



Past, Present, and Future of Corporate Social Responsibility and Earnings Management Research

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Abstract

For decades, corporate social responsibility (CSR) has been an area at the heart of business research. The aspects of CSR that researchers have been focusing on have grown exponentially. Most research efforts have dwelled on its positive effects, including good behavioural changes, promising financial performance, social investment and development, and environmental preservation and protection. On the other hand, several scholars have questioned the credibility of CSR and its link to unethical financial conduct, particularly earnings management. This review paper uses a systematic literature review to conduct bibliometric analysis, content analysis, and thematic analysis in order to identify trends and outcomes of CSR reporting and earnings management research. The literature review search is guided by PRISMA and analyses 152 Scopus-indexed articles between 2005 and 2021. As a result, this paper reveals the most influential authors and articles, leading journals and countries, and research cluster networks. This review also outlines the theoretical perspectives and future direction of CSR and earnings management research. In addition, this review paper provides critical and beneficial insights for stakeholders and researchers.⁴

Keywords: Corporate Social Responsibility, CSR, Earnings Management; Systematic Literature Review, Bibliometric Analysis, Content Analysis, Thematic Analysis

JEL Classification: M41, Q01

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1. Introduction

The transparency of non-financial disclosure, such as of corporate social responsibility (CSR), which constitutes a company's information on social and environmental initiatives, is as important as financial disclosure (Higgins et al., 2015). Numerous studies have proven the link between CSR and financial disclosure. For example, extant studies show that CSR activities and reporting practices can improve financial performance (Akisik and Gal, 2019; Azzam et al., 2020; Oncioiu et al., 2020). As a result, this type of reporting has been a hot topic of discussion for accountants, scholars, and researchers in recent decades.

Moreover, researchers have found a link between unethical financial practices, such as earnings management and CSR activities and reporting practices (Andreicovici et al., 2021; Choi et al., 2013; Grougiou et al., 2014; Ibrahim et al., 2015; Martínez-Ferrero et al., 2015; Prior et al., 2008; Rahman et al., 2018). However, to the best of the researcher's knowledge, the results of these studies on the relationship between CSR and earnings management, have been conflicting and mixed.

Despite the possibilities that CSR can boost company transparency, brand value, and reputation, the motivation for companies to undertake CSR activities and their reporting practices continue to be debated (Gunawan et al., 2020). Assumptions have been made that the more socially and environmentally responsible and ethical a company is, the less motivation it has to engage in unethical financial tactics, like earnings management.

There is evidence that CSR activities and reporting practices may be linked to information manipulation in corporate reporting (Alsaadi et al., 2017; Cai et al., 2012; Martínez-Ferrero et al. 2016). For example, some academicians believe that companies use earnings management strategies to promote higher prospects, notwithstanding their actual financial performance (Cai et al., 2012; Petrovits, 2006). Companies that engage in earnings management tactics tend to CSR activities and reporting as an entrenchment strategy, to deliberately divert stakeholders' attention to and anticipation of the companies' performance (Prior et al., 2008).

Therefore, to better understand the research topic, this paper reviews extant research on the dynamic relationship between CSR and earnings management. This review paper refers to a single term of CSR to ensure consistency and as a reflection of the company's CSR activities, initiatives, disclosure, and reporting practices. In the review of literature, other types of nonfinancial reporting, such as sustainability reporting, environmental reporting, and integrated reporting, are commonly understood as sharing similar objectives and concerns with social and environmental issues, and hence, considered as synonymous with CSR reporting practices (Higgins et al., 2015).

This review paper has three objectives: (i) to analyse the current research trends, (ii) to identify theoretical perspectives, and (iii) to identify future research of CSR and earnings management. The bibliometric analysis was performed using the science mapping tool, VOSviewer. Then, content analysis and thematic analysis were used to establish the theoretical perspectives and propose future research. Thus, this review paper contributes to CSR and earnings management research by: (i) providing a comprehensive literature review covering the main issues and theoretical arguments; (ii) contributing a systematic literature review methodology and insights by reviewing the past and present CSR reporting and earnings management research; and (iii) offering ideas on potential research areas by identifying the research gaps.

The rest of this review paper is structured as follows. Section 2 discusses the theoretical foundation of CSR and earnings management research. Section 3 outlines the research method applied in this study. Section 4 discusses the bibliometric analysis and review, content analysis of current research outcomes. Section 5 proposes research areas to be explored in the future. The last section summarises and concludes.

2. Theoretical foundation

CSR has a long history of influencing companies' behaviour. CSR signals the company's transparency and can minimise information asymmetry, enhance a company's image, and improve financial performance. Consequently, by practising CSR, a company can mitigate uncertainty and the unfavourable attitude of stakeholders, and can lead to beneficial ties between the company's management and stakeholders (Deng and Xu, 2017, Raithel and Schwaiger, 2015).

However, extant literature has questioned CSR practices' credibility (Alsaadi et al., 2017; Chih et al., 2008; Choi et al., 2013; Grougiou et al., 2014; Kim et al., 2012; Prior et al., 2008). Previous research that has examined the relationship between CSR and earnings management practices, has suggested that stakeholder pressure and financial crisis may lead the company to engage in earnings management practices (Ayedh et al., 2019; Farooq and AbdelBari, 2015; Sabrun et al., 2018).

Earnings management occurs when managers manipulate accounting data to deceive stakeholders about the company's actual financial performance (Ayedh et al., 2019; Sabrun et al., 2018). Consequently, academicians have investigated the relationship between CSR and earnings management to establish if a company's participation in CSR practices would result in earnings management activities or vice versa. However, the research findings are inconsistent (García-Sánchez et al., 2020). This paper reviews the theoretical perspectives of CSR and earnings management research, and offer explanation on how and why CSR has a dynamic relationship.

3. Method

3.1. Literature search protocol

This review paper used bibliometric analysis and content analysis to study CSR and earnings management research trends and outcomes. The researcher conducted a systematic literature search and review guided by the Preferred Reporting Items for Systematic Reviews and Meta Analyses (PRISMA) (see Figure 1). The literature search protocol includes a search and selection strategy, as well as identification, screening, and eligibility for inclusion and exclusion.

