Corporate Governance Characteristics and Involvement in ESG Activities: Current Trends and Research Directions

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ABSTRACT

Corporate governance characteristics represent a critical element that affects firms' outcomes. During the last two decades, researchers have investigated the link between different governance characteristics and firms' involvement in ESG activities. This paper provides a structured literature review on the topic with a focus on papers published in accounting and finance journals. The corpus comprises 180 academic papers from two ranked journal lists, the Association of Business Schools (ABS) and the Australian Business Deans Council (ABDC). Our analysis combines a structured literature review with citation analysis, topic-modelling using a Machine Learning (ML) approach, and a manual review of selected articles. Our unique combined approach towards conducting a literature review allows us to come up with the key research topics in the area, their deep analysis and identification of the current and future research trends. A review of corporate governance and ESG literature suggests a shift towards a more strategic and practically oriented papers.

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1. Introduction

Corporate governance (CG) mechanisms are crucial role in fulfilling strategic, monitoring, and advisory functions and facilitating a firm's access to valuable information (Hillman and Dalziel, 2003; Adams et al., 2010). Corporate governance practices include various activities and regulations designed to ensure that companies conform to prescribed codes and processes. These activities consider both the legal framework of the company's jurisdiction and internal organizational procedures (Scherer et al., 2016). Several high-profile corporate scandals of the XXI century, such as Enron, WorldCom, Refco, and Volkswagen, have raised investors' awareness and sparked the interest of academics in this field. In recent years, there has been a growing trend of employing governance mechanisms to oversee a broader range of business operations, including the impact on the environment and society. The composition and diversity of corporate boards, ownership structure, and the presence of corporate committees have garnered significant interest in scholarly literature due to their notable impact on firms' engagement in sustainable activities and non-financial disclosure practices (e.g., Ntim and Soobaroyen, 2013; Iatridis, 2013; McCarthy et al., 2017; Coffie et al., 2018; Garanina and Aray, 2021).

The concepts of corporate governance mechanisms and a firm's engagement in environmental, social and governance (ESG) activities (also referred to as corporate social responsibility (CSR)) are concepts aimed at assisting firms in achieving a balance between profitable operations and ethical practices (Jamali et al., 2008). Businesses have been compelled to alter their strategies and boost investments in ESG practices due to a variety of factors, such as environmental regulations, the rise of shareholder activism and the growing demand for sustainable products and services (Stubbs and Cocklin, 2008). Additionally, in the context of corporate governance, involvement in ESG activities refers to a company's ability to achieve long-term success and profitability while considering the environmental, social, and governance aspects in its operations that also leads to sustaining a competitive advantage (Adams et al., 2014; Nguyen et al., 2021). The increased pressure from stakeholders and the wider community has intensified companies' involvement in non-financial disclosure and performance (Majeed et al., 2015; Michelon et al., 2020), making corporate governance's role even more important.

In recent years, researchers have paid significant attention to the relationship between a company's corporate governance attributes and its engagement in ESG activities. Numerous studies have documented that organisations with good corporate governance structures exhibit better ESG practices (Iansiti and Levien, 2004; Michelon and Parbonetti, 2012; Fernando et al., 2019). Nevertheless, progress in the field remains uneven due to the differences between regional and national sectors. Our paper aims to examine the accounting and finance literature investigating corporate governance characteristics as the factors driving a firm's involvement in ESG activities. These activities relate to a company's efforts to satisfy shareholders' expectations, provide business benefits, comply with regulations, positively impact the environment and society, and promote more sustainable business practices (Eccles et al., 2014). Moreover, based on a critical analysis of the existing literature, our study provides essential insights for researchers, policymakers, and businesses, which will facilitate the best practices for achieving global sustainable development goals.

Several literature reviews (e.g., Aguilera et al. (2021), Dwekat et al. (2021), E-Vahdati et al. (2019), and Naciti et al. (2021)) have already been published examining the connection between corporate governance and a company's sustainable performance. However, these literature reviews either cover only a small corpus of papers, like E-Vahdati at al. (2019), who use content analysis for analysing 27 articles without offering a comprehensive overview, or are focused on management papers (e.g., Aguilera et al., 2021). Given the limited research on the influence of corporate governance on a company's involvement in ESG activities, the paper focuses only on ranked accounting and finance journals because these journals are more likely to publish studies that use quantitative methods to explore the association between CG characteristics and involvement in ESG activities based on strong theoretical and empirical foundations. Additionally, accounting and finance journals offer insights into the financial implications of ESG performance and disclosure. By employing the Latent Dirichlet Allocation (LDA) modelling technique, we can enhance the value of the structured literature review conducted through manual analysis. This approach enables us to incorporate additional insights and contribute to the overall findings of the study. As mentioned above, there are limited studies on this subject; therefore, it is an opportune moment to investigate the evolution of academic research in the accounting and finance fields over the past 21 years, particularly considering the integration of ESG/CSR issues.

The primary aim of this paper is to examine the impact of corporate governance characteristics on a company's engagement in ESG activities. To accomplish this objective, the study utilizes the systematic literature review (SLR) methodology offered by Massaro et al. (2016). The study seeks to address three specific research questions with the intention of advancing our comprehension in this field:

RQ1. What are the prominent trends and topics explored in research concerning the link between corporate governance and a company's involvement in ESG/CSR activities, as evidenced by publications in ranked accounting and finance journals?

RQ2: What are the primary focal points within the key research topics identified in the literature?

RQ3: What are the future research directions and emerging trends concerning corporate governance and a company's involvement in ESG/CSR activities?

We conduct a structured literature review to address these research questions with the aid of a machine learning (ML) tool that enhances manual analysis (Bentley et al., 2018; Black et al., 2021; Cai et al., 2019; El-Haj et al., 2019). In this study, a comprehensive analysis is conducted which comprises180 papers published in ranked accounting and finance journals listed by the Australian Business Deans Council (ABDC) and the Association of Business Schools (ABS). The aim is to identify key topics and trends pertaining to the correlation between corporate governance characteristics and a company's engagement in ESG activities. We identify the following topics based on our analysis: Board characteristics and a company's engagement in ESG activities; CEO characteristics and their influence on a company's involvement in ESG activities; CG and ESG as sources for transparency and legitimacy; Internal as well as external assurance of a company's involvement in ESG activities; Gender diversity and a company's involvement in ESG activities.

Our paper contributes significantly to the existing literature in several ways. First, we provide an in-depth and up-to-date review of the state and evolution of the field, outlining the primary topics of investigation within scholarly papers focused on the link between corporate governance characteristics and a company's involvement in ESG activities. Second, we present an exhaustive evaluation of the main findings within the identified key topics in accounting and finance journals, offering a comprehensive depiction and critical analysis that has not been previously undertaken. Third, we come up with areas for future research by performing a manual examination of the most representative papers identified using the ML technique. Application of the machine learning technique for conducting the literature review also makes our paper stand out from other literature reviews in the field.

