THE IMPACT OF CORPORATE SOCIAL RESPONSIBILITY ON FINANCIAL PERFORMANCE IN PAKISTAN'S INVESTMENT SECTOR

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Abstract

Corporate social responsibility (CSR) practices, or sustainable finance, are becoming an integral element of company strategy and day-to-day operations in the fast-paced, globalized world of today. Despite its widespread appeal in academia, business, and politics, there is still some ambiguity about the relationship between CSR and financial performance (FP), particularly in developing nations. This research aims to investigate the impact of CSR practices, or sustainable finance, on the financial performance of Pakistani investment banks, investment corporations, and securities companies (investment banks, investment companies, and securities companies) that are listed on the Pakistan Stock Exchange (PSX). Secondary data for the study was obtained from the 2013-2022 annual reports of 21 listed investment banks, investment companies, and securities companies. The data analysis is done using the panel data regression model with fixed effects with the aid of E-Views 9. While FP is monitored using Return on Equity (ROE) and Return on Asset (ROA), CSR is measured using content analysis. The results of the empirical study show that CSR has a favorable and considerable impact on financial performance, as measured by both of its metrics, ROA and ROE. The results contribute to the body of literature by offering a deeper comprehension of the CSR activities of Pakistani investment banks, investment companies, and securities firms. Additionally, the study suggests that investment banks, investment companies, and securities companies listed on the PSX concentrate more on applying and implementing sustainable finance, or CSR practices, and disclosing this information in their annual reports.

INTRODUCTION

In today's dynamic and global era, organizations are rapidly moving towards sustainable finance i.e., CSR practices in order to work for the well-being and prosperity of society to give a positive social value. People prefer to invest in those organizations which are socially and environmentally anxious about the ordinary people and regulatory authorities. This helps businesses to operate in a secure community,

hence developing a healthy environment in which a businesses can succeed and prosper. Due to increased social and environmental awareness among the public and regulatory authorities, organizations should ensure sustainable performance to realize a competitive edge mutually at national and international level (Kabir et al., 2023; Li et al., 2023; Adamkaite et al., 2022; Xu et al., 2022; Saeidi et al.,

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2021; Singh et al., 2021). Sustainable organizations try their best to perform their activities for the prosperity of environment and society and focus more than simply on the financial gains and profits. These organizations keenly observe the effects of those activities on both environment and society (Coelho et al., 2023; Sang et al., 2022; Novitasari et al., 2022; Bahta et al., 2021; Hermanto et al., 2021; Tjahjadi et al., 2021). Sustainable performance is basically an organizational act which focuses on performing only those activities which are beneficial for the environment and society (Rasheed et al., 2023; Adams et al., 2022; Habib et al., 2022; Mazodier et al., 2021; Morea et al., 2021; Sapta et al., 2021). Sustainable organizations consider sustainable development and sustainable growth as a foundation for progress, victory and achievement and CSR is a fundamental tool for it (Ma et al., 2023). The aim of sustainability is to help organizations in building up strong relationships with their stakeholders and acquiring such resources that will enhance and boost their financial performance (Ma et al., 2023; Zhao et al., 2023; Ghardallou, 2022; Hina et al., 2022; Szegedi et al., 2020; Javeed et al., 2019). During the preceding two decades, due to the critical issues like every kind of pollution, climate change, global warming, community relations and different philanthropic activities etc., organizations encouraged to involve in CSR practices. This involvement has resulted in a long and sustainable association between the organization and the business environment to attain long run success, an organization could ever desire for (Sarfraz et al. 2023; Bhatti et al., 2022; El Khoury et al., 2021; Shahzad et al., 2020; Broadstock et al., 2020).

Conceptually, CSR is a vast term, definition of which is really hard and complex (Coelho et al., 2023; Bian et al., 2021; Cunha et al., 2021; Huang et al., 2021). CSR is defined as: "Corporate social performance refers to the practices, the principles and the outcomes of relationships of business organizations with different stakeholders; people, organizations, societies, institutes, civilizations, communities and the Globe, with reference to the activities of business organizations toward aforementioned stakeholders along with the and cons of business actions" pros (oxfordbibliographies.com). Ismail (2009)also

quoted a comprehensive definition of CSR, "it is a concept that organizations consider as the civic interest by being responsible for the effect of their actions on shareholders, employees, customers, suppliers, societies, communities and other stakeholders, plus their environment". It is a structural model which helps firms to operate for the prosperity and well-being of environment and society rather than defiling them. It is becoming an essential part of an effective business strategy and day to day business activities.

Previous studies have described the proposed relationship with the help of the Stakeholder theory (Gangi et al., 2018; Oh et al., 2017; Lokuwaduge et al., 2017; Wang et al., 2017) and the Resource-Based View (RBV) theory (Khan et al., 2021; Bahta et al., 2021; Utomo et al., 2020; Gangi et al., 2018). The stakeholder theory states that the economic and social purpose of an organization should be to generate value for all the stakeholders and not only the shareholders (Freeman, 1984). According to Donaldson (1995), this theory is of managerial kind that promote those approaches, attitudes, activities and practices that establish the philosophy of all stakeholders altogether. The theory of RBV states that the organizations which have rare, scarce, valuable and inimitable resources can result in sustained competitive advantage and superior FP (Barney, 1991). By implementing it, CSR will support an organization in refining its sustainable outcome and be more competitive. Hence, this study supports the proposed framework with the help of these theories.

