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The Moderating Role of Audit Committee Characteristics in the Relationship between CSR Governance and Accounting Fraud: International Evidence

Nesrine GHORBEL

PhD Student in accounting
University of Sfax, Tunisia
Town/City: Sfax
Country: Tunisia
Email: nesrineghorbel0@gmail.com

Anis BEN AMAR

Professor in accounting
University of Sfax, Tunisia
Professor at the Business School,
Laboratory of Analysis and modeling economic and financial (LAMEF) at University of Sfax
Email: anis.benamar@escs.usf.tn

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Résumé

Cette étude analyse l'impact des caractéristiques du comité d'audit sur la relation entre la dimension gouvernance de la responsabilité sociétale des entreprises (RSE) et la fraude comptable. L'analyse repose sur un échantillon de 793 entreprises françaises, canadiennes, britanniques et allemandes, issues de la base ASSET4, observées sur une période de treize ans allant de 2010 à 2022. Les hypothèses sont testées à l'aide d'un modèle de régression logistique, tandis que la fraude comptable est mesurée par le modèle ajusté de Beneish (1999). Les résultats montrent que les caractéristiques du comité d'audit, notamment son indépendance, son expertise financière et la présence de femmes, exercent un effet modérateur négatif sur la relation entre la gouvernance RSE et la fraude comptable. Plus précisément, l'impact de la gouvernance RSE sur la réduction de la fraude est renforcé lorsque le comité d'audit est indépendant, compétent et diversifié. Ces résultats sont confirmés par des tests de robustesse, attestant de leur stabilité et de leur fiabilité. Sur le plan pratique, l'étude souligne que la gouvernance RSE, à elle seule, ne suffit pas à prévenir la fraude comptable, et que son efficacité dépend fortement de mécanismes de contrôle interne solides, en particulier d'un comité d'audit bien structuré. Cette recherche contribue de manière originale à la littérature en mettant en évidence le rôle clé des caractéristiques du comité d'audit dans l'efficacité des pratiques de gouvernance RSE en matière de prévention de la fraude.

Mots clés :

Dimension de gouvernance, indépendance du comité d'audit, expertise du comité d'audit, diversité de genre au sein des comités d'audit, fraude comptable, modèle de Beneish**.**

Abstract

This study examines the impact of audit committee characteristics on the relationship between the governance dimension of corporate social responsibility (CSR) and accounting fraud. Using a sample of 793 French, Canadian, British, and German firms from the ASSET4 database over the period 2010–2022, the hypotheses are tested through a logistic regression model, while accounting fraud is measured using the adjusted Beneish (1999) model. The findings indicate that audit committee characteristics—namely independence, financial expertise, and gender diversity—negatively moderate the relationship between CSR governance and accounting fraud. In particular, the effectiveness of the CSR governance dimension in reducing accounting fraud is strengthened when firms are monitored by an independent, expert, and diversified audit committee. These results are further supported by robustness tests, confirming their consistency and reliability. From a practical perspective, the study suggests that CSR governance alone is insufficient to deter accounting fraud and that its effectiveness depends on strong internal oversight mechanisms, especially well-structured audit committees. By highlighting the moderating role of audit committee characteristics, this research provides an original contribution to the literature on corporate governance and accounting ethics and offers valuable implications for corporate decision-makers and regulators.

Keywords:

Governance dimension, audit committee independence, audit committee expertise, gender diversity on audit committees, accounting fraud, Beneish model

Introduction

Following the financial scandals that have hit certain companies around the world, issues related to the management of accounting data and the transparency of accounting information continue to interest accounting researchers and practitioners (Ghorbel, N., & Ben Amar, A., 2025). . It should be noted that the concept of accounting fraud IS certainly a major concern for accounting practitioners and researchers, encompassing all sectors and all sizes of companies (N'Guilla Sow, 2018).

Audit committees are widely recognized as effective mechanisms of corporate governance that help reduce the likelihood of fraudulent financial reporting. By overseeing management, internal, and external auditors, audit committees play a crucial role in safeguarding shareholders' interests and ensuring the integrity of financial disclosures (Al-Baidhani, 2014b). To perform this function effectively, audit committees must be composed of independent members with financial and accounting expertise. Empirical research confirms that the appointment of such experts has a positive impact on market confidence, particularly in companies with strong governance frameworks (Defond et al., 2005; Al-Baidhani, 2014).

In parallel, the governance dimension of corporate social responsibility (CSR)—including ethical practices, transparency in decision-making, and accountability mechanisms—is increasingly cited as a determinant of corporate integrity, with several recent studies suggesting that robust CSR governance contributes to reducing the risk of accounting fraud (García-Sánchez et al., 2022; Efendi et al., 2024; Popa et al., 2024). However, while CSR is often promoted as a mechanism for reinforcing ethical conduct and financial transparency, research also highlights that it can be misused as a strategic communication tool. Some firms engage in CSR initiatives primarily for reputational benefits, using them as a form of greenwashing or symbolic compliance without embedding genuine ethical practices or robust internal controls. In such contexts, CSR may serve as a façade, creating a misleading image of responsible governance while allowing fraudulent practices to persist behind the scenes.

Despite growing interest in both CSR and audit committees, existing empirical findings remain mixed and fragmented. Importantly, although many studies explore the link between corporate governance and fraud, few have specifically addressed the effect of the CSR governance dimension on accounting fraud, and to our knowledge, none have examined how audit committee characteristics may moderate this relationship. This lack of integrated analysis limits our understanding of how external CSR commitments and internal governance mechanisms interact to influence corporate behavior. To address this gap, our study proposes a novel framework that investigates whether and how key audit committee attributes—such as independence, financial expertise, and gender diversity—moderate the relationship between CSR governance and accounting fraud. Our research is guided by the following question:

How does audit committee effectiveness influence the likelihood of accounting fraud in companies with a strong commitment to CSR governance?

Thus, the aim of this study is to shed light on the complex relationship between CSR governance and audit committee characteristics in the prevention of accounting fraud.

The results of our study reveal a negative relationship between the governance dimension of CSR and accounting fraud. This means that companies committed to responsible governance practices are less likely to engage in fraudulent activities. In addition, the characteristics of the audit committee play a significant moderating role in this relationship. Firstly, audit committee expertise has a negative moderating effect, indicating that committees composed of members highly qualified in governance matters reinforce the impact of CSR on the reduction of accounting fraud. Secondly, audit committee independence also negatively moderates this relationship, suggesting that more autonomous committees accentuate companies' ability to prevent fraudulent behavior by relying on strong governance practices. Finally, gender diversity within the audit committee has a negative moderating effect, showing that the presence of women contributes to a more rigorous management of financial and ethical risks, thus reinforcing the impact of CSR governance on the fight against fraud. These results underline the crucial importance of audit committee characteristics in maximizing the effectiveness of CSR governance practices in preventing accounting fraud.

