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RESEARCH ARTICLE

Corporate Social Responsibility and Environmental Management

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Corporate social responsibility and financial performance of product and service-based firms listed on London Stock Exchange

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Abstract

This article examines the impact of corporate social responsibility on the financial performance of firms listed on the London Stock Exchange (LSE). Using data for 50 firms spanning 2008–2017, our study reports that the environmental performance has positively influenced the stock price of both the product and service-based firms listed on LSE. Similarly, it enhanced the return on capital for product-based firms while reducing them for service-based firms. In contrast, social activities have a significant negative impact on the stock price of the product and service-based listed firms. Likewise, social performance has a significant negative impact on the return on capital of service-based firms listed on LSE. However, we find an insignificant relationship between governance disclosure and the stock price and the return on capital for product and service-based firms. This study has implications for policymakers of stock markets to issue rigid regulations to enforce all listed firms to disclose their environmental activities to stakeholders.

KEYWORDS

corporate social responsibility, environmental disclosure, governance disclosure, return on capital, social disclosure, stock price

1 | INTRODUCTION

The primary purpose of corporations is to generate profit for the benefit of their shareholders. With the realization of corporate social responsibility (CSR), the sphere is being broadened from just corporate sector shareholders to corporate sector stakeholders based on the apportionment of responsibility and how the company is affecting individuals (Friedman, 1970). With the growing effect of global influence, global corporations have been tasked to act responsibly and protect, promote, and realize sustainable development in their areas. This motivated corporations to balance their global activities between growth strategies and considerations of CSR. Developments that have contributed to wielding pressure on multinational corporations to behave in a socially responsible manner include a more robust demand for CSR evaluation tools and the development of independent organizations to verify the CSR reports of corporations. An increasing number of multinational corporations have increased their efforts towards CSR (Davis et al., 2006; Fiori et al., 2007). Along with this development, there is a conflict of interest among corporate managers. They have found themselves in a position where they need to make a trade-off between satisfying all their relevant stakeholders and satisfying their shareholders (Reich, 2008).

Theoretically, the essential responsibilities bestowed on companies are to make money and acknowledge only matters that are of potential value to their shareholders. This could happen due to the possible harm caused to firm performance because of ethical and discretionary considerations within the management. Therefore, the neoclassical economics theory suggests that the balance between supply and demand in markets will present an efficient resource assignation (Friedman, 1970). Considering Adam Smith's idea of an invisible hand, this balance in the market should amplify market profits and benefit society's needs; however, different factors that influence the perfect

market to arise. Then we end up with an imperfect market, which leads to an inability to satisfy society (Hillinger, 2012). However, Preston (1990) had an opposing view of the topic. The study argued that issues involving social and environmental factors were as important as market factors in achieving companies' future success. The study emphasized that these factors also deserve the same level of recognition and analysis within the executive arm to ensure firm performance. Friedman (1970) concluded that companies should not involve themselves in social responsibility unless it impacts their financial performance. Accordingly, this study seeks to understand the impact of CSR on financial performance, specifically in product and service-based companies listed on LSE.

Empirically, although previous research examined the association between CSR and financial performance, they found mixed findings, and the literature is still inconclusive. Specifically, there are three different beliefs on the impact of CSR on financial performance. The first group believes that there is a positive relationship between CSR and CFP (Ali et al., 2020; Kim & Kim, 2014; Maqbool & Zameer, 2018; Preston & O'Bannon, 1997; Waddock & Graves, 1997). The second group of thought believes in the negativity of the relationship between CSR and firm performance, emphasizing the involvement in social responsibilities, which leads to negatively impact on the financial performance of companies (Brammer et al., 2006; Cordeiro & Sarkis, 1997; Katsikides et al., 2016; Wright & Ferris, 1997). The third group of thought opines that CSR has neither positive nor negative effect on financial performance since they believe that any CSR effect which previously proven must be by mere coincidence (Abbott & Monsen, 1979; Awaysheh et al., 2020; Fabac et al., 2016; Griffin & Mahon, 1997). However, the bigger picture depicts a more serious question: "which prevails?" of the three groups of thoughts. One is more suggestive of how CSR affects the financial performance of firms listed on the London Stock Market. Kludacz-Alessandri and Cygańska (2021) argued that the relationship between CSR and firm performance depends on the type of industry in which the company operates. Hence, this study examines the link between the CSR and financial performance of product-based and service-based firms listed on LSE since there is little research regarding these two sectors in this area.

Additionally, some prior studies applied qualitative research to examine the impact of CSR on financial performance using content analysis (Barauskaite & Streimikiene, 2021; Baughn et al., 2007; Fabac et al., 2016; Kong et al., 2020; Kuo et al., 2012). Others have investigated CSR in Asian countries and other developing countries (Dobers & Halme, 2009; Hou, 2019). In addition, some scholars have employed CSR participation as a mediating variable to examine the relationship between CSR commitment and environmental and social performance (Anser et al., 2020). For example, Barauskaite and Streimikiene (2021) used a systematic literature review to examine the link between CSR and the financial performance of companies. Using a survey, Baughn et al. (2007) examined the association between CSR and financial performance in Asian countries. The study found substantial variation and regional differences in CSR among Asian countries. Yeung (2011) used surveys with 7 Likert scale questions to clarify that the administration should consider the financial and non-fiscal results with the consciousness of danger and transparency efficiency. The results with a connected *T*-test showed that corporate social execution has the same hugeness as corporate monetary execution. Similarly, Classon and Dahlström (2006) designed a questionnaire to examine how CSR affects financial performance. The study focused on the garments industry with a total sample of 15 companies. The qualitative nature of the research allowed for meetings to be held for information gathering purposes. The results of this research also were on the positive side, proving that firms must involve themselves in moral exercises to reach commendable client observation quotas and keep worthwhile pictures in client's memory to attain high benefits.

Although numerous research has been carried out on the relationship between CSR and financial performance in the UK, very few empirical studies, have examined the relationship between CSR and financial market measures in the UK. These studies covered some financial measures, such as stock returns (Brammer et al., 2006), stock market performance (Katsikides et al., 2016), market value, and profitability (Qiu et al., 2016). Prior studies have examined the association between CSR and firm performance in developing countries. For instance, Hou (2019) examined the relationship between CSR and the financial performance of firms in Taiwan. The study found that board ownership has a significant favorable influence on the CSR–CFP relationship. Anser et al. (2020) tested the mediating effect of CSR in mitigating the connection between CSR commitment and environmental and social performance. The study reported that CSR has positively and significantly impacted environmental and social performance. Dobers and Halme (2009) studied the impact of CSR on corporate performance in developing countries. The study reports that CSR legislation is a critical tool for encouraging business enterprises to disclose their CSR activities. Additionally, previous empirical research has explored the short-run and long-run relationships between CSR and financial performance without differentiating between sectors or industries. This study, therefore, employs two stock market measurements (stock price and return on capital) to examine the relationship between the CSR disclosure and the financial performance of product and services firms listed in the London Stock Exchange (LSE).