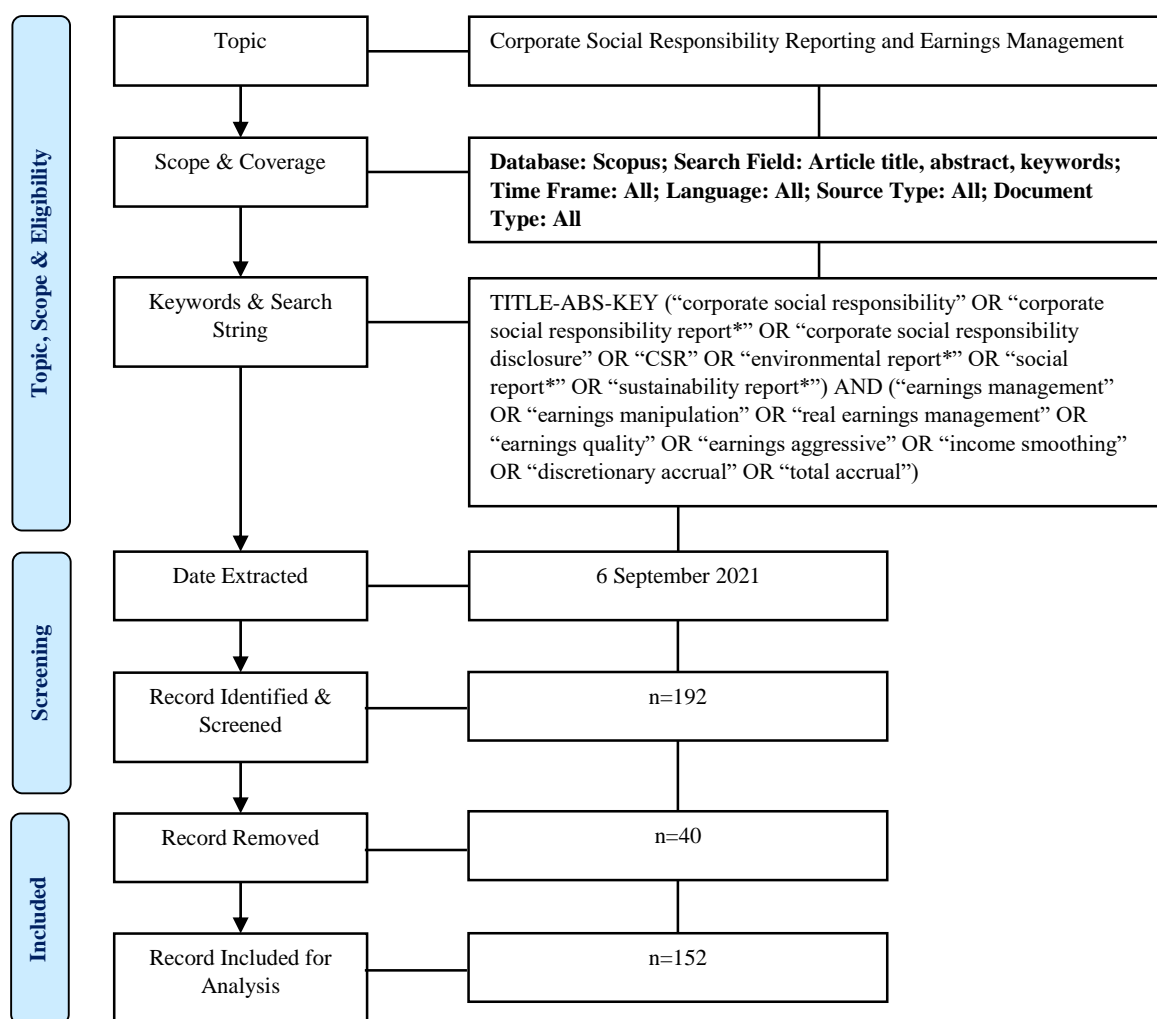


Figure 1: Flow diagram of the search strategy

3.2. Search strategy

The Scopus database was used as it has a wide coverage of academic journals (de Freitas Netto et al., 2020; Zakaria et al., 2021), and it is popular among researchers (Martínez-López et al., 2018; Baas et al., 2020). Although using more than one database would increase the likelihood of obtaining more relevant publications, screening for redundant publications will be time-consuming. The relevant keywords were identified based on the latest CSR and earnings management research to mitigate the probability of omission of relevant studies. A systematic literature search was conducted using the Scopus database and the search string is presented in Table 1.

Table 1: The search string

Database search string	
Scopus	TITLE-ABS-KEY (“corporate social responsibility” OR “corporate social responsibility report*” OR “corporate social responsibility disclosure” OR “CSR” OR “environmental report*” OR “social report*” OR “sustainability report*”); AND (“earnings management” OR “earnings manipulation” OR “real earnings management” OR “earnings quality” OR “earnings aggressive” OR “income smoothing” OR “discretionary accruals” OR “total accruals”)

Note: The intrinsic (*) was used to include the search of “reports” and “reporting”

3.3. Selection strategy

The pre-selection of publications was based on the assigned keywords presented in Table 1 in the form of a search string. The identification of publications was based on a systematic review. The Scopus search found 192 publications based on the article title, abstract, and keywords. The researcher then conducted two rounds of screening process: (i) document type; and (ii) language. Only articles in the academic journals were selected. Other publication types, including books, book chapters, book reviews, and conference papers, were excluded. Moreover, only articles written in English were selected for the review process so that translation did not become necessary. Hence, only 152 publications were eligible for the bibliometric analysis (see Figure 1).

3.4. Citation analysis

This review paper mainly used bibliographic coupling for the citation analysis. Bibliographic coupling is a scientific mapping approach that assumes two publications with shared references are similarly related in substance (Donthu et al., 2021). The methodology divides articles into thematic clusters best utilised within a specific era (Zupic and Čater, 2015). Bibliographic coupling allows current and specialised articles to get prominence in these theme clusters produced by mentioning publications and a wide range of topics and their newest advances.

4. Results

4.1. Bibliometric analysis

Pritchard (1969) defined bibliometric as, “the use of mathematical and statistical tools to articles and other forms of communication” (p. 349). It measures the evolution of a topic in a collection of publications statistically, reducing researcher bias and providing a global picture of the review area (Merigo et al., 2015). Many researchers have used bibliometric analysis because of its objectivity and capacity to manage vast amounts of data (Donthu et al., 2021; Merigo et al., 2015). Performance analysis and scientific mapping are two bibliometric analyses (Baier-Fuentes et al. 2019, Donthu et al. 2021). The advent of current software analytics such as VOSviewer with visual representations may now support a bibliometric analysis (Donthu et al., 2021; Srivastava and Sivaramakrishnan, 2021).

The most often utilised performance analysis approaches are descriptive analysis (based on publications) and citation analysis (based on citations) (Donthu et al., 2021). Articles, authors, nations, and journals may all have their performance analysed based on citations and publications (Baier-Fuentes et al., 2019; Donthu et al., 2021). On the other hand, the scientific mapping may be employed to develop article attribute networks based on article features (Donthu et al., 2021; Zupic and Čater, 2015). This review paper used bibliometric analysis to examine the following: (i) publication trajectory; (ii) leading countries; (iii) leading journals; (iv) influential articles; (v) influential authors, (vi) important keywords; and (vii) authors' research cluster network.

