THE IMPACT OF CORPORATE SOCIAL RESPONSIBILITY ON CORPORATE FINANCIAL PERFORMANCE

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Abstract

This study analyzes the relationship between corporate social responsibility (CSR) and the corporate financial performance of companies listed on the Toronto Stock Exchange (TSX 60 Companies). Environmental, social, and governance disclosure scores are used to measure CSR based on three dimensions; Environmental (ENV), social (SOC), and governance (GOV) performance. Return on asset (ROA), return on equity (ROE) and earnings per share (EPS) were used to measure corporate financial performance. I used a partial least squares path modelling package in RStudio to analyze the relationship between the dependent and the independent variables for the period 2018–2022. The results revealed that ENV has a significant positive relationship with ROA and SOC has a significant negative relationship with ROA. Whereas ENV has a significant negative relationship with ROE and SOC has a significant positive relationship with ROE. Also, ENV has a significant negative relationship with EPS; no significant relationship was found between SOC and EPS. GOV does not exhibit a significant relationship with ROA, ROE, and EPS. However, I found that the relationship between the three dimensions of CSR and the measure of corporate financial performance is moderated by company size and risk. These findings highlight that various CSR activities impact different aspects of company performance in unique ways. This result can guide managers in prioritizing implementing CSR activities based on their desired financial outcomes.

Keywords: corporate social responsibility, financial performance.

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Introduction

1.1. The Background and Significance of Corporate Social Responsibility

CSR has emerged as a significant factor that shapes the strategies and operations of businesses. Companies are becoming more concerned about the financial impact of allocating their resources to address social and environmental issues. There have been growing expectations from the public and well-meaning organizations for companies to address societal and environmental challenges while actively pursuing financial objectives in recent years. As Tarrant (1976) noted, companies are not solely economic entities but also social and political entities. Consequently, companies have responsibilities to both their shareholders and stockholders, including employees, creditors, and the communities in which they operate. Like other developed economies, Canada has witnessed a growing emphasis on CSR, with the government and various industries acknowledging the importance of sustainable business practices, ethical considerations, and involvement in societal and environmental issues. Over the years, Canadian companies have increasingly integrated CSR into their business strategies and reported on their sustainability efforts. The Canadian government has also implemented policies, laws, and regulations that encourage CSR practices. An example is the Canadian Environmental Protection Act (CEPA), which establishes a legal framework for environmentally responsible practices, including pollution prevention and waste management (Government of Canada, 2023).

CSR has evolved from a philanthropic endeavor to a core business strategy with profound implications for modern businesses. CSR practices are no longer a mere option but a necessity for companies seeking to thrive in an era characterized by heightened

social and environmental awareness. Embracing CSR benefits society and serves as a strategic imperative for organizations aiming to manage risks, gain competitive advantage, enhance reputation, and foster long-term value creation (Margolis et al., 2009). Companies develop CSR business strategies as part of their effort to gain competitive advantage (Carroll, 2008). Stakeholders, including customers, employees, investors, and communities, have high expectations of companies. Investors are now showing interest not only in a company's financial returns but also in their social impacts. They are increasingly concerned about a company's environmental, social, and governance (ESG) performance. Customers now expect responsible behaviors from companies they do business with, and the communities within which a business operates also have expectations from companies. Trust and support obtained from the community within which a company operates may impact the company's future sustainability (Gray et al., 1995). Hence, businesses must consider the social interests of their shareholders and stakeholders (e.g., host communities) in their decision-making processes (Sarkar, 2005). CSR is a type of corporate investment and how CSR activities affect financial performance has become a topic of great interest. Recently, research on the relationship between CSR and financial performance has focused on specific industries in rapidly growing sectors like financial services, energy, and information technology industries in developed countries. This trend is driven by the rapid development within these industries in recent years, resulting in heightened stakeholder expectations and greater public scrutiny. For example, the energy sector has shifted from traditional energy production to renewable and sustainable energy sources. This transition is driven by a global push towards reducing carbon emissions and improving environmental sustainability. Scholars,

practitioners, and investors have become increasingly interested in understanding how CSR practices and their disclosure influence a company's financial performance. Managers are also interested in knowing whether improving the performance of CSR activities will be beneficial in the long run (Coelho et al., 2023).

While a growing body of literature has explored the relationship between CSR and financial performance, findings remain mixed and contradictory**.** While some studies have found negative relationships (Han et al., 2016; Moore, 2019), others have found positive relationships (Preston & O'Bannon, 1997; Ruf et al., 2001; Russo & Fouts, 1997). However, some studies have found no conclusive relationship between CSR and financial performance (Abbott & Monsen, 1979; Griffin & Mahon, 1997; McWilliams & Siegel, 2000). Furthermore, some scholars insist that the relationship between CSR and financial performance depends on the specific CSR element a company implements, or the stakeholder group a company's CSR initiatives target (Pang & Yuan, 2019). Cho et al. (2019) argue that a positive relationship only exists between financial performance and CSR when certain CSR activities are implemented. While some scholars have found that CSR activities that address environmental issues majorly interact with financial performance (Iwata & Okada, 2011), others have found that CSR activities that address social issues interact more with financial performance (Drucker, 1984). Moreover, while the relationship between CSR and financial performance has been studied in several domains and industries in various countries (e.g., Canada, the United States, and the United Kingdom) with diverse findings, it is still understudied in certain domains and industries in Canada that are important to its socio-economic development. Particularly, the relationship between CSR and financial performance among big companies listed on the

Canadian Stock Exchange is yet to be adequately studied. Hence, in this research, I aim to investigate the relationship between CSR and financial performance among the companies listed on the Toronto Stock Exchange, the biggest of the eight stock exchanges in Canada. To the best of my knowledge, studies on listed companies have yet to explore the relationship between CSR and financial performance focused on the Toronto Stock Exchange 60 (TSX 60) companies.

1.2. Rationale for Studying TSX 60 Companies

The TSX 60 companies are publicly listed entities comprising some of Canada's largest and most highly capitalized companies that have significant socio-economic impact on Canada. For example, the TSX 60 companies are major employers of labor from the Canadian workforce, and they play a critical role in attracting investment capital both domestically and internationally. Also, the TSX 60 companies comprise diverse industries, including finance, energy, technology, etc. Analyzing company data from various industries can thus offer a comprehensive and nuanced understanding of how CSR practices may affect financial outcomes based on sector-specific dynamics and challenges. The TSX 60 represents a broad cross-section of the Canadian economy. Studying these companies offers unique insights due to their significant market capitalization, diverse industries, and substantial influence on economic and social policies in Canada. Unlike smaller firms, TSX 60 companies have the resources and visibility to implement comprehensive CSR initiatives. Hence, understanding how CSR practices affect their financial performance will contribute to the broader discourse on the impact of CSR practices on financial performance and their implications for the Canadian economy and the global economy at large. Furthermore, the findings can guide business

leaders in making informed decisions regarding resource allocation, strategic planning, and stakeholders' engagements. Additionally, the findings from this research can support the assessment of Canadian corporations on how they stack up against international peers in terms of CSR integration and financial outcomes (Makni & Bellavance, 2009).

While previous studies on CSR and financial performance have focused on indices such as the S&P 500 in the United States and the FTSE 100 in the United Kingdom (Dyer et al., 2006; Elmghaamez & Olarewaju, 2022), there is a gap in the literature regarding the Canadian context. Although these studies provide valuable insights, they often reflect the dynamics of their respective regions and markets. This study examines the relationship between CSR and financial performance using a Canadian sample represented by the TSX 60. This study contributes to the literature by offering a Canadian perspective; Canada has distinct regulations and policies regarding environmental sustainability and corporate governance, which may influence CSR practices differently than in other regions. By analyzing the relationship between CSR and financial performance of companies listed on one of Canada's premier stock exchanges, I aim to contribute to understanding whether and how CSR practices and disclosure impact the financial outcomes of companies in diverse sectors in the Canadian context. In this paper, CSR comprises Environmental, Social, and Governance responsibility.

1.3. Research Objectives and Questions

The primary objective of this research is to complement the existing literature by explicitly studying the relationship between CSR and financial performance among the TSX 60 companies in Canada. To achieve this objective, this research aims to answer

the overarching research question, "*Is there a correlation between CSR practices and the financial performance of TSX 60 companies?*" Specifically, the research aims to address the following questions:

1. Is there a relationship between CSR practices and the financial performance of TSX 60 companies?
2. Are the relationships moderated by company size and company risk?

1.4. Structure of the Thesis

The subsequent sections of this research will be organized as follows: Chapter 2 will review relevant literature on CSR, financial performance, and their interrelationship. Chapter 3 will outline the research design, including data collection. Chapter 4 will present the data analysis of the study; Chapter 5 will present and discuss the empirical findings of the study; Chapter 6 will present the conclusion and the future research line.