The remainder of this article includes a theoretical and empirical literature review in section two. After that, section three involves the UK's social responsibility background. Then, the research methodology section includes the research design and analysis of this paper in section four. After that, the fifth section includes the results and discussion of obtained findings. Finally, the conclusion is the last section which includes the summary of the findings, implications, and limitations of conducting this study.

2 | BACKGROUND

This section presents the importance of reporting about the CSR activities in the UK.

2.1 | Corporate social responsibility in the UK

Amidst the proposal by the United Kingdom to exit the European Union, the CSR operations of companies within the European Union are still very much influenced by the decisions made by the EU. This decision does not undermine the laws of corporate governance of the United Kingdom but instead sets a pace for making the laws by the UK government. Elmghaamez (2021) argued that corporate governance disclosure could significantly lead to substantial financial outcomes due to the benefits of high-quality governance disclosure. A definition for CSR, as proposed European Commission (2011), is said to be specific actions by companies over and above their legal obligations towards the society and environment. According to Bichta and Constantina (2013), ownership of CSR for the UK government can be traced back to the 1890s, even though adoption for business participation in CSR began early around the 1800s and is now recognized as the top CSR actor in the international realm. Similarly, Soh et al. (2014) outlined attributes the success of CSR in the United Kingdom to the unique approach by the government in the 1990s where they incorporated CSR policies into the national laws. The Blair administration promoted CSR and adopted several laws that would further provoke companies to involve themselves in social responsibility, including adopting the statement of investment principles in 1996. There is an agency set up to monitor social responsibility in the United Kingdom and drive the adoption of CSR regulations. They are tasked with ensuring the proper practice among all businesses in the UK.

Through the diaries of Moon (2004), CSR performance is considered a core issue based in the UK as a reaction to the severe crisis that hit the industrialized economy in the 20th century. Many companies were going bust, and many individuals were also becoming unemployed. Accordingly, there was an increase in the rate of social exclusion. Hence, the social exclusion issue and growing poverty level among the community needed to be controlled in haste. A continuous decline in the welfare service was taken a place as the public offices could not efficiently provide needed social services. This situation led to the government including companies in the business communities and the government playing the role of facilitators. They seek mechanisms that could encourage companies to be a part of CSR. One of these mechanisms was known as soft regulation, which would reduce the regulations on company operations given that companies were socially responsible.

This further was explained by Soh et al. (2014) to be the Philanthropic approach. This approach became the most common approach as businesses in the United Kingdom enacted CSR activities and programs with the thought that they could reap more profit through the contributions of the public. According to Riess and Welzel (2006), the bill required companies to ensure they show care towards society and the government while still pursuing their corporate responsibilities. It also made companies answerable for any human rights and environmental abuse infliction. The law was unique because it did not just talk about the behavior of companies within the UK. But it also made mention of facilities located outside of the UK.

2.2 | CSR and consumer behavior

Looking past the assumptions and theories that support the positive relationship between CSR and firms' profitability, companies have been seen to recognize the continuous demand from their market on product liability risks. Environmental activities and impacts of their operational facilities have been used in the production process. Market demands of this nature have suggested that researchers investigate numerous studies relating to CSR, social sponsorship, and corporate ethics that would establish an efficient link between social incentives and improved financial performance (Stanwick & Stanwick, 2002). Mohr et al. (2001) used a survey to examine the impact of CSR knowledge on consumers' attitudes and purchase decisions. The study sought to investigate if CSR would influence the decisions of customers and the reasons for buying sustainable products and services. The results of this research revealed a positive relationship between CSR and consumer responses, and research by Sen and Bhattacharya (2001) answered the other question of if it influenced the purchase decisions of consumers for which they found that CSR will directly affect the plans of consumers to purchase a firm's products. Pomering and Dolnicar (2008) reported that it is observed that marketplace polls concluded that consumers envisage that information about firm operation is produced for them. There is a more likely chance that they comfortably stick to companies who engage in CSR activities. Creyer (1997) specified that consumers take ethical behaviors when making purchasing decisions. Tay (2005), however, opined that as the society becomes more affluent with a considerable level of awareness among them, these consumers become more sensitive to the behaviors of the cooperation, which would in the long run also affect their decision-making process on what to buy and not to buy. Other researchers seeking to understand consumer behavior influenced the amounts recorded for donations and concluded that consumers preferred to interact with products from corporations who had donated more. Maignan (2001), who conducted a cross-cultural study in Germany and France, found that consumers considered legal concerns one of the most critical responsibilities, followed by ethical, philanthropic, and then economic responsibilities.

3 | LITERATURE REVIEW

This section presents the theoretical and empirical literature review applied in this article.

3.1 | Theories of corporate social responsibility

Even though many individuals have provided their thoughts and analyzed the CSR topic, their conclusions are sometimes in line with one another. In contrast, some may come as contradictions of what others have said. Some researchers (Ullmann, 1985; Vance, 1975) preached that the inclusion of social factors in business models will only be a source of additional costs to the firm's operations and will not be

advantageous to the firm's economic standing. McGuire et al. (1988) described the costs centres as employee welfare programs, environmentally friendly policies, charity, and community development projects. Other researchers have concluded that there is no relationship between CSR and CFP. Most of these views appear to be consistent with the warnings of (Ullmann, 1985; Vance, 1975) as earlier discussed, the increasing cost of undergoing CSR in companies and taking a theoretical outlook at the stakeholder theory, which encourages closer relationship and collaboration with the stakeholders of the companies (Freeman, 2004). Socially responsible companies are expected to have greater financial returns based on indirect effects such as community development and building more capital (Godfrey, 2005). Murray and Vogel (1997) explain the practical definition of a stakeholder; any entity typically outside the organization aims to influence and impact the organization's operations. The classical theory argues that CSR elements do not practically fit into the ideas of the classical theory of profit maximization.

