

The Effect of CSR on Corporate Financial Performance, considering the Role of Female Representation in the Retail Industry

Abstract

The aim of this study is to examine relationships between CSR and corporate financial performance, considering the role of board diversity in retail industry in the UK. The theories examined include Friedman's theory and Stakeholder theory, which have conflicting ideas on whose needs a company should serve. Quantitative methodology is utilized to capture sample data comprising 10 years of financial data. Data is collected on companies listed on the FTSE 100 during 2012 to 2021 that were operating in the UK retail sector. This study uses regression analysis to test the hypothesis that analyses the relationship between CSR, gender diversity, and financial performance. There is no significant relationship between gender diversity and financial performance. The number of female directors on the board does not impact financial performance, so the regression analysis does not allow us to reject the null hypothesis. Instead, past performance, sales growth, and leverage impact financial performance.

Keywords: Corporate Social Responsibility, CSR, financial outcome, female representation, retail industry

Article classification: Research Paper

Introduction

Corporations have increasingly included environmental, social, and economic accountability (Oueslati *et al.*, 2023; Abdelmoety *et al.*, 2022; Ginder and Byun, 2022) in their main objectives and standards due to increasing stakeholder pressure (Muflih, 2021; Mejri and Bhatli, 2014) and globalization (Belal *et al.*, 2015). Benefits of implementing CSR include improved brand name and status (Lee and Chung, 2023), alleviated threats, improved reputation (Ruiz and Garcia, 2021), and positive impacts on corporate outcomes. CSR enhances business value by providing a greater company status (Godefroit-Winkel *et al.*, 2022; Książak, 2016) and leading to improved consumer loyalty, thus generating increased sales as consumers perceive corporations advocating noble causes. Companies also see decreased governing responsibility as improvements and commitments to CSR activities lead to better relations with regulatory bodies (CFI, 2022).

The link between CSR and financial results has been analysed by different authors, but a clear consensus has not been reached. The characteristics of the correlation between CSR and financial results remains uncertain due to variations in econometric methods, data sources, and measurement of variables across different detailed studies. As a result, a conclusion regarding the relation between CSR and financial outcome cannot be drawn (Martínez-Ferrero and Frías-Aceituno, 2015). According to the research conducted by Naidoo & Gasparatos (2018), retailers typically provide a range of services to their local communities, positioning themselves predominantly as local businesses. As retailers consistently concentrate on minimizing their environmental footprint, a key dilemma arises. The retail industry has a diverse workforce, including individuals seeking their first job, carers, and parents (BRC, 2021). It is making progress towards gender equality as women are gradually being represented at the top level. Research by the BRC (2021) shows that women make up 30% of boards and executive committees. However, female workers constitute two-thirds of the industry, indicating room for improvement. The latest figures from BRC (2022) show that women are still underrepresented at higher levels, as they represent fewer than 40% of boards and executive committees. Therefore, although there have been improvements in representation, progress is slow, and leading positions are still predominantly held by white men. Furthermore, while the retail industry is making slow progress in terms of representation, it is performing better than other industries in the FTSE 100. Green Park suggests that the average gender diversity score for the retail industry is 19.9%, compared to the FTSE 100 average of 17.7%. The retail industry also performs better in terms of female board representation, with 28.5%, compared to 24.3% of FTSE 100 (Sholl, 2017).

Thus, the gap in existing literature is the absence of a clear conclusion on the link between CSR and corporate outcomes. Decisions from past studies on the correlation between CSR and corporate results cannot be generalized and often conflict due to the inclusion of multiple industries or different countries.

This study was conducted based on the ‘Stakeholder Theory’, which categorizes the government and communities as external stakeholders, while customers, suppliers, and employees are recognized as internal stakeholders. As per this theory, organisations are interconnected with various stakeholders, and the actions of these stakeholders significantly influence organisational decisions (Freeman, 2010).

In our investigation, we specifically identified the community or society as a pivotal stakeholder. Consequently, the emphasis on environmental CSR innovation is examined through a social lens, even though it has positive implications for a company's economic advantage. As a result, environmental protection becomes a collective responsibility shared by both the organisation and its stakeholders. It's crucial to note that the interests of each stakeholder and the organisation are not mutually exclusive; hence, decision-making must consider the interests of all parties involved.

The corporate social responsibility (CSR) is a crucial issue globally, discussed in many areas of research. However, the retail sector has not received sufficient examination. The proximity to communities encourages a localized approach, and effective communication of CSR initiatives plays a crucial role in fostering awareness and engagement among employees and customers. For instance, recent research by Dal Mas et al. (2022) emphasizes the significance of clear and extensive communication and translation of CSR initiatives as a central element. This is vital for raising awareness and engagement among both employees and customers, thereby positively impacting retail organisations in terms of business performance and sustainability.

Given that, this study aims to examine the relationship between CSR and corporate financial performance, considering the role of board diversity in retail industry in the UK. Additionally, there are few research that explore the link between gender diversity and financial results in the UK, as most studies have centred on companies in the US and parts of Europe. Furthermore, while there has been some research on board representation, there are few studies that analyse the impact of increased female managers on the board in the retail industry. Due to this gap, our study aims to generate a clear understanding of the correlation between gender diversity and corporate results in retail industry. We assess whether increased gender diversity has led to better financial performance in this sector.

Over the past 15 years, the UK has faced challenges such as the banking critical period and the Covid-19 pandemic, which have resulted in severe economic implications, including high inflation and an approaching recession. This study focuses on the period from 2012 to 2021, and the sample companies have been operating in the UK during this timeframe. The Fame database was utilized to select the retail PLCs for analysis. The eleven companies selected for this study are Tesco PLC, Unilever PLC, J Sainsbury PLC, National Grid PLC, Associated British Foods PLC, Kingfisher PLC, JD Sports Fashion PLC, DS Smith PLC, RS Group PLC, Ocado Group PLC, and Howden Joinery Group PLC. The aim of this study is to explore whether increased board representation of these companies has resulted in improved financial results.

This paper provides a new insight into companies and if there is a need for CSR. This study is so relevant now due to the increasing need for CSR and fluctuating economy. There is a social divide which is widening in the UK. The Government and companies need to act as the UK being a G7 country should be seen as a world leader which is improving the quality of lives. The findings of this paper will be important as it will allow companies to see how their CSR initiatives may or many not impact financial performance and if their CSR has other outcomes as a byproduct. Unexplored areas and limitation of previous studies include a focus on retail companies operating in the UK as several studies have considered companies in Europe or USA and those operating in different industries.

The following objectives were formulated to assess the link between CSR and financial outcomes: to analyse CSR activities undertaken by UK-based retailer companies, specifically focusing on gender diversity to identify indicators of corporate outcome for retail companies. To assess the link between the CSR tactics related to gender diversity and financial outcome of companies. The following question is used to address the hypothesis presented in this study: What is an appropriate indicator of financial performance considering CSR and Female Representation in the UK retail industry?

Literature Review and Model Development

CSR, Female representation, and corporate financial performance

The relationship between a company's social responsibility and its financial performance has been a subject of interest among researchers for a considerable time (Bowen's 1953). This connection varies across different companies, influenced by the perspectives of managers and diverse societies. Previous study by Lau et al., (2007) indicates that corporate social responsibility has a longstanding history, yet a common aspect is evident, as companies allocate resources towards profit maximization and enhancing shareholder wealth, with a focus on shareholder welfare. As per Maretno's (2018) study, numerous companies give precedence to incorporating CSR activities into their agendas.

Several research studied the effect of ESG on economic results. Brown and Caylor (2004) determine that governance standards have a relationship with financial results. Structure of the board is crucial as it is the central control system, which intends to protect concerns of shareholders against opportunism of managers. Besides, it indicates the increasing recognition of the role directors have in managing and promoting socially responsible results (Rao and Tilt, 2016). Toé (2014) studied seventy-one organisations which showed that gender diversity may improve a company's governance system and its efficiency. Corporate governance is crucial for the survival and prospects of companies. Governance should be ethical and forms a part of CSR. The link between governance and financial outcomes has been explained leveraging on the agency theory.

The existence of women on the board encourages a positive correlation between CSR and financial results (Kahloul *et al.*, 2022). Companies with female directors tend to incorporate increased CSR activities, leading to additional value being generated for the company (Broadbridge, 2007; Foster *et al.*, 2007; Gable *et al.*, 2005). While diversity is also seen as a CSR measure itself as inclusivity is an important social responsibility practice. Adams (2016) and Arayssi *et al.*, (2016) indicate that women have a different managerial style. Women pay more attention to and consider stakeholders' needs more important. This leads to more attention being given to concerns and demands of stakeholders in decisions about the strategic nature of the business and other aspects like CSR. Additionally, women are more likely to introduce additional CSR to meet demands and concerns of stakeholders. Female directors tend to increase board awareness of CSR strategies and practices (Galbreath, 2018). This leads to increased CSR and socially responsible investing, which generates competencies creating a competitive advantage further enhancing the business's value (Setó-Pamies, 2015). Studies highlight that boosting the percentage of female directors may enhance businesses' ESG performance and offer significant indications to shareholders about the possibility of enhanced business reputation and financial outcomes (Bear *et al.*, 2010).