4.1.1. Performance analysis

4.1.1.2. Publication trajectory

The publication trajectory suggests that CSR and earnings management research is gaining pace (see Figure 2). Journal articles on CSR reporting and earnings management from 2005 to 2017 are less than ten, annually. Then the volume of publications increased in 2018 with 22 publications and jumped to 32 publications in 2021. The annual publication growth on this topic is considerably high, with an R-squared value of 0.7187.

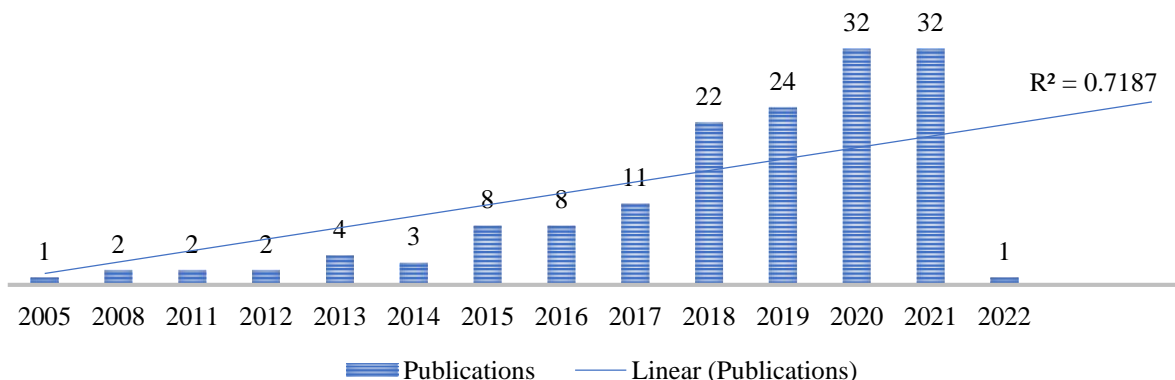


Figure 2: Publication trajectory

4.1.1.3. Leading countries

Researchers on CSR reporting and earnings management for 152 articles were contributed by authors affiliated from more than 41 countries. Figure 3 illustrates the contribution by countries, and the top 10 leading countries include China (27), South Korea (24), Indonesia (19), United Kingdom (15), United States (14), Spain (12), Taiwan (12), Australia (9), Malaysia (8) and Tunisia (7) publications.

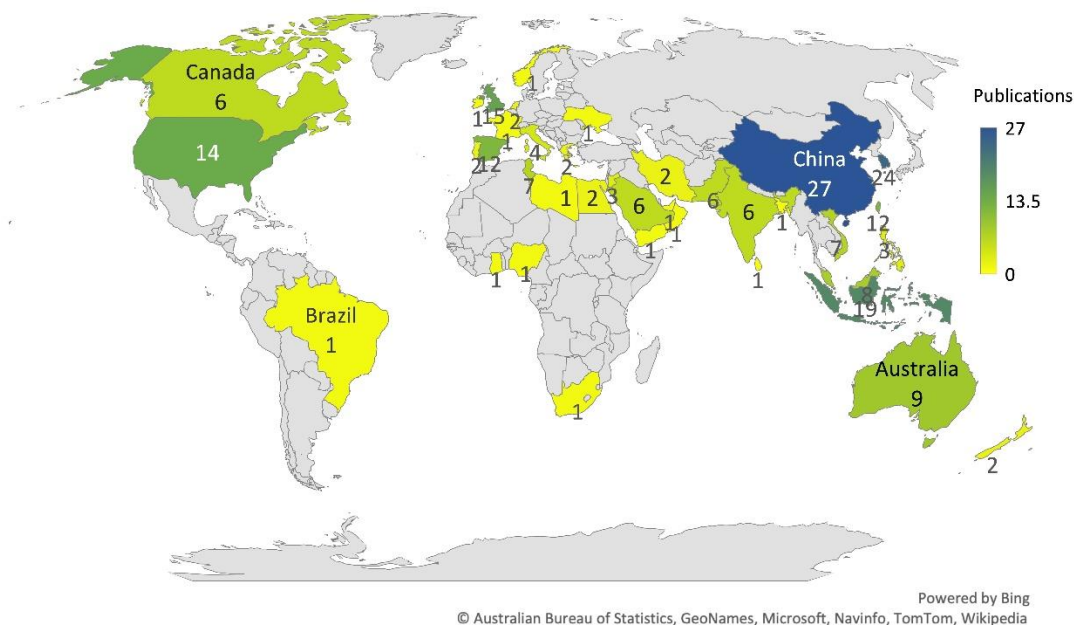


Figure 3: Total publications by country

However, using bibliography coupling citation analysis based on country, with at least two publications and 50 citations, the most influential authors are affiliated with the United States of America, Spain, Taiwan, Australia, the United Kingdom, Canada, South Korea, Vietnam, Saudi Arabia, and China. Moreover, authors affiliated in the United States have the highest average citation score of 71.6, followed by Spain (59.6), Taiwan (37.9), Australia (29.2), and the United Kingdom (26.9) for only two publications. Although authors affiliated in China and South Korea published 27 and 24 articles respectively, the average citations are low, indicating that the number of publications is less accurate compared to the citation analysis.

Table 2: Top 10 leading countries

Country	No. of Publications	No. of Citations	Avg. Citations
United States	14	1,002	71.6
Spain	12	715	59.6
Taiwan	12	455	37.9
Australia	9	263	29.2
United Kingdom	15	403	26.9
Canada	6	97	16.2
South Korea	24	309	12.9
Vietnam	7	72	10.3
Saudi Arabia	6	54	9.0
China	27	198	7.3

4.1.1.4. Leading journals

The bibliographic coupling analysis indicates the top leading journals. The total number of journals that have published CSR and earnings management research is 95. The bibliographic coupling analysis threshold was set to at least two publications with 30 citations, resulting in the top 10 leading journals as presented in Table 3. “Corporate Governance: An International Review” (164) and “Journal of Business Ethics” (95.2) lead this list based on the average citations score. However, “Corporate Social Responsibility and Environmental Management” is the journal with the highest publications on this research topic with nine articles. Most journals in this list are from the accounting, business, and economic fields.