The stakeholder approach suggests that the company goals cannot be achieved unless the stakeholders' needs are met. This status advises corporations not to make profit maximization their sole focus for establishment. Murray and Vogel (1997) outlined how an organization is appraised and perceived by stakeholders underpins all subsequent interactions. It is then of managerial importance to value the organization's perception of outsiders in terms of ethical and social responsibility, as CSR is an essential factor in consumers' consideration when making decisions relating to purchasing. In this vein, there is a relationship between social responsibility and organizations' stock market performance due to the attributed relationships with important stakeholders like banks, investors, and state agencies. This situation would serve as an input to the school of thought that says the reputation held by an organization can influence the viewpoint of its customers towards doing business with them (Moskowitz, 1972; Parket & Eilbirt, 1975).

With the evolution of research on stakeholder theory and CSR over the years, many individuals have tried to examine both as one concept when this is not right. Both concepts being discussed look at the same business problems from a different point of view. Stakeholder theory and CSR are two distinct concepts that happen to have some overlap between them. This overlap or similarity can be seen in the fact that both concepts aim to include social interests in all business undertakings. However, they stand different when we examine what they are all about. The stakeholder theory describes the key responsibilities of the business entity, which is represented based on the operation location of the business. At the same time, CSR takes priority over one aspect of the business, which is its orientation towards society. However, the stakeholder theory can be the bedrock on which CSR is founded as it focuses on elements like value creation for all stakeholder interdependence and seals the purpose of the business with its responsiveness to social interests. According to Murray and Vogel (1997) outlined, stakeholders can affect the operations of any organization positively or negatively whether they operate individually or collectively, formally, or informally. Their insinuation was based on an argument that stakeholders seem to interfere with the private affairs of companies, which leads to less progressive companies being less responsible socially while more progressive companies further intensify their efforts at being socially responsible.

3.2 | The empirical relationship between CSR and financial performance

Emphasis has continually been placed on the importance of CSR right from the first time in 1970. Since this time, it is been a point of note for researchers to understand the relationship between the concepts that make up CSR and financial performance. Alexander and Buchholz (1978) investigated a study that concluded that CSR could be viewed from two standpoints. One of them is that socially aware management would also have efficient skills to manage a superior company, which would positively affect its financial performance. The other standpoint brought to note is that being socially aware would result in a competitive advantage against the company. They used a reputation index to measure the CSR performance of companies. However, the method was later condemned by Cochran and Wood (1984) based on its subjective evaluation nature and its inability to emphasize CSR performance effectively. Through the years, many more researchers have deliberated the various pathways researchers use in measuring the relationship between CSR and financial performance. However, the use of a vast number of variables deterred the generalization of results by researchers.

3.2.1 | Positive relationship between CSR and CFP

Most of the explained conclusions and theories above establish an efficient analysis of the link between CSR and corporate firm performance while taking note of consumer behavior in society. Some prior studies found a positive association between CSR and firm performance. For example, Waddock and Graves (1997) analyzed data for 469 companies with surrogated CSR measurements for investigating their impact on slack resources and good management theory. The study reported that CSR was positively associated with previous and future financial performance. Similarly, Kim and Kim (2014) explored CSR in the tourism and hospitality industry. The study examined the possibility of CSR increasing the value of shareholders. They used CSR ratings from 1991 to 2008 to specifically test the effect of CSR on systematic and unsystematic risks. The study suggested that social responsibility has enhanced the shareholders' value by increasing the Tobin Q ratio. They also stated that the lower the CSR rating, the higher the financial risks. Using data from 229 companies listed on the Pakistan stock exchange, Ali et al. (2020) show that CSR positively impacts financial performance since it can enhance the corporate reputation among the stakeholders and customer satisfaction, thus decreasing overall costs. Maqbool and Zameer (2018) collected data for 28 Indian commercial banks listed in the Bombay stock exchange spanning 2007–2016. The study reports a significant positive link between CSR and the financial performance of Indian banks.

Preston and O'Bannon (1997) find a positive effect between CSR and financial performance innovatively. Their conclusions indicated that CSR could add more value for the company by enhancing stakeholders' interests and crafting internal capabilities through employee developments. Their argument suggested four channels to improve a firm's competitiveness: cooperation with different stakeholders, developing new business opportunities, improving working conditions, and attention to workers' needs. By using data from the services sector in the UK, Day and Woodward (2009) found that social and environmental disclosure levels are deficient for small services firms, but they increase as long as the company size increases.

3.2.2 | Negative relationship between CSR and CFP

Other scholars, however, found a significant negative link between CSR and firm performance. For instance, Brammer et al. (2006) examined the relationship between CSR and stock returns in the UK. The study found a negative association between social performance and stock returns in the UK. Similarly, Katsikides et al. (2016) studied the association between CSR and stock market performance. Their study reported that stock market performance exhibited a significant negative association between CSR and stock market performance due to money-laundering events. Using 116 companies in the South African Stock Market, Wright and Ferris (1997) examined the impact of CSR performance on stock market performance. They found a negative link between CSR and the share price when they announced the divestment. Using 523 US firms, Cordeiro and Sarkis (1997) show a negative correlation between earnings per share and environmental activism, with toxic release inventory data proxy for environmental protection. Friedman (1970) claims that business entities can increase their profit by ensuring that legal and ethical concepts are considered. CSR is a mere cost accumulator, and it would empower the progress of the company rather than hinder it. Although more costs may be incurred by companies when they venture into social responsibility, the competitive advantage will also increase over the other competitors, thus improving the companies' reputation. However, Hemingway and Maclagan (2004) argue against this claim by saying that any company involving itself in CSR activity is a mere cover-up for fraudulent activities initiated by the top management of companies.