Due to globalization, business organizations, whether in developed or under-developed countries, are embracing sustainable finance i.e., CSR rapidly. The assessment of the relationship between CSR and FP is a part of long-standing discussion in Management Science. This plays a crucial role in the long term success and for the goodwill of the business organizations (Arian et al. 2023; Rasheed et al., 2023; Lu et al., 2021; Barauskaite et al., 2020; Ting et al., 2020). Certainly, developing countries are different from developed countries in terms of different aspects: management, administration, education, politics, societal, cultural and many more. These countries are exposed to various types of risks such as social, environmental, business political,

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economical. The application and implementation of CSR and its relationship with FP face challenges when it comes to developing countries and they have received much less importance in this regard (Coelho et al., 2023; Kabir et al., 2023; Ma et al., 2023; Rasheed et al., 2023; Ramzan et al., 2021). Pakistan is a developing country and the FP of organizations plays essential role in the economic development of the country (Ma et al., 2023; Rasheed et al., 2023; Munir et al., 2022; Bhatti et al., 2022; Szegedi et al., 2020). By far, a handful of researches have been conducted to examine the influence of CSR practices on FP in different industries of Pakistan (Ma et al., 2023; Li et al., 2023; Rasheed et al., 2023; Sarfraz et al., 2023; Yasir et al., 2023; Munir et al., 2022; Zara et al., 2022; Lu et al., 2021; Ramzan et al., 2021; Hayat et al., 2020; Szegedi et al., 2020). However, no study has been found on the application and implementation of CSR to improve FP in the Banks/ Investment Corporations/ Investment Securities Companies (Inv. Banks/ Inv. Cos. / Securities Cos.) of Pakistan. Therefore, it is the need of the hour to encourage this investigation in aforementioned industry to develop the understanding of sustainable finance and enhance the importance of CSR among the organizations, the general public and the regulatory bodies.

The emphasis of the current study is on the Inv. Banks/ Inv. Cos. / Securities Cos. listed in Pakistan Stock Exchange (PSX) which shares a noteworthy portion in the economic development and growth of Pakistan due to their influence on both capital and money markets. The goal of these companies is to help different business and government agencies to nurture funds and capital by selling and issuing various securities of different nature in a primary market. These also provide assistance to investors to make investments in capital market in order to enhance their wealth (Pakistan Stock Exchange, 2023). Consequently, this study endeavors to seal this gap through defining the importance of different dimensions of CSR and outlining the way in which their application and implementation will lead to develop sustainability in the FP of Inv. Banks/ Inv. Cos. / Securities Cos. of Pakistan. The study at hand will enrich the literature on the application and implementation of sustainable finance i.e., CSR practices to enhance FP. This will be the first ever

study that will examine the proposed framework and relationship in the Inv. Banks/ Inv. Cos. / Securities Cos. of Pakistan, as no studies have been found in this context. The facts and figures of the current study will help the chosen sector to improve their FP by implementing CSR hence providing a richer perception to future visions. The knowledge and information provided by the study at hand will aid many stakeholders in identifying and realizing their responsibilities towards CSR and its relationship with FP in the context of Pakistan. Furthermore, this study will also examine the proposed relationships with the help of secondary data rather than relying on the survey data. The study is organized in the following way: the second part shows the literature review and the hypotheses development, the third part describes the research methodology applied to collect data, the fourth part discusses the empirical findings and results of the proposed study. Finally, the last part summarizes the conclusion of the study.

1. Literature Review

Sustainable performance is about performing those functions, operations, and activities that do not unfavorably affect the society, the environment and the well-being of stakeholders (employees, customers, suppliers etc.), at the same time nurturing healthy social networks with its stakeholders. Business sustainability and the factors influencing it have gained great consideration in the literature. The emphasis of this study is on the effect of CSR practices, which is one of the central tool of sustainable finance, on the FP. The effect of CSR on FP is of interest to a wide range of researchers, whose research has extended diverse results and conclusions. responsibility has been defined undertakings of companies conducted for the wellbeing of society beyond what are the legal necessities (Coelho et al., 2023). The typical CSR dimensions are CSR in the direction of Employees, Customers, Community and Environment (Ma et al., 2023; Sarfraz et al., 2023; Feng et al., 2021; Khan et al., 2021; Huang et al., 2021; Ye et al., 2020). The responsibilities towards employees include protection and safety of human responsibilities related to customers consist of marketing in the most ethical way, responsibilities regarding community comprise of social well-being

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and prosperity, and responsibilities about environment involve developing a sustainable environment. Moreover, some of the studies have also discussed that organizations should be socially responsible for their human rights and community rights, environmentally responsible for the way they use different resources and discharge waste material, and economically responsible for their various stakeholders (Arian et al., 2023; Linnenluecke, 2022; Christensen et al., 2021; Lu et al., 2021; Maury, 2021; Barauskaite et al., 2020).

Elouidani et al. (2015) argued that implementation of CSR induces some costs which reduce the effectiveness and efficiency showing adverse effect on the firm value and FP of firms. According to Lin et al. (2019), a company can adopt CSR as a business strategy to the extent that total costs become equivalent to the total benefits. Companies are required to adopt some new technology like product differentiation for the production of efficient and high quality environment friendly products which as a result increase the FP. For instance, if a company wants to reduce the level of pollution emission in the environment, it becomes essential for it to redesign its production process in order to improve the efficiency of production by decreasing the production costs. The research by Arian et al. (2023) had observed the longitudinal affiliation between CSR performance and FP in the publicly listed Australian organizations from different sectors. The study also provided the comparative analysis of the proposed framework between the consumer product and industrial product markets by focusing on stakeholder engagement. The aim of Li et al. (2023) was to help various enterprises in recognizing the vital role of CSR in enterprise development by examining the relationship between CSR and FP with the moderating effect of media attention. The relationship of CSR with the financial and environmental performance through the mediation effect of green technology innovation had been tested in Xu et al. (2022). Coelho et al. (2023) had examined the level of association between CSR practices and the FP of companies. Singh et al. (2021) had explored the association between CSR and organizational performance with the moderation effect of corporate reputation. Long et al. (2020) evaluated the part of government intervention on the

relationship between CSR and FP. Javeed et al. (2019) studied the moderation effect of responsible leadership in the relationship between CSR, corporate reputation and financial performance of the firm. Xie et al. (2017) has explored the association between CSR efforts and FP, in the background of transitional economies: China and Vietnam, and the role of customer satisfaction and institutional environment in this relationship.

