BIBLIOMETRIC ANALYSIS OF CORPORATE GOVERNANCE: PAST, PRESENT, AND FUTURE RESEARCH AGENDA

Rana Albahsh [*], Mohammad F. Al-Anaswah [**]

* Management Sciences Department, Business School, German Jordanian University, Amman, Jordan
** *Corresponding author*, Management Sciences Department, Business School, German Jordanian University, Amman, Jordan
Contact details: Business School, German Jordanian University, Amman Madaba Str., P. O. Box 35247, Amman 11180, Jordan

Abstract

During the 1990s and 2000s, the importance of strong corporate governance (CG) was acknowledged more widely due to the occurrence of major corporate failures. As a result, there was a greater focus on corporate responsibility, transparency, disclosure practices, and risk management to enhance accountability. Moreover, following the 2008 financial crisis, CG has become an increasingly important topic in the fields of business and economics in recent years, particularly. Despite this, there has been no comprehensive examination of the subject to date. The current study seeks to address this gap by providing a retrospective analysis of the emergence of CG in business and economics. The bibliometric methodology was used in this research involving four steps: defining the aims and scope of the study; selecting appropriate techniques for the analysis; collecting data; and running the analysis and presenting the findings. Thus, bibliometric analysis was conducted on 3126 scientific research articles, retrieved from the Scopus database, which combined the keywords of CG and economics and business to identify and map the cumulative scientific knowledge in these fields by analyzing large volumes of unstructured data in a rigorous manner and exploring the emerging areas in the fields. Co-citation and bibliometric-coupling analyses were employed to determine the thematic structure of CG research from 2008 to 2022, revealing 7 clusters of research that highlight the focus and directions of the field. VOSviewer and MS Excel software were used to analyze the data and identify the most active scientific contributors in terms of countries, institutions, sources, documents, and authors. Our analysis demonstrated an increasing publication trend in CG research from 2008 onwards, with a particular emphasis on its application in business and economics. Additionally, the top three contributors to the literature were found to be the UK, the USA, and Australia. The study outlines several potential avenues for future research that could deepen the body of knowledge in this field of CG.

Keywords: Corporate Governance, Sustainability, Corporate Social Responsibility (CSR), Shareholders and Board, Executive Compensation, Performance Analysis, Science Mapping

Authors' individual contribution: Conceptualization — R.A.; Methodology — R.A. and M.F.A.-A.; Writing — Original Draft — R.A. and M.F.A.-A.; Writing — Review & Editing — M.F.A.-A.; Supervision — R.A.

Declaration of conflicting interests: The Authors declare that there is no conflict of interest.

1. INTRODUCTION

Corporate governance (CG) is essential in ensuring that companies adopt effective management practices to achieve their goals while mitigating risks. However, the 2008–2009 global financial crisis exposed serious shortcomings in the effectiveness of CG practices. This led to researchers reevaluating and examining CG from various perspectives to address these governance failures. CG has gained significant importance in the fields of business and economics since the 2008 global financial crisis (Figure 2). Scholars have explored the topic from various perspectives, utilizing a multidisciplinary research approach that has enriched the topic and connected it to many issues related to organizations and countries around the world. Therefore, this research aims to map the work conducted in the field of corporate governance since 2008 through a bibliometric analysis. The analysis aims to depict the evolution of CG research over time in the fields of business and economics.

Bibliometric analysis is a powerful tool that has been increasingly used in business research to analyze and evaluate scientific literature. It allows researchers to identify trends, gaps, and opportunities for future research, as well as to map the evolution of a specific research field over time. By leveraging bibliometric software and scientific databases such as the Scopus and Web of Science, researchers can process and analyze large amounts of data efficiently and accurately, providing a comprehensive overview of the existing literature in a given field (Donthu et al., 2020; Khan et al., 2021). Bibliometric studies have the potential to establish a solid basis for advancing a field in new and meaningful ways by providing scholars with a comprehensive overview, identifying knowledge gaps, and generating new ideas for investigation. This is particularly relevant for scientific data that generates high research impact, as it requires the ability to handle large volumes of data (Ahmed et al., 2022; Goodell et al., 2021).

Despite its potential benefits, bibliometric analysis is not yet widely utilized in business research, and, therefore, has not yet reached its full potential in the field (Donthu et al., 2021). Scholars who do use bibliometric analysis in business research often use it to examine the intellectual structure of a particular domain within the existing literature. This involves identifying emerging trends in articles, and analyzing the social and structural relationships between different research constituents, such as authors, countries, and institutions (Verma & Gustafsson, 2020).

VOSviewer is a commonly used program in bibliometric analysis due to its ability to generate large bibliometric maps with graphical representations, leading to more comprehensive results compared to traditional computer programs like SPSS (van Eck & Waltman, 2010).

The research contributes to the existing literature in several ways. First, it presents and identifies the important aspects of CG. Second, it synthesizes the intellectual aspects of the literature into seven key clusters of thematic research groups: 1) corporate governance for innovation, sustainability reporting, 2) corporate resilience, CSR, financial development, 3) crash risk, financial reporting transparency, portfolio risk, factor markets, sustainable corporate governance, gender diversity, environmental disclosure and firm performance, 4) sustainable corporate governance, gender diversity, environmental disclosure and firm performance, 5) roles of institutions (informal and formal), shareholders and board, 6) socially responsible firms, firm performance, firm value, 7) executive compensation and incentives, tax avoidance. Third, the study visualizes the results using the bibliometric mapping tool VOSviewer. Finally, the researchers identify gaps in the existing literature and present future research directions that are instrumental for the growth of CG in the business and economics context.

The research is structured as follows: Section 2 provides a review of the literature, Section 3 presents the research methodology, Section 4 illustrates the research results and discussion, and finally, Section 5 presents conclusions.

2. LITERATURE REVIEW

During the 1990s and 2000s, there was a growing recognition of the need for robust CG due to the occurrence of significant corporate failures. This resulted in an increased emphasis on corporate accountability, social responsibility, transparency, and disclosure practices, as well as effective risk management (Iatridis, 2010).

In the wake of the 2007–2008 global financial crisis, there has been renewed discussion on the importance of strong CG, particularly concerning sound risk management and reporting practices (Iatridis, 2011). This crisis led to an unprecedented number of financial institutions collapsing or being bailed out by governments, resulting in a credit market freeze and global government interventions (Taylor, 2012). While macroeconomic factors were the primary cause of the crisis, recent studies indicate that firms' risk management and financing policies determined the extent to which they were affected. Corporate boards and shareholders make trade-offs between costs and benefits, ultimately influencing firms' risk management and financing policies, implying that CG significantly impacted firms' performance during the crisis period (Erkens et al., 2012).

Furthermore, CG has demonstrated its ability to enhance a company's resilience during other crises, such as the COVID-19 pandemic. Various CG practices, such as anti-takeover provisions, board structure, and executive compensation systems, have the potential to influence the market's perception of a company's ability to withstand the impact of COVID-19. Research has indicated that firms with stronger CG practices had better stock price performance in response to COVID-19 cases (Ding et al., 2021).

CG is a vital consideration for state-owned enterprises (SOEs). The agency problem, the effectiveness of the compensation system, the independent director mechanism, the outside block holder monitoring, and transparency to outside investors are crucial factors in this regard. CG aims to mitigate the insider agency problem that arises due to the divergence of interests between the controlling shareholder, minority shareholders, and top managers. In emerging markets,

non-controlling large shareholders play an important role in CG, as controlling shareholders' expropriation is a significant concern. In China, concentrated ownership further exacerbates the complexity of agency problems in SOEs. It is noteworthy that, unlike Western companies, insiders in Chinese SOEs are the controlling shareholders and managers. Therefore, various CG mechanisms such as laws, regulations, contracts, and corporate policies can contribute to maximizing corporate value (Lin et al., 2020).

South Africa and other countries have implemented CG disclosure policy reforms that specifically mandate corporations to disclose transparent information on a recommended set of good risk management practices. This approach aims to scrutinize the reasons and factors that influence corporate risk disclosures (CRD) (Ntim et al., 2013).

In recent years, there has been a significant increase in interest in the quality and scope of CG practices, driven by pressures from both external and internal corporate stakeholders, including regulators and investors (Linsley & Shrives, 2006). This is due in part to the strategic implications for maintaining long-term sustainable corporate operations (Bhimani, 2009). Rational managers must weigh the substantial costs of risk disclosure, such as litigation, copyrights, competition, regulation, and taxation (Lopes & Rodrigues, 2007), against its potential benefits.