CSR Across Various Industries: Analysing the GAP in the Retail Sector

The concept of social responsibility is closely linked to business and sustainable development. This responsibility compels companies and institutions to balance social, economic, and environmental considerations for the benefit of business stakeholders. Corporate social responsibility (CSR) lacks a specific definition (Chandler, G. 2001), but, in general, it can be described as a method based on moral values, compliance with the legal requirements of the country, and respect for people, societies, and the surrounding environment. Numerous companies design and implement their activities with a focus on long-term strategies, prioritising Corporate Social Responsibility (CSR) in their agenda to enhance or rectify social and environmental impacts. The three pillars of sustainability: environmental, social, and governance (ESG) activities are instrumental in improving the communities surrounding them (Staub-Bisang, 2012).

It goes beyond mere profitability, as companies are accountable for the entirety of their impact on both people and the planet. Companies adopt various approaches as the primary distinguishing factor for their actions. Different terms, such as corporate social responsibility, sustainability, corporate responsibility, social relations, corporate citizenship, corporate community participation (Carroll 2006; Werther & Chandler 2006; Matten et al.), and the strategic philanthropy of the club, essentially refer to the same issue.

Previous literature has examined different industries and the CSR measures companies in those industries take. CSR has an immediate effect on financial performance for certain industries as CSR has different costs and benefits for different industries. Various findings have analysed industry as an essential element that impacts CSR and its influence on financial results (Lin *et al.*, 2015). Academics have examined different industries due to the different environmental disclosures needed by companies operating in specific industries (Halme and Huse, 1997). Sectors which impact the environment are more expected to reveal CSR actions and impact (Cormier *et al.*, 2005). Thus, companies manufacturing and affecting the environment disclose more than organizations in other sectors. In fact, mining, petroleum, and chemical organizations have to disclose their impact on the natural environment and health and safety practices (Jenkins and Yakovleva, 2006). Whilst industries with service businesses may disclose actions impacting social issues and donations (Line *et al.*, 2002). Additionally, Bowen (2000) and Hoffman (1999) claim businesses that relate to mining resources, paper usage, electricity consumption, water usage and chemicals considerably affect the natural environment. On the other hand, service industries, do not affect the ecosystem as much, so they have fewer disclosures on ecological issues and more disclosures on social issues.

The retail industry has somewhat been focused on previously, due to its water usage, electricity consumption and resources usage. The impact of the industry's performance and environmental damage is seen as significant and has led to retailers becoming more environmentally friendly. Clothing retailers are using less plastic, recycled materials (H&M, 2023) and sustainable cotton (New Look, 2023) in garment manufacturing. However, social factors such as gender diversity on the board have not been examined previously in the UK retail industry, so this study fills the existing GAP by pursuing the following Hypotheses:

H0: CSR does not affect financial outcomes of businesses in the UK retail industry considering the role of gender diversity on the board.

Thus, the alternative hypothesis is:

H1: CSR does affect financial performance of businesses in the UK retail industry considering the role of gender diversity on the board.

Table 1 shows some evidence using the dependent variables in previous studies. Corporate result is analysed with two indicators: (i) ROA and (ii) PER, which aligns with previous studies such as Aggarwal *et al.* (2019), Yang *et al.* (2019) and Niikura and Seko (2020). The ROA provide an unbiased evaluation of performance in previous years. Otherwise, the PER reflect investors' forward-looking expectations and vary for each company. Furthermore, while ROA can be influenced by accounting standards and subject to manipulation of the board, PER is less susceptible to manipulation. The explanatory variables include board gender diversity, governance factors, and various firm-level control items.

“INSERT TABLE 1 HERE”

Data and methodology

Quantitative data were obtained from secondary sources such as the FTSE 100 and annual reports. The research is focusing on CSR effect, considering the role of gender diversity on corporate outcomes of organisations in the UK retail industry.

The hypothesis provided in the literature review section was decided in response to earlier studies' being unable to establish a strong link between CSR and corporate results. Our investigation will enhance the existing literature by further explaining the link of the two items and by employing an appropriate substitute for CSR measurement as gender diversity within the board.

The research conducted by Oradi and Izadi (2019) underscores that the inclusion of at least one female member in audit committees is linked to a reduced likelihood of financial restatements. Further validation through robustness tests substantiates this assertion. Additional analyses reveal that the presence of independent and financially expert female members on audit committees correlates more strongly with a decrease in financial restatements. Furthermore, the study suggests that the involvement of female members on the audit committee may contribute to an increased probability of hiring auditors of higher quality. Overall, these findings align with existing literature on gender diversity, indicating that women excel in monitoring roles, exhibit greater conservatism, and tend to make more ethical decisions.

Also, based on previous research by Sing *et al.*, (2016), women tend to pay more attention to social aspects compared to men. Female leaders often choose longer and more challenging paths in comparison to their male colleagues. The primary limitations in this field are closely tied to cultural norms and gender discrimination. Physical characteristics, including appearance and clothing, are also scrutinized. Women aiming for higher job positions frequently encounter discrimination due to prevailing stereotypes. This situation compels them to advocate for social considerations such as fair treatment, transparency, and the strengthening of social systems and activities benefiting the broader community (Cook, A., & Glass, C., 2018).

The strong presence of women in the power structure of companies should be more targeted, so any negative activity of improving gender diversity will improve to a great extent and help the sustainability of companies' performance. Also, earlier study by Siciliano (1996) shows that including women in key roles on the board improves the social performance of the organisation as a whole and thus becomes an integral part of a place.

Model design

In this study a single indicator of financial performance (ROA) is employed, aligning with the study of Simionescu *et al.* (2021) (2) and Gaio and Henriques (2020) (3). The existing model separates gender diversity and CSR and includes an interaction term. In this study, the model is adjusted to incorporate gender diversity as a measure of CSR. This allows for a clear model to be developed specifically to explore the impact of gender diversity on corporate results. Moreover, similar to earlier studies by García-Meca *et al.* (2015), Low *et al.* (2015), Nguyen *et al.* (2015), the existing model distinguishes between two groups of control variables. The first group comprises board features, such as board size and independent directors, while the second panel encompasses firms' facets, such as size, age, and growth.

Financial outcome is commonly assessed in empirical studies using two key measures: Tobin's Q and ROA/ROE. In the paper, we primarily employ Tobin's Q as performance metric, supplemented by ROA. Each of these metrics provides a distinct perspective on evaluating a corporate financial outcome.

Tobin's Q, as noted by Lee *et al.* (2015), shows the market's response and investor sentiment towards a company's environmental decisions. It serves as an indicator of corporate competitive advantages, and it is calculated by dividing the sum of market capitalization and total debt by the book value of assets.

The aim of the model is to explore the impact of CSR reporting (i.e., the ESG score) on financial outcomes, specifically Tobin's Q and ROA, within our complete sample. To assess the hypothesis regarding the moderating impact of gender diversity on the link between CSR reporting and stock market outcome, the gender diversity (Female Representation) was used as an explanatory variable and investigate the significance of the interaction term ESG* Female Representation. This framework can be described as follows:

$$ROA_{Perf_{i,t}} = \beta_{0i,t} + \beta_1 CSR_{i,t} + \beta_2 Size_{i,t} + \beta_3 Leverage_{i,t} + \beta_4 Growth_{i,t} + \beta_5 Age_{i,t} + \beta_6 BDS_{i,t} + \beta_7 FD_{i,t} + \beta_8 FD_{i,t} + \epsilon_{i,t} \quad (1)$$

Gender equality is used as a measure of CSR as it is easily measurable. It can be quantified in terms of the numbers of women in high positions in a company. This can then be counted by looking at annual reports of PLC's. CSR is divided into financial, social and governance aspects. This study focuses on the governance aspect with reference to the social aspect. So, leadership in a company was chosen with a focus on women involvement on the board.

However, the CSR and gender equality concepts are separated in the model as performance of a company may be impacted by different CSR actions of a company. Therefore, to show the gender diversity impact and wider CSR reporting, the concepts have been differentiated. They can then be assessed individually.

In this study, also we use Tobin's Q ratio as an additional metric to evaluate financial outcomes. It specifically compares the market value of an organization to the cost of replacing its items. This ratio is widely employed as an indicator of a firm's investment prospects and overall effectiveness in leveraging its assets.

$$Tobin's\ Q_Perf = \beta_0 + \beta_1 ROA_{i,t-1} + \beta_2 PFD_{i,t} + \beta_3 IFD_{i,t} + \beta_4 BDS_{i,t} + \beta_5 IndepDir_{i,t} + \beta_6 Size_{i,t} + \beta_7 Leverage_{i,t} + \beta_8 Age_{i,t} + \beta_9 Growth_{i,t} + \epsilon_{i,t} \quad (2)$$

The models link to the hypothesis as financial outcomes are assessed by using ROA and Tobin's Q as a measure whilst CSR is referred to as CSR reporting and gender diversity. Data used is of companies operating the UK retail industry. CSR may be an expensive practise so may adversely impact profitability of retail companies. However, CSR may provide benefits of businesses and positively impact profitability. But it may also be that CSR practices are irrelevant to businesses as other factors such as size or leverage of a company affect profitability.