3.2.3 | Neutral relationship between CSR and CFP

A group of researchers has hypothesized that CSR works independently, and it does not have any relationship with the financial upshots. They argue that both components are mutually exclusive, and the relations proved by the positive school of thought are only by chance. Ullmann (1985) concludes that there are many interposing variables between CSR and corporate firm performance that obstruct a possible reason to establish a relationship. (Abbott & Monsen, 1979). Griffin and Mahon (1997) investigated the relationship between CSR and financial performance, considering a sample size of 524 over 6 years. Their results showed a neutral effect of CSR on financial performance. Fabac et al. (2016) report no relationship between CSR and firm performance for companies listed on the Zagreb Stock Exchange in Croatia. Similarly, using a sample of 82 companies, Kraft and Hage (1990) tried to explore the link between community service and profit with different organizational characteristics. Their results indicate that community service did not affect the profit of companies. Fiori et al. (2007) studied the impact of CSR and performance of Italian listed companies and found that CSR disclosure did not correlate with firms' stock price. Concerning the above discussions, we infer that empirical literature does not give a conclusive summary on the relationship between CSR disclosure and financial performance of firms listed on LSE. Possible explanations for this inconclusiveness are explained by other researchers such as Surroca et al. (2009), who report that the poor theoretical construct of the CSR concept is the main reason for getting mixed results (Ruf et al., 1996). Van Beurden and Gössling (2008) report that the sampling limitations might lead to different findings. Therefore, this study proposes the following hypothesis to test the link between CSR and firm performance of firms listed on LSE. Accordingly, this study suggests the following research hypotheses:

H1. Environmental disclosure has a positive and significant effect on financial performance.

H2. Social disclosure has a positive and significant effect on financial performance.

H3. Governance disclosure has a positive and significant effect on financial performance.

4 | RESEARCH METHODOLOGY

This section seeks to understand the methodology used in the empirical investigation of the impact of CSR on financial performance with a focus on the FTSE 100 of LSE.

4.1 | Data sources and sample selection

To get data for the selected sample, many researchers have turned to Indexes like the Dow Jones sustainability index and the FTSE4GOOD index for extractions. However, looking at the conclusions drawn from previous researchers on the same topic, we have observed that access to these indexes may somewhat be limited as they need some sought of membership to have enough information about the companies being selected. For this reason, we sought to make use of data obtained from Bloomberg. Therefore, Bloomberg (2019) describes Bloomberg terminal as high tech, data-driven information company established to solve global problems. As it is referred to, the Bloomberg terminal holds market information for numerous markets and countries. It gives up-to-date information on the financial

standings and reports associated with companies listed on stock exchanges. From the information on Bloomberg, we were able to access the information of the FTSE 100 companies. We chose the sample for the research with specific criteria, which will be explained below.

In selecting the companies to be used for the research, the information needed for the analysis was considered. Big capitalization companies were initially considered for the study. Still, this decision was revisited as the effects of lower cap companies also had to be considered to avoid bias in the outcomes. The amount of unreliability that was noticed when the data in the research were analyzed using only 10 big cap companies with categories in product and service relating businesses also prompted a revisit of the selected firms.

The first criteria that were put up against the total amount of companies were the companies had to be a part of the FTSE100 index. These criteria left us 100 companies specified by the Bloomberg terminal. The Next criteria we applied to the sample was the availability of CSR information, and we only included companies that had information about CSR over the period from 2008 to 2017. This criterion brings to light the aim of the research to study 10 years of data of these companies showing the effects the financial crises of 2008 had on the financial market and efficiently showing the gradual recovery of the market. We were applying the criteria described above, only 65 companies left. The last criteria used in the selection process was the Bloomberg weighting of 0.08, which referred to the rating/weight assigned to each company by Bloomberg based on a pre-existing formula, which is the same across all indexes. Applying this left us with 50 companies of the FTSE100, with 25 companies being product-based. The other 25 companies are service-based and have 500 observations to consider for the research. Specifically, we have initially included the top FTSE 100 companies listed on the LSE. However, due to the limited data availability needed to conduct the study, we ended with 50 companies representing 50% of the FTSE 100. These 50 firms include 25 companies from the product-based and the other 25 companies from the service-based companies for 10 years from 2008 to 2017, which helped us achieve 500 observations for conducting this research. Our sample is selected randomly, representing 50% of the population. Therefore, we can generalize your results and apply them to the entire population (FTSE 100 firms listed on LSE).

4.2 | Variable's definitions and measurements

This section includes dependent, independent, and control variables included in this article.

4.2.1 | Dependent variable (financial performance)

Corporate financial performance (CFP) can be analyzed using different approaches and allowing for multiple proxy variables. However, past literature on the topic of CFP has seen researchers use accounting-based parameters to measure financial performance (Orlitzky et al., 2003) and market-based financial performance measures (Brammer et al., 2006). Justification of the use of market-based measures comes with assumptions from the roles of the investors in the company, which is not directly impacted by the accounting-based measures adopted. With this, the stock performance of companies is seen to be a measure of the financial performance of companies. Looking through the conclusions of Klassen and McLaughlin (1996), assessment of firm value by the market and expected performance is efficiently imbibed in the company's equity value, and new information provided to the public is continually valued and assessed and reflected in the stock price of the firm. This further explains the importance of the stock price compared to the different accounting measures being implored to measure financial performance. The stock price and return on capital can go beyond ascertaining the company's operating liquidity by considering the inputs from the investors and the factors within the market that influence the liquidity of the firm. For the completion of this study, we adopt the yearly stock prices and return on capital from Bloomberg terminal for 50 companies listed on the FTSE 100 UK index.

4.2.2 | Independent variables

Independent variables in research are independent because their variation is not dependent on any other mentioned variables in the research being studied by a researcher (Creswell & Creswell, 2017). In this research, the independent variable is CSR, represented by Bloomberg's ESG disclosures. Tamimi and Sebastianelli (2017) further enlightened that Bloomberg considers about 120 quantitative and qualitative measures to efficiently rate listed companies based on their Environmental (E), Social (S), and Governance (G) scores. Each score is considered to measure specific types of CSR scores and weighted differently as it is weighted based on its importance to the public. ESG disclosure scores provide a system of scoring from full ranges of 100 to null disclosure with a score of 0, making it a measure of the breadth of reporting (Eccles et al., 2011). Considering the Multi-dimensional concept of the research and the effects of the one-dimension method canceling out opposing effects of other dimensions (Nollet et al., 2016), the ESG disclosure scores were classified into its three sub-components of Environmental Disclosure Score (EDS), Social Disclosure Score (SDS), and governance disclosure score, to understand their impact on corporate financial performance.

4.2.3 | Control variables

Schjoedt and Sangboon (2015) concluded that the control variable is not part of the study being conducted by a researcher. Still, it is a variable, which the researcher holds constant during the study. Control variable seen from an organizational perspective is said to be factored in the organization that could affect the decision that makes up the other variables being examined. Considering the study of Waddock

and Graves (1997), financial leverage is employed as a surrogate for risk. In accounting terms, this risk is referred to as the total debt to equity. Justifying the use of this item as the control variable of this study would be based on its usage by previous researchers (Margolis et al., 2009; McWilliams and Siegel (2000) and for the conclusions drawn from other researchers. Therefore, this study total debt to equity ratio to control for the differences in the ratio among product and service-based firms listed on LSE.