Improved commitment to CG practices can have significant investment (capital budgeting), financing (capital structure), and liquidity (working capital) implications by reducing agency and information asymmetry problems between managers and corporate stakeholders (Brown et al., 2009). Greater transparency and disclosure practices can also strategically enhance corporate reputation and goodwill by improving alignment with societal goals and norms, thereby facilitating sustainable operations (Institute of Directors in Southern Africa, 2002). Stakeholder theory suggests that comprehensive CRD can effectively gain the support of influential corporate stakeholders, including regulators, investors, government, and employees, who are crucial to a corporation's ability to conduct economically viable operations (Institute of Directors in Southern Africa, 2002). From a resource-dependence perspective, increased commitment to CRD can increase access to crucial resources, such as finance, by minimizing capital and political costs through improved corporate image and reputation (Ntim et al., 2013).

Despite the increasing interest in CG, research on this topic has been conducted from various perspectives, which has broadened the field and enriched it with interdisciplinary knowledge. However, this has also resulted in some limitations and gaps that need to be addressed. For instance, there is a scarcity of studies examining how a company's CG mechanisms can influence its CRD (Elzahar & Hussainey, 2012). Additionally, there is a lack of research in developing countries (Ntim et al., 2013), and studies that explore non-financial CRD, such as business/operational and strategic risks, are generally rare (Brown et al., 2009). Most studies rely on cross-sectional data, with few employing longitudinal analyses (Ntim et al., 2013).

Conversely, it appears that the implementation of CG practices is influenced by the characteristics of both the board of directors and executive board, such as their age, experience, gender, level of education, regulatory environment, and period of board turnover (Berger et al., 2014).

On the other hand, some studies have yielded contrasting findings. For instance, Kim et al. (2014) found that corporate social responsibility (CSR) has a significant effect in mitigating crash risk in firms with weaker corporate governance, suggesting that firms that prioritize CSR are less likely to engage in bad news behavior, thereby reducing the likelihood of a stock price crash. This role of CSR is particularly crucial in situations where governance mechanisms, such as board or institutional investor oversight, are inadequate.

The objective of this research is to employ bibliometric analysis to map the scholarly work on CG from 2008 onwards, with a focus on the field of business and economics. The study seeks to provide analysis and insights into the development and trends of CG research over the study time.

3. RESEARCH METHODOLOGY

This study utilizes bibliometric methodology to analyze bibliometric and bibliographic information quantitatively (Donthu et al., 2021; Pritchard, 1969). There has been no comprehensive examination of the subject of CG to date. The current study seeks to address this gap by providing a retrospective analysis of the emergence of CG in business and economics utilizing bibliometric methodology. This methodology involves four steps: 1) defining the aims and scope of the bibliometric study; 2) selecting appropriate techniques for bibliometric analysis; 3) collecting data for bibliometric analysis; and 4) running the bibliometric analysis and presenting the findings. Our first step was to define the aim of gathering the intellectual structure of CG from the 2008 financial crisis until 2022 using bibliometric analysis. We determined that the available literature was sufficient to conduct a comprehensive bibliometric analysis (Donthu et al., 2021; Linnenluecke et al., 2020). However, bibliometric methodology has some limitations that can impact its usefulness and interpretation of results, for example, data accuracy and completeness, self-citation, language of articles, focus on bibliographic data (publications and citations). Thus, we use bibliometric analysis in combination with other methods namely thematic clusters through bibliographic coupling as illustrated in subsection 4.3 below.

3.1. Analysis techniques

The bibliometric approach relies on citations to identify publications, revealing the evolution of a specific field and highlighting emerging areas in that field. Its superiority stems from its ability to produce accurate and reproducible results, providing readers with full information regarding the intellectual developments of a certain field (Ahmed et al., 2022; Donthu et al., 2021). Furthermore, unlike traditional systematic literature reviews, it can handle large amounts of bibliometric and bibliographic information (Goodell et al., 2021).

It identifies publication trends, discerns progressive topics, and establishes visualizations of thematic evolution, allowing for observation and predicting future research directions (Ciampi et al., 2021; Pattnaik et al., 2021).

In our study, we aim to infer the intellectual formation of CG research by examining the bibliometric structure of articles, journals, authors, institutions, and countries.

Accordingly, we employed two methods to analyze the bibliometric data. First, we conducted a performance analysis using MS Excel to reveal the performance of scientific field constituents such as articles, authors, journals, institutions, and countries. Second, we performed a network visualization analysis using VOSviewer to conduct science mapping and discover the relationships between research constituents, which is a commonly used tool in bibliometric analysis (Ahmed et al., 2022; Alshater et al., 2021; van Eck & Waltman, 2010).

3.2. Data collection

The data for this study was obtained from Scopus, which is a large multidisciplinary database containing peer-reviewed academic literature. Scopus is highly regarded for its accessibility to reputable journals, advanced search functions, and features that allow for customizable bibliometric analysis. Compared to other databases, such as the Web of Science, Scopus includes a substantial number of articles (Ahmed et al., 2022; Alshater et al., 2021; Goodell et al., 2021).

The advent of scientific databases like Scopus and Web of Science has made it easier to gather vast amounts of bibliometric data. In addition,

bibliometric software such as Gephi, Leximancer, and VOSviewer have made it possible to analyze such data in a structured manner, increasing the appeal of bibliometric analysis (Donthu et al., 2021).

We conducted a search in Scopus on January 3, 2023, using the "title, keyword, and abstract" criteria, limited to the subject area of "corporate governance" or "CG" in business and economics for "all open access" "articles", in the "final" stage of publication, and source type "journal", spanning from 2008 to 2022. We selected 2008 as the starting year because the financial crisis highlighted the importance of transparency and corporate governance for business sustainability, resulting in increased research in this area. Our systematic approach is outlined in Table 1, resulting in a final corpus of 3126 articles.

Bibliometric analysis is a relatively new approach in business research. However, its full potential is not being realized, especially when limited bibliometric data is used, resulting in a fragmented understanding of the research area (Donthu et al., 2021; Linnenluecke et al., 2020). To overcome this limitation, we chose to focus on the subject areas of "economics, econometrics and finance" and "business, management and accounting" to include as many articles as possible related to CG, without the use of science mapping (Brown et al., 2020; Donthu et al., 2021). We also limited our analysis to the document type of "article" and excluded other document types, as the majority of documents (88.5% of 5526) were articles. We believed that analyzing bibliometric data within only the article documents would provide more informative results.