The table 2 shows different variables used in the model (4) and how they are measured.

“INSERT TABLE 2 HERE”

The regression model (4) will allow the researcher to assess the hypothesis regarding the role and effect board gender diversity, has on financial results of retail organisations selected in the sample. Financial performance is the dependent variable (ROA). While female top managers (inside the board) and independent female directors represent gender diversity, which is the independent factor. Control variables used comprise of board size, percentage of independent directors, company size, debt ratio, company age and rate of sales growth. The individual company and year are signified by i and t appropriately. The dependent item in the regression is impacted by the independent factors. β_0 represents the intercept in the regression whilst β_2 and β_3 represent the independent variable (gender diversity). β_4 , β_5 , β_6 , β_7 , β_8 and β_9 are the control factors employed in the regression. ϵ represents the error term allowing for unexpected occurrences which can affect the regression. i, t represents the panel data (cross sectional and for multiple time periods).

Data collection and sample selection

The quantitative data for this paper was obtained from two perspectives. The first one is Fame database, that offers financial information obtained from companies' annual reports. The secondary data source involves individual companies' annual reports from 2012 to 2021, specifically to gather information on the board of directors. Panel data analysis is employed to represent different sectors within the retail industry over a 10-year period. To select the sample, all active companies listed on Fame were initially chosen, resulting in 97 companies from the FTSE 100. From those, publicly listed companies were further selected, resulting in a final sample of ninety organizations. The data for these ninety companies was extracted, and primary SIC codes (classification of companies based on industries) were used to assess the nature of businesses and filter out companies operating in the retail industry.

The selected sample contains organizations ranked in the FTSE 100 (from 2012 to 2021). Furthermore, within retail industry, data was available for nine firms on the same date. Consequently, our final sample comprises nine companies, resulting in ninety firm-year observations. The utilization of panel data in this study aligns with previous research conducted

by Gordini and Rancati (2017) and Heijden and Zhang (2019). By employing panel data, the analysis incorporates a larger number of observations compared to solely using cross-sectional or time series data. As a result, this analysis enhances the reliability of the findings (Heijden and Zhang, 2019). Quantitative data for this study was gathered from two perspectives. The first source is the Fame database, which offers financial information obtained from companies' annual reports and includes Tobin's Q and ROA. The second data source involves individual companies' annual reports from 2012 to 2021, specifically to gather information on the board of directors. Panel data analysis is employed, as it allows for the representation of different sectors within the retail industry over a 10-year period.

Variables used: financial outcome and CSR.

Financial outcome is the dependent item. Financial outcome is quantified in previous research as the market value of an organisation using Tobin's Q and EPS, ROA, and ROE (Kahloul *et al.*, 2022). Many researchers like García-Meca *et al.* (2015), Martín-Ugedo and Minguez-Vera (2014) and Nguyen *et al.* (2015) use Tobin's Q and ROA as financial performance measures.

Market-based measures are obtained from market values of financier perspectives on a particular period of time. Accounting-based measures are related to company performance, during a particular period (Lin *et al.*, 2015). This measure reflects internal decision-making procedures and director's performance (McWilliams and Siegel, 2000). Moore (2001) suggests that the link between board gender diversity and financial results should be assessed using accounting-based measures than market-based measures as they are more appropriate, especially ROA. Nonetheless, a drawback of ROA is its adaptation between sectors. However, this study compares companies of one industry, which is the retail industry so unlike previous studies standardised scores of ROA are not needed.

Tobin's Q is a market assessment method which uses share prices. It is a future indicator, so offers some uncertainty in its occurrence. Whilst ROA/ROE are an accounting-based value of a business. They use the book value or accounts of a company, to arrive at the value of a business. ROA is utilized to determine efficacy of management in generating revenues, by utilizing total assets or economic resources. It is computed as percentage of net income to book value of items (Kahloul *et al.*, 2022). Thus, ROA shows that profitability of companies is related to its items. The greater ROA, the more revenue the company earns on its assets (Heijden and Zhang, 2019).

An important prevalent social issue in recent times is gender equality. Increasingly importance is given to board gender diversity. Previous studies show that increasing female top managers related to enhanced positive CSR (Yarram and Adapa, 2021). The independent variable used to represent CSR is gender diversity. This social practice is implemented by companies and is an important CSR measure. Gender diversity is chosen as the variable for CSR, as it is uncertain whether the role of women top managers impacts on financial results in retail industry. Previous literature shows female directors can cause more disputes in the boardroom, or females maybe hired due to societal pressures instead of excellence (Campbell and Mínguez-Vera, 2007). However, gender diversity may lead to more creative and new company strategies.

Gender diversity is assessed in many studies by measuring the number of female directors in the board or as measured by the Blau's and Shannon's indices (Heijden and Zhang, 2019). Two variables are utilised as alternatives for gender diversity in this study. The percentage of female directors, calculated by dividing the number of women on the board of directors by the total

number of directors, is used to quantify gender diversity. Also, the proportion of independent women top managers has been used. This is explored using the number of independent female top managers divided by total number of directors.

Previous studies use number of human resources and revenues as representations of the size of the organization, which is expected to impact company profitability (Heijden and Zhang, 2019). Company size is included as bigger companies are more visible and produce larger impacts with their actions (Gallo and Christensen, 2011). They are also more prone to implement CSR strategies and tactics than SMEs (McWilliams and Siegel, 2000; Gaio and Henriques, 2020) and have sufficient resources to process information which gives them bigger competitive advantage (Russo and Fouts, 1997). This study uses total assets to represent company size like Wahba and Elsayed (2015). The logarithm of total assets is utilized to adjust for any skewness in company size and this ensures data is correctly distributed (Heijden and Zhang, 2019). Furthermore, debt ratio is utilized to determine company leverage, that is the amount of business items which are supported by debt (Heijden and Zhang, 2019). Greater debt leads to elevated leverage producing adverse impacts on financial performance (Gaio and Henriques, 2020).

Board size reflects other research like Aggarwal *et al.* (2019), it is the total number of directors on the board. While the number of independent board members is also considered. Furthermore, company age is also a control variable and logarithm of company age is used to allow for normal distribution, as it improves normality and linearity of variables (Maqbool and Zameer, 2018). Similarly, Brahma *et al.* (2020) uses the publicly listed age of companies as this is more appropriate in their study of FTSE100 companies. Greiner (1972) suggests that age is important as management issues, decisions and principles evolve in time and this affects company financial performance (Elsayed and Wahba, 2013). Figure 1 shows the evidence of previous research that used ROA and Price to earnings for share (PER) Previous research studies used various dependent and independent variables. These variables were chosen to examine the relationships and effects under investigation. The specific variables employed in previous study may vary depending on the focus and objectives of each research.

“INSERT FIGURE 1 HERE”

Summary statistics

Table 3 shows descriptive statistics. ROA is 7.261%. The standard deviation is 0.58 which is normal. Skewness is -0.139 whilst kurtosis is 3, when data is normally distributed. However, ROA has a skewness of 0.580 and kurtosis of 1.769, this can be considered normal. The finding is in line with the results achieved by Brahma *et al.* (2020) who analysed a sample of firms in the UK between 2005-2016. Heijden and Zhang (2019) found ROA in Italy to be 6.41% and 5.5% in Spain, which shows the UK is performing better. Additionally, they found the average ROA in Norway was -0.98% and as previously mentioned in this study, Norway was a leader in gender equality so this may highlight a negative link between ROA and gender diversity.

Descriptive statistics of independent variables relating to CSR are the number of women top managers and of independent female directors. The average proportion of female directors is 26%, hence on average 1 out of 4 members of the board are female. This is lower than the

“Hampton-Alexander industry targets of 33%” for female representation (BRC, 2021). Standard deviation is 0.12 and 55% is the maximum proportion of female directors, while there are boards with no females. Similarly, Heijden and Zhang (2019) found average proportion of women on the board is 29%, with 57% being the maximum participation and 0 being the minimum. They studied Norwegian firms between 2014 to 2016 suggesting the UK and Norway are similar in female representation. While Sweden’s proportion of women on the board is 28%, which is also consistent. Thus, most businesses have gender diversification, but some businesses have minimal levels of gender diversification.

Whilst the average proportion of independent female directors is 24.7%. Hence, on average almost 1 out of 4 board members are independent and female. The standard deviation is 0.010, however, in some boards there are not independent female directors. The skewness for both variables is at -0.372 whilst kurtosis is 0.3. Therefore, the data for these two variables is near normal distribution and less skewed than ROA. In most retail companies there is gender diversity on the board with some companies having no or little gender diversification. This is consistent with the study by Brammer and Pavelin (2007) who found gender diversity to be limited in management positions.