The CSR-FP relationship is considered as a significant part of management science (Lu et al., 2021; Barauskaite et al., 2020). Despite the fact that it is a popular concept in different fields of life academia, business, politics, the affiliation between CSR and FP is still indistinct and unclear (Arian et al., 2023). Companies have to make some decisions regarding the application and implementation of CSR that can influence their FP. During the past few decades, several studies have been conducted to describe this relationship in a number of economies showing mixed results. There are most of the studies which showed the positive association between CSR and FP (Sarfraz et al., 2023; Rasheed et al., 2023; Kabir et al., 2023; Ghanbarpour et al., 2022; Albitar et al., 2020). Some studies have shown negative connection between CSR and FP (D'Amato et al., 2019; Liu et al., 2019; Oh et al., 2019; Galant et al., 2017; Elouidani et al., 2015). Whereas, some studies also showed neutral correlation between CSR and FP (Adamkaite et al., 2022; Barauskaitė et al., 2020; Shahbaz et al., 2020; Daugaard, 2020; Lin et al., 2019). All of the aforesaid studies carried out by different scholars display that there is no single response to the query of how does CSR impact FP. Generally there are several methods to measure and quantify CSR practices. According to Galant et al. (2017), these methods are summarized Environmental, Social and Governance (ESG) scores, company rating approach, reputation indices, surveys and content analysis. ESG scores are used to assess the performance of companies in three aspects: environmental, social and governance (Arian et al., 2023; Coelho et al., 2023; Okafor et al., 2021; Partalidou et al., 2020). The company rating approach for example: the Kinder, Lydenberg, and Domini index (KLD) and the Dow Jones Sustainability Indexes (DJSI) had been used by some studies (Khan et al., 2021; Harjoto et al., 2019; Jo et

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al., 2011; Lee et al., 2009). The reputation indices such as the Fortune Reputation Index and the Council of Economic Priorities Reputation Index are used to rank companies based on their CSR practices (Waddock et al., 1997; Preston et al., 1997; Griffin et al., 1997; McGuire et al., 1988). Surveys like questionnaires are also one of the most common ways to evaluate CSR practices which require a lot of time and money (Sarfraz et al., 2023; Ma et al., 2023; Xu et al., 2022; Singh et al., 2021; Feng et al., 2021; Bastič et al., 2020; Shahzad et al., 2020). The last way to measure CSR for the secondary data is the content analysis (Coelho et al., 2023; Rasheed et al., 2023; Adamkaite et al., 2022; Zara et al., 2022; Khan et al., 2021; Okafor et al., 2021; Szegedi et al., 2020). Financial performance shows the efficiency and effectiveness of a business in accomplishing its goals and objectives. Efficiency is all about getting optimal output from certain inputs and it is the 25 ratio between inputs and outputs. Meanwhile, effectiveness is attained when management is able enough to select a suitable tool or reach an accurate destination while accomplishing those goals and objectives (Kabir et al., 2023). After reviewing the literature, Galant et al. (2017) identified three main methods which are useful for computing FP: the accounting-based methods and the market-based methods. Different accounting-based methods such as ROA, ROE, net profit margin etc. have been widely used by many researchers (Kabir et al., 2023; Li et al., 2023; Adamkaite et al., 2022; Munir et al., 2022; Novitasari et al., 2022; Sang et al., 2022; Ramzan et al., 2021; Nguyen et al., 2021; Franco et al., 2020). Various market-based methods such as stock market performance, market value, Tobin's Q etc. have been used by many researchers (Shahbaz et al., 2020; Albitar et al., 2020; Hou, 2019) to assess the FP. A combination of both has also been used in several studies (Rasheed et al., 2023; Arian et al., 2023; Okafor et al., 2021; Yang et al., 2019; Cho et al., 2019). Some researchers have claimed that

accounting-based methods are the significant indicators to assess the relationship between CSR and FP (Kabir et al., 2023). Others have considered market-based methods to be the most effective indicators for CSR-FP relationship (Shahbaz et al., 2020). Whereas, according to Rasheed et al., (2023) future researches should imply the mixture of both the methods to check the effect of CSR on FP.

PSX shares a significant part in the economic development and growth of Pakistan. It pays great attention to social responsibility by following and promoting the ESG (Pakistan Stock Exchange, 2018). It can be claimed that no study has been carried out on how CSR impacts the FP in Inv. Banks/Inv. Cos. / Securities Cos. listed in PSX. The companies contribute to the economic development and growth of Pakistan because of the influence of these on both capital and money markets. These companies are listed as a Non-Banking Finance Companies (NBFCs) under the Non-Banking Finance Companies Rules, 2003. These companies have got the licenses to perform investment advisory, investment finance, and asset management services under the NBFC Rules and Non-Banking Finance Companies and Notified Entities Regulations, 2008 (Pakistan Stock Exchange, 2023). The aim of these companies is to help government and different business agencies in raising funds by selling and issuing different kind of securities in a primary market. Moreover, they assist investors in boosting up their wealth by investing in capital market. The application and involvement of CSR practices in achieving enhanced FP has a substantial character in the literature. By considering the literature following hypotheses are developed:

H1: CSR practices have positive and significant effect on ROA of the Inv. Banks/ Inv. Cos. / Securities Cos. of Pakistan.

H2: CSR practices have positive and significant effect on ROE of the Inv. Banks/ Inv. Cos. / Securities Cos. of Pakistan.

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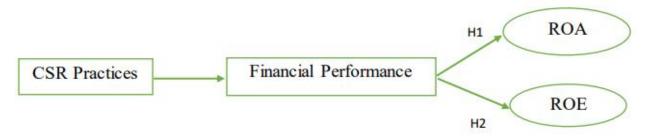


Figure 1. Theoretical model, developed by authors

2. Research Methodology

The data will be analyzed with the help of panel regression method by using E-Views 9, on the basis of annual reports of the 21 chosen Inv. Banks/ Inv. Cos. / Securities Cos. for a time period of ten fiscal years from 2013 to 2022. The proposed research studies the influence of CSR practices on FP by using the quantitative research approach and employing secondary data. All segments of the annual reports are prudently examined and gathered manually by the researcher.