4.3 | Model specification

The below models are consistent with the works of Han et al. (2016), who applied a similar model to empirically test for the relationship between CSR and financial performance in Korea. To sufficiently answer the research questions and test the research hypothesis, the panel regression models for the study is given as follows:

$$\text{Stockp} = \beta o + \beta 1\text{EDS} + \beta 2\text{LogSDS} + \beta 3\text{GDS} + \beta 4\text{TDE} + \mu t \quad (1)$$

$$\text{Retunc} = \beta o + \beta 1\text{EDS} + \beta 2\text{LogSDS} + \beta 3\text{GDS} + \beta 4\text{TDE} + \mu t \quad (2)$$

4.4 | Data analysis techniques

This section presents the data analysis methods used to examine the impact of CSR on CFP.

4.4.1 | Pooled regression model

This study employs the panel regression estimation technique to estimate the research model and obtain the numerical estimates of the co-efficient in different equations. The panel regression technique is chosen as it possesses some optimal properties, and its procedure is simple. The nature of this study is quantitative, and a panel data from 50 firms was used in this research to examine the association between CSR and the financial performance of listed firms.

4.4.2 | Fixed effects regression

The study was also analyzed by using the fixed-effects panel regression analysis. The fixed effect model is used when all the firms included in the panel analysis are functionally identical and when the expected effect size for the firms needs to be computed rather than generalizing to other firms in the industry. The random effect model is suitable if the p-value of the Hausman Chi-Sq. The statistic is more significant than 0.05. The Hausman test introduced by Hausman (1978) has been widely used to compare different estimators of the model parameters. Specifically, the Hausman test chooses between the fixed effects model or a random-effects model for the panel regression models. The null hypothesis is that the preferred model is random effects, while the alternate hypothesis is that the model has fixed effects. Essentially, the test looks to see a correlation between the unique errors and the regressors in the model. The null hypothesis is that there is no correlation between the two.

5 | EMPIRICAL RESULTS

The study aims to explore the impact of CSR on the financial performance of the Product-based and Service-based companies listed in the FTSE 100. Data used was captured from 50 listed companies for a scope of 10 years over 2008–2017. To effectively provide answers to the research questions posed by the study, the researcher employs a comparative analyses technique in which the impact of CSR variables on the financial performance is ascertained in product-based organizations and service-based organizations. Then a comparison is made to check on which of the organization types of CSR has a more significant impact.

5.1 | Descriptive analyses

Table 1 presents descriptive statistics for product-based companies listed on FTSE 100. Table 1 shows that stock price, return on capital, and total equity debt is positively skewed, implying a high tendency to have extreme positive values for all the variables. Thus, the distribution of TDE has a long tail to the right. Conversely, the three CSR

TABLE 1 Descriptive statistics for product based companies listed on FTSE 100 index

Variables	Obs	Mean	Std. dev.	Min	Max	SKEW	Kurt
Returnc	250	15.334	14.703	−58.651	71.378	0.255	4.708
Stockp	250	22.938	17.452	0.739	72.350	0.983	0.370
EDS	250	38.565	13.728	2.326	61.240	−0.414	−0.788
SDS	250	43.283	11.008	14.035	64.912	−0.248	−0.427
GDS	250	63.450	8.998	10.714	82.143	−1.592	8.236
TDE	250	87.457	84.676	0.000	626.095	2.408	8.821

Abbreviations: EDS, Environmental Disclosure Score; GDS, Governance Disclosure Score, Retunc, Log of return on capital (Natural Log of return on capital), SDS, Social Disclosure Score; Stockp, Log of stock price (Natural Log of Stock price); TDE, Total debt to equity.

measures, EDS, SDS, and GDS, are negatively skewed, which suggests that there are disturbances in the trend of the variables. Thus, the distributions of the variables have a long tail to the left, although GDS has the most extended tail to the left. Furthermore, stock price, EDS, and SDS are platykurtic with a kurtosis value less than 3, implying that the distributions of the variables are flat relative to the normal distribution. However, the distribution of GDS and TDE are leptokurtic since their kurtosis values are more significant than 3, implying that the distributions of the variables are peaked relative to the normal distribution.

Table 2 presents descriptive statistics for service-based companies listed on FTSE 100 index. Table 2 reports that stock price, return on capital, and total equity debt is positively skewed, implying a high tendency to have extreme positive values for all the variables. Thus, the distribution of TDE has a long tail to the right. However, the three CSR measures: EDS, SDS, and GDS, are negatively skewed, which suggests that there are disturbances in the trend of the variables. Thus, the distributions of the variables have a long tail to the left. Furthermore, all CSR variables are platykurtic with a kurtosis value less than 3, implying that the distributions of the variables are flat relative to the normal distribution. The distribution of TDE is leptokurtic since its kurtosis value is greater than 3, implying that the distribution of the variable is peaked relative to the normal distribution.

5.2 | Correlation analyses

Table 3 presents correlation analysis results for product-based firms listed on FTSE 100 index. The correlation coefficient of the relationship between the CSR and financial performance variables for the product-based organizations. Table 3 reports that financial performance (stock price) has a positive and significant relationship with all the CSR variables, implying that CSR and financial performance move in the same direction and directly. Furthermore, the return on capital variable exhibited a positive and significant relationship with total debts to equity (TDE) and one CSR variable: EDS. However, it exhibits a positive but insignificant relationship with SDS and governance disclosure score.

Table 4 presents correlation analysis for service-based firms listed on FTSE 100 index. Table 4 reports that financial performance (stock price) has a positive and significant relationship with EDS, implying that environmental disclosure and financial performance both move in the same direction and have a direct relationship to a greater extent. However, it has a negative and significant association with TDE. Additionally, financial performance (return on capital) has a negative and significant relationship with all CSR variables in addition to TDE, implying that there is an inverse relationship between CSR variables and financial performance (return on capital).