Table 3: Top 10 leading journals

Journal	No. of Publications	No. of Citations	Avg. Citations
Corporate Governance: An International Review	3	492	164
Journal of Business Ethics	6	571	95.2
Managerial Auditing Journal	3	108	36
Corporate Social Responsibility and Environmental Management	9	298	33.1
Journal of Business Research	2	63	31.5
Accounting Forum	2	62	31
Asia-Pacific Journal of Accounting and Economics	2	39	19.5
Journal of Applied Business Research	3	56	18.7
Business Strategy and The Environment	3	55	18.3
Australian Accounting Review	2	34	17

4.1.1.5. Influential articles

Table 4 presents the top 10 influential articles on CSR reporting and earnings management research. Kim et al. (2012) published in the most respected accounting journal, “The Accounting Review”, gaining the highest number of citations in this list with 689 citations. The second top has only half of the number of citations, i.e., a paper written by Prior et al. (2008) published in “Corporate Governance: An International Review”. However, “Journal of Business Ethics” has three papers that have earned their place in this list. Table 4 also shows that Martínez-Ferrero has co-authored two papers that gained more citations and influence (Martínez-Ferrero, Garcia-Sanchez et al. 2015; 2016), and both papers are published in highly regarded accounting and business research journals.

Table 4: Top 10 influential articles

Author	Article title	Journal	No. of Citations
Kim et al. (2012)	Is earnings quality associated with corporate social responsibility?	The Accounting Review	689
Prior et al. (2008)	Are socially responsible managers really ethical? Exploring the relationship between earnings management and corporate social responsibility	Corporate Governance: An International Review	367
Chih et al. (2008)	Corporate social responsibility, investor protection, And Earnings Management: Some international evidence	Journal of Business Ethics	254
Hong and Andersen (2011)	The relationship between corporate social responsibility and earnings management: An exploratory study	Journal of Business Ethics	131
Choi et al. (2013)	Corporate social responsibility, corporate governance and earnings quality: Evidence from Korea	Corporate Governance: An International Review	125
Scholtens and Kang (2013)	Corporate social responsibility and earnings management: Evidence from Asian economies	Corporate Social Responsibility and Environmental Management	118
Martínez-Ferrero, Garcia-Sanchez et al. (2015)	Effect of financial reporting quality on sustainability information disclosure	Corporate Social Responsibility and Environmental Management	96
Martínez-Ferrero et al. (2016)	Corporate social responsibility as a strategic shield against costs of earnings management practices	Journal of Business Ethics	86
Beattie (2005)	Moving The financial accounting research front forward: The UK contribution	British Accounting Review	72
Muttakin et al. (2015)	Corporate social responsibility disclosures and earnings quality: Are they a reflection of managers’ opportunistic behavior?	Managerial Auditing Journal	67

4.1.1.6. Influential authors

The bibliographic coupling threshold was set to at least two publications with ten citations, which yielded the top 10 most prominent authors in the field of CSR and earnings management studies. Table 5 shows Kang (56), Garcia-Sánchez (44.6), and Martínez-Ferrero (29), have the highest average citations. Martínez-Ferrero is the most highly published author with five related publications.

Table 5: Top 10 influential authors

Author	No. of Articles	No. of Citations	Avg. Citations
Kang F.-C.	2	372	56
García-Sánchez I.M.	2	112	44.6
Martínez-Ferrero J.	5	223	29
Liu M.	2	58	22.5
Wang X.	2	45	21.5
Rezaee Z.	2	43	19.5
Cho E.	2	39	18.5
Chunmei Z.	2	37	15.3
Sial M.S.	3	46	14.5
Lin F.	2	29	10

4.1.2. Science mapping

4.1.2.1 Important keywords

The analysis of important keywords was performed using co-occurrence analysis. Author keywords were used because they indicate article content, while a semantic map of keywords reflects a study area's conceptual framework (Donthu et al., 2021). It is assumed that when keywords appear together in articles, it indicates that the ideas indicated by the keywords are significantly related (Donthu et al., 2021). In this review paper, a total number of 440 keywords was used in the current reviewed literature. A threshold for keywords occurrence was set, i.e., three times, resulting in 51 keywords. A manual omission was conducted on generic keywords, including country names, research method and analysis tool, and group keywords for CSR and earnings management (see Section 3.2). As a result, only 20 important keywords were highlighted (see Figure 4). The research trends in 2017 have focused on “ethics”, “ownership”, and “investor protection”, and on “governance approach”, gender diversity”, and “financial reporting” in 2020 (see Figure 4). CSR and earnings management research intensity is in between 2017 to 2020.

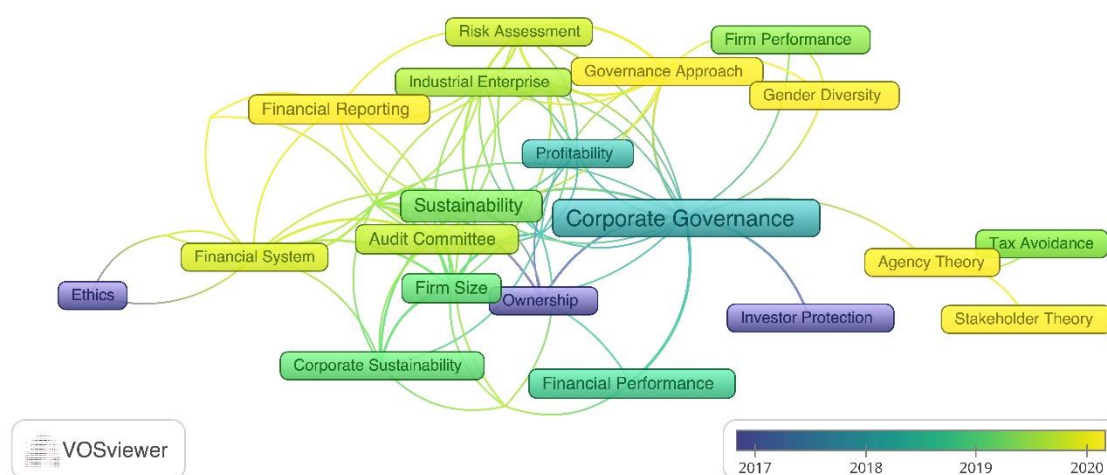


Figure 4: Overlay of important keywords

Figure 5 shows the keywords density. The level of density is indicated based on the contour. Amber to red is high density, and green to yellow is low density. From 2017 to 2020, most research topics that have a high density (amber to red) are “corporate governance”, “sustainability”, “audit committee”, “firm size”, and “financial performance”. Meanwhile, other subtopics, including “ethics”, “profitability”, “risk assessment”, “corporate sustainability”, “tax avoidance”, and “financial system” have low density (green to yellow).

Thus, future research on CSR and earnings management should cover more on these subtopics.