The target population for this study is Inv. Banks/ Inv. Cos. / Securities Cos. in Pakistan, listed in the PSX. The reason for choosing this sector is that no study has been found in this sector regarding the CSR-FP relationship. Meanwhile, it is obligatory for the companies of the selected sector to publish and disclose their annual reports according to Non-Banking Finance Companies Rules, 2003. As a result, data and information, necessary for analysis, can be extracted from the annual reports. The annual reports for a time period of 10 years from 2013 through 2022 are used. According to PSX, a total of 32 companies are listed in this industry. The sample for this study is selected on the basis of several reasons. First and foremost, banks that disclose CSR practices in 22 their annual reports are part of this analysis. Second, banks with missing data are not included in this analysis. And lastly, banks which are declared defaulter by the PSX are omitted from the sample. Thus, 3 banks which are not engaged in CSR, 1 bank with non-disclosed data and 8 defaulter banks are excluded from the sample. Consequently, this study analyzed 21 Inv. Banks/ Inv. Cos. / Securities Cos. (Appendix B) which publish their annual reports and other material related to the CSR on the official websites. This publicly available

information shows that these companies are committed to CSR practices.

The study at hand used the content analysis method of annual reports to measure sustainable finance i.e., CSR practices. Various studies have used this method to evaluate CSR (Coelho et al., 2023; Rasheed et al., 2023; Adamkaite et al., 2022; Zara et al., 2022). It implemented a scoring structure which is founded on the basis of abundance and backing of the mentioned information by Szegedi et al. (2020) to evaluate the level of CSR. It has identified four indicators of CSR: employees, customers, community and environment, and 45 statements have been selected for the analysis. The main statements regarding the indicators of CSR practices for the scoring structure are shown in (Appendix A). The annual reports of the listed Inv. Banks/ Inv. Cos. / Securities Cos. is the main source of data. Each CSR statement is rated as 0 or 1 on the basis of the richness and support of mentioned information. If the statement is not disclosed and published in the annual report, it is allotted a score 0. Whereas, score 1 is allotted if it is mentioned in the annual report. The CSR score is calculated by dividing the score given by the sum of all statements that is 45.

In the light of previous studies, the current study uses accounting-based methods because these are considered as the most authentic, accurate, credible, reliable and widely acceptable measures (Kabir et al., 2023; Li et al., 2023; Adamkaite et al., 2022; Munir et al., 2022; Novitasari et al., 2022). These methods represent an internal effectiveness of an organization which shows its performance. These methods are not influenced by the perceptions of investors or the market speculation and can be easily extracted from the annual reports (Sang et al., 2022; Nguyen et al., 2021). The FP of the Inv. Banks/ Inv. Cos. /

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Securities Cos. is evaluated by using two indicators: ROA and ROE in this study.

Table 3-2: The Summary of the proposed Study Variables

Variables	Definition	Measurement				
Dependent Va						
ROA	Return on Asset	Net Income / Total Assets				
ROE	Return on Equity	Net Income / Shareholder's Equity				
Independent	Independent Variable					
COM_CSRI	Composite CSR Index	Sum of total CSR scores / 45				

Source: Prepared by the researcher

3. Results

The subsequent sections provide a comprehensive demonstration of the result analysis performed to assess the proposed hypotheses.

4.1 Descriptive Statistics

The Table 4-1 shows the descriptive statistics of the projected study variables. The range of the CSRI is between 0.142 and 0.700. The value of mean is 0.344 with 0.348 as median, which indicates that the composite CSRI is below moderate. The value of the standard deviation is 0.125 and the skewness is

0.654. The value of Jarque-Bera, which is the test of normality, is 6.721 with probability of 0.042 (Sig.) shows that the COM_CSRI is not normally distributed. The range of the ROA is between -0.120 and 0.156, the mean of which is 0.016 with 0.014 as median. The value of the standard deviation is 0.041 and the skewness is -0.240. The value of Jarque-Bera is 155.40 with probability of 0.000 (Sig.), showing that the ROA is not normally distributed. The range of the ROE is between -2.530 and 2.034, the mean of which is 0.085 with 0.070 as median. The value of the standard deviation is 0.383 and the skewness is -1.940. The value of Jarque-Bera is 3741 with probability of 0.0000 (Sig.) shows that the ROA is not normally distributed.

Table 4-1: Descriptive Statistics

	Mean	Med	Std	Min	stit Max celler	Skewness	Kurtosis	Jarque-Bera	Prob	Obs
CSR	0.344	0.348	0.700	0.142	0.125	0.654	2.647	6.721	0.042	210
ROA	0.016	0.014	0.156	-0.12	0.041	-0.24	9.390	155.4	0.000	210
ROE	0.085	0.070	2.034	-2.53	0.383	-1.94	34.22	3741	0.000	210

4.2 Correlation Analysis

The correlation analysis of CSR practices and its four dimensions: community, employees, environment and customers are shown in Table 4-2. According to correlation analysis, the correlation between variables is said to be significant if "p < 0.05". The results, presented in Table 4-2 state that the composite CSR

and its four dimensions have significant correlation with two FP indicators: ROA and ROE. It can be seen that there is positive correlation between all the variables at the 1% level of significance. The correlation coefficients of the variables are compared to avoid any kind of distortion of the significance of the results.

Table 4-2: Correlation Analysis

VARIABLES	COM_CSRI	CM_CSRI	EM_CSRI	EN_CSRI	CU_CSRI
COM_CSRI	1.000				
CM_CSRI	0.8320***	1.0000			
EM_CSRI	0.7063***	0.5710***	1.0000		
EN_CSRI	0.6230***	0.2840***	0.3320***	1.0000	
CU_CSRI	0.7620***	0.5720***	0.3810***	0.3520***	1.0000

^{**} $\overline{p < 0.05, ***} p < 0.01$. Two tailed.

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Before the multiple regression analysis, in order to ensure that there is no multicollinearity among the proposed variables, the collinearity is calculated with the help of Variance Inflation Factor (VIF) for every

independent variable. It measures the strength or weakness of the correlation between independent variables in multiple regression analysis (Investopedia, 2023).

Table 4-3: Collinearity Analysis of the Independent Variables

VARIABLES	COM_CSRI	CM_CSRI	EM_CSRI	EN_CSRI	CU_CSRI
VIF	1.8753	2.1665	1.6648	1.3846	1.9394

The values of VIFs are compared with a threshold value to check multicollinearity (Adamkaite et al., 2022). In this study the value '3.3' is used as a threshold value for VIF. By referring to Table 4-3, all the values of VIFs \leq 3.3, so it is considered that there is no significant multicollinearity.