Literature Review

2.1. The Concept of Corporate Social Responsibility

The concept of Corporate Social Responsibility (CSR) can be traced back to the early 20th century (Smith, 2000). However, it was not until the 1950s and 1960s, when businesses began to recognize the importance of socially responsible practices, that it garnered scholarly attention (Carroll, 2008). Howard Bowen is regarded as the father of CSR, and his seminal work, *Social Responsibilities of the Businessman* (1953/2013), laid the foundation for CSR as an academic and managerial discipline (Carroll, 1999). Bowen believed that the actions and operations of businesses significantly impact society, so businesses need to consider the impact of their business decisions on the well-being of the society and environment in which they operate (Latapí Agudelo et al., 2019). CSR has been defined in various ways by different scholars reflecting the diverse perspectives of CSR. While there is no universally accepted definition of CSR, it is commonly understood to be a framework through which companies address economic, social, and environmental challenges to benefit society (Waddock & Smith, 2000). It has also been described as a voluntary action aimed at creating sustainable value for a company's stakeholders, including shareholders, employees, communities, and the environment (Swanson, 1999). McWilliams and Siegel (2001) describe it as a responsible action taken to improve societal well-being, without a compulsory economic or legal requirement to do so. Similarly, Smith (2001) defines CSR as actions and decisions aimed at minimizing harm and maximizing a firm's long-term positive impact on society without legal mandates to do so. Bowen (1953/2013) defined CSR as the ethical obligation of business leaders to make decisions that align with societal goals and values, underscoring the responsibility

of businesses to take actions that benefit society. Societal expectations and ethical standards place a moral and social responsibility on firms to engage in activities that extend beyond profit-making and contribute to the betterment of society (Frederick, 1986).

CSR has also been defined by institutions and organizations. The most general institutional definition used in most studies is that suggested by The European Commission in 2001, which describes CSR as the voluntary integration of social and environmental concerns by a firm in corporate management and their relationship with their stakeholders (European Commission, 2001; Friedman, 2007). The most recent definition of CSR provided by The International Organization for Standardization (ISO 26000) in November 2010 describes CSR as "the responsibility of an organization in relation to the impact of its decisions and activities on society and the environment, through transparent and ethical behavior that contributes to sustainable development and takes into account the expectations of stakeholder" (Cho et al., 2019, p. 4; IOS, 2010, p. 3; Moratis & Cochius, p. 22, n. 9). The definitions of CSR proposed by scholars, institutions, and organizations, suggest CSR can be described as a concept allowing companies voluntarily to incorporate addressing social and environmental concerns into their businesses to meet stakeholder expectations.

2.2. Theoretical Framework

Stakeholder theory is fundamentally rooted in the concept that organizations do not operate in isolation but rather function as part of a broad network of individuals, groups, and entities known as stakeholders (Freeman & Dymitriyev, 2017). Branco & Rodriques

(2007) refer to stakeholders as individuals or entities who provide critical resources to a company, entrust something of value with a degree of risk in a company, and possess a substantial degree of power that can impact a company's performance. They argue that stakeholders are often directly or indirectly affected by the decisions and actions of organizations; hence, the stakeholder theory underscores the need for organizations to consider the interests and concerns of their stakeholders in their decision-making processes. Stakeholder theory identifies key entities such as shareholders, creditors, customers, employees, suppliers, and the community within which a company operates as stakeholders (Freeman, 1998/2001).

The proponents of stakeholder theory believe that one of the primary goals of a company should be to build and maintain favorable relationships with its stakeholders (Werhane & Freeman, 1999). As Davis (1973) points out, the nature of the relationship between a company and its stakeholders can significantly influence a company's long-term survival and success. Companies can gain support from stakeholders and build a strong relationship with them by actively participating in CSR initiatives (Nirino et al., 2020). Companies that participate in extensive CSR initiatives are more likely to enhance their reputation in the market, attract highly skilled employees, and increase their ability to demand premium prices for their products or services (Cochran & Wood, 1984). CSR activities can be seen as an investment in capabilities that allow a company to differentiate itself from competitors and balance the competitive interests of all its stakeholders (Orlitzky et al., 2003). Cochran et al. (1985) argue that CSR activities can alleviate conflicts of interest between firms and stakeholders and ultimately increase a firm's financial performance and corporate value. Similarly, Yusoff and Adamu (2016) argue

that CSR activities fulfill societal and ethical expectations and contribute to building trust and goodwill among stakeholders, which can translate into financial gains. CSR activities are recognized for their capacity to create value for stakeholders. According to (Cochran et al., 1985), companies that incorporate stakeholder interests into their strategic decisions often achieve considerable stakeholder satisfaction, which, in turn, positively influences their financial performance. Based on stakeholder theory, we can expect CSR activities to affect corporate financial performance positively (Scholtens, 2008).

Another framework that supports how organizations leverage CSR to achieve positive financial performance is the resource-based view (RBV) of the firm. According to this theory, CSR activities can be viewed as strategic resources that provide firms with competitive advantages. CSR initiatives can lead to the development of valuable intangible assets, such as brand reputation and customer loyalty, which, in turn, contribute to a firm's competitive advantage. By integrating CSR into their core business strategies, firms can enhance their competitive positioning, attract and retain customers, and differentiate themselves from competitors. These strategic resources not only bolster the firm’s reputation but also build stronger relationships with stakeholders, thereby positively impacting financial outcomes. Mowery et al. (1998) assert that organizations possess a unique collection of capabilities and resources that they can exploit to gain competitive advantages and improve financial performance.

2.3. Literature Review

While the number of academic studies on CSR and corporate financial performance has increased substantially in recent years, there is still no clear consensus concerning whether investment in socially responsible initiatives is favorable or detrimental to corporate financial performance. Research on the impact of CSR on corporate financial performance has yielded findings that can be broadly classified into three distinct categories. The first research category shows a positive effect of CSR on corporate financial performance. Kapoor and Sandhu (2010) examine whether CSR impacts the financial performance of companies in India while controlling for variables such as firm size, risk, and age of the firm. They analyzed secondary data from 1999-2000 to 2005-2006 on CSR and corporate financial performance of 93 companies in India. The results of their study indicate a significant positive impact of CSR on corporate profitability. Their study highlights the positive effects of CSR on a company's public image, customer preferences, fundraising capabilities, and relationship with government entities, which translates into favourable financial performance. Another study, by Okafor and Adusei (2021) also shows that increased CSR activities by companies improved their revenue and profitability. Their study investigates the effect of CSR on the financial performance of tech companies in the United States. They sampled data from 97 United States tech companies on the S&P 500 index. They measured financial performance with net profit margin return on assets, return on equity, revenue growth, and firm value. Their analysis empirically reveals that in the period under study, companies that spent more resources on CSR activities showed an increase in revenue and profitability compared to companies that spent less on CSR activities. The authors also noted that during their study period,

companies such as Apple, Amazon, Cisco Systems, and Microsoft witnessed an increase in revenue in line with their CSR spending. In an analysis of data from 132 listed companies involved in CSR in the Beijing area of China, Pang and Yuan (2019) investigate the impact of CSR on financial performance. They used reputation as a key factor to measure the extent of a company's CSR engagement. They employed multiple regression analysis to analyze the 2016 data of the selected sampled companies. They found that effective CSR initiatives improve a company's overall financial performance even though the impact of CSR initiatives on creditors, customers, shareholders, suppliers and other stakeholders was more significant compared to CSR initiatives that addressed employee concerns.

Similarly, Tang and Rothenberg (2012) investigate how different CSR engagement strategies can influence the impact of CSR on a company's financial performance. Based on their analysis of longitudinal data collected from 130 firms from 1995 to 2007, they found that companies acquire greater benefits when they are involved in CSR activities that are internal to the firm. Additionally, companies can improve their financial returns when they consistently and comprehensively adopt specific CSR engagement strategies that involve implementing CSR-related initiatives. The authors suggest that companies can effectively enhance their financial gains through strategic engagement in CSR activities irrespective of internal and external constraints.

Thuy et al. (2021) investigated the mediating role of financial statement comparability in the link between corporate social responsibility disclosure and financial performance. Their analysis examined 225 non-financial Vietnamese businesses listed on the Vietnamese stock market from 2014 to 2018. They collected corporate social

responsibility-related data of the sample firms from both the firm's sustainability reports and annual reports. They measured financial performance using return on assets and measured CSR by assigning CSR disclosure scores to each firm by analyzing information in their annual reports that aligns with Global Reporting Initiative standards (GRI, 2023). They used statistical methods to analyze the relationship between CSR and corporate financial performance. The study reveals a positive impact of CSR disclosure on the financial performance of listed companies in Vietnam. Furthermore, the study finds a positive mediation effect of financial statement comparability in the relationship between CSR disclosure and financial performance. In yet another study, Rodriguez-Fernandez (2016) explores the relationship between CSR and financial performance in companies listed on the Spanish stock exchange. The result of her empirical study shows a positive bidirectional relationship between corporate social responsibility and financial performance. That is, being socially responsible is profitable for companies, and conversely, being profitable allows companies to engage in more social initiatives.