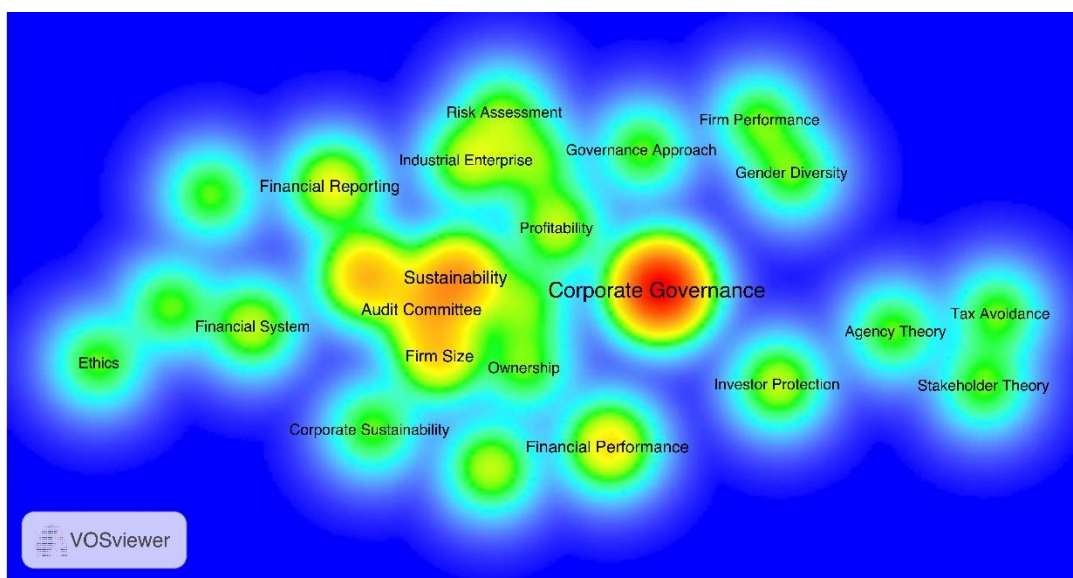


Figure 5: Density of important keywords

4.1.2.2. Authors' research cluster network

Figure 6 indicates four authors' research clusters network on CSR and earnings management research. These research clusters are based on bibliographic coupling for authors with the threshold of at least two publications with 20 citations.

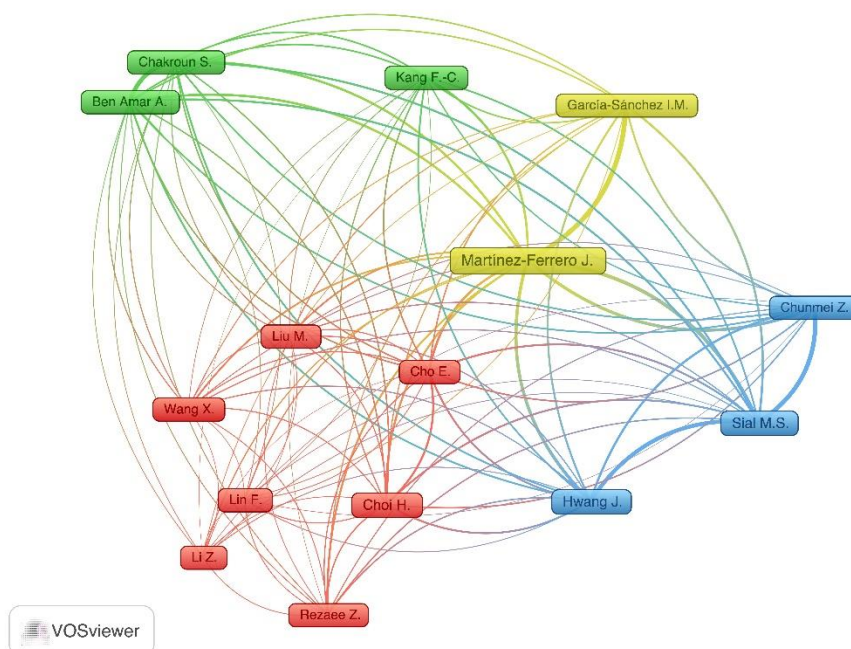


Figure 6: Authors' research cluster network

Cluster 1 (Green): The influence of financial performance

Chih et al. (2008) point out that the CSR and earnings management research gained interest from practitioners and researchers due to the allegation that Enron was involved in earnings management practices. Enron, the classical case of CSR and earnings management being

intertwined reminded many scholars and managers the severe effect of opportunistic financial reporting could lead to fraudulent financial reporting. It is a sign of severe decay of business ethics to know that companies used CSR to mask their indulgence in manipulating accounting figures (Chih et al., 2008). Nevertheless, the inclination of companies' managers involved in earnings management practices is not related to financial performance entirely, and CSR could reduce earnings management behaviour (Amar and Chakroun, 2018; Chakroun and Amar, 2022; Chih et al., 2008; Scholtens and Kang, 2013).

Cluster 2 (Red): CSR to mitigate earnings management

Researchers have examined the direct or moderating and mediating effect of religiosity and corporate governance structure on CSR and earnings management practices (Hu et al., 2018; Rezaee and Tuo, 2019). Proper practice and function of CSR are often perceived to be able to mitigate and hinder unethical financial behaviour such as earnings management, and therefore, improve financial reporting quality (Lin et al., 2019; Sungbin and Cho, 2017; Wang et al., 2018). Moreover, higher audit quality subdues companies' managers to engage in earnings management practices (Hu et al., 2018; Lin et al., 2019). Therefore, better CSR practices forge higher market and investors' anticipation (Choi et al., 2020) and have led companies' managers to be more transparent, reduce information asymmetry, and suppress managers' interest (Yuan et al., 2022; Wang et al., 2018). Consequently, it decreased financial irregularity risks and lessened agency problems in companies (Li and Thibodeau, 2019).

Cluster 3 (Yellow): CSR as entrenchment strategy

The companies' responsibilities to increase the shareholders' wealth have shifted into more concern on social development and environmental protection. This noble ideology is seldom believed, as companies struggle to meet the stakeholders' needs (Martínez-Ferrero, GarciaSanchez et al., 2015). Companies' managers used asymmetric information to manage and control stakeholders' perceptions of the company's performance, financially and nonfinancially (Villarón-Peramato et al., 2018). CSR is used as an entrenchment strategy and selfdefence mechanism and rationalises managers' decisions in manipulating the company's earnings (Villarón-Peramato et al., 2018). In order for companies to maintain a certain corporate reputation, stakeholder and investor protection strategies can curb the harmful effects of earnings management (Martínez-Ferrero, Gallego-Álvarez et al., 2015).