Table 1. Steps and results of the query

| No.	Steps of query	Results
1	(TITLE-ABS-KEY (corporate governance) OR TITLE-ABS-KEY (CG)	74,259
2	(LIMIT-TO (SUBJAREA, "BUSI") OR LIMIT-TO (SUBJAREA, "ECON"))	21,333
3	(LIMIT-TO (OA, "all")) where articles represent 88.5% as in Figure 1a	5,526
4	AND (LIMIT-TO (DOCTYPE, "ar"))	4,888
5	AND (LIMIT-TO (PUBSTAGE, "final")) AND (LIMIT-TO (SRCTYPE, "j"))	4,753
6	AND (LIMIT-TO (LANGUAGE, "English")) where researches increased exponentially	4,621
7	Limited to the period from 2008 to 2022	4,220
8	*Final query 1:* (TITLE-ABS-KEY ({corporate governance} OR TITLE-ABS-KEY (cg)) AND (LIMIT-TO (SUBJAREA, "BUSI") OR LIMIT-TO (SUBJAREA, "ECON")) AND (LIMIT-TO (OA, "all")) AND (LIMIT-TO (DOCTYPE, "ar")) AND (LIMIT-TO (PUBSTAGE, "final")) AND (LIMIT-TO (SRCTYPE, "j")) AND (LIMIT-TO (LANGUAGE, "English")) AND (LIMIT-TO (PUBYEAR, 2022) OR LIMIT-TO (PUBYEAR, 2021) OR LIMIT-TO (PUBYEAR, 2020) OR LIMIT-TO (PUBYEAR, 2019) OR LIMIT-TO (PUBYEAR, 2018) OR LIMIT-TO (PUBYEAR, 2017) OR LIMIT-TO (PUBYEAR, 2016) OR LIMIT-TO (PUBYEAR, 2015) OR LIMIT-TO (PUBYEAR, 2014) OR LIMIT-TO (PUBYEAR, 2013) OR LIMIT-TO (PUBYEAR, 2012) OR LIMIT-TO (PUBYEAR, 2011) OR LIMIT-TO (PUBYEAR, 2010) OR LIMIT-TO (PUBYEAR, 2009) OR LIMIT-TO (PUBYEAR, 2008))	4,220
9	Exclude all areas other than "BUSI" and "ECON"	3,126
10	*Final query 2:* (TITLE-ABS-KEY ({corporate governance} OR TITLE-ABS-KEY (cg)) AND (LIMIT-TO (SUBJAREA, "BUSI") OR LIMIT-TO (SUBJAREA , "ECON")) AND (LIMIT-TO (OA, "all")) AND (LIMIT-TO (DOCTYPE, "ar")) AND (LIMIT-TO (PUBSTAGE, "final")) AND (LIMIT-TO (SRCTYPE, "j")) AND (LIMIT-TO (LANGUAGE, "English")) AND (LIMIT-TO (PUBYEAR, 2022) OR LIMIT-TO (PUBYEAR, 2021) OR LIMIT-TO (PUBYEAR, 2020) OR LIMIT-TO (PUBYEAR, 2019) OR LIMIT-TO (PUBYEAR, 2018) OR LIMIT-TO (PUBYEAR, 2017) OR LIMIT-TO (PUBYEAR, 2016) OR LIMIT-TO (PUBYEAR, 2015) OR LIMIT-TO (PUBYEAR, 2014) OR LIMIT-TO (PUBYEAR, 2013) OR LIMIT-TO (PUBYEAR, 2012) OR LIMIT-TO (PUBYEAR, 2011) OR LIMIT-TO (PUBYEAR, 2010) OR LIMIT-TO (PUBYEAR, 2009) OR LIMIT-TO (PUBYEAR, 2008)) AND (EXCLUDE (SUBJAREA, "AGRI") AND (EXCLUDE (SUBJAREA, "SOCI") OR EXCLUDE (SUBJAREA, "DECI") OR EXCLUDE (SUBJAREA, "ARTS") OR EXCLUDE (SUBJAREA, "ENVI") OR EXCLUDE (SUBJAREA, "ENGI") OR EXCLUDE (SUBJAREA, "PSYC") OR EXCLUDE (SUBJAREA, "ENER") OR EXCLUDE (SUBJAREA, "COMP") OR EXCLUDE (SUBJAREA, "PHAR") OR EXCLUDE (SUBJAREA, "MEDI") OR EXCLUDE (SUBJAREA, "MATH") OR EXCLUDE (SUBJAREA, "HEAL") OR EXCLUDE (SUBJAREA, "BIOC") OR EXCLUDE (SUBJAREA, "EART") OR EXCLUDE (SUBJAREA, "MATE") OR EXCLUDE (SUBJAREA, "CHEM") OR EXCLUDE (SUBJAREA, "PHYS"))	3,126 Distributed over time as in Figure 1b and Figure 2

Figure 1a. Documents on CG by type
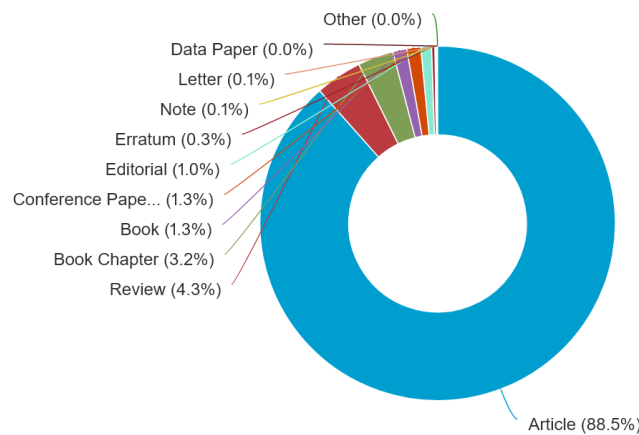
Figure 1b. Published documents on CG trend (showing periods prior and after 2008)
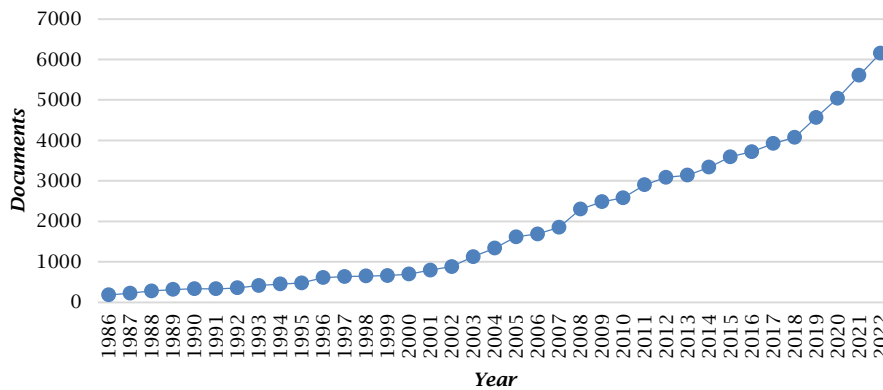
4. RESEARCH RESULTS AND DISCUSSION

Donthu et al. (2021) listed the main techniques for bibliometric analysis across two categories: 1) performance analysis and 2) science mapping. In essence, performance analysis accounts for the contributions of research constituents, whereas science mapping focuses on the relationships between research constituents. Both of these techniques have a number of metrics that this study will apply. It is important to note that while the data used in the bibliometric analysis tends to be huge and objective in nature (e.g., number of citations and publications, occurrences of keywords and topics), however, its interpretations often rely on both objective (e.g., performance analysis) and subjective (e.g., thematic analysis) evaluations established through the well-defied techniques and procedures (Donthu et al., 2021).

4.1. Performance analysis of corporate governance

Performance analysis, the hallmark of bibliometric studies, is a descriptive analysis that examines the contributions of research constituents to a given field. The most prominent measures are the number of publications and citations per year or per research constituent. The publication is a proxy for productivity, whereas citation is a proxy of impact and influence. Other measures such as citation per publication and *h*-index combine both citations and publications to measure the performance of research constituents (Donthu et al., 2020).

4.1.1. Publication-related metrics, and citation-related metrics

Figure 2 shows the trend of total publication (TP) of CG from 2008 to 2022. The TP is 3126 articles. Publications are exhibiting an upward trend at an approximate annual average rate of 10%, which indicates a growing interest in this topic.

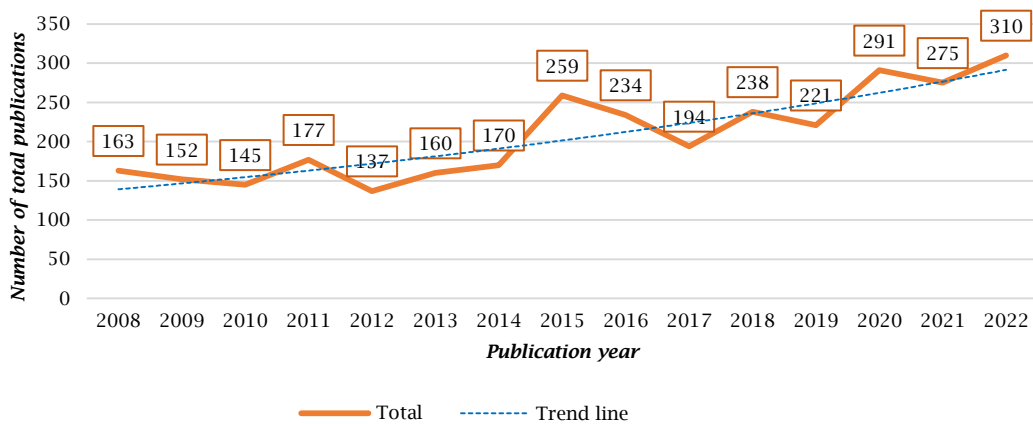**Figure 2.** Publication trend of corporate governance and control

Figure 3 depicts the number of contributing authors (NCA) and sole-authored publications (SA). The results show that NCA ranged from 1 to 17 authors. The average NCA is 2.6 per article. Moreover, 81.8% of the publications have 3 or fewer contributing authors. SA publications were 512 publications; 16.4% of NCA. This reflects a very good collaboration between scholars in this area of research.