TABLE 2 Descriptive statistics for service based companies listed on FTSE 100 index

Variables	Obs	Mean	Std. dev.	Min	Max	Skew	Kurt
Returnc	250	12.092	18.733	−41.096	93.385	2.217	6.742
Stockp	250	12.712	12.875	0.259	67.179	1.802	3.223
EDS	250	30.889	12.560	2.326	57.364	−0.440	−0.320
SDS	250	41.800	11.939	17.544	67.188	−0.016	−0.523
GDS	250	59.400	6.860	39.286	75.000	−0.110	−0.310
TDE	250	142.310	164.532	0.000	894.000	2.146	4.819

Abbreviations: EDS, Environmental Disclosure Score; GDS, Governance Disclosure Score; Retunc, Log of return on capital (Natural Log of return on capital), SDS, Social Disclosure Score; Stockp, Log of stock price (Natural Log of Stock price); TDE, Total debt to equity.

TABLE 3 Correlation test result for product-based organizations listed on FTSE 100 index

	Returnc	Stockp	EDS	SDS	GDS	TDE
Returnc	1					
Stockp	0.275***	1				
	0.000					
EDS	0.183***	0.396***	1			
	0.004	0.000				
SDS	0.073	0.187***	0.520***	1		
	0.252	0.003	0.000			
GDS	0.064	0.267***	0.664***	0.539***	1	
	0.313	0.000	0.000	0.000		
TDE	0.254***	−0.050	0.072	−0.087	−0.019	1
	0.000	0.435	0.259	0.173	0.763	

Abbreviations: EDS, Environmental Disclosure Score; GDS, Governance Disclosure Retunc, Log of return on capital (Natural Log of return on capital); SDS, Social Disclosure Score; Score; Stockp, Log of stock price (Natural Log of Stock price); TDE, Total debt to equity.
*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$.

TABLE 4 Correlation test result for service-based organizations listed on FTSE 100 index

Variables	Returnc	Stockp	EDS	SDS	GDS	TDE
Returnc	1					
Stockp	0.203***	1				
	0.001					
EDS	−0.308***	0.135**	1			
	0.000	0.032				
SDS	−0.235***	0.001	0.505***	1		
	0.000	0.991	0.000			
GDS	−0.182***	0.094	0.537***	0.441***	1	
	0.004	0.140	0.000	0.000		
TDE	−0.183***	−0.159**	0.198***	0.332***	0.204***	1
	0.005	0.015	0.002	0.000	0.002	

Abbreviations: EDS, Environmental Disclosure Score; GDS, Governance Disclosure Score; Retunc, Log of return on capital (Natural Log of return on capital); SDS, Social Disclosure Score, Stockp, Log of stock price (Natural Log of Stock price); TDE, Total debt to equity.
*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$.

TABLE 5 Result of pooled OLS regression for effects of ESG on stock prices for firms listed on LSE

Dependent variables	Stock price					
Listed firms on LSE	**Product-based firms**			**Service-based firms**		
OLS regression	Coef.	*t*	*P* > *t*	Coef.	*t*	*P* > *t*
Independent variables						
EDS	0.549***	10.350	0.000	0.163***	10.480	0.000
SDS	−0.068	−0.890	0.397	−0.141***	−3.410	0.008
GDS	−0.044	−0.310	0.763	0.094	0.840	0.421
Control variables						
TDE	−0.103***	−2.620	0.028	0.044	1.490	0.170
Constant	11.559	1.340	0.212	5.714	0.880	0.402
Number of obs	250			250		
F Value	96.32***			188.40***		
Prob > F	0.000			0.000		
R-squared	0.170			0.090		

Abbreviations: EDS, Environmental Disclosure Score; GDS, Governance Disclosure Score; SDS, Social Disclosure Score; Stockp, Log of stock price (Natural Log of Stock price), TDE, Total debt to equity.
*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$.

5.3 | Findings and discussion

The statistical assumptions of the OLS regression model were checked and corrected by using Stata software. Specifically, the normality test is employed to determine if the series of a variable or set of variables is well-modeled by a normal distribution and to determine the propensity of a random variable originating from the data set to be normally distributed. We used a natural logarithm to correct for normality. Regarding autocorrelation, the models were tested for the presence of autocorrelation using the Pesaran CD test for cross-sectional dependence. The CD test is a Lagrange multiplier (LM) test introduced by Breusch and Pagan (1980) and tests for the correlation of the residual tests. The presence of autocorrelation in the model violates one of the assumptions of the classical linear regression model. Additionally, the models were also tested to check for homoscedasticity, which implies a condition in which the changes of a variable are equal across the range of values of a second variable that predicts it. The Distribution free Wald test for heteroskedasticity is employed and is conducted to check if there is any form of heteroscedasticity among the residuals. We corrected the violation of autocorrelation and homoscedasticity by using standard errors of standardized regression by Stata. Moreover, linearity is also tested to check whether the dependent variable has a linear or curved relationship with the dependent variables. The study employed the Auxiliary regression for the specification test. The Ramsey RESET test ascertains if the non-linear combinations of the independent variables' fitted values help explain the dependent variable.

By looking at the summary statistics of product firms in Table 5, the results reveal that the model has a good fit, as the coefficient of determination (R2) indicates that CSR variables explain approximately 17% of the variations in the stock price. In comparison, the remaining 83% variation is explained by other variables that affect financial

performance but are not considered in the model. This result signifies a low explanatory power of the independent variable on the dependent variable. The *F*-statistic of 96.32 is significant as it passes the test of statistical significance at the 0.5% level with a *p*-value less than 0.05, indicating that the model is significant in explaining the effect of CSR variables on stock price firms listed on LSE.

Consistent with the expectation H1, the pooled OLS regression result in Table 5 shows a positive and significant effect between EDS and stock price for product-based firms listed on LSE. This finding is in line with the results reported by previous scholars (Ali et al., 2020; Kim & Kim, 2014; Maqbool & Zameer, 2018; Preston & O'Bannon, 1997; Waddock & Graves, 1997). The effect of environmental performance on financial performance conforms to the stakeholder theory as there exists a positive relationship between CSR and financial performance. Stakeholder theory assumes that socially responsible companies are expected to have more extraordinary financial performance because of the indirect effects of their activities on stakeholders (Freeman, 2004; Godfrey, 2005). Table 5 reports that both social and government disclosure scores have an insignificant impact on the stock price of product-based firms listed on LSE. This finding is coherent with the work conducted by prior research (Abbott & Monsen, 1979; Awaysheh et al., 2020; Fabac et al., 2016; Fiori et al., 2007; Griffin & Mahon, 1997), who empirically examined the relationship between CSR and financial performance and found an insignificant relationship between them.