Variables which relate to features of the board include board size and independent directors. The average board size are 9.8 members. The standard deviation is 0.263 due to some variation in the range. Skewness is 0.260 whilst kurtosis is -0.142. The average proportion of independent directors is around 76%.

Control variables also include company characteristics like company size calculated using logarithm of total assets. Average organization age is 16.195 which is in line with previous results of Ajaz *et al.* (2020) whose mean for size is 15.994.

Company average debt level is 59% while the minimum is 31% and maximum is 86%. This has led to a standard deviation of 0.142 that highlights the data is distributed over a wide range of values. The skewness is -0.318 and kurtosis is -0.843 which is due to the wide range of values used for the debt ratio. Leverage in the retail industry is high as it is over 60%. However, this can be expected with the retail industry. Retail companies are spending vast amounts of money and not receiving much money in return due to Covid-19. Issues in the supply chains led to increased costs for suppliers and customers. This may have affected the business leading to increased debt. Similarly, Gaio and Henriques (2020) have a median leverage of 0.595 implying the average amount of obligation is 59%, implying companies depend on external capital than equity to sustain business requirements.

Company age is calculated using natural logarithm and the average is 3.548, whilst the minimum. Standard deviation is 0.058, skewness is -0.156 and kurtosis is -0.856. The use of natural logarithm for calculation of company age resulted in lower skewness than if natural logarithm was not used. The kurtosis is low hence data is near normal distribution. Similarly in a study by Brahma *et al.* (2020), the firm age was 3.81 while Heijden and Zhang (2019) had average firm age of 3.09. The average sales growth of selected organizations is 5.4%. This has led to a low standard deviation of 0.014. The skewness is 3.07 and kurtosis is 15.650 which is due to data not being normally distributed and can indicate some outliers in the data.

“INSERT TABLE 3 HERE”

Results, Analysis and Discussion

Correlation matrix

Tab. 4 exhibits the Pearson and Spearman correlation matrices, as well as their relative significance levels, to show the link between the variables. Because it is based on the theory of covariance, the Pearson correlation matrix is regarded the best method of assessing the relationship between components (Nettleton, 2014). The Pearson correlation coefficients represent the measure of correlation between all variables and are presented with the p-value associated with each correlation coefficient. A correlation is significant if its p-value is less than 0.05. The correlation coefficients demonstrate the strength (strong, moderate, or weak) and direction (positive or negative) of each relationship. The further away the value is from zero, the stronger the correlation between two variables.

“INSERT TABLE 4 HERE”

High correlation between two independent variables displays multicollinearity. Kennedy (2003) suggests that correlation larger than 0.8 is usually seen as a multicollinearity problem. Multicollinearity makes a significant variable become insignificant as it increases its standard error and decreases its t-value leading to a greater p-value. Thus, some variables should be dropped from the independent variables with high correlation (Heijden and Zhang, 2019).

The association between gender diversity and financial performance can be used to analyse the link between the two. The correlation between Tobin's Q and portion of female directors is negative and significant (-0.272, p-value=0.010). Whilst ROA and the proportion of female directors have a correlation of (-0.059, p-value=0.582) which is also close to zero and indicates a very weak negative correlation. Therefore, both independent variables have a very weak relationship with ROA and are not significant. Similarly, a previous study by Simionescu *et al.* (2021) shows there is absence of a strong relationship for ROA and board gender diversity in measures observed. The correlation between ROA and percentage of women on the board was 0.25, which signifies a weak positive relationship. Therefore, gender diversity may not have a strong effect on financial outcomes. They are both statistically significant, indicating they also contribute to financial performance, which is in line with Brahma *et al.* (2020) whose coefficients for the relationship between ROA and size (-0.381, P-value<0.00) and they are strongly significant.

Gender of the directors does not impact performance of a company, rather it is the expertise, knowledge, and skills of the directors. This is demonstrated with the positive correlation between ROA and independent directors which is (0.260, P-value=0.013) and statistically significant. Therefore, financial performance (measured by ROA) and CSR (measured by gender diversity on the board) have less collinearity. Collinearity is where variables are strongly linearly correlated. But the findings show that is not the case, as the correlation matrix does not show a clear link between financial outcomes and gender diversity.

Regression results

Table 5 shows the multivariate regressions that investigated the impact of CSR on two financial outcomes indicators, Tobin's Q and ROA. The goal of these regressions is to test the first hypothesis, which argues that CSR has no substantial influence on the financial results of retail companies. The findings reveal that in the second regression, there was a positive and

significant correlation coefficient of 1% between the ESG score and ROA and 3% between the ESG score and Tobin's Q on financial performance (0305, t-statistic =2.688, P-value = 0.009) and (0.025, t-statistic =2.176, P-value = 0.033). This finding differs to prior studies by Kahloul et al (2022). This finding contrasts with the trade-off hypothesis, which emphasises the inverse relationship between CSR and financial outcomes. Here the possible cause may be that a business's commitment to social responsibility can lead to costs, which may result in competitive disadvantages that impact its financial performance.

However, this study result shows that when measuring stock market features using Tobin's Q ratio has a positive relevant effect on financial results. The communication of CSR information does impact investors' requirements, supporting our Hypothesis H1 and suggesting that social commitment influences companies' financial outcomes. The validation of our Hypothesis H1 is supported by the stock market performance item. The finding differs with previous studies by Hirigoyen and Poulain-Rhem (2015), Masoud and Halaseh (2017) and Kahloul et al (2022) as they show that only Tobin's Q impacts financial outcomes. Whilst the regression shows that Tobin's Q and ROA were impacted.

“INSERT TABLES 5, 6 AND 7 HERE”

We reported the outcomes of an inquiry on the moderating influence of gender diversity on the link between CSR reporting and firm financial results in Tab. 6. It is crucial to highlight that the control variable results obtained in the previous research are consistent. The effect between the ESG disclosure score and board gender diversity (ESG * BGD) on financial outcomes (ROA) is found to be positive and strongly significant (2.173, t-statistic =3.91, P-value <0.001). This shows that female directors, as well as their constructive role in monitoring and controlling managers' effective CSR implementation, can potentially improve corporate outcomes. This finding shows that gender diversity benefits management accountability (Dani *et al.*, 2019; Bear *et al.*, 2010). Thus, our Hypothesis 2 is not rejected.

Furthermore, the existence of independent board managers, as well as the dual role of CEO/Chair, have a positive and significant impact on ROA, resulting in improved corporate performance. The achieved findings indicate that gender diversity has a positive impact on CSR-related decision-making and influences firm's financial outcomes. Moreover, other features, such as board size, member independence, and the duality of the CEO/Chair job, persist to have a positive impact on financial performance.

The coefficient of the proportion of female managers is -5 showing the relation between gender diversity and ROA is negative. A unit increase in the percentage of women in the board would reduce ROA by 5%. The coefficient in this study is in line with the trade-off hypothesis. It shows the negative relation between CSR (gender diversity) and financial success (ROA). Companies assume social responsibility (hire more female employees) and commit to CSR, resulting in increased expenses (remuneration) and a competitive disadvantage, that has a detrimental impact on economic outcomes (Kahloul *et al.*, 2022). Therefore, increasing the number of female managers will have a negative effect on ROA nevertheless, this is not statistically significant. Thus, women in the board do not impact ROA. Similarly, Ionascu *et al.* (2018) suggested that the presence of women managers have no influence on business performance, measured by ROA. Their coefficient for the proportion of women on boards is 0.003, showing that it has no effect on ROA. Likewise, Simionescu *et al.* (2021), found that

female directors wielded a negative influence on performance, which is in line with the identification and social categorization theories. Women may lack sufficient management power, information, and time to influence plans, resulting in a negative effect on corporate outcomes. Nonetheless, they had an insignificant coefficient of -0.02. Whilst Akram *et al.* (2020) suggested that female directors may have close relationships with shareholders, restricting their ability to work independently, leading to no substantial impact on financial performance. In line with Chauhan and Dey (2017), the findings confirm the tokenism hypothesis and demonstrate that female managers are seen as a symbol to meet external requests. Whilst Hofstede *et al.* (2010), show that from a cultural perspective, there is a high masculinity setting in the board. Similarly, Martín-Ugedo *et al.* (2019) suggest that the number of female managers does not wield a significant effect on firm performance.

The coefficient of the proportion of independent female managers is 3.8. The proportion of women directors has a favourable link with ROA. A unit increase of independent female directors on the board would increase ROA by 3.8%. As a result, gender diversity can contribute to improve financial outcome, as independent female managers can have a positive effect on financial performance. Furthermore, increasing the number of independent female members may have a greater impact on decisions that create economic value. Independent women managers have an essential role in examining and managing managers' work, which improves business performance. The positive coefficient indicates that gender diversity is required for better managerial performance oversight and strategic decision-making. Independent female directors may promote CSR to improve business performance and income (Kahloul *et al.*, 2022). This is in line with past research by Dani *et al.* (2019) and Bear *et al.* (2010) observed that gender diversity on the board enhanced ESG performances and gave vital signs to investors, of the potential future enhancement in company reputation and financial outcome. Therefore, there are positive effects of gender diversity on ROA. However, because the coefficient in this study is not statistically significant, other relevant factors influencing financial success must be considered.