4.3 Regression Analysis

The Hausman test suggests that selection between a random model and a fixed effect model is necessary.

The F stat and Chi-square are used to make the selection. Fixed effect model will be utilized if Chisquare and F stat. are significant i.e., p < 0.05, else the standard random effect model will be used if the p-value is negligible and more than 0.05. When the fixed effect model is applied, the p-value is substantial. Table 4-4 indicates that the p-value of the study is significant i.e., 0.000, so the fixed effect model ought to be applied.

Table 4-4: Test Summary

Test	Statistics	d.f.	Probability
Cross-section F-Stat (Fixed)	7.0953	-39283	0.0000
Cross-section Chi Square (Fixed)	223.6914	39.0000	0.0000
Cross-section Random	18.4425	5	0.0524

In this study, fixed effect model is used to elaborate is 0.0389. The coefficient value for ROA is 0.0257 the impact of CSR on the FP of listed Inv. Banks/ Inv. Cos. / Securities Cos. of Pakistan. The Table 4-5 shows that both ROA and ROE are positively affected by CSR as the p-values of CSR are less than 0.05. The p-value of ROA is 0.0393 and that of ROE

and that of ROE is 1.057587. It means that sustainable finance i.e., CSR positively and significantly affects both the indicators of FP i.e., ROA and ROE.

Table 4-5: Impact of CSR on FP

VARIABLES	COEFFICIENT		STD. DEV		t-statistic		PROBABILITY	
	ROA	ROE	ROA	ROE	ROA	ROE	ROA	ROE
С	-0.1091	-5.1816	0.0391	2.5160	-2.7926	-2.0595	0.0056	0.0404
CSR	0.0257	1.0576	0.0124	0.5078	2.0711	2.0828	0.0393	0.0389

Table 4-6: Cross-section Fixed (Dummy Variables)

VARIABLES	VALUES		- VARIABLES	VALUES		
VARIABLES	ROA	ROE	VARIABLES	ROA	ROE	
R-squared	0.5991	0.6441	Mean (FP)	0.0050	0.0165	
Adjusted R-squared	0.5368	0.1284	S.D. (FP)	0.0188	0.8809	
S.E. of Regression	0.0128	0.8224	Akaike Info Criterion	-5.7541	2.5741	
Sum squared resid	0.0463	190.7387	Schwarz Criterion	-5.2337	3.0956	
Log likelihood	988.6679	-375.8573	Hannan-Quinn Criterion	-5.5465	2.7822	
F-statistic	9.6115	2.0918	Durbin-Watson Stat	1.2932	1.4021	

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Prob (F-statistic)

0.0000

0.0002

Additionally, the R-squared value creates a reliable source for the proposed CSR-FP model. According to the Table 4-6, the value of R² for ROA is 0.5991 indicating that CSR has a 59% influence on the FP of the Inv. Banks/ Inv. Cos. / Securities Cos. of Pakistan. Whereas, the value of R² for ROE is 0.6441 which indicates that CSR has a 64.41% influence on the FP of the Inv. Banks/ Inv. Cos. / Securities Cos. of Pakistan. The value of adjusted R-squared for ROA is 0.5368 and that of ROE is 0.1284. The explanatory power for the model is modest, which is typical for these kinds of investigations. The value of F-statistics discusses issues pertaining to the model's goodness of fit. The probability of F-statistics is 0.0000 which shows that the model is error-free.

Discussion of Results

The hypotheses are assessed for the sustainable finance i.e., CSR being the independent variable and FP being a dependent variable with two measures:

ROA and ROE. After analysis, the hypothesis in terms of ROA is accepted which is aligned with these researches (Rasheed et al., 2023; Kabir et al., 2023; Cho et al., 2019). It means that the implementation of CSR practices have positive and significant relationship with ROA, an indicator of FP. The hypothesis in terms of ROE is also accepted which is in lined with these researches (Rasheed et al., 2023; Ramzan et al., 2021; Okafor et al., 2021; Szegedi et al., 2020; Yang et al., 2019; Gangi et al., 2018). It states that the CSR practices have positive and significant relationship with ROE, an indicator of FP. Table 4-10 displays the overall summary of the results obtained in this study which shows the significance of the proposed relationships. The results have shown that CSR practices have positive and significant effect on ROA and ROE. The findings of the research are consistent with the theoretical underpinnings of both the Stakeholder theory and the RBV theory.

Table 4-10: The Summary of the Variables significant to FP

	Model 1				
	ROA (H1)	ROE (H2)			
Independent Variable	COM_CSRI	(+)	(+)		
	Insignificant relationship				
(+)	Positive and significant relationship				
(-)	Negative and significant relationship				

The purpose of sustainable organizations is to perform their activities for the well-being of the environment and society. This purpose goes beyond mere profit generation and wealth maximization. These organizations focus to the best of the interests of its all stakeholders by attaining those resources which will bring competitive advantage thus yielding a FP which is both sustainable and long-term in nature (Ma et al., 2023; Novitasari et al., 2022; Hermanto et al., 2021; Szegedi et al., 2020; Ting et al., 2020). The assessment approaches for CSR-FP relationship are selected at random and conveniently, according to the availability or possibility of the data.

Conclusion

The investigation conducted in the particular setting of Inv. Banks/ Inv. Cos. / Securities Cos. listed in the PSX holds considerable importance. The study focuses on the effect of sustainable finance i.e., CSR practices on the FP, thereby addressing a significant global topic. A sample of 21 Inv. Banks/ Inv. Cos. / Securities Cos. of Pakistan listed in PSX are selected for the analysis. The research covers a time period of 10 years from 2013 to 2022. The panel regression model with fixed effects was utilized with E-views 9, to observe the influence of CSR practices on commonly employed indicators of the FP, namely, ROA and ROE. The empirical evidence suggests that the panel regression model has demonstrated a strong positive relationship between CSR and the FP

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i.e., ROA and ROE in the chosen sector in Pakistan. This validates the importance of indulging in CSR practices while functioning on the way of creating a sustainable environment. These results helps developing countries like Pakistan to accomplish their long-standing growth and development aims by implementing CSR practices.