Regarding the service-based firms, the summary statistics in Table 5 reveal that the model for service-based firms has quite a poor fit. The coefficient of determination (R2) indicates that 9% of the variations in financial performance are explained by CSR variables, indicating that CSR variables have little influence on financial performance. This result also signifies the independent variable's short explanatory power on the dependent variable. The *F*-statistic of 144.89 is significant as it passes the statistical significance test at the 0.5% level with a *p*-value greater than 0.05, indicating that the model is significant in explaining the effect of CSR variables on financial performance. Similarly, Table 5 shows that the EDS exhibited significant positive effects on the stock price of service-based firms listed on LSE. This finding is consistent with the results reported by prior research (Ali et al., 2020; Kim & Kim, 2014; Maqbool & Zameer, 2018; Preston & O'Bannon, 1997; Waddock & Graves, 1997), who found a significant association between CSR and firm performance. However, Table 5 indicates that the SDS exhibits a significant adverse effect on the stock price of service-based firms listed on LSE. Theoretically. The positive effect of environmental disclosure on stock price aligns with stakeholder theory, which assumes a positive relationship between CSR and corporate financial performance (Godfrey, 2005). Table 5 reports that government disclosure has an insignificant effect on the stock price of service-based firms listed LSE.

The summary statistics of product firms of Table 6 reveals that the model has a relatively poor fit, as the coefficient of determination (R2) indicates that CSR variables explain approximately 9% of the variations in the return on capital ratio. This result signifies a low explanatory power of the independent variable on the dependent variable. The F-statistic of 22.900 is significant as it passes the test of statistical significance at the 0.5% level with a p-value less than 0.05, indicating that the model is significant in explaining the effect of CSR variables on the return on capital ratio. Consistent with the expectation H1, the pooled OLS regression result in Table 6 shows that the EDS has a positive and significant effect on the return on the capital ratio of product-based firms listed on the LSE. This result is in line with previous studies that found a positive and significant link between these two variables (Kim & Kim, 2014; Preston & O'Bannon, 1997; Waddock & Graves, 1997).

Table 6 reports that social and government disclosure scores have an insignificant effect on the return on the capital ratio of product-based firms listed on the LSE. This finding, however, is consistent with

TABLE 6 Result of pooled OLS regression for effects of ESG on return on capital for firms listed on LSE

Dependent variables Listed firms on LSE	Return on capital					
	Product based firms			Service based firms		
OLS regression	Coef.	*t*	*P* > *t*	Coef.	*t*	*P* > *t*
Independent variables						
EDS	0.300***	5.930	0.000	−0.380***	−12.000	0.000
SDS	−0.019	−0.280	0.782	−0.166**	−2.260	0.050
GDS	−0.224	−1.780	0.108	0.008	0.040	0.972
Control variables						
TDE	−0.077	−0.880	0.400	−0.005	−0.080	0.938
Constant	21.847	3.300	0.009	30.576	2.310	0.046
Number of obs	250			250		
F Value	22.900***			45.430***		
Prob > F	0.000			0.000		
R-squared	0.087			0.103		

Abbreviations: EDS, Environmental Disclosure Score; GDS, Governance Disclosure Score; Retunc, Log of return on capital (Natural Log of return on capital), SDS , Social Disclosure Score, TDE, Total debt to equity.

*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$.

some prior studies that found an insignificant relationship between CSR and financial performance (Abbott & Monsen, 1979; Griffin & Mahon, 1997; Kraft & Hage, 1990; Ruf et al., 1996; Surroca et al., 2009; Ullmann, 1985; Van Beurden & Gössling, 2008). The positive effect of EDS on the return on capital ratio conforms to the stakeholder theory as it assumes a positive relationship between CSR and financial performance (Freeman, 2004). However, the insignificant effect of social and governance disclosures on the return on capital is not consistent with the stakeholder theory.

Concerning service-based firms, the summary statistics of Table 6 reveal that the model has quite a poor fit. The coefficient of determination (R2) indicates that 10% of the variations in the return on the capital ratio (Returnc) are explained by CSR variables, indicating that CSR variables have little influence on the return on capital ratio. The F-statistic of 45.43 is significant as it passes the test of statistical significance at the 0.5% level with a p-value greater than 0.05, indicating that the model is significant in explaining the effect of CSR variables on the return on capital of firms listed on LSE. The results of pooled OLS regression in Table 6 show that environmental (EDS) and social (SDS) scores exhibit a significant adverse effect on the return on the capital ratio (Returnc) of the service-based firms listed on LSE. This result is in line with previous CSR studies (e.g., Brammer et al., 2006; Cordeiro & Sarkis, 1997; Friedman, 1970; Hemingway & Maclagan, 2004; Katsikides et al., 2016; Wright & Ferris, 1997). Theoretically, the negative effect of environmental and SDSs on return on the capital ratio of the service-based firms is not in line with the expectation reported by stakeholder theory, which assumes a positive relationship between CSR and financial performance, since stakeholders require more CSR disclosure.

6 | ADDITIONAL ANALYSIS

We also run fixed-effects and random-effects regression models to examine the robustness of original OLS regression models used to explore the causal relationship between CSR and financial performance of the product and service-based firms listed on LSE. The Hausman test, introduced by Hausman (1978), is used to choose between the fixed-effects model or a random-effects model for panel regression models and compare the two estimators. As a result, we used the Hausman test to check the correlation between the regressors in the model and the error terms. Hausman's test shows that fixed-effect models are more appropriate. Hence, and based on the Hausman test, fixed-effect models are chosen to control for constant variables across entities, but they vary over time which can be controlled by including time fixed effects. Tables 7 and 8 exhibits the results of fixed-effect models.

Table 7 shows the results of panel fixed effect regression models to examine the impact of CSR disclosure on the stock price of the product and service-based firms listed on LSE. Table 7 shows that the EDS exhibits a positive and significant effect on stock price (Stockp) of both product and service-based firms listed on LSE. Accordingly, the CSR effect on stock price conforms to theoretical expectations both in magnitude and sign. The EDS component has the most significant positive effect on the stock price of firms listed on LSE. However, the effect of SDS on the stock price (Stockp) was significantly negative for both product-based and service-based firms listed on LSE. Furthermore, the first control variable: TDE, exhibits a significant positive effect on the stock price (Stockp) for service-based firms listed on LSE. However, the TDE exhibit a negative and significant impact on the stock price (Stockp) of product-based firms listed on LSE.