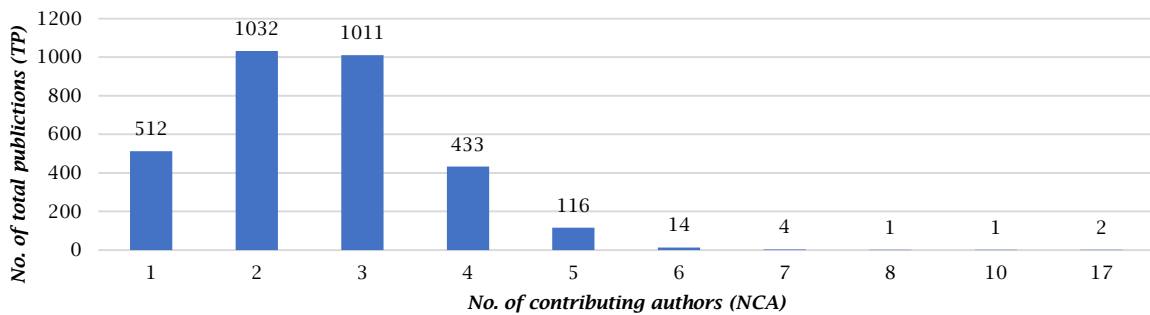**Figure 3.** The contributing authors analysis

Figure 4 below shows the yearly total citation (TC) against citation year. The TC is showing an upward trend accelerating from 2015 onward. This indicates the growing interest of scholars in this area of research reflecting growing influence and importance.
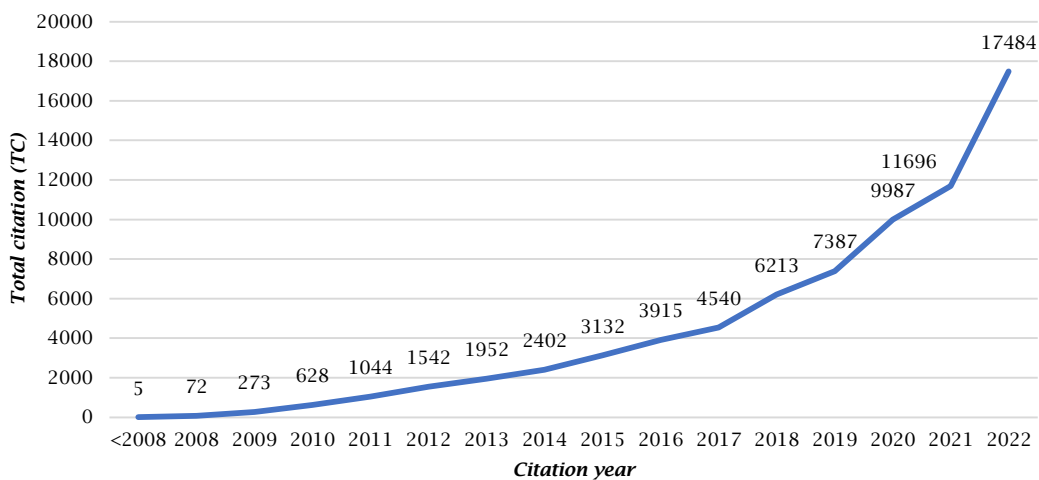
Figure 4. Yearly total citation

Table 2 shows TP of the top 10 cited authors, institutions and countries. Based on the number of citations, Laeven and Levine (2009) emerge as the most impactful and influential authors with 1774 citations, followed by Djankov et al. (2008) with 1751 citations. Among institutions, "Harvard Business School, the US" was the most influential institution with 396 TC. "Singapore Management University, Singapore" scored the highest productivity (TP = 10). Four of the top 10 institutions were in the UK. Among countries, the most impactful (TC) was the US with the highest TC (32703) and TP (513), followed by the UK with TP (713) and TC (23262).

Table 2. Top 10 cited authors, institutions, and countries of corporate governance researches

TC	Author	TP	TC	Institution	TP	TC	Country	TP
1774	Laeven and Levine	2	396	Harvard Business School, the US	6	32703	The USA	513
1751	Djankov et al.	1	326	Tilburg University, the Netherlands	7	23262	The UK	713
1595	Bebchuk et al.	1	198	Portsmouth Business School, University of Portsmouth, Portsmouth, the UK	8	6274	Australia	304
1027	Adams et al.	1	189	School of Accountancy, Queensland University of Technology, Brisbane, Australia	6	5767	Spain	173
926	Giroud and Mueller	2	182	Singapore Management University, Singapore	10	4499	Canada	105
783	Terjesen et al.	1	143	Leicester Castle Business School, De Montfort University, Leicester, the UK	6	3138	China	183
718	Dyck et al.	1	105	Department of Accounting, Faculty of Commerce, Mansoura University, Mansoura, Egypt	6	2840	Italy	156
566	Armstrong et al.	1	98	University of Portsmouth, Portsmouth, the UK	6	2786	Germany	122
535	de Andres and Vallelado	1	92	Leeds University Business School, the UK	6	1448	Malaysia	201
531	Kim et al.	1	88	European Corporate Governance Institute, Brussels, Belgium	6	790	Indonesia	129

The top-cited articles on CG research are presented in Table 3. Djankov et al. (2008) is the most impactful and influential article with the highest number of citations in Scopus (1751 citations), followed by Bebchuk et al. (2009) with 1595 citations. Djankov et al. (2008) presented a new measure of legal protection for minority shareholders against expropriation by corporate insiders: the anti-self-dealing index. The index is calculated for 72 countries based on legal rules prevailing in 2003 and focuses on private enforcement mechanisms, such as disclosure, approval, and litigation, that govern a specific self-dealing transaction. This theoretically grounded index predicts a variety of stock market outcomes and generally works better than the previously introduced index of anti-director rights. Bebchuk et al. (2009) investigated the relative importance of the 24 provisions of the Investor Responsibility Research Center (IRRC). They put forward an entrenchment index based on six provisions: staggered boards, limits to shareholder bylaw amendments, poison pills, golden parachutes, and supermajority requirements for mergers and charter amendments. The authors found that increases in the index level are monotonically associated with economically significant reductions in firm valuation as well as large negative abnormal returns during the 1990–2003 period. The other 18 IRRC provisions not in the entrenchment index were uncorrelated with either reduced firm valuation or negative abnormal returns.

Table 3. Top 10 cited articles of corporate governance research

Authors	Year	Title	TC
Djankov et al.	2008	The law and economics of self-dealing	1751
Bebchuk et al.	2009	What matters in corporate governance	1595
Laeven and Levine	2009	Bank governance, regulation and risk taking	1494
Adams et al.	2010	The role of boards of directors in corporate governance: A conceptual framework and survey	1027
Terjesen et al.	2009	Women directors on corporate boards: A review and research agenda	783
Dyck et al.	2010	Who blows the whistle on corporate fraud?	718
Armstrong et al.	2010	The role of information and financial reporting in corporate governance and debt contracting	566
de Andres and Vallelado	2008	Corporate governance in banking: The role of the board of directors	535
Kim et al.	2014	Corporate social responsibility and stock price crash risk	531
Walls et al.	2012	Corporate governance and environmental performance: Is there really a link?	528

Although the focus of this study is on the scholars and topics of CG mostly used in the published papers, however, we reviewed the top journals that published CG research with its relevant indicators: "*Journal of Financial Economics*", and "*Corporate Governance: An International Review*" are the two most influential journals with 9195 and 6144 total citations (TC), respectively. However, in terms of publications; "*Corporate Ownership and Control*", is the most productive journal with 515 publications, which means that the most influential journals with the highest TC may not be the most published (TP) ones. Moreover, when mapping publication productivity against differing time periods, results show that the number of total publications of the top 5 journals decreased from 393 in (2008–2012) to 139 in (2018–2022). This reflects a declining interest by these top 5 journals, to publish in the area of CG even if we consider the movements in/out of two of the top journals from the Scopus database. Conversely, if we consider the published papers in all journals, we clearly notice the growing interest to publish papers in the area of CG with 73251 and 3126 TC and TP respectively and as also depicted in Figure 2 above.