To our knowledge, this study is the first to comprehensively document the effect of the interaction between the audit committee and the governance dimension of CSR on accounting fraud. By exploring the relationships between audit committee expertise, independence and gender diversity, as well as their interaction with corporate governance commitments, we reveal groundbreaking results. These findings underline the crucial importance of a well-structured and diverse audit committee in enhancing financial transparency and preventing fraudulent behavior, while supporting sustainable corporate initiatives. Our findings offer valuable guidance for practitioners and policymakers seeking to improve corporate governance and promote ethical and sustainable practices.

Thus, our study makes significant contributions at several levels. On the theoretical level, it enriches the literature by highlighting the moderating role of audit committee characteristics (expertise, independence and gender diversity) in the relationship between the governance dimension of CSR and accounting fraud, an interaction as yet little explored. Empirically, our results demonstrate that companies committed to responsible governance practices are less likely to commit fraud, and that this effect is amplified by competent, independent and diverse audit committees. From a practical point of view, this research offers concrete recommendations to policy-makers and regulators, highlighting the importance of audit committee composition in maximizing the impact of CSR governance initiatives on fraud prevention. Finally, our study makes a social contribution by showing that gender diversity within audit committees promotes better management of ethical and financial risks, thus encouraging more inclusive and responsible governance practices.

The remainder of this paper is structured as follows: Section 2 reviews the literature and sets out the research hypotheses. Section 3 describes the data and the empirical study. Section 4 presents a discussion of the results. Section 5 covers the robustness checks and Section 6 concludes the paper.

2. Theoretical bases and literature review

2.1. Explanatory theories

Agency theory:

According to agency theory (Jensen & Meckling, 1976), the audit committee plays a key role in reducing conflicts of interest between shareholders and management by acting as an internal monitoring mechanism (Madi et al., 2014). The board of directors (BoD) serves as a vital link between management, auditors, and shareholders (Ahmed Haji & Anifowose, 2016), facilitating communication (Barako et al., 2006), reducing information asymmetry, and enhancing the quality of disclosure (Said et al., 2009). Its presence also helps lower agency costs, particularly in publicly listed firms, thereby improving performance (Forker, 1992). An effective board improves internal control systems and CSR disclosure (Appuhami & Tashakor, 2017; Madi et al., 2014; Setiany et al., 2017). Moreover, board independence is a critical factor in addressing agency problems and reducing managerial collusion through stronger oversight (Fama, 1980; Fama & Jensen, 1983), which can positively influence CSR reporting quality (Qaderi et al., 2020).

Signalling theory

According to signalling theory (Spence, 1973), the independence and expertise of the audit committee can be perceived as positive signals of the company's commitment to ethical and transparent governance. An independent and competent audit committee sends a strong message to investors and stakeholders about the rigor of internal control and the reliability of financial information. Khan et al (2021) demonstrate that companies with independent, diversified and qualified audit committees enjoy a better perception on the financial markets, which translates into lower financing costs and reduced fraud risks. In addition, audit committee independence acts as a disciplinary mechanism, encouraging managers to adopt responsible behavior and avoid conflicts of interest (Si & Maalemi, 2023). In this way, the independence of the audit committee is a strong signal of good governance, likely to boost financial performance and reduce the risk of accounting fraud.

Legitimacy theory:

In fact, Legitimacy Theory asserts that the management of an organization undertakes actions with the aim of generating a perception within the community that the organization's value system is consistent with the value system of the wider social system of which it is a part (Lindblom, 1994). There is considered to be a “social contract” between an organization and the society (or societies) in which it operates, and any breach of the social contract has negative implications for the organization's continued survival. A “legitimate organization” - and therefore one that enjoys the support of the community - is one that respects the terms of the social contract. Society's expectations serve as the basis for assessing an organization's legitimacy and influence its disclosure decisions (Islam and Deegan, 2010).

2.2 literature review and hypothesis development:

2.2.1. The Governance Dimension and Accounting Fraud

The governance dimension encompasses all the rules, policies and organizational mechanisms designed to prevent accounting fraud. Several studies have highlighted the central role played by management in this process. Troy, Smith and Domino (2011) show that certain CEO profiles - young, inexperienced and without management training - are more inclined to rationalize fraud. What's more, compensation schemes, particularly those based on shares or bonuses, can encourage the manipulation of financial results (Jensen et al., 2004). Conversely, governance based on transparency and formal communication reduces the risk of criminal behavior (Schnatterly, 2003; Tutino & Merlo, 2019).

Governance is also strengthened by corporate social responsibility (CSR) practices, which promote internal controls and limit opportunistic behavior (Liao et al., 2019). In this sense, internal stakeholders with moral values - such as executives, investors and employees - are more inclined to engage with ethical and responsible companies (Lee & Mitchell, 1994; Zheng et al., 2014), thus strengthening the fight against fraud.

The composition of the board of directors is also an essential lever. Several authors (Beasley, 1996; Uzun et al., 2004; Farber, 2005; Helland & Sykuta, 2005) point out that a high percentage of outside and independent directors reduces the probability of fraud. However, results concerning CEO duality and multiple mandates are more nuanced: while Farber (2005) observes a positive relationship between duality and fraud, Beasley (1996) finds no significant link, and Ferris et al. (2003) detect no correlation between multiple mandates and either performance or fraud. These findings suggest that governance, particularly through the composition and functioning of the board, plays a crucial but complex role in preventing accounting manipulation (Crutchley et al., 2007; Hopkins et al., 2015).

Recent literature highlights the central role of CSR governance in preventing accounting fraud. Gendron et al. (2004) indicate that practices based on transparency and accountability reduce the manipulation of financial statements, as companies seek to maintain a positive image with stakeholders. Similarly, Maignan and Ferrell (2004) argue that the integration of ethical principles through internal policies and codes of conduct reduces fraudulent behavior. Along the same lines, Freeman (1984) and Suchman (1995) point out that meeting the expectations of all stakeholders, and reinforcing the legitimacy perceived by the public, can deter accounting fraud. Moir (2001) adds to this perspective, explaining that the adoption of rigorous CSR governance mechanisms strengthens internal controls and reporting procedures.