However, the conducted study has its own limitations and further studies are necessary. First, the model may be applied with a sizable sample size from PSX because the study only considered the Inv. Banks/ Inv. Cos. / Securities Cos. of Pakistan. Second the investigation analyzed data spanning 10 years but it was discovered that CSR has a good, meaningful effect on the FP but it takes time. Third, there is limited amount of research on CSR in developing countries or less developed countries, and we only included Pakistan, even though a sample of five or more developing countries might produce more reliable results. Fourth, it is logical to consider both developing and developed nations when examining the CSR practices and their subsequent effects on FP. Fifth the study has used only the accounting-based methods of FP rather than using the combination of both. Sixth, the study has examined the combined effect of CSR on FP, instead of examining the effect of different dimensions of CSR. In conclusion, we recommend considering the maximization of shareholders' wealth as a more practical indicator of market value rather than just exploring the traditional proxies of FP such as ROA and ROE. It is advised that CSR can be incorporated by the Inv. Banks/ Inv. Cos. / Securities Cos. of Pakistan into strategic business plans for long-term success as a central tool for sustainable finance. Unhealthy CSR policies may result in those externalities that can harm stakeholder's interests or benefits. Disappointed stakeholders may become lost clients and a source of diminishing profits. Policy makers are also advised to ensure CSR related disclosure which would not only increase the profitability but enhance the market value of the unit's share, leading to the amassing of numerous social and economic benefits.

Given the escalating environmental and social predicaments and the expanding significance placed on CSR, comprehending the interconnection between sustainable finance and financial results is

imperative not just for these enterprises but also for whole financial industry in Furthermore, this study has significant ramifications for the financial landscape of Pakistan. Through an examination of the performance of Inv. Banks/ Inv. Cos. / Securities Cos., this study offers valuable insights to effectively respond to developing global trends and regulatory shifts within the context of sustainable finance. This analysis provides insight into the possible competitive advantages or drawbacks that these companies may face when they integrate their operations with sustainability in terms of CSR. In addition, the findings of this study can provide valuable perceptions to the policymakers & the regulatory authorities in Pakistan regarding the necessity of implementing customized policies that facilitate the adoption of CSR practices inside the nation. This study makes a valuable contribution to the current discourse on sustainable finance by providing practical insights that can assist financial institutions in adopting more responsible and that match lucrative practices with global sustainability objectives.

REFERENCES

Adamkaite, J., Streimikiene, D., & Rudzioniene, K. (2022). The impact of social responsibility on corporate financial performance in the energy sector: Evidence from Lithuania. Corporate Social Responsibility and Environmental Management, 30(8), 1-14.

Adams, D., Adams, K., Attah-Boakye, R., Ullah, S., Rodgers, W., & Kimani, D. (2022). Social and environmental practices and corporate financial performance of multinational corporations in emerging markets: Evidence from 20 oil-rich African countries. Resources Policy, 78, 102756.

Albitar, K., Hussainey, K., Kolade, N., & Gerged, A. M. (2020). ESG disclosure and firm performance before and after IR: The moderating role of governance mechanisms. International Journal of Accounting and Information Management, 28(3), 429-444.

Arian, A., Sands, J., & Tooley, S. (2023). Industry and stakeholder impacts on corporate social responsibility (CSR) and financial

- performance: Consumer vs. industrial sectors. <u>Sustainability</u>, 15(16).
- Bahta, D., Yun, J., Islam, M. R., & Bikanyi, K. J. (2021). How does CSR enhance the financial performance of SMEs? The mediating role of firm reputation. Economic Research-Ekonomska Istraživanja, 34(1), 1428-1451.
- Barauskaite, G., & Streimikiene, D. (2020). Corporate social responsibility and financial performance of companies: The puzzle of concepts, definitions and assessment methods. Corporate Social Responsibility and Environmental Management, 28(1), 278-287.
- Barney, J. (1991). Firm resources and sustained competitive advantage. Journal of Management, 17(1), 90-120.
- Bastič, M., Mulej, M., & Zore, M. (2020). CSR and Financial Performance – Linked by Innovative Activities. Naše gospodarstvo/Our Economy, 66(2), 1–14.
- Bian, J., Liao, Y., Wang, Y. Y., & Tao, F. (2021). Analysis of firm CSR strategies. <u>European Journal of Operational Research</u>, 290(3), 914-926.
- Bhatti, S. H., Saleem, F., Murtaza, G., & Haq, T. U. (2022). Exploring the impact of green human resource management on environmental performance: The roles of perceived organizational support and innovative environmental behavior. International Journal of Manpower, 43(3), 742-762.
- Broadstock, D. C., Chan, K., Cheng, L. T., & Wang, X. (2020). The role of ESG performance during times of financial crisis: Evidence from COVID-19 in China. Finance Research Letters, 38. 101716.
- Cho, S. J., Chung, C. Y., & Young, J. (2019). Study on the relationship between CSR and financial performance. Sustainability, 11(2), 343.
- Christensen, H. B., Hail, L., & Leuz, C. (2021). Mandatory CSR and sustainability reporting: Economic analysis and literature review.

- Review of Accounting Studies, 26, 1176–1248.
- Coelho, R., Jayantilal, S., & Ferreira, J. J. (2023). The impact of social responsibility on corporate financial performance: A systematic literature review. Corporate Social Responsibility and Environmental Management, 30(4), 1535-1560.
- Cunha, F. A. F. D. S., Meira, E., & Orsato, R. J. (2021). Sustainable finance and investment: Review and research agenda. Business Strategy and the Environment, 30(8), 3821–3838.
- D'Amato, A., & Falivena, C. (2019). Corporate social responsibility and firm value: Do firm size and age matter? Empirical evidence from European listed companies. Corporate Social Responsibility and Environmental Management, 27(2), 909–924.
- Daugaard, D. (2020). Emerging new themes in environmental, social and governance investing: A systematic literature review. Accounting & Finance, 60(2), 1501–1530.
- Donaldson, T. (1995). Editor's comments: Taking ethics seriously A mission now more possible. The Academy of Management Review, 28(3), 363–366.
- El Khoury, R., Nasrallah, N. & Alareeni, B. (2021). ESG and financial performance of banks in the MENAT region: concavity-convexity patterns. Journal of Sustainable Finance & Investment, 13(1), 406-430.
- Elouidani, A., & Faical, Z. (2015). Corporate social responsibility and financial performance. African Journal of Accounting, Auditing and Finance, 4(1), 74–85.
- Feng, Y., Akram, R., Hieu, V. M., & Tien, N. H. (2021). The impact of corporate social responsibility on the sustainable financial performance of Italian firms: Mediating role of firm reputation. Economic Research-Ekonomska Istraživanja, 35(1), 4740-4758.
- Franco, S., Caroli, M. G., Cappaa, F., & Chiappa, G. D. (2020). Are you good enough? CSR, quality management and corporate financial performance in the hospitality industry. International Journal of Hospitality Management, 88, 102395.