4.1.2. Citation-and-publication-related metrics

According to Donthu et al. (2021), the number of cited publications (NCP) represents the number of publications of research constituents that are cited in the study dataset. It amounts to 183555 references. The proportion of cited publications (PCP) represents the ratio of NCP to TP (3126). It results in 58.72 indicating the number of works of literature that have been reviewed per publication. Citations per cited publication (CCP) is the ratio of TC (73251) for NCP, which is 0.40. In other words, for each 2.5 references cited within a publication there is one citation in Scopus.

H-index (*h*) is a measure of influence. It is the *h* number of publications cited at least *h* times. It is an author-level metric used to gauge the quantity and quality of a scholar. For the dataset,

h-index = 119 (i.e., of the 3126 documents considered for the *h*-index, 119 have been cited at least 119 times.).

Table 4 shows the most impactful authors used in this area of research. The *g*-index (*g*) is a measure of impact. It is the *g* number of publications receiving at least g^2 citations, quantifying the productivity in science based on the publication record. *I*-index is a measure of the productivity of a scholar; it is the *i* number of publications cited at least *i* times (e.g., *i* = 10, 100, 200, etc.). The *m*-index is the *h*-index divided by the number of years that a researcher has been active. Adams et al. (2010), though not with the highest TC in Scopus, scored the top *h*-index (69), *g*-index (145), *i*-index (180), NP (495) and TC (21817), however, *m*-index (0.697) was not the top, indicating that he has the highest influence among other authors in the study dataset.

Table 4. Indexes of the top 10 cited authors in the dataset based on TC in Scopus

Author	h-index	g-index	i10-index	m-index	TC in Scopus	NP in Scopus	PY_Start
Djankov	37	68	50	1.423	17596	68	1996
Bebchuk	43	93	67	0.672	10562	93	1958
Laeven	54	117	99	1.385	13893	157	1983
Adams	69	145	180	0.697	21817	495	1923
Terjesen	38	78	67	2.235	6216	102	2005
Dyck	13	14	18	0.542	3493	18	1998
Armstrong	18	21	30	0.857	3344	30	2001
de Andres	14	16	35	0.824	1287	38	2005
Kim	23	31	42	1.211	3048	42	2003
Walls	9	9	18	0.818	1298	18	2012

Note: TC = total citations for the author according to the Scopus index, NP = number of publications for the author according to the Scopus index, PY_Start = the starting year of publication according to the Scopus index. Authors are listed according to their TC in the dataset of this study.

4.2. Science mapping analysis

Science mapping examines the *relationships* between research constituents (unit of analysis) (Baker et al., 2021; Donthu et al., 2021). Its techniques explore intellectual interactions and structural connections among research constituents. Such techniques, when combined with network visualization analysis, are instrumental in presenting the bibliometric structure and the intellectual structure of the research field. Co-citation analysis separates the publications from their foundational knowledge perspective (Boyack &

Klavans, 2010). Bibliographic coupling describes the themes in the body of knowledge (Andersen, 2021), and co-occurrence (co-word) analysis discloses the up-to-date trajectories in research (Pattnaik et al., 2020).

Table 5 shows the five techniques of science mapping that were used (Donthu et al., 2021) in VOSviewer software (van Eck & Waltman, 2010). We applied the analysis from two different perspectives: 1) *Pattern analysis*: for all units of analysis in each technique and with varying thresholds, and 2) *Network visualization*.

**Table 5.** Techniques for science mapping analysis, their usage and unit of analysis

Technique	Usage	Unit of analysis
Co-authorship	To examine the social interactions or relationships among authors and their affiliations and equivalent impacts on the development of the research field	Authors, organizations, countries
Co-occurrence (word)	To explore the existing or future relationships among topics in a research field by focusing on the written content of the publication itself	All keywords, author keywords, index keywords
Citation	To analyze the relationships among publications by identifying the most influential publications in a research field	Documents, sources, authors, organizations, countries
Bibliographic coupling	To analyze the relationships among citing publications to understand the periodical or present development of themes in a research field	Documents, sources, authors, organizations, countries
Co-citation	To analyze the relationships among cited publications to understand the development of the foundational themes in a research field.	Cited references, cited sources, cited authors

4.2.1. Citation analysis

This technique measures how often a published work is cited reflecting the intellectual linkages between publications (Appio et al., 2014). It designs the intellectual dynamics of a field, determines how much impact a particular work has had, and

highlights the most influential publications in a research field. It is measured as the number of citations a document, author, organization, source, or country receives reflecting the importance of publications in a research field (Stremersch et al., 2007).

**Figure 5.** Citation analysis based on documents as a unit of analysis
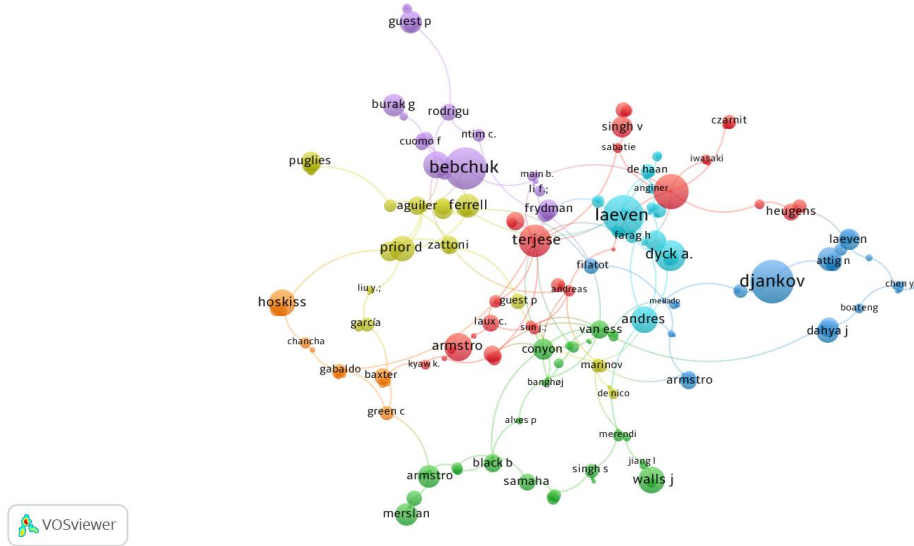
The threshold included 5 as a minimum number of citations of a document. 1617 documents (out of 3126) met the threshold forming 7 clusters and 288 links. Each node in a network represents a document. Each color of nodes represents a cluster of publications. The size of nodes represents the degree of citations wherein larger nodes reflect greater intensity of citations. The links between nodes represent connections between documents. The size of the link between nodes represents the degree of citations wherein thicker links reflect greater citation intensity. Djankov et al. (2008) scored the highest citation (1751). Citations linkages between authors were led by Djankov, Bebchuk, Laeven and Adams with the highest citation as shown in Table 6.

Table 6. The most influential documents according to the highest citation received

Document	Citations	Links
Djankov et al. (2008)	1751	3
Bebchuk et al. (2009)	1595	4
Laeven and Levine (2009)	1494	8
Adams et al. (2010)	1027	8
Terjesen et al. (2009)	783	9