The subsequent sections of the paper are structured as follows: The methodology for our literature review is described in Section 2, and the results are discussed in Section 3. Section 4 is dedicated to an in-depth analysis of the most representative articles identified during our review. In Section 5, we put forth potential directions for future research. Finally, Section 6 wraps up the paper by providing some concluding comments.

2. Methodology

We use a systematic literature review approach, which is defined as "a method for studying a corpus of scholarly literature, to develop insights, critical reflections, future research paths, and research questions," to identify and analyse the topics in the area of CG and a firm's involvement in ESG activities (Massaro et al., 2016, p. 2). The review process is divided into various steps.

1. The literature review protocol and research questions

First, we outline the framework for our paper by identifying that to date, no comprehensive literature review has been presented at conferences or published in ranked academic journals that analyses this topic based on publications in accounting and finance journals. According to Massaro et al., (2016, p. 7), "Researchers use a systematic literature review to map and evaluate the existing intellectual territory and to determine the needs for future study". Therefore, it is imperative to critically examine current knowledge in order to establish future research directions. Given the limited scope of earlier literature assessments, we formulate our research questions using the three critical management research tasks of "insight", "critique", and "transformative redefinition".

RQ1. What are the prominent trends and topics explored in research concerning the relationship between corporate governance and a company's involvement in ESG/CSR activities, as evidenced by publications in ranked accounting and finance journals?

RQ2: What are the primary focal points within the key research topics identified in the literature?

RQ3: What are the future research directions and emerging trends concerning corporate governance and a company's involvement in ESG/CSR activities?

2. Selecting articles for in-depth examination

According to Massaro et al. (2016), selecting the appropriate body of literature while carrying out a systematic literature review is essential to avoid introducing bias into the study's findings. We use the following procedure to identify and select the research articles that form the basis of our study.

Phase 1. Our search for the articles was based on ABS and ABDC rankings with a focus on accounting and finance journals. First, we compiled a comprehensive list of accounting and finance journals based on the Chartered Association of Business Schools' 2021 rankings (ABS rankings). This exhaustive catalogue included 198 journals in total. Likewise, we compiled a list of journals from the 2019 Australian Business Deans Council Journal Quality List (the ABDC rankings), totalling 332 journals. Subsequently, we eliminated any journals that appeared in both classification systems more than once, resulting in a list of 393 unique journals. Within these journals, our focus was on identifying pertinent papers published within the timeframe of January 2000 to December 2021. By considering this specific timeframe, we aimed to encompass the most relevant and recent scholarly contributions in the field. The final count of journals and the papers used for the SLR are provided in Appendix.

Phase 2. The paper selection was made using the academically known databases - SCOPUS and Web of Science. Our search was based on the keywords from two groups: keywords related to CG attributes AND keywords related to ESG/CSR aspects. More detailed information is represented in Figure 1. Boolean search function 'AND' and 'OR' operators were used to limit, widen, and refine search parameters. This step has returned 614 articles in total.

Phase 3. The corpus of 614 articles was reviewed manually. We have gone through the title and abstracts of all the selected papers to check their relevance and appropriateness to the research topic. This process has eliminated 89 articles. Furthermore, we examined the full text carefully, and only those papers, which have focused on CG attributes AND attributes of CSR/ESG/sustainability were considered when proceeding with the literature review. Based on checking the full texts of the papers, we excluded 345 articles that had a focus only on CG attributes or CSR/ESG/sustainability aspects, leaving 180 articles in total.

FIGURE 1 SHOULD BE INSERTED AROUND HERE

3. Data coding and reliability assurance

To ensure the reliability of our data analysis, we followed the methodology employed in (Buenechea-Elberdin, 2017; E-Vahdati et al., 2019; Garanina et al., 2021), which involved categorizing the full texts of the articles by manually coding them. To assess the inter-rater reliability, we calculated Krippendorff's alphas, a widely used measure for reliability testing (Krippendorff, 2013, p. 277). Each researcher individually reviewed the complete texts of the articles, and subsequently, we compared and discussed our respective codings. Based on this comparison, we made incremental changes and adjustments to the coding protocol, such as expanding the list of ESG/CSR items and providing clearer definitions of the research methods. All modifications were thoroughly discussed among the authors until a consensus was reached. The results of the reliability testing, along with the content analysis, are presented in Table 1. It is worth noting that the reliability measure for the coding surpassed the threshold of 0.800, indicating a high degree of reliability and agreement among the researchers.

TABLE 1 SHOULD BE INSERTED AROUND HERE

4. Coding data using the developed framework and assuring reliability

Machine learning is related to developing algorithms specifically intended to analyse datasets. Its primary focus is on tasks such as prediction, classification, and clustering, which involve various forms of data processing (Athey, 2018). ML offers powerful tools for analysing a collection of texts, like academic journal papers (Wanner et al., 2014). Additionally, ML approach offers several advantages, including wider generalizability, increased objectivity, improved replicability, enhanced statistical power, and the ability to identify hidden linguistic features (El-Haj et al., 2019). In our literature review, we incorporate one of the ML tools, known as Latent Dirichlet Allocation (LDA), which analyses a corpus of text and provides a systematic way to identify latent topics in the corpus (Fligstein et al., 2017; Bentley et al., 2018; Cai et al., 2019; Black et al., 2021). This method is widely utilized in research for topic identification (Blei et al., 2003) since it goes beyond static word frequencies and enables the exploration of latent relationships between terms and topics within a given sample. This method allows for the identification of the most representative articles associated with each topic and facilitates the identification of emerging trends within those topics. In LDA models, documents are represented as compositions of a fixed number of topics, which are probability distributions over a vocabulary. Determining the optimal number of topics is typically achieved through techniques like grid search and the use of various topic coherence measures (Röder et al., 2015).

Research studies show that LDA is a relevant tool for working with both big and small literature corpus (e.g., Li, 2010; Asmussen and Møller, 2019; El-Haj et al., 2019). Asmussen and Møller (2019, p. 16) underline the reliability of LDA, even when applied to smaller article sets, as the results can be replicated by re-running the code on the same papers, which will provide identical results. Furthermore, the transparency of the LDA process allows other researchers to review most of the decisions made by the researchers, unlike the creation of coding sheets. For example, Fligstein et al., (2017, p. 889) applied the LDA method to analyse a small corpus of data – 72 transcripts of the meetings of Federal Open Market Committee – and justify their decision to use LDA because it "allows a great deal of insight in the context".

The LDA model identifies topics as probability distributions over words, so researchers can infer the meaning of the LDA model topics by observing the most probable words in each topic. We used the Python programming environment (www.python.org) to construct our LDA model. We first converted the articles from PDF to text files. Then the contents of the text files were cleaned, removing everything other than words, which were turned into lowercase letters. Next, stop words (e.g., the, and, but, if, or) were excluded, and the remaining words were lemmatised (i.e. changed into their base form). During the process, we kept only nouns and discarded everything else. Finally, we turned the documents into a bag-of-words format and used them to train the LDA model.