Several empirical studies confirm this link. The KPMG report highlights that companies with well-established CSR policies maintain high standards of financial transparency. Kang et kim (2012) and García-Sánchez et al (2022) show that strict CSR governance practices reduce the incidence of fraud, not least through better internal control. Other studies reinforce this relationship between governance and fraud prevention: according to Efendi et al. (2024), Rahayu et al. (2024), and Nasir et al. (2019), internal control and the implementation of good governance have a significant effect on fraud prevention. Rohmatin et al. (2021) point out that companies facing fraud become more sensitive to good governance principles, while Popa et al. (2024) demonstrate that low governance scores (including AUDIT, EQUIL, INDEP and GenF) increase the risk of financial fraud. BAALI, A. (2024) recommends the adoption of robust internal processes, including staff training and the creation of an ethical organizational culture. Finally, according to Moufid and Benbba (2024), and Seoulou and Touré (2024), effective governance not only helps prevent fraud, but also enhances corporate reputation, competitiveness and innovation.

H1: the governance dimension has a negative impact on accounting fraud.

2.2.2. The moderating effect of audit committee independence on the relationship between the governance dimension and accounting fraud

Audit committees play a vital role in corporate governance by overseeing financial reporting, ensuring regulatory compliance, and protecting shareholders functions that have become increasingly important following major financial scandals (Sykes, 1988; Walker, 2004; Appuhami & Tashakor, 2017). As noted by Al-Baidhani (2014), audit committee activities are closely tied to governance responsibilities, particularly in monitoring financial disclosures and coordinating with auditors. The Treadway Commission (1987) identified the audit committee as a key mechanism for preventing financial fraud, emphasizing the need for informed and vigilant members. Regulatory bodies such as the SEC, COSO, and the Big Four accounting firms have since promoted reforms to strengthen audit committee independence and expertise, notably through the Sarbanes-Oxley Act (2002), which mandates independent committees and financial expertise. Independence, defined as the absence of close ties with management—is essential for effective oversight, as empirical studies show it enhances disclosure quality and reduces the likelihood of fraud (Li et al., 2012; Cheng & Courtenay, 2006; Patelli & Prencipe, 2007; Madi et al., 2014; Ha, 2022).

The audit committee plays an important role in overseeing the governance dimension of CSR by promoting ethical, transparent, and compliant practices. Studies by Khan et al. (2012) and Brédart et al. (2019) highlight a positive association between the presence of an audit committee and CSR engagement, while Pluchart (2013) emphasizes the value of specialized committees in enhancing internal control and accountability. However, the effectiveness of these mechanisms depends heavily on the committee's independence. A lack of autonomy may weaken oversight, enabling financial manipulation or CSR greenwashing. Thus, audit committee independence is key to reinforcing the impact of CSR governance on reducing accounting fraud. Independent committees with financial expertise enhance transparency and oversight, limiting fraud risk (Defond et al., 2005; Lee & Mande, 2005). Without such independence, the positive influence of CSR governance on fraud prevention may be significantly reduced.

Audit committee independence plays a critical role in reducing the risk of accounting fraud. Studies by Farber (2005) and Chan and Li (2008) show that fraudulent firms often lack financial experts on their audit committees. Similarly, research by Dwekat et al. (2021) and Al-Shaer and Zaman (2018) confirms that independent and expert audit committees enhance CSR implementation and lower fraudulent behavior. Reinforced by the Sarbanes-Oxley Act (2002), independence serves as a key driver of corporate transparency and governance. As highlighted by Al-Baidhani (2014), the audit committee not only monitors financial reporting but also ensures risk management and regulatory compliance. Empirical evidence from Skousen et al. (2015) and Rohmatin et al. (2021) further supports that audit committee independence enhances the credibility of both financial and CSR practices. Therefore, it acts as a negative moderator in the relationship between CSR governance and accounting fraud by ensuring stronger oversight and greater transparency.

If the association between CSR and accounting fraud indicates a misuse of CSR strategies, a strong and responsible governance system and a fully independent audit committee may be able to effectively limit it. In other words, misuse of CSR strategies is more likely to occur in companies with weak governance environments and dependent committee members. Thus, according to (FAITEH et al., 2024) the internal auditor contributes to reducing the risk of fraud. According to BOUMESKA and ALLOULI (2024) when the company integrates the oversight function of the audit committee and a strong internal audit function to combat fraud. The independence of audit committee directors has a negative impact on manipulation, and companies with several independent directors performed better ALAMI, Y. (2024). KOUNOUWEWA and IGUE (2024), the independence of directors significantly influences the quality of accounting and financial information in companies. On the other hand, other standards of excellent governance assert that all audit committee members should be independent directors to qualify the audit committee as independent (CONTRÔLE and DRISSA., 2023). Moreover, research by Piot and Kermiche (2009) asserts that the independence and expertise of the audit committee help to prevent and deter accounting irregularities and manipulations in the financial statements (CONTRÔLE and DRISSA., 2023). With this in mind, we propose our hypothesis:

H2 : the independence of the Audit Committee negatively moderates the relationship between the governance dimension and accounting fraud.

2.2.3. The moderating effect of audit committee expertise on the relationship between the governance dimension and accounting fraud

Audit committee expertise plays a vital role in reinforcing the governance dimension of CSR by ensuring responsible, ethical, and transparent management of corporate activities (Aoudane & Wahabi, 2023). Members with accounting and financial specialization are well equipped to oversee CSR integration, regulatory compliance, and fraud risk reduction (Si & Maalemi, 2023; Houndjo, 2021). Beyond financial reporting, expert audit committees monitor CSR-related controls, detect management flaws, and help build stakeholder trust (Velte, 2018). Acting as a moderator, audit committee expertise strengthens the link between CSR governance and fraud prevention, as qualified members can identify irregularities and ensure adherence to CSR commitments (DeFond & Francis, 2005; Simnett et al., 2009). This expertise enhances internal controls and supports the company's social and environmental responsibilities.

The interaction between the expertise of the AC and CSR governance is essential to ensure effective oversight of corporate practices and prevent accounting fraud. Where CSR governance is still fragile or insufficiently developed, the expertise of audit committee members plays a crucial compensatory role, reinforcing vigilance and preventing the occurrence of fraudulent behavior (Dhaliwal et al., 2010). In this context, the audit committee, as a central component of CSR governance, can contribute to a significant reduction in fraud risks by implementing enhanced monitoring practices (Andayani et al., 2024). To be fully effective, audit committee members need to possess in-depth accounting and financial skills in order to exercise their internal control and financial reporting oversight role with rigor (Keita et al., 2023).