**Figure 6.** Citation analysis based on countries as a unit of analysis
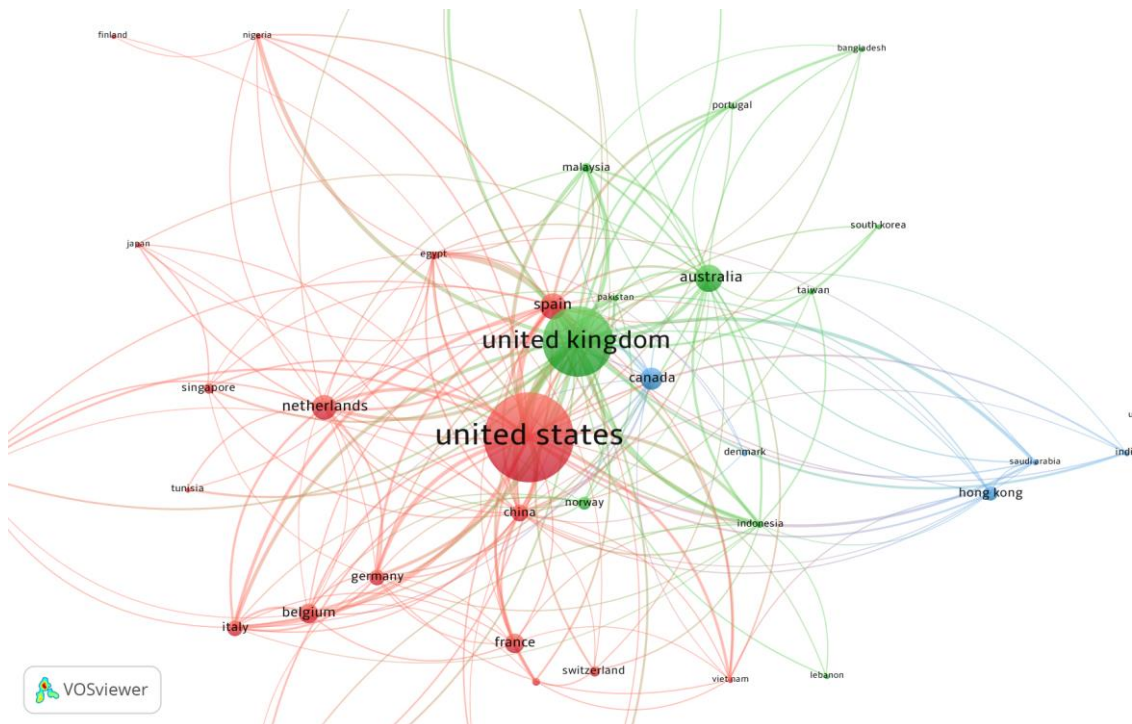
The threshold included is 25 as a minimum number of documents of a country and 100 as a minimum number of citations of a country. 40 countries (out of 145) met the threshold criteria forming 3 clusters and 3606 total link strengths. Each node in a network represents a country. Each color of nodes represents a cluster of countries. The size of the nodes represents the degree of citations wherein larger nodes reflect greater intensity of citations. The links between the nodes represent connections between the nodes. The size of the link between nodes represents the degree of citations wherein thicker links reflect greater citation intensity. Citations linkages between countries were led by the UK, the USA, Australia, Spain and the Netherlands with the highest citation as shown in Table 7. These findings are similar to the ones found by Ahmed et al. (2022).

Table 7. Citations linkages between top 5 countries

Country	Citations	Documents	Total link strength
The US	32703	513	483
The UK	23262	713	653
Australia	6274	304	149
Spain	5767	173	280
The Netherlands	5430	96	118

Figure 7. The overlay visualization for countries
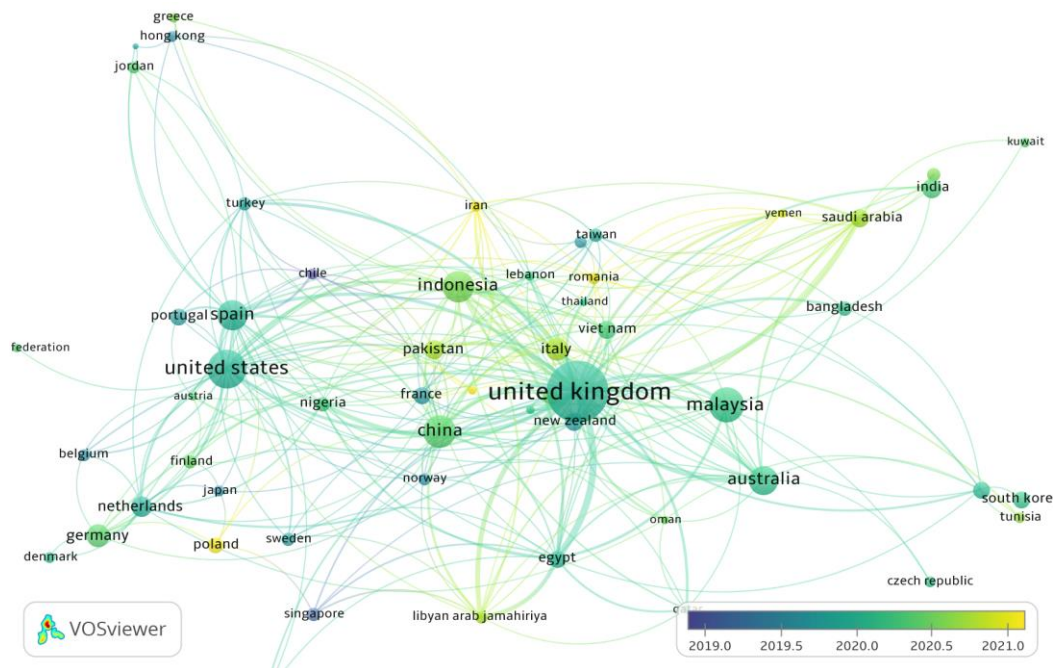

The overlay visualization demonstrates the evolution of the research in CG in the last few years where many new countries have participated in the field research from 2019 onward. Table 8 illustrates the related statistics regarding the most recent countries that increased their publication in the field with their average publication year.

Table 8. The most recent publications in the field listed by countries

Country	Citations	Documents	Total link strength	Average publication year
Indonesia	486	97	65	2020.49
Italy	391	51	19	2020.71
Libyan Arab Jamahiriya	279	15	43	2020.67
Pakistan	250	39	30	2020.67
Saudi Arabia	119	32	33	2020.66
Jordan	113	15	5	2020.33
Iran	85	13	19	2021.31
Romania	74	14	13	2020.93
Poland	48	24	5	2021.17
Ukraine	22	8	8	2021

Figure 8. Citation analysis based on the source as a unit of analysis
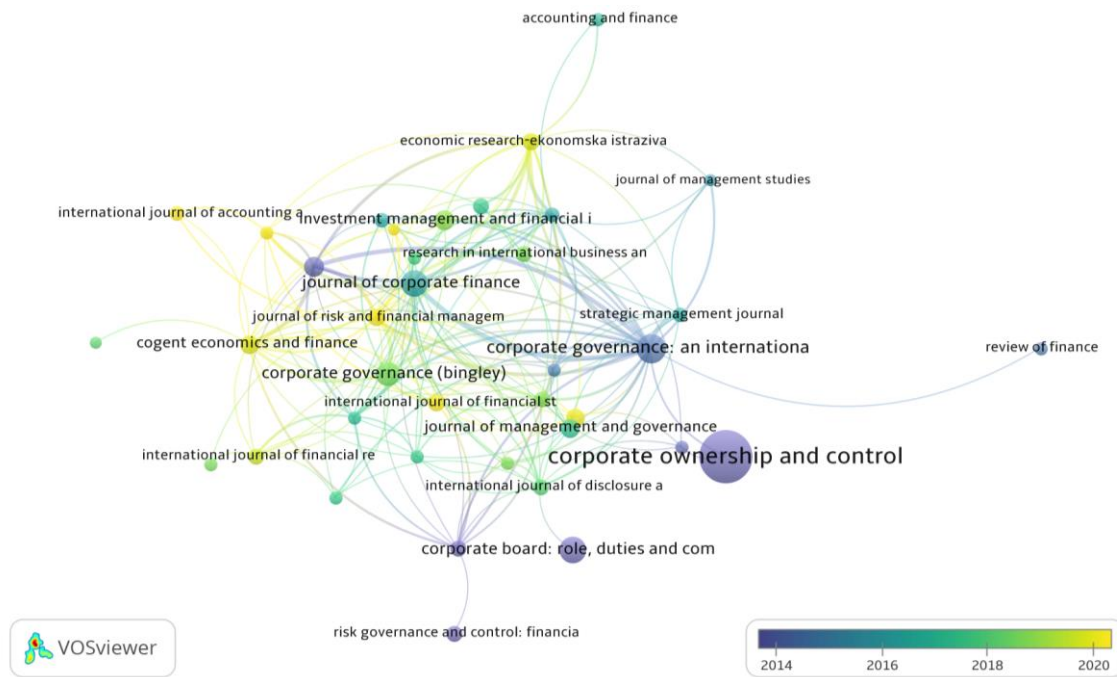
The threshold included is 15 as a minimum number of documents of a source and 15 as a minimum number of citations of the source. 40 sources (out of 424) met the threshold criteria forming 8 clusters. Each node in a network represents a country. Each color of nodes represents a cluster of sources. The size of the nodes represents the degree of citations wherein larger nodes reflect greater intensity of citations. The links between the nodes represent connections between the nodes. The size of the link between nodes represents the degree of citations wherein thicker links reflect greater citation intensity. The overlay visualization between 2014 and 2020 shows the evolution of sources in the field of corporate governance. Table 9 gives summarized details of this analysis.