Additionally, Dumay and Cai (2014) and Jones and Alam (2019) argue for the increasing importance of citation impact factors because they help to define the most influential articles. Highly cited articles represent a "corpus of scholarly literature" that can be used "to develop insights, critical reflections, future research paths and research questions" (Massaro et al., 2016, p. 767). To perform a citation analysis in our study, we utilized Google Scholar Citations and employed Harzing's Publish or Perish software, as of 22 May 2023. The LDA method allows us to recognise the trends in the identified research topics.

The use of the Latent Dirichlet Allocation (LDA) method offers substantial practical advantages as it allows for the representation of documents as a combination of multiple topics, with each topic represented as a mixture of different words. This feature of LDA enables a more comprehensive analysis of the relationships and patterns within the literature corpus. Topics derived using the LDA approach are explained in Figure 4. The ability of LDA to represent documents as a combination of multiple topics is particularly advantageous in the context of corporate governance and sustainability studies, where documents may contain overlapping themes. Despite this, Cai et al. (2019, p. 710) argue that the human researcher possesses a unique advantage in evaluating future trends in the literature. Therefore, to offer a critique and gain more insights while identifying future research directions, we also conduct a manual analysis of those articles that LDA identified as most representative of each topic. This combined approach allows us to uncover nuanced insights and perspectives within the literature. El-Haj et al. (2019, p. 292) recommend using ML methods and high-quality manual analysis in conjunction as they "represent complementary approaches to analysing financial discourse".

3. Results

In this section, we use descriptive statistics and analysis to answer the first research question:

RQ1. What are the prominent trends and topics explored in research concerning the link between corporate governance and a company's involvement in ESG/CSR activities, as evidenced by publications in ranked accounting and finance journals?

3.1 Articles over time

Figure 2 represents the number of publications that study the relationship between CG attributes and companies' involvement in ESG practices during the last 21 years. From 2000 to 2004, no single publication in accounting and finance journals ranked in ABS or ABDC was published on the topic. As it can be observed, from 2007, the number of publications is stably increasing, with a huge jump after 2015. A noticeable spike in the number of publications shows that the topic is currently attracting a lot of attention among academics.

FIGURE 2 SHOULD BE INSERTED AROUND HERE

The Global Financial Crisis (GFC) in 2008 led to a large-scale banking failure, which caused serious damage to business operations and induced economic uncertainty (Iwasaki, 2014). As a result of the failure of many companies during the GFC, the demand for better corporate governance and board responsibility increased with a higher emphasis on firms' ethical, environmental, and social responsibility to establish the legitimacy to operate (Lawrence et al., 2013; Mallin and Michelon, 2011). The increased interest in climate change is putting pressure on companies globally to be more responsible toward society and the planet

(Muttakin et al., 2015). In 2006, the United Nations first incorporated ESG factors into investment practices, setting the principle for responsible investing. This could be the possible reason for accounting and finance researchers' increased interest in this area. According to the Ernst & Young report (EY, 2021) CSR disclosure provides institutional investors with additional information about a firm's portfolio, risks, and future aspects of investment. Krishnamurti and Velayutham (2018) mention that firms voluntarily disclosing information on CSR/ESG improve their reputation and attract shareholders' attention better.

3.2. Citation analysis: Impact of article measurement

According to Massaro et al. (2016, p. 767) high-cited papers are a "corpus of scholarly literature" that might "develop insights, critical reflections, future research directions, and research questions". Several researchers support the growing importance of citation impact factors because it assists researchers in identifying the most influential articles (Dumay and Cai, 2014; Barrick et al., 2019; Jones and Alam, 2019). For citation analysis we conduct citation-based counts using Google Scholar and Harzing's Publish or Perish software data as of 22 May 2023.

Table 2 displays the most-cited articles from the top 10 list. According to Small (2004), analysing citation-based counts can assist researchers in determining the most influential author with the highest impact in the field. The paper by Haniffa and Cooke (2005) was the most cited paper, with 2,780 citations. Two articles have gained over 1,000 citations each (Jamali et al., 2008; Liao et al., 2015).

TABLE 2 SHOULD BE INSERTED AROUND HERE

To better understand the impact factor, we have analysed ten articles from the list. It reveals that two articles were published in top accounting and finance journals, ranked as A* in the ABDC journal list (one published in The British Accounting Review and the second published in Journal of Corporate Finance ranked as 3 and 4 as per ABS lists, respectively).

Furthermore, we have measured citation per year (CPY) because it is another method to estimate a paper's influence and arguably a more accurate proxy for that (Dumay et al., 2018). The highest CPY articles are listed in Table 3. Comparison of Tables 2 and 3 reveals a substantial overlap between the articles included in each table. Using CPY as an indicator, an article published a year ago has gained comparatively high CPY (Gillan et al., 2021). Papers published in The British Accounting Review, Corporate Governance: An International Review, Journal of Accounting and Public Policy, and Journal of Corporate Finance have the highest overall citations. Moreover, Corporate Governance: An International Review has published several papers with the highest CPY.

TABLE 3 SHOULD BE INSERTED AROUND HERE

3.3. Region of origin

Floyd et al. (1994) suggest that the first author has a non-monetary reward and is considered the primary contributor to the article. The author's name sequence is seen as merely their contribution to academia (Balkin et al., 2020; Sauermann and Haeussler, 2017; Venkatraman, 2010). Based on the approach outlined in Dumay et al. (2018), we conduct coding of the country of first authors by considering their university affiliations and then classified them into four major regions: Australasia (which includes Australia, New Zealand, and Asian countries), Continental Europe (which includes nations like Finland, Denmark, Spain, France, Sweden, etc.), America (which includes Canada, South America, and North America), and the UK. Some authors were categorised as "Other" because they were from countries including Lebanon, Iran, Saudi Arabia, and Africa that did not belong to one of the four zones mentioned above.

The number of papers by year and location are shown in Figure 3. It demonstrates that compared to writers from other regions, Australasian authors contribute significantly to the topic (47.22 per cent throughout the entire sample of articles).

FIGURE 3 SHOULD BE INSERTED AROUND HERE

3.4. The results of the LDA analysis

We continued our analysis with the LDA model. The maximum coherence was achieved by defining five topics for our LDA model. The articles were classified into these five topics, and keywords for each "topic" group were identified. Furthermore, we also calculated the marginal topic distribution and analysed the time evolution of the distribution. These steps are described in detail below.

We followed a two-step procedure to create illuminating and clearly identifiable titles for each of the topics. First, we analysed the 20 most important keywords identified by LDA for each of the topics (shown in Table 4). Then, to reconfirm the title, we manually examined the most representative articles associated with each topic, as identified by the LDA model. That enabled us to come up with the most appropriate titles for each of the topics.

TABLE 4 SHOULD BE INSERTED AROUND HERE

Figure 4 illustrates how the weight (importance) of the topics changes over the years.

