found its way into the realm of controllership and financial risk management". This study aimed to analyze and clarify the link between corporate sustainability, corporate governance, and risk, evidencing data from the New York stock exchange. Those who support sustainable capitalism are often confronted to explain why sustainability adds value. But the real question to be answered should be: "Why does an absence of sustainability not damage companies, investors, and society at large?" The study is a remarkable contribution using an international database which creates diverse information particularly considering different, corporate governance systems, corporate environments and so on. We tested the impact of corporate sustainability score, environmental social governance committee, corporate governance committee, capital expenditure, leverage, firm size on market risk.

In this study, data analysis with FE models resulted in robust and consistent findings. There were both negative and positive relationships between sustainability practice and firm performance. First, our findings indicate a negative relationship between total ESG and FP (ROE and EPS). This supports the German study by Velte (2017) and the Japanese study by Lo and Liao (2021), etc. (Brammer et al., 2006). Nonetheless, our findings also contradict other studies (Ameer and Othman, 2012; Artiach et al., 2010). One possible explanation for the negative relationship is that sustainability practices require a long-run investment that inversely affects FP.

Our findings indicate a positive relationship between the governance dimension (G) and ROA. Sustainability practice appears to be critical from a purely financial perspective when looking into governance dimensions. The positive relationship may indicate that solid governance ensures higher profitability from firms' use of their assets. This is not surprising, as asset management is the driver of financial firms and the financial industry. Control over assets is critical and ensures a prudent allocation of resources, helping the financial firms to enhance ROA. Proper governance has a positive impact on the financial firms' customers as well, providing benefits for shareholders. Furthermore, governance was identified as a weak link in the recent corporate scandals and much focus turned to governance afterward (Ehrenhard and

Fiorito, 2018).

The result of bringing ESG moderating variables (ESG interaction with firm size) into the first models showed that firm size together with ESG had a positive association with ROIC and ROE but a negative relationship with EPS. This may be explained by the tendency of large firms to have long experience and plenty of professionals dealing with ESG dimensions in management control practices (Derbali, 2021). On the other hand, a negative relationship between ESG and EPS may imply that the distribution of profit may not achieve the overall ESG goal. There was no association for interaction at the individual.

One explanation for the positive relationship between sustainability practice and governance and the negative relationship between the total ESG and performance may be the different time periods for the establishment of norms and legislation. The positive relationship with governance may relate to the establishment of the corporate governance code (Swedish Corporate Governance Code, 2020) in 2005, which targets all firms traded on regulated markets. These regulations also apply to other companies operating. In contrast, the negative relationship between total ESG and firm performance may be explained by less mature norms on social and environmental sustainability and high investment costs for achieving the legal requirement from a short-term perspective. Our results conclude that the presence of ESG committee can ensure the safe investment, increased returns and reduced risk. Same impact of corporate governance committee can be concluded as the risk can be reduced by the presence of it. As the firm grows the risk is decreased and with the increase in leverage there is also the chance of increase in risk.

Weber & Rong Ang (2016) argued that during bearish times, socially responsible investments indices have shown resistance to market low returns and can thus be used in bearish market periods to minimize equity risks. (Orlitzky, 2001) revisit several empirical studies between 1978 and 1995, dealing with the relationship between financial risk and social performance in the US, meta-data analysis. Their findings endorse the presence of inverse relationship between these two variables. Previously, in literature Jo and Na, (2012) reports that firms can reduce their business risk through good management of corporate social concerns. (Jiraporn et al., 2014) shows that socially responsible corporations are regarded more credit worthy and have increased access to funding. These studies focus on environmental responsibility, report that the environmental performance of these companies is inversely related to risk. Indigenous bodies and few private organizations must realize that public-private partnerships has the possibility to breathe new life into neighborhoods. Besides this sustainability fits various purposes in different management disciplines like finance, quality management, HRM, marketing, communication and reporting all these factors show different views on sustainability aligned to the specific situation and challenges as a result the of contemporary ideas and thoughts are often tilted towards specific interests. The major input of this paper lies in the use of sustainability score which is a novelty in measuring sustainability performance and the use of an extensive database that makes the study comprehensive and reliable.

5.1.Discussion

All the market players must be aware that sustainability is regarded as the panacea which will solve the global poverty gap, social exclusion, and environmental degradation. Considering the presence of committees in the firm for governance and sustainability we have come across diverse empirical studies regarding their roles

Some of the researchers consider the large presence of insiders in committees increases the risk that the committees serve only as a mask for non-socially responsible, profit-making actions, following the fashion of many European companies (Burke et al., 2019). It further add that sustainability committees are operative at impacting applicable strengths, but do not mitigate risk concerns. These results are the same as found by (Ayse & Triant, 2010) who argue that Sustainability management will succeed only if managers and personnel recognize that the reforms create value for them. They also add committees that create value by tracking sustainability-related opportunities and protect value by nursing, but not necessarily mitigating sustainability-related risks. Thus we assume that the presence of a sustainability and corporate governance committee indicates an attempt to empower stakeholder management but they do not necessarily mitigate risk. For doing so an effective sustainability committee and corporate governance committee must have independent members, particularly those who have experience in risk evaluation and techniques so that the committee also serves for the safe investment and reduced risk. The results show that in order to explain the effect of board composition of sustainability committee and corporate governance committee we need to go beyond the narrow and traditional distinction between committee members, focusing on the specific characteristics of each member. The committee members may be constrained by their education and experience to handle risk. If sustainability committee members and corporate governance committee members lack experience in oversight areas such as risk evaluation and control, then their ability to govern corporate sustainability activity and facilitate corporate risk management in those areas may differ from companies with such experience.