In companies where CSR governance is already well established, the audit committee's expertise enhances the effectiveness of oversight, creating an environment in which accounting fraud becomes even more difficult to perpetrate. Research by Bouaziz and Maalemi (2023) highlights that audit committee scrutiny has a positive impact on audit quality, which is an essential element in ensuring the transparency and reliability of financial reporting. In addition, this expertise contributes to improving financial communication and reducing information asymmetries, thus creating a dynamic of responsible and ethical governance that supports CSR objectives (Kounouwewa & Igue, 2024). Thus, the audit committee's expertise in accounting and CSR governance is a powerful lever for preventing accounting fraud and strengthening the quality of financial information, thereby consolidating stakeholder confidence and the company's commitment to responsible practices. Consequently, the expertise of the audit committee plays a decisive role as a moderator in the relationship between CSR governance and accounting fraud, ensuring that CSR practices are properly monitored and reducing the risk of fraudulent behavior. Thus, our research hypothesis :

H3: audit committee expertise negatively moderates the relationship between the governance dimension and accounting fraud.

2.2.4. The moderating impact of women on audit committees on the relationship between corporate governance and accounting fraud

The role of women on audit committees and their impact on corporate governance and accounting fraud is a debated topic in the literature. While research on gender diversity in boards of directors is extensive, studies focusing specifically on audit committees are limited. Agency and resource dependency theories provide differing views: agency theory suggests that gender diversity, especially women's presence, enhances group cohesion and audit committee effectiveness. Women are generally associated with higher ethical standards and more cautious, risk-averse behavior, which can reduce fraud risk. Their inclusion on audit committees broadens the scope of accounting oversight, potentially strengthening fraud prevention (Adams & Ferreira, 2009; Pucheta-Martinez & Fuentes, 2007; Srinidhi et al., 2011).

Research shows that audit committees with female members tend to ask more detailed questions about accounting practices and foster better communication with external auditors, enhancing their oversight and ability to detect irregularities (Srinidhi, Gul, & Tsui, 2011). Gender diversity thus acts as a moderating factor, strengthening the link between corporate governance and fraud prevention. For instance, Lai et al. (2017) found that firms with at least one woman on the audit committee pay higher audit fees and select specialized auditors, improving accounting quality and reducing earnings manipulation. Additionally, studies by Krishnan and Visvanathan (2008) and Sun et al. (2011) suggest that women's presence limits financial statement fraud, strengthens internal controls, lowers audit costs, and increases financial reporting transparency, all critical for effective governance.

Consequently, Women on audit committees, due to traits such as greater risk aversion and stronger moral reasoning, are more likely to challenge unethical behavior, making their presence vital in curbing accounting fraud (Wood & Eagly, 2009; Elm et al., 2001). They leverage their influence to promote CSR, thereby moderating the effect of governance on fraud (Khenissi et al., 2024). This moderating role is especially important in weak governance environments, where women bring increased vigilance and ethical rigor, strengthening internal controls and reducing fraud risk (Khlif & Achek, 2017). Thus, their presence enhances the effectiveness of corporate governance in preventing fraudulent practices. However, Kanter (1977) suggests that the impact of women on group culture only becomes significant when their representation reaches a threshold of three members. Such female representation, distinct from that of men, can influence strategic decisions and improve boardroom interaction. Several empirical studies support this idea, showing that a board with more women gives greater priority to corporate social responsibility (Bear et al., 2010; Nuber and Velte, 2021; Williams, 2003; Yarram and Adapa, 2021) (Khenissi et al., 2024). However, the mere presence of women on boards and their committees is not always enough to bring about significant changes in management teams and improve corporate governance (Torchia et al., 2010; Khenissi et al., 2024). On the other hand, where governance is already well established, gender diversity on the audit committee can further enhance the effectiveness of oversight, thereby reducing the risk of fraud. Indeed, recent research has shown that gender diversity on boards amplifies the negative effect of corporate social responsibility on fraud intensity (Chu et al., 2023). Moreover, the presence of women on these governance bodies contributes to fraud deterrence at all levels (Widyaningsih et al., 2023). Furthermore, according to Rathnasiri et al. (2015), gender diversity on audit committees has a significant and negative effect on the probability of fraud. In conclusion, this analysis leads to the formulation of the following hypothesis:

H4: The presence of the female gender on the audit committee negatively influences the relationship between governance and accounting fraud.

Research Methodology

Statistical Population, Sample, and Research Period

This study aims to elucidate the moderating impact of the audit committee on the relationship between the governance dimension of CSR and accounting fraud. The study is based on a final sample of 793 companies from France, Canada, the UK and Germany, drawn from the ASSET4 database for the years 2010 to 2022. The initial sample included 1,553 companies, of which 670 were excluded due to missing data, as well as 32 banks, 104 finance companies, 37 insurance companies and 83 investment and real estate services companies. The final study sample comprised 793 ASSET4 companies, including 117 French companies, 225 Canadian companies, 306 British companies and 145 German companies. We subsequently obtained the necessary information for these companies from the Thomson Reuters database.

3. Research Model and Variables

Recall that our main objective is to analyze the moderating impact of audit committee characteristics on the relationship between the governance dimension of CSR and accounting fraud in French, Canadian, British and German companies. This study used logistic regression analysis because the dependent variable is financial statement fraud, which uses categorical variables. Logistic regression is an analytical technique used to estimate outcomes based on changes in the values of independent variables (Maria Ulfah et al., 2017), or to estimate probability based on the value of each independent variable (Triyanto, D. N. 2020).

To test the research hypotheses, four logit-probit models are used, as presented below:

Model (1)

$$FRAUD_{it} = \beta_0 + \beta_1 GOV_{it} + \beta_2\, SIZE_{it} + \beta_3 ROA_{it} + \beta_4 MTB_{it} + \beta_5\, LEV_{it} + \lambda_i + \mu_t + \varepsilon_{it}$$

Model 2 :

$$FRAUD_{it} = \beta_0 + \beta_1 GOV_{it} + \beta_2 \boldsymbol{INAUD}_{it} + \beta_3 GOV_{it} * \boldsymbol{INAUD}_{it} + \beta_4\, SIZE_{it} + \beta_5 ROA_{it} + \beta_6 MTB_{it} + \beta_7\, LEV_{it} + \lambda_i + \mu_t + \varepsilon_{it}$$

Model 3 :

$$FRAUD_{it} = \beta_0 + \beta_1 GOV_{it} + \beta_2 EXPAUD_{it} + \beta_3 GOV_{it} * \boldsymbol{EXPAUD}_{it} + \beta_4\, SIZE_{it} + \beta_5 ROA_{it} + \beta_6 MTB_{it} + \beta_7\, LEV_{it} + \lambda_i + \mu_t + \varepsilon_{it}$$

Model 4:

$$FRAUD_{it} = \beta_0 + \beta_1 ENV_{it} + \beta_2 GDAUD_{it} + \beta_3 ENV_{it} * \boldsymbol{GDAUD_{it}} + \beta_4\, SIZE_{it} + \beta_5 ROA_{it} + \beta_6 MTB_{it} + \beta_7\, LEV_{it} + \lambda_i + \mu_t + \varepsilon_{it}$$

The first model is used to test the first research hypothesis, the second model is used to test the second hypothesis, the third model is used to test the third hypothesis and the fourth model is used to test the fourth hypothesis.