FIGURE 4 SHOULD BE INSERTED AROUND HERE

As seen from the LDA analysis, the most widely discussed topics trending upward are "Internal and external assurance of involvement in CSR/ESG activities" and "CEO characteristics and their influence on involvement in CSR/ESG activities". Figure 4 also reveals that the weight (importance) of such topics as "CG and CSR/ESG as sources for transparency and legitimacy" and "Gender diversity and involvement in CSR activities" has a bit decreased in comparison to previous years.

4 Key research topics: focus and critique

In this section, we answer our second research question:

RQ2. What are the primary focal points within the key research topics identified in the literature?

Drawing from the findings of our analysis, we identify the key topics of papers published in accounting and finance journals ranked in ABS and ABDC rankings that examine the relationship between corporate governance attributes and a firm's engagement in ESG activities. Our analysis of the distribution of topics allowed us to come up with the following five key research topics: Board characteristics and involvement in CSR/ESG activities; CEO characteristics and their influence on involvement in CSR/ESG activities; CG and CSR/ESG as sources for transparency and legitimacy; Internal and external assurance of involvement in CSR/ESG activities; Gender diversity and involvement in CSR activities. We proceed by providing an analysis of each key research topic. To select the most representative articles, the LDA model assigns topic weights for every paper from the sample, i.e. the "weight" of each topic in that article. Further, drawing on the approach used in Moro et al. (2015), we manually analyse the most representative papers pertaining to each of the key identified topics to define the focus of the research related to CG and CSR.

4.1. Board characteristics and involvement in CSR/ESG activities

Globalisation has escalated demands for firms' involvement in CSR/ESG activities. In addition, climate events such as fire, flood, drought etc., add pressure on companies to demonstrate accountability towards CSR-related activities (Muttakin et al., 2015). A number of studies have looked into the relationship between various board and ownership characteristics and a firm's involvement in CSR/ESG activities (e.g. Mallin and Michelon, 2011; Muttakin and Subramaniam, 2015; Garanina and Aray, 2021).

The high quality of the board and ownership structure may reduce the information asymmetry problem and enhance more transparent and accountable information through voluntary disclosure (Garanina and Aray, 2021). Various corporate mechanisms can influence the effectiveness and diversity of a company's board of directors (Al-Gamrh et al., 2020; Rao and Tilt, 2020). Researchers frequently highlight the differences between men and women regarding values, perceptions, skills, experiences, professional backgrounds, and networking abilities. Furthermore, evidence suggests that female directors contribute more actively during boardroom discussions and exhibit greater involvement in CSR practices than their male counterparts (Rao and Tilt, 2020). In their study, Al-Gamrh et al. (2020) examined the impact of independent board members and foreign ownership on a firm's commitment to CSR. The findings indicate that companies with more independent directors and foreign ownership experience fewer conflicts between shareholders and managers. They protect better the interests of minority shareholders and heighten their social performance on a global scale.

According to Harjoto and Wang (2020), a board of directors with strong networks enables directors to access valuable resources embedded within their social and professional networks. These resources, accessible through direct and indirect professional connections, enhance firms' competitive advantages in meeting the requirements of non-investing stakeholders, consequently leading to improved CSR/ESG performance. Therefore, companies with stronger board networks can leverage the information derived from their networks to comprehend recent developments better, thereby potentially enhancing their CSR/ESG performance.

The results indicate that the behaviour of CEOs plays a significant role in shaping corporate decisions, particularly in the context of CSR activities. The findings suggest that the presence of effective corporate governance (CG) mechanisms, particularly a well-functioning board of directors, can influence the behaviour of CEOs and subsequently moderate the impact of their cognitive and behavioural biases. For instance, Kouaib et al. (2021) discover that companies with effective CG mechanisms provide CEOs with a sense of security, which enhances their confidence, capabilities, and commitment to CSR/ESG performance.

Al-Mamun and Seamer (2021) find a statistically significant relationship between several director characteristics, such as their political influence, international experience, business knowledge, other directorships held and independence from management, and participation in CSR initiatives. The authors come up with the question of determining which attributes are more important in exaggerating companies' involvement in CSR. Therefore, they suggest that future studies focus on particular attributes of the board of directors to understand better their impact on sustainability (Al-Mamun and Seamer, 2021). The authors also highlight the need for analysing these links in different country contexts.

The ownership structure has been regarded both conceptually and empirically as a crucial explanatory mechanism that could affect a firm's social performance (Al-Gamrh et al., 2020). Foreign investors are generally more capable of managing businesses, typically using modern technology, business expertise, and innovative ideas to turn around failing companies (Al-Gamrh et al., 2020). In addition, foreign investors may also be more aware of societal issues because they are more familiar with them, and higher sensitivity to such matters, and greater emphasis on corporate social responsibility in their home countries.

Research studies investigating the relationship between foreign ownership and CSR disclosure report mixed findings. For instance, Meutia et al. (2017) and Muttakin and Subramaniam (2015) find no significant influence of foreign ownership on CSR disclosure. One plausible explanation provided by Meutia et al. (2017) is that foreign owners lack sufficient power to influence CSR disclosure. To gain a comprehensive understanding, Garanina and Aray (2021) emphasize the importance of understanding the nature of foreign ownership. Using sample of Russian firms, Garanina and Aray (2021) find a negative association between foreign ownership and CSR disclosure. This is because foreign owners of Russian firms often register in offshore domiciles such as Cyprus or the Virgin Islands, primarily utilising them for tax optimisation rather than pursuing long-term CSR/ESG strategies. Al-Gamrh et al. (2020) also find a similar conclusion. The authors document that Arab foreign ownership negatively influences firms' social performance, while non-Arab foreign ownership has a positive impact. Thus, it is crucial to analyse the nature of foreign ownership to understand its influence on a company's engagement in CSR/ESG activities.

Muttakin and Subramaniam (2015) find that CSR disclosure has a positive association with foreign ownership, government ownership, and board independence but negatively correlates with CEO duality. The authors also note differences in the relationships between the various CSR/ESG components and the CG attributes.

According to Nekhili et al. (2021), employee directors may have an impact on how market participants perceive ESG problems. The findings suggest that companies with employee shareholder board representation outperform stronger in ESG performance.

Aguilera et al. (2006) discover that institutional ownership plays a vital role in promoting engagement in CSR activities. This study further suggests that institutional ownership in pension funds and insurance firms is primarily linked to long-term investment strategies. Additionally, this type of investors are keen on encouraging investments in CSR/ESG and act as a strong indicator for other investors regarding the position they should adopt.

Chahine et al. (2019) investigate the role of network centrality as a critical trait of CEOs that influences strategic decision-making. Network centrality empowers CEOs with enhanced access to information by facilitating more efficient connections with other individuals. The findings suggest that the CEO's incentives to devote resources to CSR/ESG activities are influenced by their social network status. More specifically, when a CEO occupies a central position within the network, he/she is exposed to greater personal benefits from investments in CSR/ESG activities.