Increasing the percentage of women managers on the board has a negative effect, whereas enhancing the percentage of independent female directors has a beneficial impact. As a result, independent managers can have more knowledge about the retail sector, resulting in better decisions and financial performance, rather than gender of directors influencing decisions. However, both variables are not statistically significant, indicating that factors other than gender diversity on the board influence business financial outcome. The coefficient's p-value show no substantial impact is seen with the impact of gender diversity on ROA. This is also seen by Brahma *et al.* (2020) who found 1 or 2 women managers have a statistically insignificant effect on corporate outcome. As a result, female directors had no impact on the corporate financial outcome or ROA, which supports our hypothesis. This adds to the concept of "neutrality of social commitment in the explanation of companies' financial performance" (Kahloul *et al.*, 2022). As p-values for gender diversity variables are not statistically significant, the null hypothesis is affirmed rather than rejected. The result is consistent with previous studies by Hirigoyen and Poulain-Rehm (2015) and Masoud and Halaseh (2017).

Independent directors help protect interests of shareholders. They reduce the agency conflict between those that run the company and those that own the company. This supports outcome of previous studies, like Dahya *et al.* (2008).

Table 7 demonstrates the link between ESG disclosure (CSR reporting) and Independent Female Director (Indep.FD) as an alternative measure. The ESG* Indep variable has a positive and significant effect at the 1% level (2.115, t-statistic= 3.58, P-value<0.00), indicated by a coefficient of 2.115 and also has a positive effect on the Tobin's Q (0.146, t-statistic= 2.363, P-value=0.021). This finding validates the moderating influence of independent female in enhancing the impact of ESG disclosure on corporate financial outcome, as assessed through the return on assets (ROA).

Implications, conclusions, and future research

Gender diversity sparks debate due to women's underrepresentation in senior roles. Some argue increased female management could enhance financial outcomes, citing diverse boards' better monitoring capabilities. However, conflicting views suggest men excel in senior positions. Prior research yields mixed results regarding the impact of female managers on financial performance due to varied performance indicators. Discrepancies in findings may stem from market factors not reflected in accounting measures or ROA failing to capture perceived company potential. This study offers hypothetical insights into the role of women on retail boards, contributing to gender diversity and retail sector understanding. Unlike previous research spanning multiple countries and sectors, this study uniquely focuses on the UK retail industry. CSR is a form of self-accountability by companies, who increasingly recognise the importance of CSR in society. There is no standard or regulation of CSR, which makes it difficult to compare companies on some areas of CSR. Companies use different measures to show their CSR commitments or targets which vary in different industries.

The findings from our sample suggest that CSR does not significantly influence financial outcomes in the retail industry. However, our research reveals a strong correlation between the presence of women (a measure of CSR) and financial indicators such as ROA and Tobin's Q. Specifically, independent female managers show a robust connection with both ROA and Tobin's Q. Additionally, our findings demonstrate a significant relationship between female representation and Tobin's Q, indicating market value relative to replacement cost. Thus, gender diversity serves as a relevant indicator of financial outcomes within the UK retail sector, alongside other factors like sales growth attributed to workforce knowledge and skills enhancement (learning curve) and leverage effects on ROA. However, it's worth noting that simply increasing the number of female directors may not singularly influence financial performance. The emphasis on diversity over skills and expertise could lead to the appointment of women in higher positions without a significant impact on corporate outcomes. Further research is needed to explore the effects of female director recruitment on financial outcomes. Moreover, our findings suggest that CSR policies, including specific board structures, may not significantly affect performance and profitability. Regulators and stakeholders should be aware of the limited impact of gender diversity as a CSR measure on financial outcomes. Therefore, while businesses may integrate females into top management and engage in social and environmental practices, these actions may not necessarily lead to improved financial performance. The research result means that the theory of CSR should in future not be used to improve performance of a company. CSR should be used as a measure to improve ethical standards within a company or its reputation. The performance of a company should in future

be improved by enhancing production processes, efficiency of workforces, better marketing, and motivation of its workforce. CSR is a measure to take companies to account for the financial, social, and environmental impact of its practices on society. It should be differentiated from the financial performance of a retail company.

Recommendations should include increasing policies in companies to increase CSR. Gender equality should be promoted in companies within the retail sector with a focus on the benefits such as efficacy and efficiency. This will then lead to better production and increased incomes thus better profitability. There should be internal auditors and comparison on past performance with results after implementation of increased females on the boards. This can also include other gender quality practices such as increased female managers and additional female works on all levels. Other forms of CVSR should also be considered to address whether it impacts profitability.

References

- Abdelmoety, Z. H., Aboul-Dahab, S., and Agag, G. (2022), "A cross cultural investigation of retailers commitment to CSR and customer citizenship behaviour: The role of ethical standard and value relevance", *Journal of Retailing and Consumer Services*, Vol. 64, pp. 102796.
- Adams, R. B. (2016), "Women on boards: The superheroes of tomorrow?", *The Leadership Quarterly*, Vol. 27 No. 3, pp. 371-386.
- Aggarwal, R., Jindal, V. and Seth, R. (2019), "Board diversity and firm performance: The role of business group affiliation", *International Business Review*, Vol. 28 No. 6, p.101600.
- Ahmadi, A., Nakaa, N. and Bouri, A. (2018), "Chief Executive Officer attributes, board structures, gender diversity and firm performance among French CAC 40 listed firms", *Research in International Business and Finance*, Vol. 44, pp. 218-226.
- Ajaz, A., Shenbei, Z. and Sarfraz, M. (2020), "Delineating the influence of boardroom gender diversity on corporate social responsibility, financial performance and reputation", *Scientific Journal of Logistics*, Vol. 16 No. 1, pp. 61-74.
- Akram, F., Abrar ul Haq, M., Natarajan, V.K. and Chellakan, R.S. (2020), "Board heterogeneity and corporate performance: An insight beyond agency issues", *Cogent Business & Management*, Vol. 7 No. 1, p.1809299.
- Arayssi, M., Dah, M. and Jizi, M. (2016), "Women on boards, sustainability reporting and firm performance", *Sustainability Accounting, Management and Policy Journal*, Vol. 7 No. 3, pp. 376-401.
- Bear, S., Rahman, N. and Post, C. (2010), "The impact of board diversity and gender composition on corporate social responsibility and firm reputation", *Journal of Business Ethics*, Vol. 97, pp. 207-221.
- Belal, A. R., Cooper, S. M. and Khan, N. A. (2015), "Corporate environmental responsibility and accountability: What chance in vulnerable Bangladesh?", *Critical Perspectives on Accounting*, Vol. 33, pp. 44-58.
- Böhren, O. and Ström, R. O. (2010), "Governance and politics: Regulating independence and diversity in the boardroom", *Journal of Business Finance & Accounting*, Vol. 37, pp. 1281-1308.
- Bowen, F.E. (2000), "Environmental visibility: a trigger of green organizational response?", *Business strategy and the environment*, Vol. 9 No. 2, pp. 92-107.
- Brahma, S., Nwafor, C. and Boateng, A. (2020), "Board gender diversity and firm performance: The UK evidence", *International Journal of Finance & Economics*, Vol. 26 No. 4, pp. 5704-5719.

Brammer, S. and Pavelin, S. (2007), "Gender and Ethnic Diversity Among UK Corporate Boards", *Corporate Governance an International Review*, pp. 393-403.

BRC (2021), *Diversity and inclusion in UK retail: where are we now and what comes next?* available at: <https://brc.org.uk/media/677267/diversity-and-inclusion-in-uk-retail-in-depth-research-and-analysis-from-brc-the-mbs-group-and-pwc-2021-002.pdf>

BRC (2022), *Retailers must double down on diversity and inclusion*, available at: <https://brc.org.uk/news/corporate-affairs/retailers-must-double-down-on-diversity-and-inclusion/>

Broadbridge, A. (2007). Dominated by women: managed by men? The career development process of retail managers. *International Journal of Retail & Distribution Management*, 35(12), 956-974.

Bowen, H. R. (2013). Social responsibilities of the businessman. University of Iowa Press.

Brown, L. D. and Caylor, M. L. (2004), "Corporate governance and firm operating performance", *Review of Quantitative Finance and Accounting*, Vol. 32 No. 2, pp. 129-144.

Campbell, K. and Mínguez-Vera, A. (2007), "Gender Diversity in the Boardroom and Firm Financial Performance", *Journal of Business Ethics*, Vol. 83 No. 3, pp. 435-451.

Chandler, G. (2001). Defining corporate social responsibility. Ethical Performance Best Practice.

CFI (2022), *Corporate Social Responsibility (CSR)*, available at: <https://corporatefinanceinstitute.com/resources/knowledge/other/corporate-social-responsibility-csr/>

Chauhan, Y. and Dey, D.K. (2017), "Do female directors really add value in Indian firms?", *Journal of Multinational Financial Management*, Vol. 42, pp. 24-36.