Cluster 4 (Blue): Symbolic function of CSR to hide earnings management

From an ethical perspective, CSR is perceived as a countermeasure for unethical financial conduct such as earnings management practices (Chen et al., 2020). This view suggests that companies' social development and environmental protection initiatives align with stakeholder expectations, as commonly promoted in CSR (Chen et al., 2020). However, companies used CSR as a symbolic rather than an actual function. Consequently, it led companies' managers to manipulate accounting figures and reporting policies for their desirable outcome (Chen et al., 2020; Sial et al., 2019). Arguably, better financial performance resulting from stakeholders' appreciation of companies' CSR had led the managers to manoeuvre the company's earnings. Such behaviour is incorporated into companies' corporate strategies aimed to protect companies' image (Chen et al., 2020).

4.2. Content Analysis

The researcher conducted content analysis in order to identify sub-themes within the previously stated theoretical views on CSR and earnings management research. Despite publications' years and citations, the researcher screened and identified publications at least B-ranked in the Australian Business Deans Council (ABDC) for content analysis. This inclusion ensures that content analysis reviews reflect the highest quality of research publications. The total number of journals that have published CSR and earnings management research is 152 (see Table 6). However, only 50 articles are published in A*, A, and B ranked journals. Thus, the content analysis was performed on 50 articles, about 33 per cent from 152 publications (see Table 7).

Table 6: Frequency of ABDC-ranked journals

ABDC Rank	Count	Percentage
A*	2	1.3
A	18	11.8
B	30	19.7
C	46	30.3
X	56	36.8
Total	152	100

Table 7: Distribution of 50 articles from ABDC-ranked journals

Journal	ABDC-rank	Count	Percentage
Journal of Corporate Finance	A*	1	2
The Accounting Review	A*	1	2
Journal of Business Ethics	A	6	12
Corporate Governance: An International Review	A	3	6
Journal of Business Research	A	2	4
British Accounting Review	A	1	2
Emerging Markets Review	A	1	2
International Journal of Auditing	A	1	2
International Review of Financial Analysis	A	1	2
Journal of Accounting and Public Policy	A	1	2
Journal of Contemporary Accounting and Economics	A	1	2
Journal of Financial Services Research	A	1	2
Business Strategy and the Environment	B	3	6
International Journal of Accounting and Information Management	B	3	6
Managerial Auditing Journal	B	3	6
Social Responsibility Journal	B	3	6
Accounting Forum	B	2	4
Accounting Research Journal	B	2	4
Asia-Pacific Journal of Accounting and Economics	B	2	4
Australian Accounting Review	B	2	4
Emerging Markets Finance and Trade	B	2	4
Sustainability Accounting, Management and Policy Journal	B	2	4
Asian Review of Accounting	B	1	2
European Business Review	B	1	2
Finance Research Letters	B	1	2
Global Finance Journal	B	1	2
Managerial and Decision Economics	B	1	2
Review of Quantitative Finance and Accounting	B	1	2

Note: Journals are sorted based on ABDC rank and alphabetical order.

4.2.1. Transparent and reliable reporting versus opportunistic behaviour

Researchers believe in the idea that companies which are highly regarded as socially and environmentally responsible and ethical would have more transparent and reliable financial statements (Al-Shaer, 2020; Chan et al., 2021; Chih et al., 2008; Hong and Andersen, 2011; Kim et al., 2012). Therefore, an improved financial reporting system will positively affect the quality of a company's CSR report. Then, CSR increases transparency and minimise opportunistic behaviour (Al-Shaer, 2020; Martínez-Ferrero et al., 2015b). Hence, the information system used to generate financial reports should be the same as that used to create other disclosures, like CSR (Carey et al., 2017).

The capital market has less interest in companies with better CSR performance but engaged in earnings management practices, suggesting that truthful representation is compatible with shareholder and stakeholder interests (Chen et al., 2019). Moreover, to escape scrutiny from stakeholders, companies may employ an ethical practice as a label to provide the appearance of openness. In this way, the approach helps companies gain social legitimacy (Merkl-Davies and Brennan 2007). Thus, companies that create and execute ethical initiatives to satisfy stakeholders' interests are more likely to disclose transparent and truthful earnings information (Alsaadi et al., 2017; Kim et al., 2012).

Moreover, companies with high performance on CSR have better contemporaneous earnings return relationships (Gao and Zhang, 2015). Consequently, fewer auditors are concerned with a company's possibility of engaging in any sort of financial misconduct (Al-Shaer, 2020; Chan et al., 2021; Maso et al., 2019; LópezPuertas-Lamy et al., 2017). However, arguably, managers may be tempted to utilise ethical principles to disguise their opportunistic conduct (MerklDavies and Brennan, 2011).

A good practice of CSR also improves the relationships between companies and stakeholders (Cho and Chun, 2016). Additionally, good corporate governance, mandatory CSR reporting practices, and statutory CSR-guided reporting, might better restrain earnings management practices (Cho and Chun, 2016; Hickman et al. 2021; Liu and Lee, 2019; Suyono and Al Farooque, 2018; Wang et al., 2018; Wu and Zhou, 2021). However, the negative association between CSR and earnings management is weaker for companies with highly concentrated ownership, where those companies tend to hide the company's losses using CSR (Choi et al., 2013).

A recent study has confirmed that high CSR performing companies with an improved market and regulatory, media, and society monitoring tend to provide better quality accounting information (Dimitropoulos, 2022). It is also supported by empirical findings of other researchers that increased stakeholder-oriented management through CSR functions, helps attenuate earnings management practices (Dimitropoulos, 2022; Ehsan et al., 2022; Gong and Ho, 2021; Hwang et al., 2021; Kim et al., 2019; Kumala and Siregar, 2021; Rezaee and Tuo, 2019; Rezaee et al., 2020; Sial et al., 2019; Song and Rimmel, 2021).

4.2.2. Entrenchment strategy versus Impression management

CSR benefits include a more credible reputation, increased consumer and societal trust, openness and accountability, better access to funding, sustained competitive advantages over rivals, and profit maximisation (Dang et al., 2021). However, theoretically, managers tend to conceal knowledge from stakeholders, resulting in agency issues and information asymmetry.

Thus, managers tend to use CSR to control stakeholders' perception of companies' actual performance (Frias-Aceituno et al., 2014; Martínez-Ferrero, Gallego-Álvarez et al., 2015; Villarón-Peramato et al., 2018). CSR can be used as an entrenchment tool to obfuscate poor earnings quality (Alsaadi et al., 2017; Chih et al., 2008; Prior et al., 2008). Recent evidence has confirmed that the agency issue emerges in CSR companies when managers utilise their management discretion over accrual accounting to alter reported profit (Dang et al., 2021).