Academic literature widely recognises that the experience of directors plays a crucial role in implementing sustainability practices within organisations. In this context, Naheed et al. (2021) conduct a study to examine how the financial expertise of board members promotes CSR disclosure. The authors document that directors with financial expertise possess pertinent knowledge about the financial implications of enhancing CSR disclosure. These directors strongly believe that companies can achieve long-term performance by disclosing their socially responsible activities. The findings indicate that financial expertise is a significant characteristic of the board, enabling financial and non-financial performance through enhanced CSR disclosure.

4.2. CEO characteristics and their influence on involvement in CSR/ESG activities

The next group of papers defined by the LDA model is related to the role of CEOs and particularly the traits of CEOs that may lead to a firm's involvement in CSR/ESG activities. We proceed by analysing in detail the most representative articles of this group defined with the help of a machine-learning approach.

McCarthy et al. (2017) demonstrate that managers' personal characteristics, particularly their confidence, affect corporate policies, such as participation in CSR/ESG activities. The study reveals a significant negative correlation between CEO confidence and CSR activities, suggesting that firms led by more confident CEOs tend to undertake fewer CSR initiatives. This finding implies that CEO confidence may be inversely related to the level of CSR activity within a firm. In a related study, Davidson et al. (2019) reveal that companies led by materialistic CEOs tend to have lower CSR scores. This finding aligns with the notion that materialistic CEOs engage in CSR activities primarily for personal benefits rather than a genuine commitment to corporate social responsibility.

Zou et al. (2018) examine the participation of female executives in CSR. The findings of the study suggest that the presence of female leaders on board positively impacts the level of CSR engagement. Similarly, a study by McGuinness et al. (2017) suggest that firms with female officers at the CEO and/or vice-CEO level exhibit better CSR performance confirming the influential role of female executives in driving CSR initiatives. Moreover, the findings suggest that while gender diversity, in general, contributes to improved social performance of firms, the presence of female leadership alongside a diverse board composition results in even stronger incremental effects. Taken together with the literature findings, we can infer that female leadership significantly promotes CSR change within organisations.

Cooper (2017) asserts that increased CEO turnover results from improved CSR performance. This is consistent with the stakeholder theory, which suggests that strong CSR engagement increases the turnover probability. Another possible reason for such a phenomenon is that firms with strong CSR involvement tend to have better governance practices supporting the interest of diverse stakeholders. In addition, Cooper (2017) finds that firms actively engaged in CSR activities are more inclined to select a female CEO when faced with the need to replace an outgoing executive.

Khoo et al. (2022) reveal that independent directors lead to increase in a firm's corporate social responsibility performance. The authors explain that by their reputational incentives. A firm's CSR performance is stronger when it has a higher percentage of independent directors. This relationship is stronger for more visible firms and those subject to increased external CSR pressure. Basing the results on the upper echelon theory, Kouaib et al. (2021) suggest that board characteristics may also induce the behaviour of CEOs. For example, CEOs' secure position will increase their support and commitment to executing CSR practices.

Hegde and Mishra (2019) examine an additional characteristic of CEOs. The authors determine a positive correlation between married CEOs and a company's participation in CSR/ESG activities. The authors propose that this relationship can be attributed to the stability associated with marriage. Furthermore, they suggest that married life serves as a powerful catalyst for fostering prosocial values, preferences, and behaviours among family members. Their findings indicate that companies led by married CEOs exhibit significantly higher scores on a widely recognised CSR index. The marital status of CEOs is considered one personal attribute that may be linked to both the socially responsible actions of corporations and various other individual traits.

CEOs may be motivated to engage in CSR decoupling when their company's actual CSR performance falls short of the desired CSR image (Sauerwald and Su, 2019). One possible explanation for increased involvement in CSR decoupling is the presence of CEO overconfidence. Overconfident CEOs tend to have a biased perception of their ability to influence their firm's CSR activities. This cognitive bias can lead CEOs to communicate a CSR narrative that is excessively optimistic in comparison to the actual CSR performance of the company, thereby resulting in CSR decoupling.

Effective corporate governance practices play a crucial role because governance mechanisms provide independent oversight and accountability, reducing the likelihood of CEOs misrepresenting the CSR efforts of the firm. For instance, having a higher proportion of outside directors or directors with significant ownership positions can help mitigate the positive association between CEO overconfidence and CSR decoupling.

Therefore, the overall results reveal that CEOs and their personal characteristics play an important role in a company's engagement in CSR/ESG activities.

4.3. CG and CSR/ESG as sources for transparency and legitimacy

According to Suchman (1995, p. 574), legitimacy refers to the general perception or assumption that the actions of an entity align with the socially constructed system of norms, values, beliefs, and definitions. Therefore, when corporations engage in CSR/ESG activities, they deliberately improve their organizational credibility by gaining support from influential stakeholders, including trade unions, shareholders, politicians and governments. Moreover, the study supports the notion that concentrated ownership is linked with a decline in CSR disclosures (Shahab and Ye, 2018). This study further suggests that institutional owners are inclined to engage in lobbying activities in order to gain support of other influential stakeholders, including employees and governments. Such lobbying is intended to persuade managers to cultivate a more socially responsible image to increase market transparency and legitimacy.

According to the preface of the Global Reporting Initiative (GRI), "transparency regarding the sustainability of organisational activities is of interest to a wide variety of stakeholders, including business, labour, non-governmental organisations, investors, accountancy, and others" (Czernkowski et al., 2019, p. 693). Firms are now more conscious of their responsibilities to society and environment, resulting in a growing trend in social and environmental voluntary reporting (Boshnak, 2021), also driven by market participants' demand for greater transparency (Michelon et al., 2020). While improved transparency of CSR/ESG reporting can enhance a firm's legitimacy in the market, Michelon et al. (2020) argue that it is crucial to shift the focus away from disclosure as the primary objective of accounting studies. Instead, the authors advocate for analysing how accounting practices can actively contribute to addressing social and environmental issues beyond mere market demands. Further, Michelon et al. (2020) emphasise the need to explore how accounting can be more proactive in tackling social and environmental challenges beyond meeting the market's disclosure requirements.

In line with Michelon et al. (2020), efficient corporate governance practices (e.g. board independence, CEO-non-duality, CSR committee and institutional ownership) may improve the quality of reported CSR/ESG information that will be disclosed free of errors and without restatements. As getting legitimacy through better transparency is especially important for multinational corporations (Gold and Heikkurinen, 2018), corporate governance mechanisms may play an even more important role in this type of companies for obtaining and improving their legitimacy.

According to Iatridis (2013), companies that provide high-quality environmental disclosures demonstrate effective corporate governance practices and encounter fewer challenges in accessing capital markets. To achieve this, environmental disclosure should be relevant, easily understandable, accessible to users, provided in a timely manner, and possess confirmatory value. Additionally, the information presented should be comparable, reliable, and free from errors or bias. The inclusion of numerical environmental data in disclosures can contribute to reducing environmental costs and the cost of capital by enhancing transparency (Iatridis, 2013).