- Freeman, R. (1984). Strategic management: A stakeholder approach (p. 46). Pitman.
- Galant, A., & Cades, S. (2017). Corporate social responsibility and financial performance relationship: A review of measurement approaches. Economic Research-Ekonomska Istraživanja, 30(1), 676-693.
- Gangi, F., Mustilli, M., Varrone, M., & Daniele, L. M. (2018). Corporate social responsibility and banks' financial performance. International Business Research, 11(10), 42.
- Ghanbarpour, T., & Gustafsson, A. (2022). How do corporate social responsibility (CSR) and innovativeness increase financial gains? A customer perspective analysis. Journal of Business Research, 140, 471-481.
- Ghardallou, W. (2022). Corporate sustainability and firm performance: The moderating role of CEO education and tenure. Sustainability, 14(6), 3513.
- Griffin, J. J., & Mahon, J. F. (1997). The corporate social performance and corporate financial performance debate: Twenty-five years of incomparable research. Business & Society,
- Habib, A., Khan, M. A., Popp, J., & Rákos, M. (2022). The influence of operating capital and cash holding on firm profitability. Economies, 10(3), 69.
- Harjoto, M. A., Laksmana, I., & Wen Yang, Y. (2019). Board nationality and educational background diversity and corporate social performance. Corporate governance. The International Journal of Business Society, 19(2), 217–239.
- Hayat, M., Khan, S., & Iqbal, A. (2020). Impact of Carroll CSRs pyramid on firms financial performance in Pakistan as a developing country. International Review of Management and Business Research, 9(2), 65-79.
- Hermanto, Y. B., Lusy, L., & Widyastuti, M. (2021). How financial performance and state-owned enterprise (SOE) values are affected by good corporate governance and intellectual capital perspectives. Economies, 9(4), 134.
- Hina, M., Chauhan, C., & Kaur, P., Kraus, S., & Dhir, A. (2022). Drivers and barriers of circular economy business models: Where

- we are now, and where we are heading. Journal of Cleaner Production, 333, 130049.
- Huang, D. Z. X. (2021). Environmental, social and governance (ESG) activity and firm performance: A review and consolidation. In an integrated theory of the firm approach to environmental, social and governance performance. Accounting & Finance, 61(1), 335-360.
- Ismail, M. (2009). Corporate social responsibility and its role in community development: An international perspective. The Journal of International Social Research, 2(9).
- Javeed, S. A., & Lefen, L. (2019). An analysis of corporate social responsibility and firm performance with moderating effects of CEO power and ownership structure: a case study of the manufacturing sector of Pakistan. Sustainability, 11(1), 248.
- Jo, H., & Harjoto, M. A. (2011). Corporate governance and firm value: The impact of corporate social responsibility. Journal of Business Ethics, 103, 351–383.
- Kabir, M. A., & Chowdhury, S. S. (2023). Empirical analysis of the corporate social responsibility and financial performance causal nexus:

 Evidence from the banking sector of Bangladesh. Asia Pacific Management Review, 28(1), 1-12.
- Khan, S. A. R., Razzaq, A., Yu, Z., & Miller, S. (2021). Industry 4.0 and circular economy practices: A new era business strategies for environmental sustainability. Business Strategy and the Environment, 30(8), 4001-4014.
- Lee, D. D., & Faff, R. W. (2009). Corporate sustainability performance and idiosyncratic risk: A global perspective. The Financial Review, 44(2), 213–237.
- Li, J., Fu, T., Han, S., & Liang, R. (2023). Exploring the impact of corporate social responsibility on financial performance: The moderating role of media attention. Sustainability, 15(6), 5023.
- Lin, W. L., Ho, J. A., & Sambasivan, M. (2019). Impact of corporate political activity on the relationship between corporate social responsibility and financial performance: A

- dynamic panel data approach. Sustainability, 11(1), 1–22.
- Linnenluecke, M. K. (2022). Environmental, social and governance (ESG) performance in the context of multinational business research. Multinational Business Review, 30(1), 1–16.
- Lokuwaduge, C. S. D. S., & Heenetigala, K. (2017). Integrating environmental, social and governance (ESG) disclosure for a sustainable development: An Australian study. Business Strategy and the Environment, 26(4), 438-450.
- Long, W., Li, S., Wu, H., & Song, X. (2020).

 Corporate social responsibility and financial performance: The roles of government intervention and market competition.

 Corporate Social Responsibility and Environmental Management, 27(2), 525-541.
- Lu, J., Javeed, S. A., Latief, R., Jiang, T., & Ong, T. S. (2021). The moderating role of corporate social responsibility in the association of internal corporate governance and profitability: Evidence from Pakistan. International Journal of Environmental Research and Public Health, 18(11), 5830.
- Maury, B. (2021). Strategic CSR and firm performance: The role of prospector and growth strategies. Journal of Economics and Business, 118, 106031.
- Mazodier, M., Carrillat, F. A., Sherman, C., & Plewa, C. (2020). Can donations be too little or too much? European Journal of Marketing, 55(1), 271–296.
- McGuire, J. B., Sundgren, A., & Schneeweis, T. (1988). Corporate social responsibility and firm financial performance. Academy of Management Journal, 31(4), 854–872.
- Morea, D., Fortunati, S., & Martiniello, L. (2021). Circular economy and corporate social responsibility: Towards an integrated strategic approach in the multinational cosmetics industry. Journal of Cleaner Production, 315, 128232.
- Munir, S., Irfan, D. M., & Malik, D. M. S. (2022). Impact of sustainable finance on the firm performance: A study on the Pakistani banking sector. Indian Journal of Economics and Business, 21(2).