CSR has become a defensive mechanism to avert unfavourable responses and subsequent monitoring by stakeholders who may be impacted by earnings management, therefore cementing the managers' position in the company and enabling them to continue acting in their own interests (Martínez-Ferrero et al., 2016; Prior et al., 2008). Managers might also use CSR to balance the interests of various stakeholder groups to minimise the negative implications of earnings management (Martínez-Ferrero, Garcia-Sanchez et al., 2015). Therefore, CSR might be considered a management entrenchment strategy aimed at meeting the expectations of many stakeholders (Martínez-Ferrero, Garcia-Sanchez et al., 2015; Prior et al., 2008; Wu and Zhou, 2021). For this reason, the credibility of companies' CSR should continuously be questioned (Muttakin et al., 2015).

Researchers have claimed that CSR is a tool for impression management and is prone to abuse (Stacchezzini et al., 2016). Grougiou et al. (2014) and Martínez-Ferrero, Gallego-Álvarez et al. (2015) found inconclusive findings in their attempt to conduct bidirectional analysis on CSR and earnings management, leading to future research on impression management. Ideally, socially and environmentally responsible companies tend to impress a wide range of stakeholders. Thus, companies might appear responsible for giving diverse stakeholders a positive impression, resulting in earnings management behaviour (Habbash and Haddad, 2020; Hickman et al., 2021).

Jadiyappa et al. (2021) hypothesised that companies that engage in substandard social behaviour, would often invest in CSR to obscure their unethical business activities. CSR is used as a smokescreen to establish a favourable public image in the face of operational malfeasance. Companies participate in CSR as a sort of reputation insurance, implying that CSR might offer stakeholders the appearance of a transparent company. In reality, the companies hide earnings management behind the illusion of openness and transparency (Kuo et al., 2021), consequently leading to increased activities on CSR to enhance the company's reputation through earnings management practices (Kuo et al., 2021). Interestingly, while CSR conscious companies are unlikely to participate in earnings management, they may engage in a lesser and overt kind of impression management practice (Lu et al., 2019). Companies with excellent media coverage, institutional investor holdings, and analysts' monitoring, will be more likely to participate in CSR impression management reporting (Zhang and Chen, 2020).

5. Future Research

The proposed future directions on CSR and earnings management research are based from thematic analysis. Thematic analysis entails extracting qualitative data (e.g., text) from a collection of documents (e.g., articles, interviews) in order to identify, analyse, and report on themes (Agyekum et al., 2019; Vaismoradi et al., 2013). A thematic analysis should be undertaken independently or combined with other qualitative methodologies (Braun and Clarke, 2006). A specific analysis technique must comply with the criteria of credibility, transferability, dependability, and confirmability (Braun and Clarke, 2006). The inductive thematic analysis procedure of familiarising with qualitative data (i.e., article text on

implications and future research directions), generating initial codes, searching for themes, reviewing themes, and defining and naming themes, has been followed and agreed upon by the researcher with 95% inter-rater agreement (Braun and Clarke, 2006). This review paper reveals four future topics on CSR and earnings management research, i.e., Sustainable Development Goals (SDGs), climate change, artificial intelligence, and small and medium-sized enterprises (SMEs) (see Figure 7).

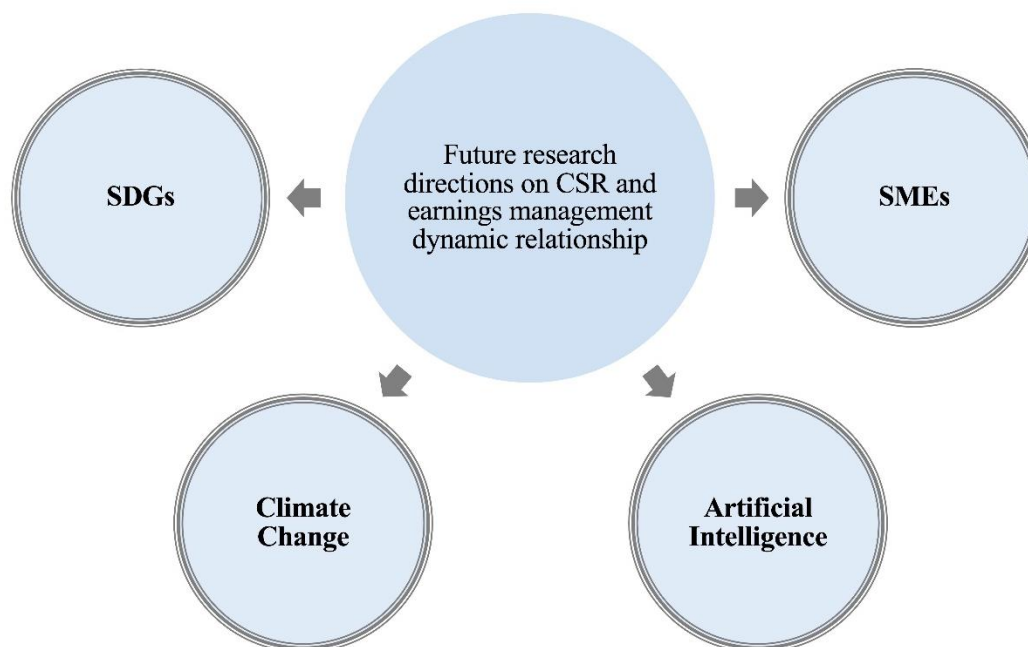


Figure 7: Future research directions

5.1. Sustainable Development Goals

The SDGs has outlined 17 goals related to achieving sustainable development. These goals are to meet the needs of three pillars of sustainability, including economic, environmental, and social. Hence, the company's SDGs disclosure should be in accordance with sustainability objectives. Unlike SDGs, there is no defined standard for CSR reporting procedures other than a flexible reporting framework. Consequently, the factual information in CSR reporting is often mixed with rhetoric discourse. Thus, companies may report sugar-coated reports on CSR to appear more responsible (Seele and Gatti, 2017). Also, companies employ self-laudatory reporting to purposefully boost their reputation (Gavana et al., 2016). Finally, some companies overstate their commitment to sustainability to gain a competitive advantage (Nunes and Park, 2016; 2017).

However, Indonesian researchers have found that companies' efforts to achieve SDGs are limited (Gunawan et al., 2020). Also, a recent study on European companies, has revealed that SDGs disclosure procedures are primarily symbolic, manifesting their lack of impact on company performance. However, research on Italian corporations has shown that the application of SDGs disclosure was considerably low (Izzo et al., 2020). Thus, research in examining SDGs disclosure and earnings management is essential as an effort to confirm the company's intention and actions to attain SDGs.

5.2. *Climate change*

Companies tend to make misleading environmental communications (Guix et al., 2022). Such practices are manifested through the act of fibbing, hidden trade-off, no proof, ambiguity, and irrelevance in providing climate-related information. The reporting practice of CSR is still considered remote and unrelated to companies' core business in certain corners of the world, resulting in an insignificant impact of CSR on climate change initiatives. For instance, new evidence has shown that most companies are in a relatively early stage of CSR development. Hence, contrary to popular expectations, the reporting practice of CSR is not significantly reduced carbon emissions (Li, Cheng et al., 2021).