FRAUD: The misleading presentation of financial statements according to models (1), (2), (3), and (4) is a dependent research variable, measured by Razali and Arshad (2014) using the modified Beneish (1999) model. The M-score model developed by Beneish (1999) is optimized to estimate the probability of manipulation rather than bankruptcy.

Research Independent Variables

The governance dimension reflects a company's management, control, and accountability practices, including board composition, transparency, risk management, ethics, anti-corruption, and internal controls. It is measured by an overall score indicating the quality of governance structures. Audit committee independence (INAUD) refers to the proportion of independent directors on the committee, following ASX recommendations, with fully external committees offering stronger oversight and more reliable financial reporting. Audit committee expertise (EXPAUD) is assessed by the percentage of members with qualifications in accounting or finance, as per ASX standards, which is vital for ensuring effective oversight and accurate financial information, in line with Jeanjean and Stolowy (2010). Lastly, gender diversity is measured by the proportion of women on the audit committee, promoting inclusive decision-making, stronger governance, and improved transparency.

Control Variables Measurement

Several control variables are included to better identify the factors that can influence accounting fraud. The size of the company (SIZE), measured by the natural logarithm of its total assets, is taken into account, as large structures, due to the complexity of their operations, offer more opportunities for fraud (Becker et al., 1998; Vander Bauwhede et al., 2003; Bédard et al., 2004). Financial leverage (LEVERAGE) is also considered, as highly leveraged companies are perceived as riskier; this ratio is calculated according to the approaches of Yang and Krishnan (2005) and Bradbury et al. (2006). Corporate profitability, represented by return on assets (ROA), serves as an indicator of financial performance: the more profitable a company is, the less incentive it has to manipulate its results to satisfy shareholders. Finally, the Market-to-Book (MTB) variable is used to assess a company's stock market performance. It reflects the company's ability to create shareholder value by comparing its book value with its market value, which is particularly relevant for innovative companies.

4. Research Findings

4.1 Descriptive statistics

Table I gives an overview of the central and dispersion statistics for the statistical population of this research.

Descriptive analysis shows that around half the companies in the sample have been involved in accounting fraud, with an almost balanced distribution between fraudulent and non-fraudulent cases. Audit committee independence is high on average (82.48%), with a distribution concentrated around the mean, albeit slightly skewed to the left. Audit Committee expertise follows a similar trend, with an average of 0.82 and a high concentration around the mean. The average proportion of women on the committee is 13.56%, with a skewed distribution to the right and a notable concentration around the mean. The governance score shows an average of 52.60 and a relatively normal distribution. Interactions between governance and committee characteristics reveal generally balanced trends, except for the interaction with female presence (GOV_GDD), marked by a strong asymmetry and significant concentration around the mean. Among the control variables, company size follows a normal distribution, while profitability (ROA), the ratio of market value to book value (MTB) and debt (LEVERAGE) show highly asymmetrical distributions, revealing the presence of significant extreme values in the sample.

Table 1 : descriptive statistics of variables :
Descriptive Statistics

Variables	Mean	Std. Dev.	Minimum	Maximum	Skewness	Kurtusosis
FRAUD	0.4958285	0.5000069	0	1	0.0166866	1.000278
INAUD	82.47775	25.33197	0	100	-1.531516	4.611258
EXPAUD	0.8212242	0.3831831	0	1	-1.676691	3.811292
GDAUD	13.56137	12.63154	0	100	1.166462	5.196439
GOV	52.59811	22.38158	0.34	98.43	-0.1489907	2.117886
GOV_IN~D	4369.882	2376.546	0	9794	0.1151604	2.099162
GOV_EX~D	43.58955	28.65451	0	98.43	-0.1686903	1.852379
GOV_GD~D	721.1023	805.8355	0	8797	1.822232	8.881817
SIZE	14.51384	1.929788	4.094345	20.95731	-0.0096352	3.471266
ROA	4.249658	18.70163	-918.18	134.92	-24.82851	1168.078
MTB	3.220896	30.01869	-1082.44	1668.05	27.23239	1638.406
LEVRAGE	26.95912	23.67876	0	778.05	8.511374	217.1361

***Note** : Ce tableau présente des statistiques descriptives des variables de la présente étude.*

FRAUD: accounting fraud; INAUD: audit committee independence; EXPAUD: audit committee expertise; GDAUD: presence of women on the audit committee; GOV: governance dimension score; GOV_IN~D: interaction between the governance dimension and committee independence; GOV_EX~D : interaction between the governance dimension and the committee's expertise; GOV_GD~D: interaction between the governance dimension and the presence of women on the audit committee; ROA: stock market performance; SIZE: size of the company's assets; LEVERAGE: level of financial debt; MTB: market value/book value ratio.

4.2 Correlation analysis

We explored the relationships between audit committee characteristics, the environmental dimension of CSR and accounting fraud (FRAUD) using Spearman correlation matrices. According to Farrar and Glauber (1967), there should be no harmful levels of multicollinearity until the correlation coefficient reaches 0.8 or 0.9. To confirm this observation, we assessed potential multicollinearity between variables using an analysis of variance inflation factor (VIF).

To complete this analysis, we calculated the VIF for each variable. The results show that VIFs vary between 1.00 and 1.42 in all models. Myers (1990) indicates that the effect of multicollinearity is insignificant if all VIFs are below 10. Therefore, given that all VIF values are well below this threshold, we conclude that multicollinearity does not represent a significant problem for the interpretation of our results.

Consequently, although some correlations between variables are strong, they do not exceed the critical thresholds generally associated with problematic multicollinearity. What's more, the low VIF values confirm the absence of any major multicollinearity problems, enabling a reliable interpretation of the relationships studied in our models.