5.2.Future Directions

In closing, we acknowledge that this study can be extended in several directions. This study strongly recommends to all corporations, the market stakeholders including investors, portfolio managers, and policymakers to be aware of the threats of corporate activities on the external and internal environment. All the market players must know that sustainability is regarded as the cure which will solve the global poverty gap, social exclusion, and environmental degradation. Some important recommendations of this study are given below.

• The measure of governance committee used are in common for which data are available. But the concept of using sustainability score is evolving and new metrics to defined risk. Future studies can replicate this study with additional measures of sustainability and governance.

• Different committees can be studied as additional research with diverse range of tasks to fully address whether and when a lack of relevant member or experience increases the risk of economic loss.

5.3. Specific Recommendations

1. The presence of a corporate governance committee is significant in reducing risk and increasing the profitability so its role must be strengthened in the corporate governance structure.

2. ESG committee must be incorporated where the firm does not have an ESG committee, and its effective role should be ensured.

3. Though the use of leverage can mitigate risk and better the performance of the firm, but care must be taken using leverage as its excessive use can increase risk.

4. Capital expenditure generally leads to new investments but according to the “pecking order theory”, debt should be used first. So capital expenditure can create uncertainty about risk reduction. Thus, disclosures should be increased to reduce the ambiguity regarding capital expenditure.

5. The role of sustainability score is ambiguous, and it should be investigated.

5.3.Limitations

Nonetheless, this research is subject to some limitations. Our result is consistent with the original theory outlined in this paper and proposes that corporate Discussion and Conclusion governance committees are possibly a contrivance to improve a firm's overview of an influence on stakeholder groups, but sometimes at the cost of economic success. First, the study is restricted to the fact that other elements of the corporate governance committee and ESG committee, i.e. committee member expertise (e.g. awareness, expertise, ability, education, and risk exposure) and judgment performance (e.g. stability, hypothesis generation) are not apprehended. Another apprehension of both committees is, they serve the administration in locale strategy, setting goals, and incorporating sustainability and corporate governance into the routine business matters of the company. These results suggest that the teams positively impact sustainability strengths, but do not lessen risk concerns. In sum, the forecast for the association between sustainability committee, corporate governance committees, and risk concerns is not without tension.

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Appendix

AUTOMOBILE ASSEMBLER

- Honda Atlas Cars (Pakistan) Limited
- Atlas Honda Limited
- Millat Tractors Limited
- Pak Suzuki Motor Company Limited
- Indus Motor Company Limited
- Honda Atlas Cars (Pakistan) Limited
- HinoPak Motors Limited
- Ghandhara Industries Limited
- Ghandara Nissan Limited
- Dewan Farooque Motors Limited
- Atlas Honda Limited

CEMENT

- Fauji Cement Company Limited
- Maple Leaf Cement Factory Limited
- Power Cement Limited
- Flying Cement Company Limited
- Bestway Cement Limited
- Safe Mix Concrete Limited
- Power Cement PREF
- Power Cement Limited
- Pioneer Cement Limited
- Kohat Cement Limited

FERTILIZER

- Fatima Fertilizer Company Limited
- Engro Fertilizers Limited
- Fauji Fertilizer Bin Qasim Limited
- Fauji Fertilizer Company Limited

- Arif Habib Corporation Limited
- Engro Corporation Limited

TEXTILE COMPOSITE

- Gul Ahmed Textile Mills Limited
- Azgard Nine Limited
- Feroze1888 Mills Limited
- Nishat Mills Limited
- Zahidjee Textile Mills Limited
- Taj Textile Mills Limited
- Sapphire Fibers Limited
- Zahidjee Textile Mills Limited
- Kohinoor Textile Mills Limited

C**HEMICAL**

- Lotte Chemical Pakistan Limited
- Shaffi Chemical Industries Limited
- Lotte Chemical Pakistan Limited
- Data Agro Limited
- Sardar Chemical Industries Limited
- Data Agro Limited
- Agritech Limited
- Ghani Global Holdings Limited
- Nimir Resins Limited

MISCELLANEOUS

- TPL Properties Limited
- Pace (Pakistan) Limited
- Siddiqsons Tin Plate Limited
- Synthetic Products Enterprises Limited
- Shifa International Hospitals Limited

ENGINEERING

- Quality Steel Works Limited
- Pakistan Engineering Company Limited
- Mughal Iron and Steel Industries Limited
- Metropolitan Steel Corporation Limited
- K.S.B. Pumps Co. Limited
- Ittefaq Iron Industries Limited
- International Steels Limited
- Huffaz Seamless Pipe Industries Limited
- Aisha Steel Mills Limited
- Agha Steel Industries Limited

LEASING COMPANIES

- Security Leasing Corporation Limited - 9.1% Preference Shares
- Security Leasing Corporation Limited
- Saudi Pak Leasing Company Limited
- Pakistan Industrial and Commercial Leasing Limited
- Pak Gulf Leasing Company Limited
- Grays Leasing Limited
- SME Leasing Limited

FOOD & PERSONAL CARE PRODUCTS

- ZIL Limited
- Unilever Pakistan Foods Limited
- Treet Corporation Limited
- The Organic Meat Company Limited
- Shield Corporation Limited
- Nestle Pakistan Limited
- National Foods Limited
- Matco Foods Limited
- Unity Foods Limited
- Gillette Pakistan Limited

GLASS & CERAMICS

- Tariq Glass Industries Limited
- Shabbir Tiles and Ceramics Limited
- Ghani Global Glass Limited
- Ghani Value Glass Limited
- Frontier Ceramics Limited
- Karam Ceramics Limited
- Baluchistan Glass Limited

ORIGINALITY REPORT

13%	8%	8%	6%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

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1	Submitted to Higher Education Commission Pakistan Student Paper	1%
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