However, Bui et al. (2021) recently found that carbon assurance and disclosure reduce earnings management and improve reporting integrity. These results support the idea that ethical concerns lead to better reporting. However, polluter companies face political costs resulting in income reductions through income-decreasing earnings management (Yang and Tang, 2021). Also, the initial public offering under-pricing is high when severe air pollution occurs (Zhang et al., 2021).

Moreover, Litt et al. (2014), who examined the link between environmental information and earnings management, concluded that companies with more significant financial performance, are likely to be related to genuine economic success rather than profit management tactics. Thus, in light of the current stakeholder interests on climate change issues, more research on CSR and earnings management pertaining to climate change, is crucial.

5.3. *Artificial intelligence*

Rapid advancements in artificial intelligence (AI) technology have provided new reporting information concerns for companies (Bonsón et al., 2021). Several studies have utilised AI technology to analyse a company's reporting information and have found profound outcomes. For instance, Li, Mai et al. (2021) had employed a machine learning technique called the Word Embedding Model to analyse earnings call transcripts. The result indicates that corporate culture is linked to corporate outcomes, including operational efficiency, risk-taking, earnings management, CEO compensation design, company value, and deal-making. On the other hand, D'Amato et al. (2021) used a Random Forest method to see how structural data affects ESG ratings and found that financial data can explain ESG ratings. However, another research has found that AI technology application in CSR may result in some substitution effects, and the benefits are not conclusive (Li, Li et al., 2021).

Nevertheless, several researchers have successfully applied AI technology to earnings management detection using machine learning Simulation-based Sampling Techniques and Gradient Boosted Regression Tree (Bertomeu et al., 2021; Sanad, 2021). Thus, more research can benefit from accurate and the shortest total time completion analysis via AI technology (Bertomeu et al., 2021; D'Amato et al., 2021; Sanad, 2021). Although AI technology has been applied in CSR and earnings management in different research settings, AI technology has not confirmed the dynamic relationship between CSR and earnings management. Thus, more research is needed on this area.

5.4. *Small and medium enterprises*

Globalisation and fast environmental changes pose rising hazards and difficulties to businesses worldwide, especially SMEs in developing nations. SMEs that apply parts of the CSR strategy are more likely to introduce innovations. The association between SMEs and innovation are expected to boost investment and market demands (Zastempowski and Cyfert, 2021). Hence, a good measure of CSR for SMEs is crucial to meet stakeholders' needs (Sancho et al., 2020). Several studies have analysed SMEs' possibility in earnings management practices (Anton and Carp, 2020; Belot and Serve, 2018; Fera and Salzillo, 2021; Sánchez-Ballesta and Yagüe, 2021a; 2021b). Earnings management practices have a negative effect on SMEs growth (Anton and Carp, 2020). SMEs managers in high-social capital locations are less likely to manage reported earnings, and private SMEs' social capital and earnings management are firm-size dependent (Sánchez-Ballesta and Yagüe, 2021a). Also, low earnings quality has a positive association with discretionary accruals and borrowing costs in SMEs (Fera and Salzillo, 2021), and it can hurt SMEs survival and financial stability (Sánchez-Ballesta and Yagüe, 2021b).

Most CSR and earnings management research has been conducted among publicly listed companies, multinational companies, or governmental-linked companies. It indicates that most prior research has focused on larger companies. Therefore, more research on the CSR-earnings management dynamic relationship among SMEs is needed. For instance, Al-Shaer (2020) suggested that more research efforts for smaller companies might benefit accounting policy implications found in larger companies.

6. Conclusion

This review article addresses three research objectives using bibliometric analysis, content analysis, and thematic analysis on CSR and earnings management research publications. Following significant discoveries from the past and present of CSR and earnings management research, this review article sheds light on the knowledge and potential for prospective researchers to pursue future directions. This review had conducted a comprehensive and scientific retrospective analysis of CSR and earnings management research published between 2005 and 2021 in 95 Scopus-indexed publications. The results should be useful for prospective researchers interested in conducting the CSR and earnings management research in its broadest yet quality assured sense. The review indicates that CSR is used as a smokescreen to establish a favourable public image. CSR also increases transparency and minimises opportunistic behaviour, and a robust CSR emphasises relationships with stakeholders. Good corporate governance, resulting in a negative link between CSR and earnings management. Also, mandatory CSR reporting practices and statutory CSR-guided reporting might better restrain earnings management. On the other hand, managers might use CSR to balance various stakeholder groups' interests to minimise the negative implications of earnings management. Yet, the trustworthiness of companies' initiatives on CSR should continuously be questioned. The inconsistent results thus far have failed to provide a consensus on whether or not the actions taken by companies in addressing social and environmental concerns through CSR have had a good intention. Hence, it is hard to generalise the statistical findings per se. Thus, future research should analyse relevant data using different research approaches to address the inconsistent CSR and earnings management research results.

Future research on CSR and earnings management may explore other research areas, including SDGs, climate change, AI, and SMEs. The new application of SDGs disclosure among companies might change managers' perspectives on CSR and look into a bigger picture of

contribution aligned with global sustainable business practices. Hence, examining SDGs disclosure and earnings management might offer new insights. Moreover, the rising issues of climate change impact, concerning companies' initiative to safeguard the company's ability to meet the sustainable future, ethical practice in reporting the company's information is crucial. Furthermore, applying AI technology might assist companies in better practice for CSR. It is also beneficial to the researcher to produce more reliable research outcomes in understanding the dynamic relationship between CSR and earnings management using AI technology. Lastly, most CSR and earnings management research focuses on larger companies, and knowledge of CSR practices and earnings management behaviour among SMEs remains scarce.

This review paper has two significant limitations that other review papers can address. Firstly, this review is restricted from the Scopus database. While the current review paper has a literature search protocol based on the Scopus database that is justified and supported (Donthu et al., 2021; Fetscherin and Heinrich, 2015; Paul et al., 2021), the review cannot rule out the possibility of missing out on CSR and earnings management publications that are indexed in other databases, such as Web of Science. Thus, future reviews of CSR and earnings management, particularly those that plan to concentrate on certain niche areas, might use the Web of Science database. Secondly, this review paper focuses on CSR's theoretical perspectives and its dynamic relationship with earnings management. Future review papers may investigate the different measurement tools for analysing earnings management to review its shortcomings (Botsari and Meeks, 2008; Miller, 2006). Also, Higgins et al. (2015) emphasised the difficulty of assessing the variations of CSR measures with any accuracy. Therefore, the future review focuses on different CSR and earnings management measures.

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