The studies that found a positive relationship between CSR and corporate financial performance demonstrate that companies that invest more in CSR activities experience a corresponding increase in financial performance in the long run, even though the initial stages of implementation may show temporary negative effects. Using firm implementation and disclosure of environmental, social, and governance performance as a measure of CSR, Kuo and Meng (2021) investigate the influence of corporate social practices on airline companies. They analyzed environmental, social, and governance performance data from 2012 to 2016 and short-term corporate financial performance data from 2013 to 2017 of sampled airline companies. They found that the financial

performance of airline companies reduced at the initial stages of implementation of environmental, social, and governance performance practices. However, as the airline companies incorporated and implemented environmental, social, and governance performance practices further over time, they experienced an improvement in their financial performance.

The second category of studies found a negative correlation between CSR activities and corporate financial performance. This category of studies emphasizes that investment in CSR activities increases companies' costs beyond standard management activities, which hinders maximizing shareholders' profits and ultimately affects corporate financial performance. According to Cho et al. (2019), companies' investments in CSR activities, ethical responsibilities, and donations reduce shareholders' economic profit and value. Davis (1973) examines the relationship between CSR and the financial performance of British companies. Using comprehensive performance indicators, he used price-earnings ratio to measure financial performance and measured CSR performance across three categories (environment, employment, and community service). The study found a negative correlation between CSR performance and price-earnings ratio. Similarly, Brammer et al. (2006) examined the relationship between corporate social performance and financial performance using a sample of quoted companies in the United Kingdom. To measure corporate social performance, they measured financial performance with stock return and social performance indicators for environment, employment, and community activities. They found that the composite social performance score shows a significant negative relationship with stock returns in the sampled

companies, and the poor financial returns associated with these companies are primarily a result of their high social performance in employment.

The third category of studies denies any correlation between CSR activities and corporate financial performance. Nelling and Webb (2009) report that there is no statistically significant relationship between CSR and corporate financial performance when time-series effects are excluded. They argue that with a robust research model, studies will not show a positive correlation between CSR and financial performance, as CSR engagements cannot increase the financial performance of firms. Galant and Cadez (2017) report that a common reason for the equivocal empirical results of the relationship between CSR and corporate financial performance is how CSR and corporate financial performance are operationalized and measured. Okafor et al. (2021) note that sampling errors and biases, inability to explain mediating effects in design processes, and the absence of control variables in research models are other reasons for inconsistencies in the relationship between CSR and corporate performance. The study by McWilliams and Siegel (2000) on the relationship between CSR and financial performance finds that CSR can have a neutral effect on profitability when investment in research and development was added to their equation. They note that investment in research and development influences a company's financial performance, and ignoring the relationship between CSR and financial performance will lead to erroneous findings. Pan et al. (2014) investigates the relationship between CSR and financial performance in the mineral industry in China by sampling data from 228 listed mineral firms in China. They found no significant influence of CSR on the financial performance of the sampled firms. Similarly, Kahloul et al. (2022) explore the relationship between CSR and financial

performance by analyzing data from 52 listed French companies from 2015 to 2018. Based on their empirical analysis, they find that CSR has no relationship with financial performance. Javed et al. conducted research on CSR and corporate financial performance in Pakistan. Their study collected data from 224 senior-level Pakistani managers using a questionnaire survey, and structural equation modelling was employed to analyze the data. The findings indicate that socially responsible initiatives targeting various stakeholders positively impact corporate financial performance. However, the study revealed that the relationship between CSR and performance is negatively moderated by responsible leadership. This suggests that when socially responsible firms are led by responsible leaders, they may engage in excessive CSR activities, which can negatively affect the financial performance of the firm. The diverse findings reported by past research can be attributed to several factors. One key factor is the choice of financial performance indicators. Studies vary in their use of financial performance measures. While some studies use accounting-based measures, such as return on assets (ROA) and return on equity (ROE), to measure companies' financial performance, other studies use market-based measures like Tobin's Q. This variation can lead to different outcomes since a single accounting measure (e.g., ROA) might not capture the full financial reality of a company (Orlitzky & Rynes, 2003). Additionally, the inconsistency in results may arise from the inability of researchers to control for other influencing variables such as company size, and industry differences, which can significantly impact the relationship between CSR and financial performance (Ullmann, 1985). Additionally, the challenges faced by researchers in selecting appropriate variables that may mediate or moderate the

link between CSR and firms' performance can lead to varying results in research on CSR and financial performance (Nirino et al., 2020)

Research Design

3.1. Sample Selection and Data Collection

The study sample comprises 60 companies, which include energy, financial services, information technology, real estate, industrial, basic materials, consumer, and utility companies listed on the Toronto Stock Exchange. Secondary data was sourced for this study from Bloomberg, covering five years (2018 to 2022). The chosen period ensures that the data analyzed is current, relevant, and reflects the latest trends and developments in CSR and their impacts on a company's financial performance. Using recent data ensures that the findings apply to current business environments, making it highly relevant for both scholars and practitioners.

3.2. Independent variable

CSR is the independent variable and the environmental, social, and governance (ESG) disclosure score is used as a proxy to measure CSR. The ESG disclosure score is obtained from Bloomberg Terminal. ESG practices are an important sustainable development strategy that companies engage in as a form of CSR (Wang & Sarkis, 2017). ESG data have been adopted in many previous studies to test the relationship between CSR and corporate financial performance (e.g., Kim & Kim, 2014; Kuo et al, 2021; Maqbool & Zameer, 2018). The ESG data of companies includes information on environmental impact, social responsibility, and governance practices. The environmental dimension primarily addresses the environmental impact of a company's operations, including sustainability practices, carbon footprint reduction, and waste management (Naranjo-Gil, 2016; Cadez &

Czerny, 2016; Marquis et al., 2011). The social dimension is broad and includes aspects such as community engagement, philanthropic donations, diversity initiatives, human rights, and employee benefits (Galant & Cadez, 2017; Nirino et al., 2020). The governance dimension involves the structures and processes that direct and control the company, ensuring accountability, transparency, and ethical behavior, which includes corporate policies, board diversity and executive compensation (Almeyda & Darmansya, 2019). The ESG disclosure score is considered an appropriate CSR indicator because the ESG disclosure score often indicates a company's commitment to ESG principles. Companies that prioritize ESG considerations are more likely to provide detailed disclosures about their practices in these areas. Also, a company that actively shares information on its ESG efforts is likely to be more engaged in responsible business practices, making the ESG disclosure score an appropriate proxy for a company's commitment to responsible practices (Kim & Kim, 2014). The ESG disclosure score represents the extent to which a company discloses information related to its environmental, social, and governance practices. The score assesses the transparency and openness of a company in providing relevant data and details about its performance in key ESG areas. The ESG disclosure score is analyzed using three dimensions: environment, social and governance. The environmental aspect includes a company's disclosure of its impact on the environment, which may cover areas such as carbon emissions, energy usage, water consumption, waste management, and efforts to mitigate environmental risks. The social aspect encompasses companies' relationships with their employees, communities, and other stakeholders. Disclosure may include information on labor practices, diversity and inclusion, community engagement, human rights policies, and social impact initiatives. Governance relates to the company's internal structures,

policies, and leadership practices. Governance may cover disclosures on board composition, executive compensation, anti-corruption measures, shareholder rights, and adherence to ethical business practices. The disclosure scores range from 0 to 100. A high score in these three areas (environmental, social, and governance) indicates transparent reporting on the company's ESG practices.

3.3. Dependent Variable

Corporate financial performance is the dependent variable, and it is generally measured using profitability ratios. Profitability ratios measure the overall efficiency of a firm and offer a comprehensive snapshot of the outcomes resulting from its decision-making and policies. Previous literature that studied the correlation between CSR and corporate financial performance has measured financial performance, specifically profitability, with accounting or market-based indicators. Galant and Cadez (2017) compare accounting-based and market-based measures, which focus on different aspects of financial performance. According to Galant and Cadez accounting-based measure emphasizes a firm's historical performance, and the data are reasonably comparable and readily available for all companies. Market-based measures reflect investors' evaluations and expectations of firms' performance. However, these measures may not reflect the actual evaluation if there is asymmetric information (Scholtens, 2008). In line with the above, market-based measures will reflect changes in CSR faster than accounting-based measures. Thus, in this study, I have considered four corporate financial performance measures that have been used in previous studies (Cowen et al., 1987; Waddock & Graves, 1997; Wang & Sarkis, 2017;) to consider both the market-based and accounting-based measures of financial

performance of the companies under study. I employ earnings per share (EPS) as a market-based indicator and return on assets (ROA) and return on equity (ROE) as an accounting-based indicator of financial performance. EPS is determined by dividing net income by the total number of shares. It helps assess a company's profitability on a per-share basis, and it facilitates comparisons across different companies. ROA is determined by dividing net income by a firm's total assets. Generally, it allows one to highlight how much a company is profitable relative to its assets and to compare companies of different sizes. ROE is determined by dividing net income by a firm's equity. It allows one to determine a business's profitability by referring to the equity available to it.