Cook, A., & Glass, C. (2018). Women on corporate boards: Do they advance corporate social responsibility? *Human relations*, 71(7), 897-924.

Cormier, D., Magnan, M. and Van Velthoven, B. (2005), "Environmental disclosure quality in large German companies: economic incentives, public pressures or institutional conditions? *European accounting review*, Vol. 14 No. 1, pp. 3-39.

Dahya, J., Dimitrov, O. and McConnell, J. (2008), "Dominant shareholders, corporate boards, and corporate value: A cross-country analysis, *Journal of Financial Economics*, Vol. 87 No. 1, pp. 73-100.

Dal Mas, F., Tucker, W., Massaro, M., & Bagnoli, C. (2022). Corporate social responsibility in the retail business: A case study. *Corporate Social Responsibility and Environmental Management*, 29(1), 223-232.

Đặng, R., Houanti, L.H., Reddy, K. and Simioni, M. (2020), "Does board gender diversity influence firm profitability? A control function approach", *Economic Modelling*, Vol. 90, pp.168-181.

Dani, A. C., Picolo, J. D. and Klann, R. (2019), "Gender influence, social responsibility and governance in performance", *Management Journal*, Vol. 54 No. 2, pp. 154-177.

Elsayed, K. and Wahba, H. (2013), "Reinvestigating the relationship between ownership structure and inventory management: A corporate governance perspective", *International Journal of Production Economics*, Vol. 143 No. 1, pp. 207-218.

Foster, C., Whysall, P., & Harris, L. (2007). Female career progression in retailing. *International Journal of Retail & Distribution Management*, 35(12), 975-981.

Freeman, R. E. (2010). Strategic management: A stakeholder approach. *Cambridge university press*.

Gable, M., Fiorito, S. S., & Topol, M. T. (2005). The Current Status of Women in US Department Store Retailing: 2004. *The International Review of Retail, Distribution and Consumer Research*, 15(2), 217-225.

- Gaio, C. and Henriques, R. (2020), "Social Responsibility and Financial Performance: The Case of STOXX Europe Index", *Corporate Social Responsibility*.
- Galbreath, J. (2018), "Is board gender diversity linked to financial performance? The mediating mechanism of CSR", *Business & Society*, Vol. 57 No. 5, pp. 863-889.
- Gallo, P. and Christensen, L. (2011), "Firm size matters: An empirical investigation of organizational size and ownership on sustainability-related behaviors", *Business & Society*, Vol. 50 No. 2, pp. 315-349.
- García-Meca, E., García-Sánchez, I. M. and Martínez-Ferrero, J. (2015), "Board diversity and its effects on bank performance: An international analysis", *Journal of Banking & Finance*, Vol. 53, pp. 202-214.
- Ginder, W., and Byun, S. E. (2022), "To trust or not to trust? The interplay between labor-related CSR claim type and prior CSR reputation of apparel retailers", *Journal of retailing and consumer services*, Vol. 65, 102875.
- Godefroit-Winkel, D., Schill, M. and Diop-Sall, F. (2022), "Does environmental corporate social responsibility increase consumer loyalty?", *International Journal of Retail & Distribution Management*, Vol. 50 No. 4, pp. 417-436.
- Gordini, N. and Rancati, E. (2017)", Gender diversity in the Italian boardroom and firm financial performance", *Management Research Review*, Vol. 40 No. 1, pp. 75-94.
- Greiner, L. E. (1972), "Evolution and Revolution as Organizations Grow", *Readings in Strategic Management*, pp. 373-387.
- H&M, 2023. Sustainability, available at: <https://hmgroup.com/sustainability/> [Accessed 25 January 2023].
- Halme, M. and Huse, M. (1997), "The influence of corporate governance, industry and country factors on environmental reporting", *Scandinavian Journal of Management*, Vol. 13, p. 137–157.
- Harjoto, M., & Laksmana, I. (2018). The impact of corporate social responsibility on risk taking and firm value. *Journal of business ethics*, 151, 353-373.
- Heijden, J. and Zhang, L. (2019), "The effect of gender diversity on firm performance", *Jonkoping International Business School*, pp. 1-57.
- He, J. and Huang, Z. (2011), "Board informal hierarchy and firm financial performance: Exploring a tacit structure guiding boardroom interactions", *Academy of Management Journal*, Vol. 54 No. 6, pp. 1119-1139.
- Hirigoyen, G. and Poulain-Rehm, T. (2015), "Relationships between corporate social responsibility and financial performance: What is the causality?", *Journal of Business & Management*, Vol. 4 No. 1, pp. 18-43.
- Hoffman, A. (1999), "Institutional evolution and change: Environmentalism and the US chemical industry", *Academy of Management Journal*, Vol. 42, p. 351–371.
- Hofstede, G., Hofstede, G. and Minkov, M. (2010), *Cultures and Organizations. SOFTWARE OF THE MIND. Intercultural Cooperation and Its Importance for Survival*. New York: McGraw-Hill.
- Hou, T. C. T. (2019), "The relationship between corporate social responsibility and sustainable financial performance: Firm-level evidence from Taiwan", *Corporate Social Responsibility and Environmental Management*, Vol. 26 No. 1, pp. 19-28.
- Ionascu, M., Ionascu, I., Sacarin, M. and Minu, M. (2018), "Women on boards and financial performance: evidence from a European emerging market", *Sustainability* Vol. 10 No. 5, p. 1644.
- Jenkins, H. and Yakovleva, N. (2006), "Corporate social responsibility in the mining industry: Exploring trends in social and environmental disclosure", *Journal of Cleaner Production*, Vol. 14, p. 271–284.

- Kahloul, I., Sbair, H. and Grira, J. (2022), "Does Corporate Social Responsibility reporting improve financial performance? The moderating role of board diversity and gender composition", *The Quarterly Review of Economics and Finance*, Vol. 84, pp. 305-314.
- Kennedy, P. (2003), *A guide to econometrics (5th ed.)*, Cambridge, MA: MIT Press.
- King, A. and Lenox, M. (2002), "Exploring the locus of profitable pollution reduction", *Management Science*, Vol. 48, p. 289-299.
- Książak, P. (2016), "The Benefits from CSR for a Company and Society", *Journal of Corporate Responsibility and Leadership*, Vol. 3 No. 4, pp. 53-65.
- Lau, C., Hulpke, J. F., To, M., & Kelly, A. (2007). Can ethical decision making be taught? The JUSTICE approach. *Social Responsibility Journal*, 3(2), 3-10.
- Lee, A. and Chung, T.L.D. (2023), "Transparency in corporate social responsibility communication on social media", *International Journal of Retail & Distribution Management*, Vol. 51 No. 5, pp. 590-610.
- Lin, C.-S., Chang, R.-Y. and Dang, V. T. (2015), "An Integrated Model to Explain How Corporate Social Responsibility Affects Corporate Financial Performance", *Sustainability*, Vol. 7, pp. 8292-8311.
- Line, M., Hawley, H. and Krut, R. (2002), "The development of global environmental and social reporting", *Corporate Environmental Strategy*, Vol. 9, p. 69-78.
- Liu, Y., Wei, Z. and Xie, F. (2014), "Do women directors improve firm performance in China?", *Journal of Corporate Finance*, Vol. 28, pp. 169-184.
- Low, D. C., Roberts, H. and Whiting, R. H. (2015), "Board gender diversity and firm performance: Empirical evidence from Hong Kong, South Korea, Malaysia and Singapore", *Pacific-Basin Finance Journal*, Vol. 35, pp. 381-401.
- Lu, W., Ye, M., Chau, K. W. and Flanagan, R. (2018), "The paradoxical nexus between corporate social responsibility and sustainable financial performance: Evidence from the international construction business", *Corporate Social Responsibility and Environmental Management*, Vol. 5 No. 5, pp. 844-852.
- Maqbool, S. and Zameer, M. N. (2018), "Corporate social responsibility and financial performance: An empirical analysis of Indian banks", *Future Business Journal*, Vol. 4 No. 1, pp. 84-93.
- Martínez-Ferrero, J. and Frías-Aceituno, J. V. (2015), "Relationship between sustainable development and financial performance: International empirical research", *Business Strategy and the Environment*, Vol. 24 No. 1, pp. 20-39.
- Martín-Ugedo, J. F. and Mínguez-Vera, A. (2014), "Firm performance and women on the board: Evidence from Spanish small and medium-sized enterprises", *Feminist Economics*, Vol. 20, pp. 136-162.
- Martín-Ugedo, J., Mínguez-Vera, A. and Rossi, F. (2019), "Female directors and firm performance in Italian and Spanish listed firms: does masculinity matter?", *Academia Revista Latinoamericana De Administración*, Vol. 32 No. 3, pp. 411-436.
- Masoud, N. and Halaseh, A. (2017), "Corporate social responsibility and company performance: An empirical analysis of Jordanian companies listed on Amman stock exchange", *British Journal of Education, Society & Behavioural Science*, Vol. 19 No. 1, pp. 1-26.
- Mejri, C. A., and Bhatli, D. (2014), "CSR: Consumer responses to the social quality of private labels", *Journal of Retailing and Consumer Services*, Vol. 21 No. 3, 357-363.
- McWilliams, A. and Siegel, D. (2000), "Corporate social responsibility and financial performance: Correlation or misspecification?", *Strategic Management Journal*, Vol. 21, p. 603-609.
- Moore, G. (2001), "Corporate social and financial performance: An investigation in the UK supermarket industry", *Journal of Business Ethics*, Vol. 34, pp. 299-315.