Table 9. The most influential sources according to the number of citations (Panel A), and the very recent sources with the average publication year (Panel B)

Source	Documents	Citations	Total link strength	Average publication year
Panel A: Most influential sources according to the number of citations				
Journal of Financial Economics	47	9195	43	
Corporate Governance: An International Review	121	6144	90	
Journal of Corporate Finance	90	3957	44	
Journal of Banking & Finance	29	2699	22	
Strategic Management Journal	23	1876	20	
Journal of Management Studies	15	1632	8	
Corporate Governance (Bingley)	71	1351	34	
Corporate Ownership and Control	515	1286	3	
Panel B: Very recent sources with the average publication year				
Journal of Risk and Financial Management	32	51	55	2022
Review of Quantitative Finance and Accounting	17	150	21	2020
International Journal of Finance and Economics	15	268	11	2020

4.2.2. Co-citation (network) analysis

In a co-citation network, two publications are connected when they are cited together by other publications (Figure 8) allowing the discovery of thematic clusters in a field. Co-citation analysis assumes the similarity between publications that are cited together frequently. Co-citation analysis demonstrates how authors connect ideas from different published works (Chen et al., 2016; Liu et al., 2015). It reflects the joint view expressed by a large number of citing authors, and not the personal opinions that individual author may have enabling the reader to understand the intellectual structure and composition of a research field, identify the specialty fields, research fronts and links between scientific disciplines over time as well as the changes in their intellectual structures. However, the co-citation analysis concentrates only on highly-cited publications leaving recent publications out of the thematic clusters (Donthu et al., 2021).

Figure 9. Co-citation assumption

Citing document, **A** (primary paper)

Co-cited documents **b** & **c** together
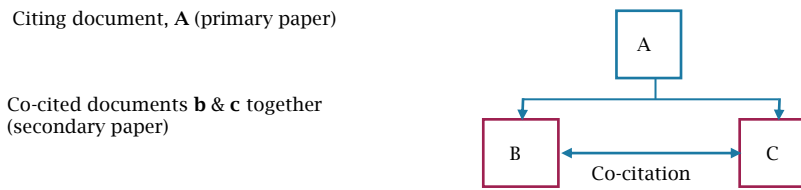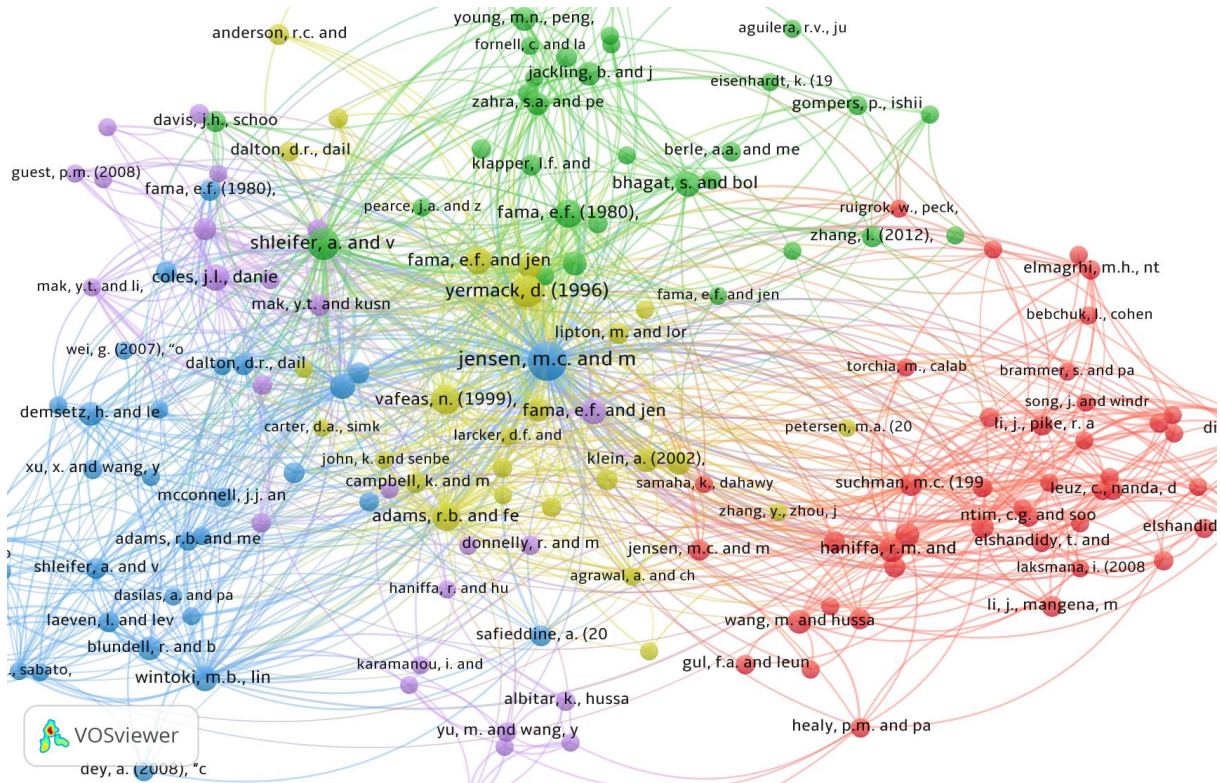(secondary paper)

Figure 10. Co-citation analysis based on a reference as a unit of analysis

The threshold included 4 as a minimum number of co-citations of a reference. 549 out of 183555 references met the criterion forming 5 clusters and 4673 total links strengths. Each color of nodes represents a semantic cluster of reference based on thematic similarity. The node size corresponds to the number of co-citations, while the lines correspond to the existence of co-citations in either direction. The distance between the nodes corresponds to the tendency for journals to be co-cited by other studies. The longer (shorter) distance between the sources means less (more) connectedness between the sources. The highest link strength co-cited references are listed in Table 10.

In fact, results show that connectivity between the references is weak; even though the threshold was as low as 4, the links resulted were only 3466. Moreover, with the few links, the total link strength was only 4673, only 9 cited references exceeded the threshold of the test. Furthermore, it is noticed that the 5 most cited references were published before 2000. Authors seem to find difficulties connecting ideas from different sources, and/or the evolution of the field of corporate governance needs extra research work to define and structure it, especially since this field is related to all domains of business and economy.

Table 10. The highest link strength co-cited references

Cited reference	Citations	Total link strength
Jensen and Meckling (1976)	53	404
Shleifer and Vishny (1997)	27	236
Yermack (1996)	27	288
Vafeas (1999)	19	140

4.2.3. Bibliographic coupling

Contrary to co-citation where *cited publications* reflect the *past* knowledge in a field, the bibliographic coupling technique assumes that when two publications share the same references, they are similar thematically. It is based on *citing publications* reflecting, accordingly, the *present* knowledge in a field, and recent and niche publication can gain

visibility (Kessler, 1963; Zupic & Čater, 2015). Therefore, it highlights works that have not yet received many citations and are thus likely to become overlooked in the co-citation analysis.

In that sense, bibliographic coupling is suitable for scholars who wish to uncover a broad spectrum of themes and their latest developments (Donthu et al., 2021).

Figure 11a. Bibliographic coupling based on documents as the unit of analysis
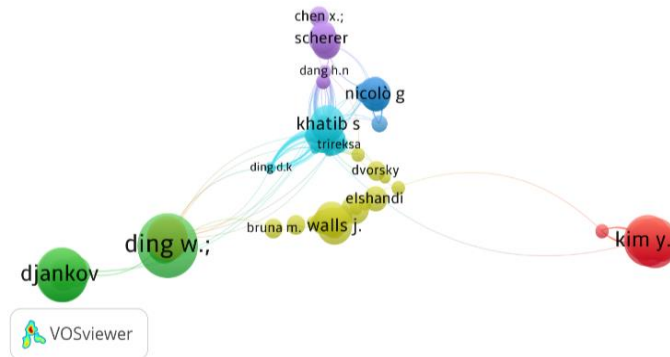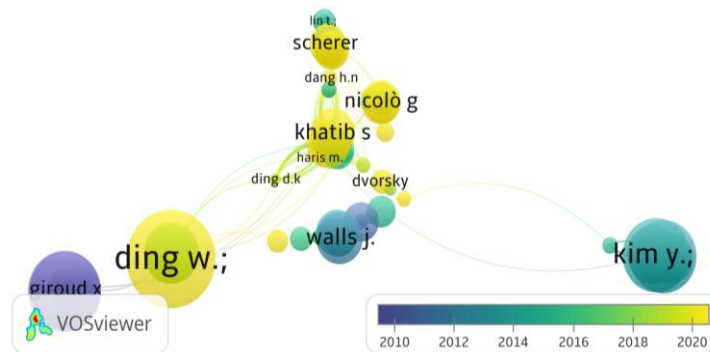