3.4. Control Variable

This study focuses on investigating the influence of CSR on corporate financial performance. Several variables can account for potential influences on a firm's financial performance; it is therefore important to control factors that may affect financial performance. Firm size and leverage are used as the control variables in the analysis, consistent with previous studies (Bird et al., 2007; Cho et al., 2019; Kim & Kim, 2014; Saeidi et al., 2015). The inclusion of control variables helps isolate the impact of CSR on financial performance by accounting for other factors that could influence the relationship. Firm size, often measured by total assets, is a critical control variable. Larger firms generally have more resources to invest in CSR activities and are more likely to engage in such practices due to greater public scrutiny and pressure from stakeholders. Compared to smaller firms, these larger firms are often more motivated to implement CSR initiatives to

enhance their reputation. Leverage is another important control variable. Highly leveraged firms may have fewer resources available for discretionary activities like CSR and may be less inclined to invest in CSR due to their need to meet debt obligations. However, in some cases, firms with high leverage may engage in CSR to improve their reputation and potentially lower their cost of capital by demonstrating responsibility and commitment to ethical practices. Total assets were used to measure the size of companies, and leverage was measured using debt to earnings before interest tax depreciation and amortization ratio (EBITDA).

3.5. Research Hypotheses

This study examines the relationship between CSR and corporate financial performance among the TSX 60 companies, using environmental, social, and governance performance indicators to measure CSR performance. The study establishes hypotheses to analyze how CSR performance influences corporate financial performance. Prior research has yielded mixed results on the relationship between CSR and financial performance: while some studies found a positive relationship, others found a negative relationship or even no significant relationship between CSR and financial performance. However, based on the review of related literature, recent studies have reported a more positive relationship between CSR activities and profitability indexes (Okafor et al., 2021; Pang & Yuan, 2019; Thuy et al., 2021). The research hypotheses are based on insights gathered from the literature review. Environmental initiatives, such as reducing carbon emissions, managing waste, and implementing sustainable practices, have been said to improve operational efficiency and enhance corporate reputation, which can lead to better financial performance

(Dalal & Thaker, 2019; Almeyda & Darmansya, 2019). Based on these considerations, I have hypothesized the following:

Hypothesis H1a: The implementation of environmental performance practices by TSX 60 companies has a significant positive relationship with ROA.

Hypothesis H1b: The implementation of social performance practices by TSX 60 companies has a significant positive relationship with ROA.

Hypothesis H1c: The implementation of governance performance practices by TSX 60 companies has a significant positive relationship with ROA.

The literature suggests that firms investing in social activities, such as fair labour practices and community development, often see a boost in employee morale and customer loyalty, leading to higher financial performance as customers are willing to pay more for their products and services (Saeidi et al., 2015; Luo & Bhattacharya, 2006; Nirino et al., 2020; Fernandez, 2016). These considerations have led to the following hypothesis:

Hypothesis H2a: The implementation of environmental performance practices by TSX 60 companies has a significant positive relationship with ROE.

Hypothesis H2b: The implementation of social performance practices by TSX 60 companies has a significant positive relationship with ROE.

Hypothesis H2c: The implementation of governance performance practices by TSX 60 companies has a significant positive relationship with ROE.

Research indicates that companies with robust governance frameworks tend to perform better financially due to increased investor trust and reduced likelihood of corporate

scandals, which can lead to costly legal and regulatory actions (Chava, 2014; Wang et al., 2018). Good corporate governance practices can reduce risks, enhance investor confidence, and improve decision-making processes, which are critical for financial stability and performance. These considerations have led to the following hypothesis:

Hypothesis H3a: The implementation of environmental performance practices by TSX 60 companies has a significant positive relationship with EPS.

Hypothesis H3b: The implementation of social performance practices by TSX 60 companies has a significant positive relationship with ROE.

Hypothesis H3c: The implementation of governance performance practices by TSX 60 companies has a significant positive relationship with ROE.

Data Analysis and Results

In this section, I present the data analysis and the results. Three types of analyses were carried out: descriptive statistics, correlation analysis and Partial Least Square Path Modeling (PLSPM).

4.1. Descriptive Statistic

Table 1 shows the descriptive statistics of the selected variables for the five years (2018-2022) under study. Regarding the financial performance of the companies, the mean return on asset (ROA) ranges from 3.03 percent in 2020 to 5.29 percent in 2022 with a standard deviation ranging from 4.56 percent in 2020 to 5.84 percent in 2021. Meanwhile, return on equity (ROE) ranges from 9.7 percent in 2020 to 14.94 percent in 2021 with a standard deviation ranging from 8.88 percent in 2021 to 14.21 percent in 2021. Furthermore, for the market base measure of financial performance earnings per share (EPS), the mean ranges from 2.43 percent in 2019 to 3.9 percent in 2021 with a standard deviation ranging from 2.73 percent in 2019 to 4.25 percent in 2022. For the independent variable measured by environmental (ENV), social (SOC) and governance (GOV) disclosure ratios which range from 0 to 100, the mean ENV score range from 36.66 percent in 2018 to 45.8 percent in 2022 with a standard deviation ranging from 17.33 percent 2022 to 20 percent in 2018. The SOC mean score ranges from 35.62 percent in 2018 to 38.84 percent in 2021 with a standard deviation ranging from 13.4 percent in 2022 to 16.96 percent in 2018. The GOV mean score ranges from 87.29 percent in 2018 to 89.63 percent in 2021 with a standard deviation ranging from 7.96 percent in 2019 to 8.54 percent in 2018. Finally, for the control variables, the mean values of assets were above $145 billion with a minimum value of

about $1 billion in 2018 and a maximum value of about $1444 billion in 2018. The mean risk value (LEV) ranges from 3.31 percent in 2018 to 7.33 in 2020 with a standard deviation ranging from 1.95 percent in 2018 to 12.63 in 2020. Table 2 shows the overall descriptive statistics of the selected variables for the period (2018-2022). The table also shows the average value, minimum value, maximum value, and standard deviation. The independent variable, ENV, has an average value of 41.39 with a standard deviation of 3.32, the average SOC is 37.16 with a standard deviation of 1.08. and the average GOV is 88.73 with a standard deviation of 0.9. Regarding the dependent variable, the average ROA is 4.42 with a standard deviation of 0.98, the average ROE is 12.35 with a standard deviation of 2.05 and the average EPS is 3.02 with a standard deviation of 0.69. The averages of the control variables are 33.06 for company size and 4.88 for company risk with a standard deviation of 33.62 and 1.38 respectively.

Figure 1 shows a graphical representation of the mean of the selected variable. The bar chart depicting the mean return on ROA for the companies across the years 2018 to 2022 shows noticeable variation. In 2020, the mean ROA is at its lowest point at 3.03%, reflecting a challenging period for company profitability, possibly due to global economic disruptions. However, by 2022, the mean ROA significantly increases to 5.29%, indicating a robust recovery and improvement in asset utilization efficiency. This trend suggests a positive trajectory in financial performance post-2020, aligning with economic recovery phases. The mean ROE shows a peak in 2021 at 14.94%, highlighting a period of strong shareholder returns, which could be associated with improved company performance or efficient equity management. Meanwhile, the mean EPS demonstrates a gradual increase from 2.43% in 2019 to 3.9% in 2021, suggesting consistent growth in profitability per share

over the years. These visualized trends underscore the varying financial health and market performance of the firms within the TSX 60 over the observed period, reflecting both economic challenges and recoveries. The bar chart depicting the mean ENV disclosure scores from 2018 to 2022 indicates a positive trend, with the mean score rising from 36.66% in 2018 to 45.8% in 2022. This increase reflects a growing emphasis on environmental responsibility and transparency among the companies, likely driven by heightened regulatory pressures and stakeholder expectations regarding environmental sustainability. The mean SOC disclosure scores show a steady improvement, from 35.62% in 2018 to 38.84% in 2021, suggesting an increasing focus on social responsibility aspects such as community engagement and employee well-being. On the other hand, the GOV scores are relatively high and stable, ranging from 87.29% in 2018 to 89.63% in 2021. This consistency indicates robust governance practices among the TSX 60 companies, reflecting adherence to high standards of corporate governance and regulatory compliance. The bar chart illustrating the mean values of assets for the companies over the years 2018 to 2022 shows that the average assets were consistently above $145 billion. The minimum asset value observed in 2018 was about $1 billion, while the maximum asset value reached approximately $1444 billion in the same year. This significant range indicates considerable diversity in company sizes within the TSX 60. The high mean asset values suggest that these companies are substantial players in their respective industries, with considerable financial resources at their disposal. The bar chart depicting the mean risk value, measured as LEV, reveals notable variation over the period. In 2018, the mean LEV was 3.31%, increasing to 7.33% in 2020, reflecting a period of heightened financial risk. This peak in leverage in 2020 could be associated with economic uncertainties caused by the COVID-

19 pandemic, which disrupted global markets and economies. The pandemic led to increased borrowing and financial instability as companies sought to navigate the unprecedented challenges. The standard deviation of LEV ranged from 1.95% in 2018 to 12.63% in 2020, indicating variability in financial risk among the companies during these years.