Table 2 : correlataion matrix :

Model 1 : correlation matrix (M1)

	FRAUD	GOV	Size	ROA	MTB	LEV
FRAUD	1,000					
GOV	-0,026	1,000				
	0,010					
Size	-0,140	0,321	1,000			
	0,000	0,000				
ROA	0,005	-0,024	-0,073	1,000		
	0,623	0,019	0,000			
MTB	0,069	0,015	-0,117	0,367	1,000	
	0,000	0,155	0,000	0,000		
LEV	-0,069	0,090	0,257	-0,117	-0,043	1,000
	0,000	0,000	0,000	0,000	0,000	

Model 2 correlation matrix (M2):

	FRAUD	GOV	INAUD	GOV_INAUD	Size	ROA	MTB	LEV
FRAUD	1.0000							
GOV	-0.0249	1.0000						
	0.0114							
INAUD	-0.0217	0.0736	1.0000					
	0.0274	0.0000						
GOV_INAUD	-0.0393	0.8011	0.5496	1.0000				
	0.0001	0.0000	0.0000					
Size	-0.1389	0.3288	-0.0434	0.2087	1.0000			
	0.0000	0.0000	0.0000	0.0000				
ROA	0.0036	-0.0252	-0.0174	-0.0138	-0.0682	1.0000		

	0.7127	0.0105	0.0766	0.1614	0.0000			
MTB	0.0691	0.0122	-0.0077	0.0160	-0.1129	0.3625	1.0000	
	0.0000	0.2154	0.4355	0.1035	0.0000	0.0000		
LEV	-0.0722	0.0954	0.0281	0.0852	0.2601	-0.1215	-0.0419	1.0000
	0.0000	0.0000	0.0044	0.0000	0.0000	0.0000	0.0000	

Model 3 correlation matrix (M3) :

	FRAUD	**GOV**	**EXPAUD**	**GOV_EXPAUD**	**Size**	**ROA**	**MTB**	**LEV**
FRAUD	1.0000							
GOV	-0.0249	1.0000						
	0.0114							
EXPAUD	-0.0132	0.0441	1.0000					
	0.1797	0.0000						
GOV_EXPAUD	-0.0306	0.7033	0.6656	1.0000				
	0.0019	0.0000	0.0000					
Size	-0.1389	0.3288	-0.0072	0.2188	1.0000			
	0.0000	0.0000	0.4679	0.0000				
ROA	0.0036	-0.0252	-0.0145	-0.0264	-0.0682	1.0000		
	0.7127	0.0105	0.1419	0.0074	0.0000			
MTB	0.0691	0.0122	-0.0013	0.0003	-0.1129	0.3625	1.0000	
	0.0000	0.2154	0.8962	0.9775	0.0000	0.0000		
LEV	-0.0722	0.0954	0.0230	0.0751	0.2601	-0.1215	-0.0419	1.0000
	0.0000	0.0000	0.0194	0.0000	0.0000	0.0000	0.0000	

Model 4 correlation matrix (M4):

	FRAUD	**GOV**	**GDAUD**	**GOV_GDAUD**	**Size**	**ROA**	**MTB**	**LEV**
FRAUD	1.0000							
GOV	-0.0249	1.0000						
	0.0114							
GDAUD	-0.0164	0.0223	1.0000					
	0.0964	0.0235						
GOV_GDAUD	-0.0331	0.3335	0.8977	1.0000				
	0.0008	0.0000	0.0000					
Size	-0.1389	0.3288	-0.0100	0.1020	1.0000			
	0.0000	0.0000	0.3113	0.0000				
ROA	0.0036	-0.0252	0.0148	0.0064	-0.0682	1.0000		
	0.7127	0.0105	0.1326	0.5156	0.0000			
MTB	0.0691	0.0122	0.0258	0.0200	-0.1129	0.3625	1.0000	
	0.0000	0.2154	0.0089	0.0425	0.0000	0.0000		
LEV	-0.0722	0.0954	0.0570	0.0812	0.2601	-0.1215	-0.0419	1.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	

Table 3 : VIF table :

Model 1:

Variable	**VIF**	**1/VIF**
GOV	1.14	0.874018
SIZE	1.14	0.875626
ROA	1.05	0.954853
LEVERAGE	1.05	0.955778
COVID	1.04	0.962219
MTB	1.00	0.997718
MEAN VIF	1.07	

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Model 2:

Variable	VIF	1/VIF
Size	1.17	0.858201
GOV	1.13	0.885266
ROA	1.05	0.954154
LEV	1.05	0.955206
INAUD	1.02	0.981197
MTB	1.00	0.997703
Mean VIF	1.07	

Model 3:

Variable	VIF	1/VIF
Size	1.15	0.870902
GOV	1.12	0.890777
ROA	1.05	0.953464
LEV	1.05	0.956049
EXPAUD	1.00	0.996523
MTB	1.00	0.997680
Mean VIF	1.06	

Model 4:

Variable	VIF	1/VIF
Size	1.15	0.870827
GOV	1.12	0.892134
ROA	1.05	0.952063
LEV	1.05	0.954124
GDAUD	1.01	0.994764
MTB	1.00	0.997670
Mean VIF	1.06	

4.3 Fixed or random effect

The decision to choose between a fixed effect and a random effect is based on the result of the Hausman test, when run for the data in this study, this test gave significant results, proving the use of fixed effect regression analysis for our model prior to regression analysis. The Hausman test was performed and a fixed effect was applied in accordance with the results of the Hausman test.

Table 4. Hausman test for models M2 to M4 :

Modéles	DL : K*	χ2calculée	p-value	EF/EA**
Model (M2)	7	46.38	0.0000	**EF**
Model (M3)	7	45.22	0.0000	**EF**
Model (M4)	7	44.31	0.0000	**EF**

* K : Number of explanatory variables;

** EF/EA : Fixed or random effects ;

4.4 Heteroscedasticity test (modified Wald test)

To ensure the validity of our estimates, we checked the homoscedasticity of the residuals using the modified Wald test for grouped heteroscedasticity in the fixed-effects model. This test determines whether the variance of the errors is constant across the different groups. The null hypothesis (H0) of the test is homoscedasticity of residuals, while the alternative hypothesis (H1) is heteroscedasticity.

The results of the residual heteroscedasticity test for all models show that the probability associated with the coefficients is less than 5% and insignificant (p = 0.0000). We therefore reject the null hypothesis H0. There is therefore a heteroscedasticity problem present.

Table 5: Residual heteroscedasticity test

Test/Regression	Chi2	Prob>chi2
Heteroskedasticity GOV	2.6e+07	0.0000
Heteroskedasticity GOV*INAUD	1.0e+09	0.0000
Heteroskedasticity GOV* EXPAUD	1.4e+09	0.0000
Heteroskedasticity GOV* GDAUD	1.4e+09	0.0000

5.5 Error autocorrelation test (Breusch-Pagan test)

We also assessed the presence of serial autocorrelation in our models using the Breusch-Pagan LM test. This test verifies the independence of residuals and detects whether errors are correlated over time. The null hypothesis (H0) of the test is the absence of autocorrelation, while the alternative hypothesis (H1) is the presence of autocorrelation.