- Muflih, M. (2021), "The link between corporate social responsibility and customer loyalty: Empirical evidence from the Islamic banking industry", *Journal of Retailing and Consumer Services*, Vol. 61, 102558.
- Nettleton, D. (2014), *Commercial Data Mining Processing, Analysis and Modeling for Predictive Analytics Projects*. s.l.: Morgan Kaufmann.
- New Look, 2023. *Kind to our core*, available at: <https://www.newlook.com/uk/sustainability> [Accessed 25 January 2023].
- Nguyen, T., Locke, S. and Reddy, K. (2015), "Does boardroom gender diversity matter? Evidence from a transitional economy", *International Review of Economics & Finance*, Vol. 37, pp. 184-202.
- Oradi, J., & Izadi, J. (2020). Audit committee gender diversity and financial reporting: evidence from restatements. *Managerial Auditing Journal*, 35(1), 67-92.
- Oueslati, H., Bennaghmouch-Maire, S., Deparis, M. and Paquier, M.C. (2023), "Importance and conditions of effectiveness of CSR communications in franchise networks", *International Journal of Retail & Distribution Management*.
- Rao, K. and Tilt, C. (2016), "Board composition and corporate social responsibility: The role of diversity, gender, strategy and decision making", *Journal of Business Ethics*, Vol. 138, pp. 327-347.
- Ruiz, B., and Garcia, J. A. (2021), "Analysing the relationship between CSR and reputation in the banking sector", *Journal of Retailing and Consumer Services*, Vol. 61, 102552.
- Russo, M. V. and Fouts, P. A. (1997), "A resource-based perspective on corporate environmental performance and profitability", *Academy of Management Journal*, Vol. 40 No. 3, pp. 534-559.
- Singh, M. P., Chakraborty, A., & Roy, M. (2016). Entrepreneurial commitment, organizational sustainability and business performance of manufacturing MSMEs: Evidence from India. *Int. J. Appl. Bus. Econ. Res*, 14(6), 4615-4631.
- Staub-Bisang, M. (2012). Sustainable investing for institutional investors: Risks, regulations and strategies. *John Wiley & Sons*.
- Setó-Pamies, D. (2015), "The relationship between women directors and corporate social responsibility", *Corporate Social Responsibility and Environmental Management*, Vol. 22 No. 6, pp. 334-345.
- Sholl, A. (2017), *Retail leads the way in gender diversity*, available at: <https://www.drapersonline.com/news/retail-leads-the-way-in-gender-diversity>
- Siciliano, J. I. (1996). The relationship of board member diversity to organizational performance. *Journal of business ethics*, 15, 1313-1320.
- Simionescu, L. N., Gherghina, S. C., Tawil, H. and Sheikha, Z. (2021), "Does board gender diversity affect firm performance? Empirical evidence from Standard & Poor's 500 Information Technology Sector", *Financial Innovation*, Vol. 7.
- Toé, M. (2014), "Gender diversity and corporate governance: Endogenous determinants", *Revue Française de Gestion*, Vol. 238, pp. 153-178.
- Tu, J. and Huang, H. (2015), "Analysis on the relationship between green accounting and green design for enterprises", *Sustainability*, Vol. 7, pp. 6264-6277.
- Wahba, H. and Elsayed, K. (2015), "The mediating effect of financial performance on the relationship between social responsibility and ownership structure", *Future Business Journal*, Vol. 1 No. 1, pp. 1-12.
- Yarram, S. R. and Adapa, S. (2021), "Board gender diversity and corporate social responsibility: Is there a case for critical mass?", *Journal of Cleaner Production*, Vol. 278, p.123319.

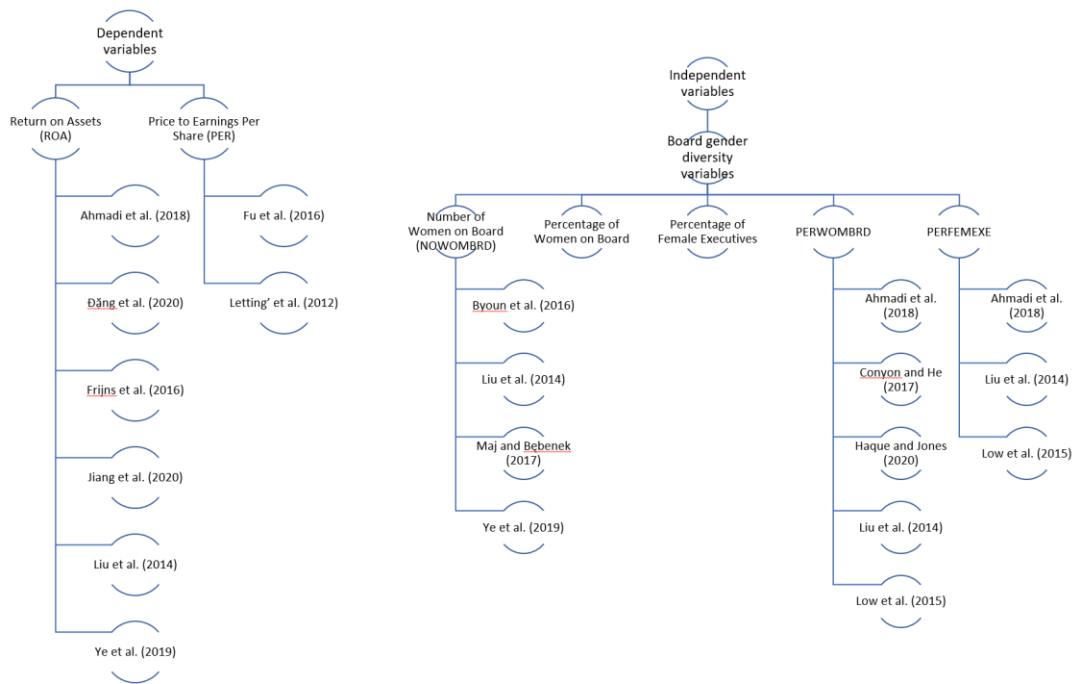


Figure1. Dependent and Independent variables that used in the previous research.

Table 1. Some of the previous studies who used dependent variables such as ROA, Per in their studies in area of Gender diversity.

<u>Previous Studies</u>	<u>Var. Abbr</u>	<u>Variable name</u>	<u>Definition</u>
Liu et al. (2014), Ahmadi et al. (2018), Ye et al. (2019), Simionescu et al. (2021), Jiang et al. (2020)	ROA	Return on Assets	Net income divided by average total assets
Fu et al. (2016), Letting' et al. (2012)	PER	Price to Earnings Per Share	Stock price divided by earnings per share
Byoun et al. (2016), Liu et al. (2014), Maj and Bebenek (2017), Ye et al. (2019)	NOWOMBRD	Number of Women on Board	Number of women on board
Ahmadi et al. (2018), Conyon and He (2017), Haque and Jones (2020), Low et al. (2015)	PERWOMBRD	Percentage of Women on Board	Number of women on board divided by board seats
Liu et al. (2014), Low et al. (2015)	PERFEMEXE	Percentage of Female Executives	Number of women executives divided by total executives
Aggarwal et al. (2019), Haque and Jones (2020), Rockey and Zakir (2020)	SIZEBRD	Size of the Board	Number of directors
Aggarwal et al. (2019)	BRDMEET	Number of Board Meetings	Number of board meetings
Byoun et al. (2016), Haque and Jones (2020)	BRDDUR	Board Duration	Number of years since board appointment
Eulerich et al. (2014), Song et al. (2020)	AGEYNGDIR	Age of the Youngest Directors	Age of the youngest directors

Eulerich et al. (2014), Song et al. (2020)	AGEOLDDIR	Age of the Oldest Directors	Age of the oldest directors
Chen et al. (2017), Jiang et al. (2020), Naciti (2019)	INDEPDIR	Number of Independent Directors	Number of independent directors
Conyon and He (2004)	BRDCOMP	Total Board Compensation Paid	Board members total compensation
Badertscher et al. (2013), Conyon and He (2004)	EXECOMP	Total Executive Compensation Paid	Executives' total compensation
Badertscher et al. (2013), Byoun et al. (2016)	TA	Firm size	Total assets
Naciti (2019)	EMP	Employees	Number of employees
Ogbeide and Akanji (2017)	FCF	Free Cash Flow	Cash available to be distributed to owners
Ogbeide and Akanji (2017)	CFFO	Cash Flow from Operating Activities	Cash inflows and outflows from main operations
Ogbeide and Akanji (2017)	CFFF	Cash Flow from Financing Activities	Cash to raise capital or repay investors
Delen et al. (2013)	CR	Cash Ratio	Cash and cash equivalent