4.2. Correlation Analysis

Table 3 presents correlations between analyzed variables. I found that the independent variables are positively and highly correlated among themselves. A positive correlation indicates that the variables increased or decreased together. For the analysis, the Spearman correlation analysis was used because the data were not normally distributed. I conducted a Shapiro-Wilk test on all the independent variables (ENV, GOV, and SOC) for the five years under consideration to examine the normality of each variable. The results showed that 46.67% of the p-values were less than 0.05 for the independent variables in each given year, indicating that about half of the variables (ENV and SOC for 2022, and GOV for the five years) were not normally distributed. As a result, I decided to carry out a non-parametric correlation test based on Spearman's correlation efficiency on all the independent variables.

4.3. Partial Least Squares Path Modeling

I used the PLSPM package in RStudio to analyze the data in this research (Hair et al., 2021; Orji et al., 2018). PLSPM is a statistical technique for analyzing significant relationships among latent variables, which comprise predictors and a target construct. PLSPM is used

to analyze the data in this study for several reasons. First, the independent variables in this study are highly correlated and may cause multicollinearity problems. As shown in Table 3, all the relationships between the independent variables, except two, range from moderate (r = 0.4) to strong (r = 0.8) correlations (Care et. Al., 2018). In this case, if a traditional regression method like OLS (Ordinary Least Squares) is used to analyze the data, it can produce unstable estimates and inflated standard errors. PLSPM, however, is robust in handling multicollinearity (Farahani et al., 2010). It does not require the assumption of independence between variables, making it suitable for highly correlated data. Second, PLSPM allows you to conduct a multigroup analysis to compare the relationship between two variables for two groups. Third, PLSPM is suitable for small sample sizes. PLSPM can provide reliable results even with smaller samples which enhances its applicability in research settings with a small sample size, as in the case of my research. Finally, unlike correlation analysis which only allows for calculation between a pair of variables, in which the relationship between two variables is calculated at a time, PLSPM allows us to compute the relationship between two or more independent variables and a dependent variable simultaneously. In other words, unlike correlation analysis, in PLSPM the independent variables compete among themselves as to which has the strongest relationship with the dependent variable. Using PLSPM, I explored the relationships between the independent variable CSR, and the dependent variable, financial performance. The research model for the study is shown in Figure 2. In the model, I aimed to uncover whether a significant relationship exists between the independent variables [environmental (ENV), social (SOC), and governance (GOV) performance] on the left and the dependent variable (corporate financial performance) on the right, using return on asset ROA, ROE, and EPS

as the measure of financial performance. Moreover, I aimed to explore whether company size and risk moderate the relationships shown in the model by using the multigroup analysis function in PLSPM. PLSPM offers several advantages over other methods such as covariance-based Structural Equation Modeling (CB-SEM). PLSPM is more flexible, handling complex models and smaller sample sizes better than CB-SEM (Dash & Paul, 2021). Farahani et al., 2010 assert that PLSM effectively addresses multicollinearity issues among predictors and models relationships among latent variables, which are essential for understanding the interactions between CSR and financial performance variables. However, despite the advantages of using PLSPM for management and organizational research (Henseler, 2014), certain limitations have been highlighted by Rönkkö and Evermann. First, Rönkkö and Evermann (2013) asserted that PLS, which PLSPM is based on, is biased because it underestimates the relationships in the structural model (i.e., path coefficients) and overestimates the relationships in the measurement model (i.e., outer loadings) when the data originate from a common factor model. Second, Evermann and Rönkkö (2013) argued that PLSPM is not reliable as it can lead to overly complex measurement models, complicating result interpretation. However, other researchers have contested these limitations. Schuberth et al. (2023) stated that the conclusions reached by Evermann and Rönkkö were based on flawed simulated data and Henseler (2014) stated that the limitations pointed out by Rönkkö & Everman are unfounded and questionable. Consequently, the potential limitations of PLSPM remain a topic of ongoing debate within the PLS research community (Rönkkö & Evermann, 2013; Schuberth et al., 2023; Goodhue et al., 2013; Evermann & Rönkkö, 2023).

4.3.1. Evaluation of the Measurement Model

Before analyzing the structural model in PLSPM, we need to assess the measurement model to ensure that the preconditions for analyzing the structural model are satisfied. Usually, four preconditions (outer loading, internal consistency reliability, convergent validity, and discriminant validity) are evaluated. However, given that each of the constructs in the model in Figure 2 is measured with a single item, the assessment of the measurement model does not apply here because none of the constructs was measured using multiple items. Research has shown that single items are as good as multiple items in measuring a construct, and there is "no difference in the predicting validity of the multiple-item and single-item measures" (Bergkvist, 2007, p. 3).

4.3.2. Analysis of Structural Model

Table 4 shows the path coefficients (βs) and the coefficient of determination (R^2) of the dependent variable for the overall model across the five years under study. The path coefficients together with the asterisks in each column indicate the strength of the relationship between the independent variable (e.g., SOC) and the dependent variable (e.g., ROA), and the level of statistical significance of the relationship. Research shows that the path coefficient ($\beta \geq 0.2$, $p < 0.05$) is a strong relationship between two variables (Bergkvist, 2007). The R^2 value indicates the amount of variance of the dependent variable explained by the independent variable. The structural models show that in the second year there is a significant relationship between SOC and ROA ($\beta = -0.31$, $p < 0.05$), between ENV and ROE ($\beta = -0.36$, $p < 0.01$), and between ENV and EPS ($\beta = -0.37$, $p < 0.05$). In the third year, there is a significant relationship between ENV and EPS ($\beta = -0.47$, $p <$

0.001). In the fourth year, there is a significant relationship between ENV and ROA (β = -0.36, $p < 0.05$) and in the fifth year, there is a significant relationship between SOC and ROE (β = -0.44, $p < 0.05$), between ENV and EPS (β = -0.34, $p < 0.05$). Regarding R2, three of the models with significant relationships explained more than 10% of the variance of the dependent variable. In 2021, the independent variables explained 11% of the variance of EPS, with ENV explaining most of the variance (β = -0.37, $p < 0.05$). In 2020, they explained 18% of the variance of EPS, with ENV accounting for most of the variance (β = 0.47, $p < 0.001$). In 2018, they explained 14% of the variance of ROE, with SOC explaining most of the variance (β = 0.44, $p < 0.05$).

4.3.3. Subgroup Models and Multigroup Analysis Based on Company Size

To uncover the moderating effect of company size on the explored relationships in Figure 2, the dataset for each of the five years was dichotomized into two groups based on company size. Specifically, to divide the data into two approximately equal groups based on company size, the median of the total assets of the companies for each of the five years was calculated as shown in Table 5. Next, the mean of the five medians for all five years was calculated ($25.9 billion). Third, for easy reference, I used the floor of this value ($25 billion) as a basis for dividing the data for each year into two approximately equal groups. For example, for 2022, 29 companies with total assets less than $25 billion were classified as small companies, while the rest 31 companies with total assets equal to or greater than $25 billion were classified as large companies. Moreover, for 2021, 2020, 2019 and 2018, the number of small-size companies include 28, 31, 33, and 37, respectively. Table A shows the sub-models for small-size and large-size companies and the multigroup analysis

which indicates whether there is a significant difference between the two sub-models with respect to each of the three relationships. For 2022, the multigroup analysis shows that there is a difference between small-size and large-sized companies for the relationships between ENV and ROA ($p < 0.05$), ENV and ROE ($p < 0.01$), GOV and EPS ($p < 0.05$). For 2021, the multigroup analysis shows that there is a difference between small-size and large-sized companies for the relationships between SOC and ROA ($p < 0.01$), GOV and ROE ($p < 0.05$). For 2020, the multigroup analysis shows that there is a difference between small-size and large-sized companies for the relationships between SOC and ROA ($p < 0.1$), GOV and ROE ($p < 0.05$), ENV and EPS ($p < 0.01$). For 2019, the multigroup analysis shows that there is a difference between small-size and large-sized companies for the relationships between ENV and ROA ($p < 0.05$), ENV and ROE ($p < 0.01$), GOV and EPS ($p < 0.05$). For 2018, the multigroup analysis shows that there is a difference between small and large-sized companies for the relationships between ENV and ROA ($p < 0.01$), and GOV and EPS ($p < 0.05$).

4.3.4. Subgroup Models and Multigroup Analysis Based on Company Risk

To uncover the moderating effect of company risk on the explored relationships in Figure 2, the dataset for each of the five years was dichotomized into two groups based on company risk, a similar method to that based on company size was used to dichotomize the five years datasets based on company risk, which resulted in a mean value of 3.69. For example, for 2022, based on this risk level mean for the five years under consideration, 32 companies with risk levels less than 3.69 were classified as low-risk companies, while the other 29 companies with risk levels equal to or greater than 3.69 were classified as high-

risk companies. Moreover, for 2021, 2020, 2019, and 2018, the number of low-risk companies include 31, 22, 31, and 45, respectively. Table 6 shows the sub-models for low and high-risk companies and the multigroup analysis which indicates whether there is a significant difference between the two sub-models for each of the three relationships. For 2022, the multigroup analysis shows that there is a significant difference between low and high-risk companies for the relationships between ENV and ROA ($p < 0.01$), SOC and ROA ($p < 0.01$). For 2021, the multigroup analysis shows that there is a significant difference between low and high-risk companies for the relationships between SOC and ROA ($p < 0.01$). For 2020, the multigroup analysis shows that there is a significant difference between low and high-risk companies for the relationships between GOV and ROA ($p < 0.05$) and GOV and EPS ($p < 0.05$). For 2019, the multigroup analysis shows that there is a significant difference between low and high-risk companies for the relationships between SOC and EPS ($p < 0.05$).