Meaningful environmental disclosures would further enhance credibility, aid investors in accurately assessing a company's risk exposure, and allow investors to adjust their investment strategy and portfolio accordingly (Iatridis, 2013). By meeting these criteria and providing comprehensive and reliable environmental disclosures, companies can enhance transparency, reduce risk, and attract investors who prioritize sustainable practices.

Haniffa and Cooke (2005) suggest that the presence of independent and non-executive directors on a company's board of directors, as well as the existence of an audit committee, can enhance the quality of reported environmental disclosures. These governance mechanisms contribute to improved transparency, thereby reducing levels of investor uncertainty. Independent and non-executive directors bring an objective perspective to the board and are less likely to be influenced by management biases. Their presence can ensure that environmental disclosures are more accurate, reliable, and free from potential conflicts of interest.

Corporate governance mechanisms play a crucial role in building trust among shareholders and guaranteeing fair treatment of all stakeholders (Mukhtaruddin et al., 2019).

Corporate governance contributes to establishing a strong foundation for sustainable practices within the organisation by promoting transparency, accountability, and ethical behaviour. Furthermore, effective corporate governance can assist a firm in implementing strong governance structures and processes that positively impact a firm's competitive advantage. Corporate governance attributes such as board independence, ownership, board of directors and gender diversity determine the level of corporate environmental performance (Kock et al., 2012). Effective corporate governance mechanisms are also essential for implementing and developing good environmental practices (Harjoto and Wang, 2020).

Involvement in CSR/ESG-related activities may differ in different economic periods. For example, Chintrakarn et al. (2021) find that independent directors tend to hold an unfavourable view of CSR investments during challenging times. This perspective can be attributed to a decrease in their risk exposure. They also find that the less effective boards do not behave in the same way and do not cut their investments in CSR during crises, which disagrees with the risk-mitigation hypothesis. As involvement in CSR during crises might decrease, disclosure transparency might also change.

Involvement in CSR/ESG activities to get more legitimacy can also differ based on country contexts (Boshnak, 2021; Cohen et al., 2011). For example, Shahab and Ye (2018) find that Chinese firms increase their voluntary engagement in socially responsible practices to strengthen their social legitimacy. Therefore, increased CSR/ESG transparency is related to the need to gain legitimacy and remain competitive in the institutional setting.

4.4. Internal and External Assurance of Involvement in CSR/ESG Activities

The papers related to this topic analyse the importance of internal and external assurance of sustainable information.

When sustainability reporting faces growing criticism for its perceived lack of transparency, assurance of a firm's involvement in ESG practices provides more confidence in the CSR/ESG information provided by firms to their stakeholders (Trotman and Trotman, 2015). As sustainability reporting is crucial for addressing climate change issues and achieving a low-carbon economy, assurance of the company's actions related to greenhouse gas (GHG) and energy reporting is vital (Trotman and Trotman, 2015). The increased interest in recent years related to sustainable investments has also led to an increased demand for firms' high-quality reporting and disclosure about CSR/ESG (Christensen et al., 2021). Therefore, Trotman and Trotman (2015) claim that auditing of non-financial information disclosed by companies may significantly decrease the "window dressing" effects. As CSR/ESG-related disclosure strengthens future stock return performance, investors should scan ESG information for potential risks and rewards (Khan, 2019).

Research claims that it is very difficult to assess a company's real involvement in ESG activities, and that is why stakeholders must have concrete and verifiable facts about it (Khan, 2019). While specified, quantifiable and verifiable information is perceived to be of higher quality (Toms, 2002, p. 261), it is also more difficult to replicate by firms not committed to good CSR/ESG practices (Grosser and Moon, 2008). However, Peters and Romi (2015) highlight the challenges associated with sustainability reporting, particularly due to the absence of common standards and the limited understanding of the public regarding the origin and meaning of sustainability reports. These factors create opportunities for managers to engage in opportunistic behaviour. Therefore, there is a need for assurance of CSR/ESG-related information by internal or external parties.

According to Trotman and Trotman (2015, p. 212), the internal audit function plays a crucial role in ensuring the quality and integrity of corporate sustainability reports. The internal audit function can be executed through various mechanisms, such as the audit committee, an in-house assurance department, an effective board of directors, the inclusion of independent directors, women on boards, and the involvement of institutional investors. These entities provide oversight and ensure that appropriate controls and processes are in place to validate the accuracy and completeness of sustainability data and reports, etc. (Trotman and Trotman, 2015). In addition to internal audit, establishing an environmental committee within the board of directors can further enhance the quality of corporate sustainability reports. This committee can focus specifically on environmental performance and monitor the implementation of sustainable practices within the organization. Furthermore, appointing a Chief Sustainability Officer (CSO) in the management team can help ensure that sustainability considerations are integrated into strategic decision-making and day-to-day operations (Peters and Romi, 2015).

The external assurance can be verified with the help of professional accountants and third-party consultants. Auditors' reports may be considered an essential document for stakeholders that assure data reporting accuracy and completeness and may also lead to cost reduction and less information asymmetry (Trotman and Trotman, 2015).

However, according to the authors, some businesses set up governance structures related to sustainability primarily with the intention of engaging in socially desired behaviour. That is the reason why Peters and Romi (2015) find that only those internal committees and boards containing directors with related expertise influence the likelihood and real quality of sustainability assurance. The authors also find that environmental committees with greater expertise may even prefer external assurance from the higher-quality services of professional accounting firms (Peters and Romi, 2015). The authors discover that committees with greater expertise may even prefer external assurance from professional accounting firms. This preference for external assurance reflects a desire for higher-quality services and independent validation of the reliability of sustainability reports. This creates a unique chance for the internal audit profession as a substitute for external assurance. It allows the internal auditing profession to position itself as an objective and value-adding assurance provider (Peters and Romi, 2015).

Further, Grosser and Moon (2008) emphasise the importance of developing and implementing reporting guidelines, such as the Global Reporting Initiative (GRI), Non-Financial reporting EU directives, and Sustainability reporting guidelines, to enhance uniformity in reporting standards. Standardised guidelines can ensure consistency and will make the process of assurance easier. When reporting follows standardised guidelines, it becomes easier for assurance providers to assess the reported information's accuracy, completeness, and reliability. This enhances the credibility and trustworthiness of sustainability reports and promotes greater transparency and accountability. In addition to general reporting guidelines, there has been a growing interest in employee-related issues, such as gender diversity and equality (Grosser and Moon, 2008).

As previous research has observed a clear link between CG characteristics, a firm's involvement in CSR/ESG activities, and a firm's performance, assurance of sustainable actions may help to unmask earnings management (Abdelfattah and Elfeky, 2021). Therefore, internal and external assurance in companies with high-quality corporate governance mechanisms may reduce earnings management (Mahrani and Soewarno, 2018).