Table 8 shows the results of panel fixed effect regression models to examine the impact of CSR disclosure on the return on the capital ratio of the product and service-based firms listed on LSE. Table 8 shows that EDS has a positive and significant effect on product-based firms' return on capital (Returnc). However, Table 8 indicates that the EDS has a significant negative impact on return on capital (Returnc) for service-based firms listed on LSE. This finding is consistent with Hassel et al. (2005), who found a negative relationship between that

TABLE 7 Result of fixed effect regression for effects of ESG on stock prices for firms listed on LSE

Dependent variables Listed firms on LSE	Stock Price					
	Product based firms			Service based firms		
Fixed effect model	Coef.	*t*	P > t	Coef.	t	*P* > t
Independent variables						
EDS	0.630***	15.450	0.000	0.152***	9.420	0.000
SDS	−0.244**	−3.040	0.014	−0.237***	−5.110	0.001
GDS	−0.158	−1.610	0.143	0.083	1.210	0.257
Control variables						
TDE	−0.148***	−3.900	0.004	0.056*	2.070	0.068
Constant	15.892	3.110	0.013	3.603	0.990	0.350
Number of obs	250			250		
F Value	6.710***			2.990***		
Prob > F	0.000			0.000		
R-squared	0.270			0.142		

Abbreviations: EDS, Environmental Disclosure Score; GDS, Governance Disclosure Score; SDS, Social Disclosure Score; Stockp, Log of stock price (Natural Log of Stock price); TDE, Total debt to equity.
*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$.

TABLE 8 Result of fixed effects regression for effects of ESG on return on capital for firms listed on LSE

Dependent variables Listed firms on LSE	Return on capital					
	Product based firms			Service based firms		
Fixed effect model	Coef.	*t*	*P* > *t*	Coef.	*t*	*P* > *t*
Independent variables						
EDS	0.295***	5.640	0.000	−0.378***	−10.820	0.000
SDS	0.020	0.270	0.790	−0.232**	−2.580	0.030
GDS	−0.270	−1.780	0.109	−0.087	−0.400	0.698
Control variables						
TDE	−0.063	−0.700	0.499	0.008	0.110	0.912
Constant	21.379	3.630	0.005	32.497	2.900	0.018
Number of obs	250			250		
F Value	1.680***			3.280***		
Prob > *F*	0.006			0.000		
R-squared	0.085			0.153		

Abbreviations: EDS, Environmental Disclosure Score; GDS, Governance Disclosure Score; Retunc, Log of return on capital (Natural Log of return on capital), SDS, Social Disclosure Score, TDE, Total debt to equity.
*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$.

environmental performance and market value of equity. This result implies that firms rated high in environmental performance are not valued highly by investors of service-based firms. However, Table 8 reports that the governance disclosure (GDS) has an insignificant effect on the return on capital of both product and service-based firms listed on LSE. This result is consistent with the findings reported by Elmghaamez and Akintoye (2021) who argued that better governance performance depends not merely on governance disclosure but also on the board compensation. However, the neoclassical theory supports the findings of the insignificant negative impact of GDS on the return on capital of the product and service-based firms listed on LSE. This insignificant effect could happen since investments in CSR initiatives required an increase in costs, especially with little or no corresponding increase in financial performance (Friedman, 1970).

7 | CONCLUSION

Despite a surfeit of research to illustrate the relationship between CSR and the financial performance of listed firms in developing and developed countries, the different conclusions have led to the creation of new categories of beliefs concerning the relationship between these two variables. This reason was the primary reason for conducting this research to explore the relationship between CSR and financial performance of the FTSE 100 product and service-based firms listed on LSE. This study used panel data from 50 companies that have been quoted on the LSE, making sure they were of two different categories: the product and service-based companies over the period from 2008 to 2017.

Our findings report that CSR measures generally had a mixed positive and negative effect on the financial performance of product and service firms listed on LSE. Specifically, our study reports that environmental performance has positively influenced the stock price of both LSE's product and service firms. Environmental disclosure has enhanced product firms' return on capital ratios while reducing the return on capital for service firms. In contrast, social disclosure has negatively and significantly influenced the stock price of the product and service firms listed on LSE. It significantly and negatively affects the return on capital of service firms listed on LSE. Surprisingly, we do not find any relationship between governance disclosure and the stock price alongside the return on the capital for both the product and service listed firms. Therefore, CSR initiatives by firms listed on LSE would favor the product-listed firms more than the service-listed firms concerning the financial performance, especially the stock price.

This study has some implications for different groups. First, authority and policymakers of stock markets need to issue rigid regulations to encourage all listed firms to be mandatory disclose their environmental activities and produce sustainable and friendly goods since it can improve the stock price of listed firms. Second, managers and executives of listed firms are responsible for improving their social activities since low and bad social activities could negatively impact their firms' financial performance. Third. This study offers implications of governance disclosure for investors and users of annual reports of product and service-based firms listed on LSE. In particular, the regulatory might identify the minimum level of governance disclosure that all listed firms should disclose in their annual report. This action would build a positive reputation among investors and thus be reflected in the high value of stock price, ultimately resulting in improved financial performance. Fourth, our study provides significant implications for managers of product and service-based firms listed on LSE. Specifically, managers and directors should understand that stock prices can remarkably increase even with higher CSR costs because investors place higher valuations on those listed firms that disclose more about their CSR activities. Finally, all LSE member firms should be cooperative and work closely with the regulations of the LSE to establish a clear set of regulations and laws to ensure compliance with the rules and regulations. This

implication can ultimately improve environmental, social, and corporate governance disclosure (CSR) performance among companies listed on its stock exchanges.

This study, however, has several limitations that should be acknowledged. This study has covered 50 listed firms on LSE, where results might be changed if the future research might include more firms in the sample selected if the data became available. Future research might include the individual components of the ESG variables provided by Bloomberg Terminal and run the analysis by creating a model consisting of up to 14 independent variables, which we did not in this study. Further studies might include other financial performance variables rather than stock price and return on capital which can give a big picture about the impact of CSR initiatives on corporate performance. Additionally, future research could seek to understand how recessions have affected financial performance and understand if companies' CSR ensures that customers keep transacting at the same volumes with companies. This was a limitation for this research as the years to be investigated were cut short due to companies' insufficient information on CSR activities. Finally, for more understanding by companies, further research can be launched towards different sectors in the economy. To fully understand the relationship between CSR and financial performance based on the operations of each sector of the economy. This will give more explicit directives as to which sectors need to be socially responsible and those who do not need it as a factor that improves financial performance.

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