Findings

In the overall model Table 4), I found that the environmental dimension of CSR (ENV) had a significant positive relationship with ROA in the year 2019 ($\beta = 0.36$, $p < 0.05$) and the social dimension of CSR (SOC) had a significant negative relationship with ROA in the year 2021 ($\beta = -0.31$, $p < 0.05$). No significant relationship was found between ROA and the governance dimension of CSR (GOV). When the impact of the control variable, size, was analyzed in the sub-model (Table 4), a significant positive relationship was found to exist between ENV and ROA, but only among large companies. A significant negative relationship was also found to exist between SOC and ROA only among large companies. When the impact of risk was analyzed in the sub-model (Table 4), I found a significant positive relationship between ENV and ROA across two years and this relationship exists only among high-risk companies. Also, a significant negative relationship exists between SOC and ROA across two years among the high-risk companies. The results in the ROA models indicate that the relationship between CSR and financial performance is moderated by the size and risk level of companies. The significant positive relationship between ENV and ROA may be the result of a company's ability to attract environmentally conscious consumers which would potentially increase market share and sales and, consequently, ROA. The negative relationship between SOC and ROA may be a result of commitments to ethical labour practices, employee welfare, community engagement, etc. While these initiatives contribute positively to society, they may also entail increased operational costs, such as higher wages, community development projects, or philanthropic activities. These additional expenses can impact profitability and, consequently, lead to a negative association with ROA.

In the overall model (Table 4) for ROE, only ENV and SOC had a significant relationship with the dependent variable ROE. The relationship between ENV and ROE is negative across five years with a significant relationship occurring in 2021 (β = -0.36, p < 0.01), and the relationship between SOC and ROE is positive across five years with a significant relationship occurring in 2018 (β = 0.44, p < 0.05). The impact of the control variable size in the sub-model (Table 5), showed no significant relation between ENV, SOC, GOV, and ROE across the five years under study, indicating that the size of companies does not significantly moderate the relationship between the dimensions of CSR and financial performance (ROA, ROE, and EPS). An analysis of the impact of risk in the sub-model (Table 6), revealed no significant relationship exists between ENV and ROE across the five years for both low-risk and high-risk companies. However, there is a significant positive relationship between SOC and ROE for low-risk companies (β = 0.46, p < 0.05) but this is not the case for high-risk companies whose relationship is not significant (p > 0.05). The risk level of these companies moderates the relationship between SOC and ROE. The negative relationship found between ENV and ROE might suggest that the costs associated with environmental initiatives are impacting the return generated for shareholders. Environmental efforts, such as pollution control or sustainable sourcing, might involve costs that affect net income, subsequently influencing ROE negatively. The positive relationship between SOC and ROE indicates that certain social responsibility initiatives may positively affect shareholders' equity. Socially responsible practices, such as ethical sourcing and community engagement, contribute to a positive corporate image which can attract more customers, enhance trust among stakeholders, and

lead to increased sales and market share which may ultimately positively impact the company's profitability and ROE.

In the overall model (Table 4) for EPS, only ENV had a significant relationship with the dependent variable EPS. This relationship is negative, strong, and cut across three years. The strongest relationship occurred in the year 2020 (β = -0.47, $p < 0.001$) followed by the year 2018 (β = -0.37, $p < 0.05$) and year 2021 (β = -0.34, $p < 0.05$). No significant relationship was found between SOC, GOV, and EPS. When analyzing the impact of the control variable size in the sub-model (Table 5) I found that 80% of the relationship between ENV and EPS was negative for both small and large companies, with 25% of these negative relationships being statistically significant. Additionally, the results show that the relationship between GOV and EPS is influenced by company size: the relationship is negative for small companies but positive for large companies. The influence of risk in the sub-model (Table 6) demonstrates that 70% of the relationship between ENV and EPS is negative across the five years under study for both low and high-risk companies, with about 40% being significant for high-risk companies. In other words, risk does not moderate the relationship between ENV and EPS.

Discussion and Conclusion

The findings of this study align with previous research in some respects while diverging in others, underscoring the complex nature of the impact of CSR on financial performance. Dalal & Thaker (2019) and Almeyda & Darmansya (2019) found a positive relationship between environmental performance and financial performance, suggesting that the operational efficiencies and cost savings derived from sustainable practices may lead to improved profitability and asset efficiency, as evidenced by the positive impact of ENV on ROA. Conversely, this study's nuanced results, such as the negative impact of ENV on ROE and EPS, suggest a more intricate interplay where the initial costs of environmental investments may outweigh short-term financial benefits (Dalal & Thaker, 2019; Almeyda & Darmansya, 2019). The negative impact of SOC on ROA, contrasting with its positive impact on ROE, is somewhat unexpected. One potential explanation is the nature of social initiatives which, while enhancing long-term brand reputation and stakeholder trust, may incur immediate costs that temporarily reduce asset efficiency. Additionally, the lack of significant impact of GOV on financial metrics might suggest that governance improvements, though critical for ethical operations and risk management, do not directly translate into short-term financial performance. This finding suggests that there is no direct relationship between good governance and financial performance, which is in line with the findings of Kabir & Chowdhury (2023) and Almeyda & Darmansya (2019).

The findings for the control variable, firm size reveal that the relationship between environmental (ENV) and financial performance, specifically earnings per share (EPS), is predominantly negative for both small and large companies. This suggests that investments

in environmental initiatives may lead to short-term financial burdens regardless of firm size. However, the negative relationship is statistically significant for 25% of these cases, indicating that the impact of environmental CSR on financial performance can be more pronounced in certain contexts. Furthermore, the relationship between governance (GOV) and EPS varies by firm size. For small companies, this relationship is negative, possibly reflecting the higher relative costs and resource constraints associated with implementing robust governance practices. In contrast, for large companies, the relationship is positive, suggesting that well-established governance structures can enhance financial performance by improving investor confidence and operational efficiency. The analysis for the control variable, risk, shows that 70% of the relationship between ENV and EPS is negative across both low and high-risk companies, with about 40% of these relationships being significant for high-risk firms. This indicates that environmental initiatives tend to negatively impact financial performance in the short term, especially for companies exposed to higher risks. High-risk firms might face greater financial strain when investing in environmental CSR due to already existing financial pressures, leading to more significant negative impacts on EPS. Importantly, the risk does not moderate the relationship between ENV and EPS, suggesting that the negative financial implications of environmental initiatives are consistent regardless of a firm's risk level. This consistency across different risk profiles highlights that while CSR activities are crucial for long-term sustainability and reputation, they may pose short-term financial challenges.

While numerous studies have explored the relationship between corporate social responsibility (CSR) and corporate performance, no prior research has specifically investigated this relationship within the context of TSX 60 Companies. The study

contributes to the CSR literature by assessing the impact of CSR activities on corporate financial performance among the TSX 60 companies in Canada. Moreover, CSR is measured using three dimensions (environmental, social, and governance) which allows one to measure more in-depth the impact of companies' choices regarding CSR on their corporate financial performance. The study also contributes to the literature by emphasizing the need to consider the distinct dimensions of ESG separately rather than as a single composite measure. This approach will provide an in-depth understanding of how each dimension uniquely influences different financial metrics. The mixed impacts observed suggest that theories of CSR need to account for the short-term costs and long-term benefits of ESG investments, incorporating temporal dynamics and varying stakeholder perspectives. This nuanced perspective aligns with stakeholder theory, which posits that companies must balance the interests of diverse stakeholders, even if it leads to short-term trade-offs.