4.5. Gender Diversity and Involvement in CSR Activities

The issue of gender diversity has been extensively examined in the board diversity literature, and our LDA model identifies a topic on the relationship between gender diversity at the board level and a company's engagement in CSR/ESG activities.

Rao and Tilt (2020) have previously emphasised the importance of gender diversity in promoting a company's engagement in CSR/ESG issues. However, they also find that the impact of individual women on CSR initiatives is limited unless a certain threshold or "critical mass" of at least three women is present on the board. Similarly, Adams and Ferreira (2009) conduct a study that examines the association between gender diversity on the board of directors and CSR performance. The finding further suggests that companies with more female directors exhibit better CSR performance and positively influence a firm's engagement in CSR activities, particularly in the area of environmental and social responsibility.

In this context, Manita et al. (2018) document a strong and positive correlation between gender diversity on boards and ESG disclosure. The authors report that the presence of a significant proportion of women on boards prevents and surpasses the “invisibility” phenomenon and leads to higher levels of ESG disclosure. Empirical evidence further suggests that when two or more women are appointed to a board, they function as active minorities, influencing the establishment of rules, procedures, and practices. Companies with diverse boards exhibit greater transparency, openness, and commitment to CSR.

Rao and Tilt (2020) argue that the limited impact of having a small share of women on boards on CSR/ESG involvement is primarily due to a lack of support from the board, particularly from influential board members or the chair. This lack of support stems from the existence of a traditional male-dominated board culture, often characterized as an “old boys club”, with a primary focus on profit maximization. In such environments, the perspectives and contributions of women may not receive adequate attention or consideration. A study by Zhao and Lord (2016) suggests that women in leadership or managerial positions may need to conceal their emotions and adopt a more masculine behavioural style. In line with this, most female directors surveyed in the study mentioned that they must adopt a specific style or behaviour to gain attention and influence within the board discussions, particularly in the presence of the “old boys club”. This behaviour often responds to the prevailing norms and expectations within male-dominated work environments. One aspect of this behavioural adaptation addresses the perception that women are primarily interested in “soft” issues, such as social responsibility or sustainability, which may be undervalued in traditional boardroom settings. Female directors may need to emphasize their competence in areas traditionally associated with male directors, such as finance, strategy, or operations, to gain credibility and be taken seriously.

The framework developed by the United Nations Special Representative of the Secretary-General on Business and Human Rights acknowledges the importance of gender as a fundamental element within the broader context of human rights. The framework highlights the increasing expectations placed on businesses to actively promote gender equality, address gender-based discrimination and violence, and create inclusive and diverse work environments. Gender equality is recognised as an integral component of this framework, reflecting the growing emphasis on reporting and addressing gender-related issues within the business and human rights agenda (Miles, 2011). It reflects the understanding that businesses have a role in promoting gender equality and contributing to achieving the Sustainable Development Goals, particularly Goal 5 (Gender Equality).

In addition to the significance of women's representation on boards, Grosser and Moon (2008) assert that incorporating reporting on gender equality issues is essential in CSR disclosure. However, the authors observe that the market does not needs actively seek or reward such information despite its importance. This lack of demand for gender equality disclosure, the absence of legal requirements and concerns about potential exposure to competitors can explain why companies are hesitant to disclose extensive information on gender equality practices.

According to Laine (2010), the concept of sustainability has evolved over time from a revolutionary idea to an evolutionary one. Initially, the disclosure and conceptualization of sustainability varied widely and were characterized by diverse perspectives. However, in recent years, companies have adopted a more standardized rhetoric and language, drawing on the discourse of sustainability. Gender equality is one of the topics that has gained an increasing attention within this discourse.

Some researchers have explored incorporating CSR factors into the executive compensation system, moving beyond solely financial metrics (Mackenzie, 2007). However, the interview results suggest that including CSR factors in incentive design plays a relatively minor role. Instead, the professionalism and competence of board members is more important. In this context, women on boards can play a significant role in driving involvement in CSR initiatives.

Women's influence on engagement in CSR may vary across different country contexts. Therefore, examining the unique dynamics and challenges present in emerging economies is necessary. Dwekat et al. (2021) highlight the importance of researching the role of women on the board of directors, specifically within the context of emerging countries.

5. Future research directions

This section answers our third research question:

RQ3. What are the future research directions and emerging trends concerning corporate governance and a company's involvement in ESG/CSR activities?

5.1. Board characteristics and involvement in CSR/ESG activities

Different CG characteristics related to board composition have been linked to companies' involvement in forward-looking ESG practices. Future studies can also explicitly explore the cultural diversity of directors and its impact on a company's CSR/ESG disclosure and performance. Further, it would be worth examining the influence of various board characteristics, including the number of female directors, CEO duality, audit committee composition and size of the board, to comprehensively understand how governance factors affect a firm's involvement in CSR/ESG practices (Al Fadli et al., 2019). According to researchers, there is no common consensus on which board characteristics influence disclosure more effectively and efficiently. Thus, many aspects of board characteristics could be explored in the future. For instance, expertise, education, age, and culture are variables that researchers can use to examine companies' socially responsible practices.

Considering the growing climate catastrophic events such as heatwaves, extreme weather conditions, bushfires etc., we can expect to see the analysis of more concrete factors/pillars of a firm's involvement in CSR/ESG activities in their relationship with CG characteristics. In addition, future studies can rely on new databases or apply a qualitative approach to investigate the issue in detail.

We argue that the evolving global economic trends and the inherent socio-cultural disparities between developed and developing nations, there is a compelling argument for conducting additional research on CSR practices within the context of developing countries (Garanina and Aray, 2021; Muttakin and Subramaniam, 2015). Another rationale for further exploration of CSR reporting in developing economies stems from the growing demand for such reports, particularly as firms in these countries play an increasingly significant role in the global supply chain.

We also note that only a few studies focus on specific industries. It is essential to analyse the link between CG characteristics and involvement in CSR/ESG activities in companies belonging to different industries.

5.2. CEO characteristics and their influence on involvement in CSR/ESG activities

It has been well established that globalisation has accelerated progress and brought economic growth for firms. Hence, the role of the CEO has become crucial to enhance companies' CSR practices because it signals to stakeholders about the firms' social responsibility and reliability in both foreign and domestic markets. We note that there is a great deal to discuss regarding the determinants of the relationship between a CEO's attributes and a firm's involvement in CSR/ESG activities. For example, how do directors' background, engagement, age, and education affect CSR/ESG performance and disclosure? We suggest a more in-depth analysis of the impact of CEO's psychological and social traits and their role in CSR/ESG activities. Moreover, future studies can analyse how context and cultural factors moderate this relationship (Mallin and Michelon, 2011). We also recommend that future studies on CEO attributes should use a qualitative and a meta-analysis approach.

In their paper, Sauerwald and Su (2019) suggest that boards might appoint highly experienced CEOs as a symbolic status, which creates a favourable impression among stakeholders and leads to improvement in CSR strategies. As such an appointment could be perceived as an exogenous shock, future studies might use quasi-natural experiments or other methods to empirically test the influence of such an appointment on a firm's engagement in CSR/ESG activities.