The test results (Table 6) show a probability associated with the coefficients of less than 5% for all models (p = 0.0000). We therefore reject the null hypothesis of no autocorrelation in favor of the alternative hypothesis of autocorrelation. This observation suggests that the errors are not independent and are correlated over time, which could also affect the validity of our results.

Table 6 : Autocorrelation test:

Test/Regression	Chi2	Prob>chi2
Autocorrelation GOV	2.04e+06	0.0000
Autocorrelation GOV*INAUD	1.13e+06	0.0000
Autocorrelation GOV* EXPAUD	1.10e+06	0.0000
Autocorrelation GOV* GDAUD	1.10e+06	0.0000

Our test results revealed the presence of heteroscedasticity and autocorrelation in our models. To take account of these problems and guarantee the reliability of our estimates, we corrected the variance-covariance matrix of our models using robust estimation. This approach results in corrected standard errors that are more robust to heteroscedasticity and autocorrelation, improving the validity of our statistical inferences.

4.5 Regression results

Model 1 :

The coefficients on the governance dimension (GOV) are negative and highly significant, suggesting that companies that develop strong corporate governance are less likely to commit accounting fraud. Good governance promotes greater transparency and strengthens internal controls, which in turn reduces fraudulent behaviour (Beasley, 1996). Furthermore, the literature shows that robust governance structures, such as effective boards and adequate oversight mechanisms, play a key role in fraud prevention (Aguilera & Cuervo-Cazurra, 2009).

Model 2 :

The coefficient of audit committee independence, when integrated as an interaction variable with the GOV dimension, appears fundamental in the objective and effective control of accounting practices. An independent audit committee is essential to reduce conflicts of interest, ensure greater transparency and reduce the risk of accounting fraud. This is also in line with the findings of Bouaziz and MAALEMI (2023), who show that audit committee autonomy has a positive effect on internal audit quality, creating an organizational environment that favors transparency and fraud prevention. Zahra et al (2023) point out that independent audit committees promote transparency and disclosure, which discourages fraudulent behavior.

The significant and negative interaction between the governance dimension (GOV) and audit committee independence (INAUD) (-0.0001207***) underscores the vital role of combining strong corporate governance with an independent audit committee in mitigating accounting fraud. Independent oversight enhances internal control systems, reducing opportunities for manipulation. This finding supports and extends prior research by Boumeska and Allouli (2024), who emphasize the importance of board oversight and internal audit functions, and aligns with studies by Piot and Kermiche (2009), Contrôle and Drissa (2023), Klein (2002), and Abbott et al. (2004), all of which highlight audit committee independence as a key factor in preventing financial misstatements. These results confirm the acceptance of H2, suggesting that audit committee independence negatively moderates the relationship between CSR governance and accounting fraud.

Model 3 :

The coefficient on audit committee expertise (EXPAUD) is negative and highly significant. This indicates that the high level of expertise in the AC is associated with a significant reduction in accounting fraud. Board expertise increases the ability to detect and prevent financial errors and fraud, thus contributing to better financial governance. This finding also concurs with the conclusions of (CONTRÔLE and DRISSA., 2023), L'expertise financière du comité d'audit vise à limiter les manipulations, les fraudes financières et les détournements de fonds. Piot and Kermiche (2009) also confirm that this expertise makes it possible to prevent and detect irregularities and manipulations in the financial statements.

The negative and significant interaction between the governance dimension (GOV) and audit committee expertise (EXPAUD) (-0.0001207***) suggests that combining strong governance with knowledgeable audit committees significantly reduces accounting fraud. This synergy enhances internal control and the quality of financial oversight (Abbott, Parker, & Peters, 2004). The finding aligns with Andayani et al. (2024), who argue that improved audit committee skills, alongside effective governance, reduce fraud risks. Similarly, Keita et al. (2023) emphasize that sufficient accounting expertise is essential for audit committees to effectively monitor financial reporting and prevent fraud. These results support the acceptance of H3, confirming that audit committee expertise negatively moderates the relationship between CSR governance and accounting fraud.

Model 4 :

The coefficient of gender diversity on the audit committee is negative and significant, indicating that a higher presence of women is associated with a lower likelihood of accounting fraud. This finding supports Carter et al. (2003), who suggest that diverse groups offer broader perspectives and are more effective at addressing complex issues. It also aligns with Amar (2014) and Bello et al. (2019), who highlight that women directors tend to be more conservative, ethical, and risk-averse, making them less likely to engage in or tolerate financial manipulation. Additionally, Wang et al. (2022) find that women are particularly effective in reducing both the frequency and severity of fraud, especially in male-dominated industries.

The negative and significant coefficient of the interaction between governance (GOV) and gender diversity on the audit committee (GDAUD) (-0.0002558**) indicates that combining strong governance practices with gender-diverse audit committees significantly reduces accounting fraud. This synergy enhances internal controls and limits fraud opportunities. Research by Khenissi et al. (2024), Bear et al. (2010), and Nuber and Velte (2021) supports the idea that female presence on boards strengthens CSR efforts and ethical oversight. However, as Torchia et al. (2010) and Khenissi et al. (2024) argue, mere representation may not be sufficient unless women are meaningfully integrated into decision-making. Overall, these findings support the acceptance of H4, confirming that gender diversity on audit committees negatively moderates the relationship between CSR governance and accounting fraud.

The results show that ROA is negatively and significantly associated with accounting fraud across all models, suggesting that more profitable firms are less likely to engage in financial manipulation. This aligns with agency theory and previous findings by Dechow et al. (2010) and Rezaee (2005), who argue that higher profitability reduces incentives for fraud and is linked to stronger internal controls. Conversely, firm size (SIZE) is positively associated with accounting fraud, indicating that larger companies, due to their complexity and weaker governance structures, may face higher fraud risks (Jensen, 1986; Beasley, 1996; Zahra & Pearce, 1989; Kim et al., 2003; Ali et al., 2015). However, Meek et al. (2007) suggest that larger firms may benefit from better governance, potentially offsetting this risk. Leverage also shows a significant positive association with fraud, supporting the notion that highly indebted firms face greater pressure to meet financial expectations, increasing the likelihood of fraudulent behavior (Myers, 1977; Press & Weintrop, 1990; Jensen, 1986). Finally, the market-to-book ratio is not significantly related to accounting fraud in any model.