This study makes a significant contribution to the existing literature by focusing on the TSX 60 companies in Canada, which have not been studied in previous research. The study provides insights into how CSR activities influenced the financial performance of leading firms in Canada. The findings provide critical insights for managers and policymakers. The positive impact of ENV on ROA suggests that managers should recognize that strong environmental performance can enhance operational efficiency, leading to a higher ROA. Investments in sustainable practices, energy efficiency, and waste reduction may improve the overall operational performance of an organization. However, the negative impact of ENV on ROE and EPS suggests that these initiatives might incur significant upfront costs or longer payback periods, which could dilute shareholder returns

and earnings in the short term. Therefore, managers need to balance environmental initiatives with strategies that also support shareholder value. The negative impact of SOC on ROA suggests that while social initiatives are crucial for building community relations and employee satisfaction, they may initially detract from asset efficiency. Therefore, managers should implement these initiatives strategically, ensuring they align with broader operational goals to mitigate potential short-term inefficiencies. Conversely, the positive relationship with ROE indicates that social performance can enhance shareholder value, likely through improved brand reputation and customer loyalty. Managers should leverage social initiatives as a means to strengthen market position and investor confidence. The lack of significant impact of GOV on the financial metrics suggests that governance practices alone may not directly influence financial performance. However, managers should not disregard governance improvements, as they are essential for long-term sustainability and risk management. The results of this study also offer important insights for policymakers who aim to promote CSR practices while fostering economic growth. Given the positive impact of environmental performance on operational efficiency, policymakers could incentivize companies to adopt green practices through subsidies, tax breaks, or grants. This support can offset the initial costs and encourage more firms to invest in sustainability. Policymakers should recognize the varied impacts of CSR dimensions on financial performance. They should not only promote environmental sustainability but also encourage social initiatives that can enhance community welfare and shareholder value. Balanced policies can help companies achieve comprehensive CSR engagement without compromising financial stability. Although governance performance did not show a direct impact on financial metrics in this study, robust governance standards

are crucial for transparency, accountability, and long-term resilience. Policymakers should continue to enforce and enhance governance regulations to ensure ethical corporate behavior and protect stakeholders' interests.

This study has some limitations. First, the study is conducted with a sample of companies from diverse sectors, including finance, energy, retail, and others. Analyzing these companies collectively may oversimplify the relationship between CSR and financial performance as the impact of CSR practices on financial performance may vary significantly across industries due to distinct business models, stakeholder expectations, and market dynamics. Future research could adopt an industry-specific approach to examine the impact of CSR on financial performance within each sector to uncover any sector-specific nuances. Additionally, future research may explore whether certain CSR dimensions are more critical in particular industries. Secondly, the study relies on the ESG (Environmental, Social, and Governance) disclosure score as a metric for measuring CSR activities. However, this score may not comprehensively capture the extent of company engagement in CSR initiatives. Future research could explore alternative measures to assess CSR engagement beyond ESG disclosure scores to better understand the actual depth and impact of these activities on companies' performance. Finally, the study employs only two control variables, size and risk, to analyze the potential moderating relationship between CSR and financial performance. While these variables are essential, their limited scope may overlook other influential factors that could moderate or mediate the observed relationship. Future research could explore a more comprehensive set of control variables to better understand the nuanced dynamics between CSR and financial performance. Additionally, future research could build upon the findings of this study by conducting a

longitudinal study to track changes in CSR practices and financial performance over time, which could provide valuable insights into the long-term impact of CSR. By continuing to explore these issues, we can further our understanding of the complex relationship between CSR and financial performance and identify strategies for companies to maximize the benefits of CSR initiatives.

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Appendix

Table 1. Descriptive Analysis. SD: Standard Deviation.

Variable	Year	Mean	SD	Minimum	Maximum
ROA	2022	5.29	4.86	-8.62	18.05
	2021	5.73	5.84	-1.36	28.42
	2020	3.03	4.56	-8.78	14.21
	2019	3.99	4.61	-16.98	15.94
	2018	4.04	5.20	-9.86	18.08
ROE	2022	14.47	9.21	-10.73	42.39
	2021	14.94	8.88	-2.09	48.21
	2020	9.70	11.81	-30.78	50.29
	2019	10.95	14.21	-76.00	42.88
	2018	11.68	12.40	-29.67	51.70
EPS	2022	3.81	4.25	-2.73	24.18
	2021	3.90	3.52	-0.21	15.57
	2020	2.45	3.53	-4.10	20.57
	2019	2.43	2.73	-6.58	15.73
	2018	2.52	3.11	-5.79	17.91
ENV	2022	45.80	17.33	0.00	87.80
	2021	44.01	19.78	0.00	84.29
	2020	41.41	18.98	0.00	76.53
	2019	39.06	19.59	0.00	78.77
	2018	36.66	20.00	0.00	78.44
SOC	2022	37.20	13.40	6.38	69.41
	2021	38.84	15.86	6.38	71.46
	2020	37.58	15.57	6.38	71.70
	2019	36.58	16.01	6.38	67.90
	2018	35.62	16.96	6.38	70.68
GOV	2022	89.52	7.96	41.12	100.00
	2021	89.63	8.44	43.62	100.00
	2020	89.04	8.44	43.62	100.00
	2019	88.14	8.44	43.05	97.50
	2018	87.29	8.44	43.05	97.50
ASSET	2022	144.23	322.02	2.77	1444.62
	2021	145.41	316.65	2.51	1410.00
	2020	138.73	308.89	2.20	1390.00
	2019	124.40	276.15	1.96	1290.00
	2018	110.39	244.45	1.01	1090.00
LEV	2022	4.21	5.68	0.00	43.01
	2021	4.31	5.08	0.00	35.16
	2020	7.33	12.63	0.00	91.24
	2019	5.23	11.48	0.12	91.24
	2018	3.31	1.95	0.46	10.68

Table 2. Overall descriptive Analysis. SD: Standard Deviation.

Variable	Mean	S D	Minimum	Maximum
ENV	41.39	3.32	36.66	45.8
SOC	37.16	1.08	35.62	38.84
GOV	88.73	0.9	87.29	89.63
ROA	4.42	0.98	3.03	5.73
ROE	12.35	2.05	9.7	14.94
EPS	3.02	0.69	2.43	3.9
ASSET	33.06	33.62	23.32	4.18
LEV	4.88	1.38	4.31	3.31

Table3. . Spearman correlation coefficient between independent variables.

Year	Variable	ENV	SOC	GOV
2022	ENV	1		
	SOC	0.8***	1	
	GOV	0.48***	0.49***	1
2021	ENV	1		
	SOC	0.74***	1	
	GOV	0.38**	0.48***	1
2020	ENV	1		
	SOC	0.68***	1	
	GOV	0.33**	0.44***	1
2019	ENV	1		
	SOC	0.73***	1	
	GOV	0.41**	0.49***	1
2018	ENV	1		
	SOC	0.73***	1	
	GOV	0.52***	0.54***	1
Overall	ENV	1		
	SOC	0.75***	1	
	GOV	0.96***	0.89***	1

**$p<0.01$, ***$p<0.001$

Table 4. Relationships and Coefficient of Determination *(R2)* for the overall model. *p<0.05, **p<0.01, ***p<0.001. ENV: Environmental disclosure, SOC: Social Disclosure, GOV: Governance Disclosure, Return on Asset: ROA, Return on Equity: ROA, Earnings per share: EPS.

Relationship	2022	2021	2020	2019	2018
ENV -> ROA	0.12	0.10	-0.04	0.36*	-0.07
SOC -> ROA	0.06	-0.31*	-0.20	-0.19	-0.19
GOV -> ROA	0.04	0.06	-0.10	-0.05	0.06
R2	0.04	0.05	0.08	0.06	0.05
ENV -> ROE	-0.04	-0.36**	-0.28	-0.33	-0.33
SOC -> ROE	0.16	0.20	0.20	0.44	0.44*
GOV -> ROE	0.04	0.18	0.19	0.14	0.17
R2	0.02	0.08	0.08	0.13	0.14
ENV -> EPS	-0.18	-0.37*	-0.47***	-0.15	-0.34*
SOC -> EPS	-0.11	0.03	0.03	-0.06	0.09
GOV -> EPS	0.06	0.17	0.09	0.13	-0.01
R2	0.06	0.11	0.18	0.03	0.08

Table 5. Subgroup Models and Multigroup Analysis Based on Companies Size. LG: Large Company, SM: Small companies.

	2022			2021			2020			2019			2018		
Relationship	SM	LG	*p*-value	SM	LG	*p*-value	SM	LG	*p*-value	SM	LG	*p*-value	SM	LG	*p*-value
ENV → ROA	-0.22	**0.55***	0.013	-0.42	**0.76*****	0.001	-0.42	-0.12	0.206	0.14	0.48	0.206	-0.19	**0.75****	0.005
SOC → ROA	0.24	-0.03	0.229	0.2	**-0.56****	0.009	0.35	**-0.5****	0.006	0.19	-0.42	0.090	-0.14	**-0.5***	0.164
GOV → ROA	-0.17	-0.04	0.157	-0.04	0.05	0.351	**-0.51****	**0.44****	0	-0.17	0.1	0.192	-0.06	0.01	0.388
R2	0.04	0.26	NA	0.08	0.38	NA	0.27	0.27	NA	0.08	0.15	NA	0.12	0.26	NA
ENV → ROE	-0.37	0.4	0.009	-0.26	-0.27	0.409	-0.17	-0.18	0.425	-0.09	-0.31	0.311	-0.06	-0.54	0.174
SOC → ROE	0.21	-0.02	0.258	-0.09	0.27	0.203	-0.07	0.23	0.159	-0.19	0.43	0.054	0.01	0.55	0.108
GOV → ROE	-0.18	-0.05	0.319	-0.1	0.26	0.0166	-0.11	0.24	0.028	-0.07	0.17	0.139	0.01	0.34	0.081
R2	0.1	0.12	NA	0.14	0.12	NA	0.08	0.1	NA	0.09	0.14	NA	0	0.22	NA
ENV → EPS	-0.33	0.14	0.168	-0.15	**-0.4***	0.243	-0.24	**-0.83*****	0.010	0.01	-0.55	0.070	-0.19	-0.51	0.170
SOC → EPS	-0.02	-0.2	0.339	-0.31	0.21	0.098	-0.15	0.17	0.097	-0.2	0.18	0.151	-0.02	0.17	0.258
GOV → EPS	**-0.36***	0.24	0.032	-0.06	0.32	0.070	**-0.31***	**0.54*****	0.001	-0.12	**0.59***	0.027	-0.44	**0.68****	0.011
R2	0.33	0.06	NA	0.22	0.13	NA	0.29	0.47	NA	0.07	0.29	NA	0.33	0.31	NA