Table 2. Variable definitions

Variable	Denoted as	Measured as
Return on assets	ROA	Net income/Total assets x 100
Tobin's Q	TQ	(Market capitalization + total debt)/total assets
Reporting about CSR	ESG	The ESG disclosure score comes from the ESG information disclosure scores available in the Thomson Reuters
Company size	Size	The natural logarithm of total assets of the company
Debt ratio (leverage)	Leverage	Total debt/total assets
Rate of sales growth	Growth	Difference in sales/sales from last year
Company age	Age	The natural logarithm of the age of the company using the IPO
Board size	BDSIZE	Number of board members
Proportion of female directors	FD	Number of female directors/total number of directors
Proportion of independent female directors on the board	IFD	Number of independent female directors/total number of directors
Percentage of independent directors	IndepDir	Number of independent directors/total number of directors

Table 3 Descriptive statistics for data collection of retail industry sample

Variables	Mean	Std. Dev.	25th Percentiles	Median	75th Percentiles	Skewness	Kurtosis
ROA	7.261	0.580	3.389	6.242	11.500	-0.139	1.769
Tobin's Q	0.962	0.067	0.478	0.808	1.297	1.202	0.812
ESG	21.911	0.886	14.875	22.050	29.125	-0.179	-1.009
Size	16.195	0.155	15.190	16.325	17.640	-0.580	-0.815
Leverage	0.604	0.015	0.516	0.636	0.710	-0.442	-0.848
Growth	0.054	0.014	-0.012	0.028	0.086	3.079	15.650
Age	3.548	0.058	3.124	3.555	3.956	-0.156	-0.856
BDSIZE	9.800	0.263	8.000	10.000	11.000	0.260	-0.142
FD	0.263	0.012	0.220	0.273	0.333	-0.370	0.370
Indep.FD	0.247	0.011	0.195	0.250	0.300	-0.372	0.375
Indep.D	0.759	0.007	0.700	0.774	0.805	-0.480	-0.604

Note: the number of observation is ninety firm-year observations

Table 4. Pearson and Spearman correlation coefficients between variables

Variables	ROA	Tobin's Q	ESG	Size	Lev	Growth	Age	BDSIZE	FD	Indep.FD	InDdep.D
ROA	1	.788** <.001	0.047 0.658	.348** <.001	-.263* 0.012	.357** <.001	0.047 0.663	-0.190 0.073	-0.142 0.183	-0.141 0.184	.265* 0.011
Tobin's Q	.658** <.001	1	-0.192 0.070	-.513** <.001	.358** <.001	.276** 0.009	-0.109 0.305	.459** <.001	.272** 0.010	-.233* 0.027	.260* 0.013
ESG	0.047 0.657	-0.198 0.061	1	.280** 0.008	.597** <.001	-0.132 0.215	.509** <.001	.465** <.001	0.021 0.846	0.083 0.437	0.017 0.877
Size	.381** <.001	-.545** <.001	0.181 0.087	1	.564** <.001	-.393** <.001	0.187 0.077	.850** <.001	.513** <.001	.487** <.001	0.114 0.284
Leverage	-0.201 0.057	-.333** 0.001	.648** <.001	.416** <.001	1	-0.181 0.087	.292** 0.005	.518** <.001	.223* 0.034	.374** <.001	0.175 0.099
Growth	.271** 0.010	.305** 0.003	-0.149 0.162	.372** <.001	-0.033 0.760	1	-0.161 0.130	.368** <.001	-.259* 0.014	-.239* 0.023	-0.011 0.922
Age	0.044 0.683	-0.111 0.298	.462** <.001	0.201 0.058	.267* 0.011	-0.185 0.080	1	.392** <.001	.440** <.001	.514** <.001	.518** <.001
BDSIZE	-0.147 0.165	-.421** <.001	.461** <.001	.823** <.001	.453** <.001	-.362** <.001	.381** <.001	1	.568** <.001	.517** <.001	0.183 0.084
FD	-0.059 0.582	-0.188 0.076	-0.021 0.847	.565** <.001	0.112 0.293	-.253* 0.016	.390** <.001	.583** <.001	1	.873** <.001	.333** 0.001
Indep.FD	-0.014 0.897	-0.122 0.252	0.053 0.617	.553** <.001	.278** 0.008	-.230* 0.029	.473** <.001	.576** <.001	.908** <.001	1	.457** <.001
InDdep.D	.260* 0.013	.314** 0.003	-0.024 0.822	0.106 0.318	0.121 0.256	0.087 0.413	.524** <.001	0.159 0.134	.367** <.001	.482** <.001	1

Table 2 presents the Spearman and Pearson correlation coefficients along with their respective significance levels. The correlation coefficients above the diagonal represent Spearman correlations, while the coefficients below the diagonal represent Pearson correlations. The sample comprises ninety firm-year observations spanning 10 years, from January 2012 to December 2021. The P-value for each variable is included alongside its coefficient to indicate the level of significance. Note: *** denotes statistical significance at 1%, ** denotes statistical significance at 5%, * denotes statistical significance at 10%

Table 5. The relationship between ESG disclosure and financial performance both ROA and Tobin's Q

Variables	ROA		Tobin's Q	
	<i>Coeff.</i>	<i>t-Statistic</i>	<i>Coeff.</i>	<i>t-Statistic</i>
Intercept	23.652	2.239 0.028	2.554	2.407 0.018
ESG	0.305	2.688 0.009	0.025	2.176 0.033
Size	-2.070	-2.990 0.004	-0.211	-3.036 0.003
Leverage	-0.175	-3.164 0.002	-0.017	-3.133 0.002
Growth	0.076	1.879 0.064	0.004	0.876 0.384
Age	-3.382	-2.505 0.014	-0.501	-3.693 <.001
BDSIZE	0.704	1.563 0.122	0.007	0.163 0.871
FD	-11.989	-1.052 0.296	-1.876	-1.638 0.105
Indep.FD	24.304	1.860 0.067	3.039	2.315 0.023
Indep.D	30.174	3.071 0.003	4.966	5.029 <.001
<i>R-Squared</i>		0.419		0.559

Notes, the analysis conducted in this study encompasses a well-balanced panel consisting of 90 firm year observation over the period from 2012 to 2021. *, **, and *** refer to level of significance of 10%, 5%, and 1%, respectively.

Table 6. The relationship between ESG disclosure (CSR reporting) and financial performance considering P/B ratio as an alternative measure

Variables	ROA		Tobin's Q	
	<i>Coeff.</i>	<i>t-Statistic</i>	<i>Coeff.</i>	<i>t-Statistic</i>
Intercept	40.469	3.804 <.001	3.925	3.556 <.001
ESG	-0.252	-1.428 0.157	-0.021	-1.125 0.264
ESG*FD	2.173	3.91 <.001	0.177	3.072 0.003
Size	-2.233	-3.494 <.001	-0.225	-3.386 0.001
Leverage	-0.159	-3.11 0.003	-0.016	-3.037 0.003
Growth	0.047	1.241 0.218	0.001	0.306 0.760
Age	-2.564	-2.034 0.045	-0.434	-3.319 0.001
BDSIZE	0.439	1.044 0.300	-0.014	-0.327 0.745
FD	-41.619	-3.214 0.002	-4.292	-3.195 0.002
Indep.FD	6.571	0.511 0.611	1.594	1.194 0.236
ID	25.677	2.814 0.006	4.599	4.859 <.001
<i>R-Squared</i>		0.588		0.536

Table 7. The relationship between ESG disclosure (CSR reporting) and Independent Female Director (Indep.FD) as an alternative measure

Variables	ROA		Tobin's Q	
	<i>Coeff.</i>	<i>t-Statistic</i>	<i>Coeff.</i>	<i>t-Statistic</i>
Intercept	40.314	3.697	3.706	3.247
		<.001		0.002
ESG	-0.225	-1.238	-0.012	-0.622
		0.219		0.536
ESG*Indep.FD	2.115	3.58	0.146	2.363
		<.001		0.021
Size	-2.112	-3.268	-0.214	-3.165
		0.002		0.002
Leverage	-0.158	-3.042	-0.016	-2.989
		0.003		0.004
Growth	0.052	1.343	0.002	0.466
		0.183		0.643
Age	-2.694	-2.114	-0.453	-3.398
		0.038		0.001
BDSIZE	0.456	1.072	-0.01	-0.218
		0.287		0.828
FD	-8.708	-0.815	-1.65	-1.475
		0.417		0.144
Indep.FD	-25.51	-1.379	-0.403	-0.208
		0.172		0.836
ID	23.054	2.456	4.474	4.553
		0.016		<.001
<i>R-Squared</i>		0.500		0.588