5.3. CG and CSR/ESG as sources for transparency and legitimacy

Corporate governance practices are crucial for bridging the information gap between a corporation and its stakeholders by transparently reporting companies' actions. Previous studies (e.g. Harjoto and Wang, 2020) reveal that a closed network of boards may lead to unethical practices (e.g., falsification, manipulation). Therefore, future research could investigate board connections and networks and their role in obtaining legitimacy. Also, mostly in emerging country contexts, firms' non-financial disclosure might be subjective (Mukhtaruddin et al., 2019). Therefore, researchers should incorporate various reports, i.e., sustainability, annual and media reports to measure the quality of CSR/ESG disclosure by firms to verify the quality of transparency.

According to Al-Gamrh et al. (2020), the ownership structure plays a significant role in impacting a firm's social and financial performance. Haniffa and Cooke (2005) argue that to avoid the issue of ethnocentricity, legitimacy should be contextualized within the environmental framework, particularly when evaluating developing countries using Anglo-Saxon cultural norms that are treated as absolute. However, these norms may differ significantly in countries with varying levels of development. Therefore, future research could explore the influence of different ownership types, such as domestic, institutional, state, and foreign ownership, on a firm's engagement in CSR/ESG activities within diverse country contexts. Further, society disclosure by small and medium companies could be a promising area for future research to obtain insights about the extent of CSR/ESG disclosure and performance. Moreover, future research studies could analyse in more detail the influence of CG characteristics on specific types of ESG performance and disclosure (e.g. emission-related disclosure).

5.4. Internal and External Assurance of Involvement in CSR/ESG Activities

The number of research articles investigating the relevance of audits in the context of CSR/ESG activities is growing. As a potential future direction, conducting a more in-depth analysis of the role of internal and external audits in assessing CSR/ESG information is possible.

Moreover, over time, corporate governance code and structure will evolve; therefore, auditors must comply with assurance norms and quality in CSR reporting (Peters and Romi, 2015), bringing another direction for future research to the surface. As CSR or sustainability reporting standards are changing in nature, which requires firms to adapt to the new reporting norms, future research may consider examining the actual changes in reporting quality over time and their compliance with the norms and guidelines. Therefore, the role of internal and external assurance becomes more vital as it ensures CSR activities in an organisation.

We foresee further increased interest towards sustainable investments in the future. Several mandatory and non-mandatory guidelines are required for companies to inform about their corporate strategy related to the commitment toward environmental safeguard and responsibility. At the same time, it is critically important for investors and analysts to distinguish between CSR/ESG performance and disclosure, and eliminate the potential effects of "window dressing" or "decoupling". Therefore, auditing CSR/ESG information might play an even more important role in the future. For example, we recommend including additional and more detailed indicators of sustainability expertise, specifically pertaining to the management, board members, and assurance providers (Peters and Romi, 2015; Trotman and Trotman, 2015). Disclosure on CSR/ESG activities is voluntary, especially in developing countries where there are no rules requiring it. Therefore, it is worth investigating what kind of information regarding social and environmental actions is disclosed by different type of companies (Coffie et al., 2018; Wasdani et al., 2021).

5.5. Gender Diversity and Involvement in CSR/ESG Activities

On the 17 SDGs' agenda, SDG 5 is related to the improvement of gender diversity on board of directors (United Nations, 2021). Previous research confirms that a critical mass of women positively influences a firm's involvement in CSR/ESG activities. Most of the studies in this context have used quantitative methods and are country specific. However, a few researchers have recommended using the qualitative method to get a more in-depth understanding of the issue (Majeed et al., 2015; Mohd-Said et al., 2018). In addition, this approach may help clarify, validate, support, and gain insights on what are the factors influencing CSR/ESG performance and disclosure.

Future research related to this topic could also investigate the influence of female directors' values and attitudes, their social networks, and the effect of their appointment on board decision-making processes and involvement in CSR/ESG activities. Future studies could also explore the role of factors such as firm size, industry type, and cultural differences in moderating the relationship between gender diversity and a firm's CSR/ESG engagement.

Additionally, we suggest future research on gender diversity use new databases or computer-intensive methodologies, such as text mining on conference calls or board meeting minutes, to extract data. Further, Khlif and Achek (2017) document that the percentage of female equity ownership in companies can impact the various aspects of CSR activities. Therefore, it is crucial to investigate this research question across various institutional settings. Addressing characteristics of women on board is another direction for future research, as this is not only the number of women on board but their differences in age, education, experience, national origin, etc., that influence a company's involvement in CSR/ESG activities.

6. Conclusions

The main purpose of this paper is to clearly define the key topics and trends identified in papers investigating the link between corporate governance characteristics and a firm’s involvement in CSR/ESG activities published in ranked accounting and finance journals. The study employs a complementary approach combining ML techniques with high-quality manual analysis to identify research topics and trends based on a corpus of 180 papers. The findings of the study shed light on the researcher’s emphasis on the following themes: Board characteristics and involvement in CSR/ESG activities; CEO characteristics and their influence on involvement in CSR/ESG activities; CG and CSR/ESG as sources for transparency and legitimacy; Internal and external assurance of involvement in CSR/ESG activities; Gender diversity and involvement in CSR activities.

Our literature review reveals that studies in this field were mostly conducted in the Australasian countries (Australia, New Zealand and Asia), followed by the Continental European region. Further investigation of the relationship between corporate governance characteristics and a firm’s involvement in CSR/ESG activities is required, particularly considering the significant role of country context as indicated by previous research findings.

In addition, we document that board characteristics and gender diversity are frequently used to assess board diversity, while other factors, such as multiple directorships, board tenure, board expertise, CEO duality or foreign board members, are scarce in research. To enhance the validity of research findings, supplementary qualitative research methodologies, such as surveys, interviews, or board case studies, should also be employed.

While literature reviews tend to focus on specific topics or subfields, our analysis provides a broader overview of the link between CG characteristics and a firm's involvement in CSR/ESG activities, identifying the common themes that unite diverse research streams. The use of the ML approach in the literature review provides a novel and efficient way of synthesising information and extracting meaningful insights. It enables researchers to identify relevant studies, evaluate their quality, and generate a comprehensive overview of the existing literature. This literature review is not free of limitations. This study focused only on academic articles from two ranked journal lists, i.e., ABS and ABDC. It excluded other sources such as books, reports and working papers. However, it is worth considering the inclusion of these additional academic sources as an avenue for future research.

This article presents a concise overview of the existing landscape within accounting and finance research papers that relate to the investigated topic. By examining trends and identifying research directions, our study can potentially predict the future citation impact and propose further research directions for authors. Additionally, our findings may prompt journal editors to call for special issues. Overall, the study provides valuable insights for policymakers, managers, and investors seeking to better understand the relationship between corporate governance characteristics and a firm's involvement in ESG activities.

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