Table 6. Subgroup Models and Multigroup Analysis Based on Company Risk

	2022			2021			2020			2019			2018		
Relationship	Low	High	*p*-value	Low	High	*p*-value	Low	High	*p*-value	Low	High	*p*-value	Low	High	*p*-value
ENV → ROA	-0.28	**0.62***	0.005	-0.18	0.17	0.177	0	-0.08	0.419	0.04	**0.42****	0.172	-0.1	-0.24	0.297
SOC → ROA	**0.53***	-0.54	0.002	0.2	**-0.57*****	0.010	0.03	**-0.4***	0.185	-0.25	0.16	0.204	-0.14	0	0.299
GOV → ROA	-0.17	0.13	0.052	-0.09	0.18	0.211	**-0.46***	0.15	0.046	-0.03	-0.13	0.416	-0.11	0.35	0.051
R2	0.1	0.18	NA	0.02	0.18	NA	0.2	0.16	NA	0.06	0.26	NA	0.09	0.08	NA
ENV → ROE	-0.4	0.21	0.095	-0.29	-0.35	0.407	-0.31	-0.17	0.386	-0.2	-0.35	0.341	-0.36	0.19	0.162
SOC → ROE	0.47	0.12	0.213	0.28	0.08	0.373	-0.04	0.33	0.183	0.29	0.45	0.362	**0.46***	-0.01	0.184
GOV → ROE	0.05	0	0.403	**0.35***	0.15	0.212	0.2	0.13	0.340	0.31	0.07	0.189	0.16	0.14	0.426
R2	0.08	0.1	NA	0.16	0.08	NA	0.1	0.11	NA	0.16	0.12	NA	0.17	0.08	NA
ENV → EPS	-0.3	0.24	0.074	-0.34	**-0.4***	0.396	-0.24	**-0.51*****	0.213	-0.2	-0.13	0.449	**-0.46****	0.12	0.209
SOC → EPS	0.08	-0.21	0.154	-0.02	0.14	0.330	-0.17	0.16	0.175	-0.3	0.46	0.025	0.23	0	0.428
GOV → EPS	-0.34	0.18	0.056	0.02	0.31	0.166	-0.23	0.27	0.049	0.05	0.1	0.406	-0.24	0.24	0.223
R2	0.26	0.06	NA	0.12	0.14	NA	0.29	0.22	NA	0.2	0.19	NA	0.21	0.11	NA

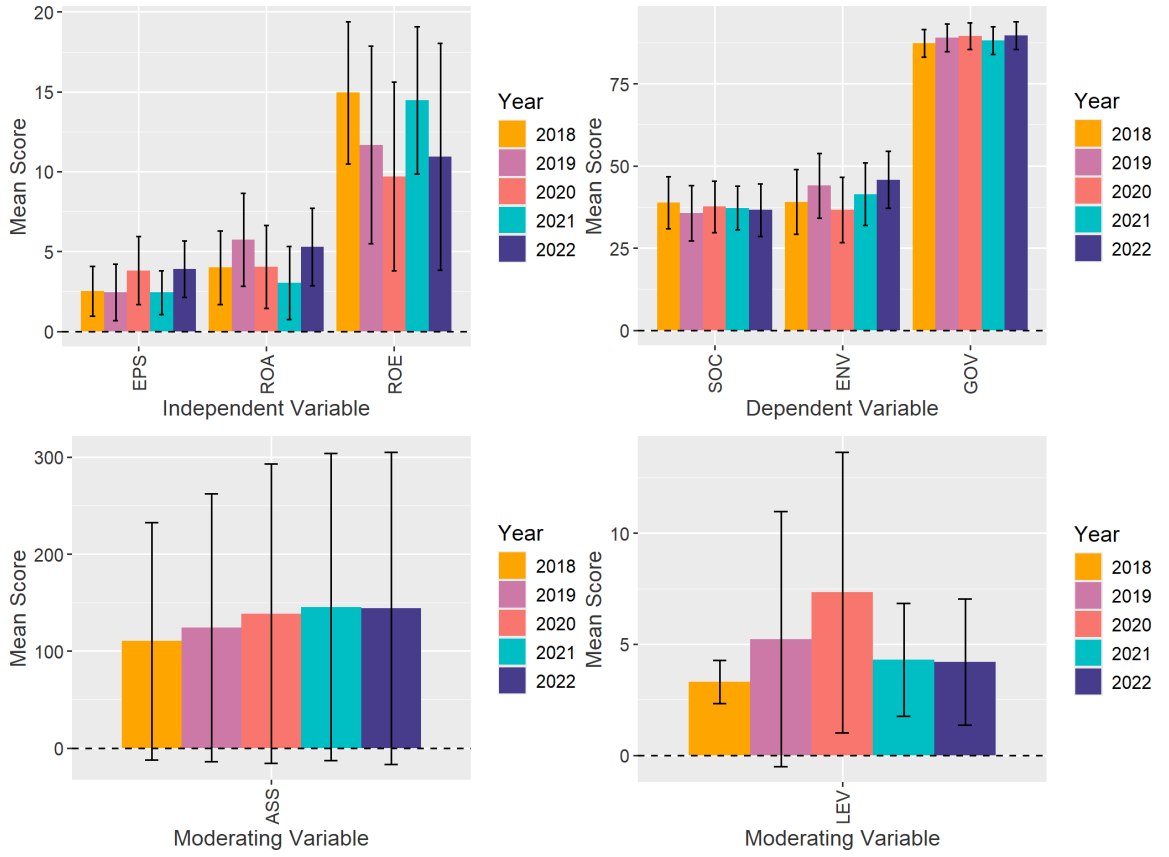

Figure 1. Graphical representation of the mean of the selected variable (EPS, ROE, ROA).

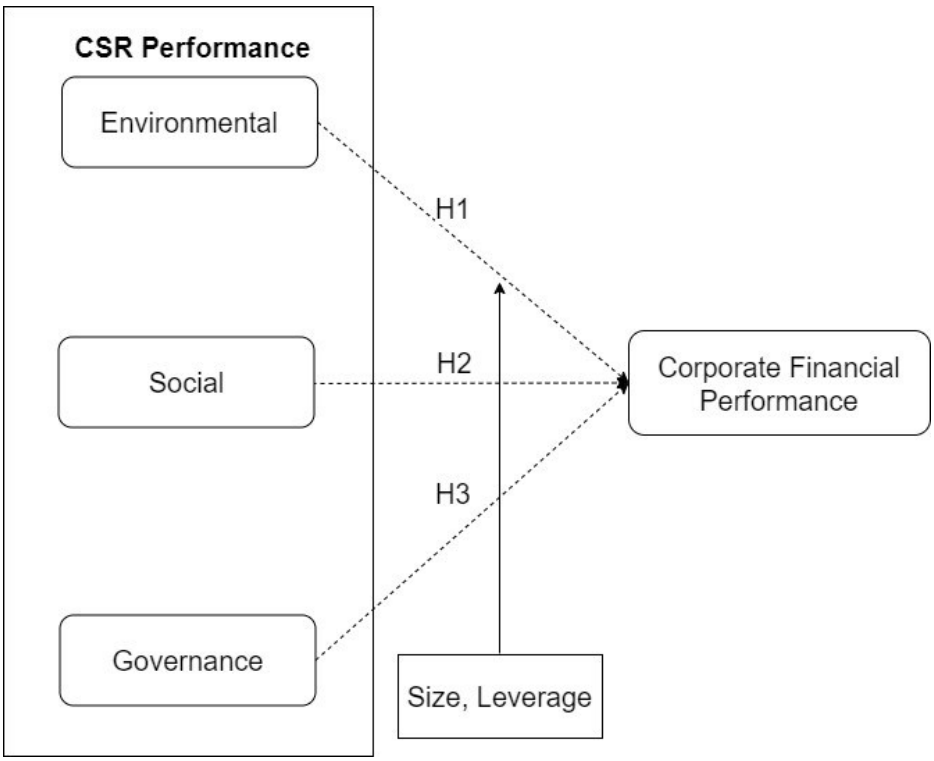

Figure 2. Conceptual framework: The relationship between CSR and financial performance.