Table 7: Model estimation results :

VARIABLES	(1) FRAUDE	(2) FRAUDE	(3) FRAUDE	(4) FRAUDE
GOV	-0.013832***	-0.0322169***	-0.0304165***	-0.0259792***
	(0.003612)	(0.0102273)	(0.0049507)	(0.0042873)
INAUD		-0.0001061**		
		(0.0000528)		
EXPAUD			-1.108275***	
			(0.3111743)	
GDAUD				-0.0254569**
				(0.0121787)
GOV-INAUD		-0.0001207***		
		(0.0000405)		
GOV- EXPAUD			-0.0109817**	
			(0.0052874)	
GOV- GDAUD				-0.0002558**
				(0.0001132)
ROA	-0.013151***	-0.0140569***	-0.0138387***	-0.0140571**
	(0.0047733)	(0.005413)	(0.0053063)	(0.0055034)
SIZE	0.0686341***	0.1802032**	0.1828838**	0.230779**
	(0.0239143)	(0.0853839)	(0.0837731)	(0.0922273)
LEVERAGE	0.0023167**	0.0012402**	0.0012746**	0.0010968**
	(0.0009775)	(.0005255)	(0.0005378)	(0.0004748)
MTB	6.44e-06	0.000531	0.0004471	0.0004402
	(0.0005616)	(0.0007238)	(0.0007017)	(0.0007017)
Constant	-4.672047***	-1.055182	-2.209117*	-1.442712
	(1.194913)	(1.325096)	(1.182933)	(1.248819)
Observations	9,515	10,307	10,307	10,307
Number of ID	793	793	793	793
Pseudo R^2	.034635	0.02225397	0.022531	0.022531

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

5. Robustness analysis

To confirm the robustness of our results, we first analyzed each moderator variable audit committee independence (INAUD), audit committee expertise (EXPAUD), and audit committee gender diversity (GDAUD) in isolation in our main models. Next, we conducted a more comprehensive robustness test by examining the combined interactions of these three moderator variables with the governance dimension of CSR.

$$FRAUD_{it} = \beta_0 + \beta_1 GOV_{it} + \beta_2 \boldsymbol{INAUD}_{it} + \beta_3 GOV_{it} * \boldsymbol{INAUD}_{it} + \beta_4 EXPAUD_{it} + \beta_5 GOV_{it} * \boldsymbol{EXPAUD}_{it} + \beta_6 GDAUD_{it} + \beta_7 GOV_{it} * \boldsymbol{GDAUD_{it}} + \beta_8\, SIZE_{it} + \beta_9 ROA_{it} + \beta_{10} MTB_{it} + \beta_{11}\, LEV_{it} + \lambda_i + \mu_t + \varepsilon_{it}$$

The robustness test reveals remarkable consistency with our initial findings. Indeed, the coefficients of the moderating variables and of the CSR governance dimension remained stable and significant. This stability reinforces the idea that the protective effect of CSR governance practices on accounting fraud is indeed moderated by the quality of the audit committee, thus confirming our hypotheses.

This test shows that the interactions between independence, expertise and gender diversity on the AC and the CSR governance dimension retain a significant negative effect on accounting fraud. Thus, our results highlight the importance of these moderating variables in exploring the relationship between the governance dimension and accounting fraud, and show that our findings are robust and generalizable. Consequently, good governance, accompanied by a competent and diversified audit committee, is essential to limit fraudulent practices within companies.

Table 8 : Estimation results of the model:

	(4)
VARIABLES	FRAUDE
INAUD	-0.0027856**
	(0.0011904)
EXPAUD	-1.024589***
	(0.3335604)
GDAUD	-0.0214304*
	(0.0123505)
GOV-INAUD	-0.000214**
	(0.0001044)
GOV- EXPAUD	-0.000106***
	(0.0000379)
GOV- GDAUD	-0.0081358***
	(0.0023651)
ROA	-.0136014**
	(.005324)
SIZE	.2142267**
	(.0869389)
LEVERAGE	.0012927**
	(.0005431)
MTB	.0003562
	(.0006877)
GOV	-0.0408446***
	(0.0111666)
Constant	-2.353926*
	(1.347633)
Observations	10,307
Number of ID	793
Pseudo R²	0.02072494

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

6. Summary and conclusion

This study examined the impact of the governance dimension of CSR on accounting fraud, along with the moderating role of audit committee characteristics such as independence, expertise, and gender diversity. Based on a sample of 793 companies from France, Canada, Germany, and the UK, the findings show that CSR governance significantly contributes to reducing accounting fraud. Specifically, ethical policies, transparent reporting, and strong internal controls associated with CSR governance help lower the risk of fraudulent behavior, suggesting that firms committed to CSR governance are less likely to engage in financial misconduct.

The analysis shows that audit committee independence significantly strengthens the negative relationship between CSR governance and accounting fraud. Committees with a majority of independent members are more likely to provide objective oversight and promote responsible governance, being less influenced by management. Additionally, the expertise of audit committee members further enhances fraud prevention efforts. Knowledgeable members are better equipped to evaluate the reliability of financial and non-financial disclosures, detect potential risks, and ensure the effectiveness of internal controls.

Firstly, Gender diversity within the audit committee plays a vital role in enhancing governance quality and reducing accounting fraud. The presence of women brings diverse perspectives, stronger sensitivity to ethical and CSR issues, and fosters a more inclusive and transparent decision-making process. This diversity strengthens the company's integrity culture and promotes responsible governance. The study's findings offer practical implications: companies should adopt transparent, ethical CSR policies and view CSR governance as a strategic tool rather than a compliance burden. Audit committees should be composed of independent, qualified members with strong financial expertise, and gender diversity should be actively promoted to improve oversight, risk management, and overall governance effectiveness.

This study has several limitations that offer avenues for future research. First, it aggregates data from four countries (France, Canada, Germany, and the UK) without accounting for their distinct institutional, regulatory, and cultural contexts, which may influence the relationship between CSR governance and accounting fraud. Future studies could analyze each country separately or compare legal traditions, such as continental versus Anglo-Saxon systems, to better understand how governance frameworks shape these dynamics. Additionally, this research focused solely on the governance dimension of CSR, leaving out the potential influence of the social and environmental dimensions. Exploring these aspects could provide a more comprehensive view of how CSR interacts with corporate governance and fraud prevention.

Therefore, while this study makes important contributions, future research could refine the results by making in-depth comparisons between different countries and legal systems, as well as exploring other dimensions of CSR.

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