- Novitasari, M., & Tarigan, Z. J. H. (2022). The role of green innovation in the effect of corporate social responsibility on firm performance. Economies, 10(5), 117.
- Okafor, A., Adeleye, B. N., & Adusei, M. (2021). Corporate social responsibility and financial performance: Evidence from U.S tech firms. Journal of Cleaner Production, 292(1), 126078.
- Oh, S., Hong, A., & Hwang, J. (2017). An analysis of CSR on firm financial performance in stakeholder perspectives. Sustainability, 9(6), 1023.
- Pakistan Stock Exchange, (2023). Citing a website APA. Retrieved from, www.psx.com.pk.
- Partalidou, X., Zafeiriou, E., Giannarakis, G., & Sariannidis, N. (2020). The effect of corporate social responsibility performance on financial performance: the case of food industry. Benchmarking: An International Journal, 27(10), 2701-2720.
- Preston, L. E., & O'bannon, D. P. (1997). The corporate social-financial performance relationship: A typology and analysis.

 Business & Society, 36(4), 419-429.
- Ramzan, M., Amin, M., and Abbas, M. (2021). How does corporate social responsibility affect financial performance, financial stability, and financial inclusion in the banking sector? Evidence from Pakistan. Research in International Business and Finance, 55, 101314.
- Rasheed, B., Malik, Z. F., Haider, S. T. F., & Shakeel, A. (2023). Corporate social responsibility disclosure and firm's operational, financial and market performance: A study of content analysis of firms listed at Pakistan Stock Exchange. Journal of Economics, 5(1), 1–13.
- Saeidi, P., Robles, L. A. A., Saeidi, S. P., & Zamora, M. I. V. (2021). How does organizational leadership contribute to the firm performance through social responsibility strategies? Heliyon, 7(7).
- Sang, M., Zhang, Y., Ye, K., & Jiang, W. (2022).

 Moderating effects of internationalization
 between corporate social responsibility and
 financial performance: the case of
 construction firms. Buildings, 12(2), 185.

- Sapta, I. K. S., Sudja, I. N., Landra, I. N., & Rustiarini, N. W. (2021). Sustainability performance of organization: Mediating role of knowledge management. Economies, 9(3), 97.
- Sarfraz, M., Ozturk, I., Yoo, S., Raza, M. A., & Han, H. (2023). Toward a new understanding of environmental and financial performance through corporate social responsibility, green innovation and sustainable development. Humanities & Social Sciences Communication, 10, 297.
- Shahbaz, M., Karaman, A. S., Kilic, M., & Uyar, A. (2020). Board attributes, CSR engagement, and corporate performance: What is the nexus in the energy sector? Energy Policy, 143, 111582.
- Shahzad, M., Qu, Y., Rehman, S. U., Zafar, A. U., Ding, X., & Abbas, J. (2020). Impact of knowledge absorptive capacity on corporate sustainability with mediating role of CSR: analysis from the Asian context. Journal of Environmental Planning and Management, 63(2), 1-27.
- Singh, K., & Misra, M. (2021). Linking corporate social responsibility (CSR) and organizational performance: The moderating effect of corporate reputation. European Research on Management and Business Economics, 27(1), 100139.
- Szegedi, K., Khan, Y., & Lentner, C. (2020). Corporate social responsibility and financial performance: Evidence from Pakistani listed banks. Sustainability, 12(10), 4080.
- Ting, I. W. K., Azizan, N. A., Bhaskaran, R. K., & Sukumaran, S. K. (2020). Corporate social performance and firm performance: Comparative study among developed and emerging market firms. Sustainability, 12(1), 26
- Tjahjadi, B., Soewarno, N., & Mustikaningtiyas, F. (2021). Good corporate governance and corporate sustainability performance in Indonesia: A triple bottom line approach. Heliyon, 7(3).
- Utomo, M. N., Rahayu, S., & Kaujan, K. (2020). Environmental performance, environmental disclosure, and firm value: Empirical study

- of non-financial companies at Indonesia Stock Exchange. Journal of Business Ethics, 2(1), 100–113.
- Waddock, S. A., & Graves, S. B. (1997). The corporate social performance financial performance link. Strategic Management Journal, 18(4), 303–319.
- Wang, Z., & Sarkis, J. (2017). Corporate social responsibility governance, outcomes, and financial performance. Journal of Cleaner Production, 162, 1607-1616.
- Xie, X., Jia, Y., Meng, X., & Li, C. (2017). Corporate social responsibility, customer satisfaction, and financial performance: The moderating effect of the institutional environment in two transition economies. Journal of Cleaner Production, 150, 26-39.
- Xu, X., Imran, M., Ayaz, M., & Lohana, S. (2022). The mediating role of green technology innovation with corporate social responsibility, firm financial, and environmental performance: The case of Chinese manufacturing industries. Sustainability, 14(24), 16951.
- Yang, M., Bento, P., & Akbar, A. (2019). Does CSR influence firm performance indicators? Evidence from Chinese pharmaceutical enterprises. Sustainability, 11(20), 5656.
- Yasir, M., Khan, S., Khan, S., Khan, K., & Nisar, M. (2023). Impact of corporate social responsibility on financial performance; evidence from banking sector of Pakistan. International Journal of Business and Economic Affairs, 8(2), 66-85.
- Ye, N., Kueh, T. B., Hou, L., Liu, Y., & Yu, H. (2020). A bibliometric analysis of corporate social responsibility in sustainable development. Journal of Cleaner Production, 272, 122679.
- Zara, M., Saleem, F., & Khan, W. (2022). Effect of corporate social responsibility disclosure on financial performance in banking industry of Pakistan. Sarhad Journal of Management Sciences, 8(2).
- Zhao, L., Yang, M. M., Wang, Z., & Michelson, G. (2023). Trends in the dynamic evolution of corporate social responsibility and leadership:

ISSN: 3006-5291 3006-5283 Volume 3, Issue 2, 2025

a literature review and bibliometric analysis. Journal of Business Ethics, 182(1), 135-157.