Figure 11b. Overlay visualization of Bibliographic coupling based on documents as the unit of analysis

Bibliographic coupling (Figure 11a) based on documents as the unit of analysis. The threshold included is 15 as a minimum of citation of a document resulting in 904 (out of the 3126) documents that met the threshold criteria forming 7 clusters and 3075 links. Each node in a network represents a document. Each color of the nodes represents a cluster of documents. The size of the nodes represents the degree of bibliographic coupling wherein larger nodes reflect the greater intensity of coupling. The links between the nodes represent connections between the nodes. The size of the link between the nodes represents the degree of citations wherein thicker links reflect greater coupling intensity. Again, in order to create structured results, we performed clustering with a minimum cluster size of 50 documents. We applied the normalized citation (NC) to correct the fact that older documents have had more time to receive citations than more recent documents. This NC equals the number of citations of the document divided by the average number of citations of all documents published in the same year and included in the data that is provided to VOSviewer. Interesting results evolved from the overlay visualization (Figure 11b) where 4 of the 7 clusters have a high concentration of research from 2020 onward. Table 11 lists the major two documents of each recent active cluster.

Table 11. The major two documents of each recent active cluster

Cluster	Document	
Purple	Scherer and Voegtlin (2020)	Buallay et al. (2022)
Dark blue	Albitar et al. (2020)	Alshbili et al. (2018)
Light blue	Khatib et al. (2022)	Su et al. (2021)
Green	Ding et al. (2021)	Lin et al. (2020)
Yellow	Walls et al. (2012)	Bell et al. (2014)
Red	Kim et al. (2014)	Hoskisson et al. (2013)
Orange	Ullah et al. (2018)	Ferrell et al. (2016)

4.2.4. Co-occurrence (co-word analysis)

While the previous three techniques for science mapping focus on publications, co-occurrence (co-word analysis) use "words" as the unit of analysis. Unlike citation analysis, co-citation analysis, and bibliographic coupling, which employs either cited or citing publications as a central point, the co-word analysis is a technique that examines the actual content of the publication itself. The words in a co-word analysis are often derived

from "author keywords", extracted from "article titles", "abstracts", and "full texts" for the analysis (Baker et al., 2020; Burton et al., 2020; Donthu et al., 2020). Similar to co-citation analysis, the co-word analysis assumes that words that frequently appear together have a thematic relationship with one another. However, the usage of words as a unit of analysis has its downsides; for example, certain words are used in multiple contexts, and thus, reading publications becomes necessary to understand the meaning of the relationships between words. Besides that, some words can be very general, and thus, it may be challenging to assign them to any one thematic cluster (Donthu et al., 2021).

Figure 12. Author keyword co-occurrence network map
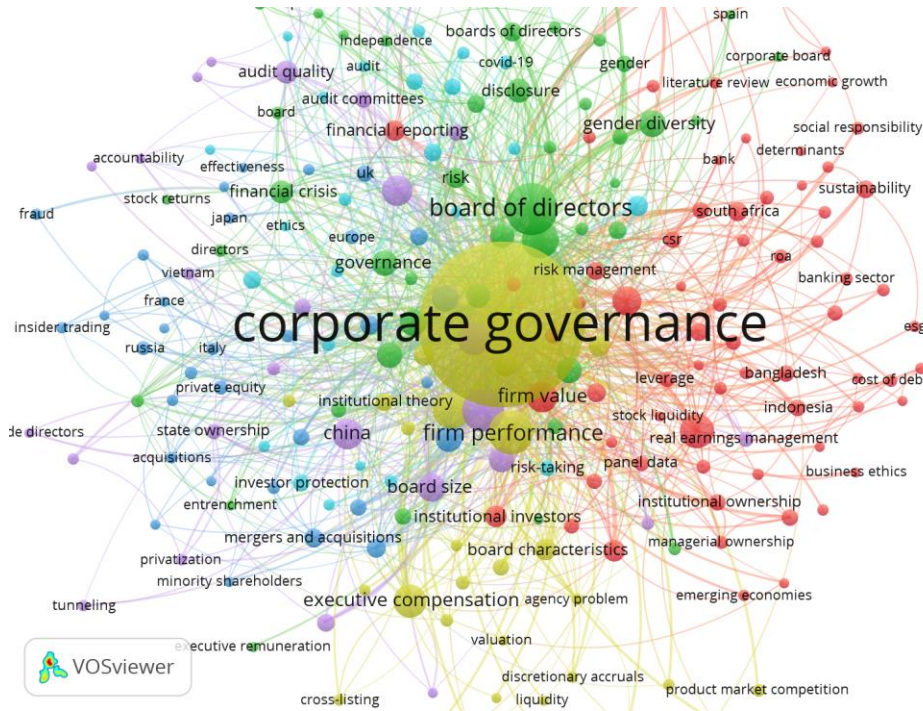
Author keyword co-occurrence network map shows patterns of the 231 items (out of 5462 keywords) that met the threshold of 8 minimum occurrences of a keyword, forming 6 clusters. The top co-occurrence keywords are shown in Table 12.

Table 12. The top co-occurrence keywords

Keyword	Cluster	Occurrences	Keyword	Cluster	Occurrences
corporate governance	yellow	1985	board independence	dark blue	53
board of directors	green	198	emerging markets, gender diversity	dark blue, green	52
firm performance	yellow	142	ownership concentration	purple	51
ownership structure	purple	132	governance, Malaysia	green, green	49
agency theory	green	103	family firms	green	48
earnings management	yellow	101	banks, disclosure	green, green	46
corporate social responsibility	red	88	board composition	green	44
performance	purple	83	dividend policy, financial crisis	yellow, green	39
executive compensation	yellow	79	audit quality	purple	38
firm value	red	72	board characteristics	yellow	36
China	purple	69	capital structure, institutional investors	red, red	35
audit committee	purple	90	voluntary disclosure	yellow	34
financial performance	red	76	regulation	yellow	32
board size	purple	59	financial reporting	purple	31
ownership	green	54	board structure, risk	blue, green	30

Author keyword overlay shows that the most recent research concentrated on topics related to corporate social responsibility, gender diversity, audit committee, board characteristics, and financial reporting.

Figure 13. Author keyword overlay

4.2.5. Co-authorship

Co-authorship analysis examines the interactions and intellectual collaboration among scholars in a research field (Cisneros et al., 2018). Advances in research increased the collaborations among scholars forming clusters that concentrate on certain topics (Tahamtan et al., 2016). The analysis also enables collaborations among researchers and assesses the trajectory of intellectual development against collaboration networks (Donthu et al., 2021).

Figure 14. Co-authorship based on country as a unit of analysis

The threshold included 5 as the minimum number of countries of an author and 5 as a minimum number of citations of a country. 69 (out of 145) countries met the threshold criteria. This formed 8 clusters and 504 links. Each node in a network represents a country. Each color of the nodes represents a cluster of countries. The size of the node represents the strength of the connection wherein larger nodes reflect greater intensity of the connection. The links between the nodes represent connections between the nodes. The top countries are listed in Table 13.

4.3. Thematic clusters of CG in business research through bibliographic coupling

Table 14 presents the seven thematic clusters that underpin the knowledge structure of CG research in business revealed through bibliographic coupling. Each cluster presents publications with the highest total normalized citation (TNC). In each cluster, we investigated the titles, the keywords, the abstract to distinguish differences between the clusters. Further reading of the whole publication was done whenever needed. Moreover, we used co-occurrence analysis to enrich and deepen our understanding of the thematic clusters derived from the bibliographic coupling. The overlay of author keyword co-occurrence in Figure 13 can shed light on future research in the field.

Table 13. Top countries in co-authorship

Country	Documents
The UK	713
The USA	513
Australia	304
Malaysia	201

Table 14. Thematic clusters of CG research in business (Part 1)

Theme	Author(s)	Title	Author's keywords	TNC
1. Corporate governance for innovation, sustainability reporting	Scherer; Voegtlin (2020)	Corporate governance for responsible innovation: Approaches to corporate governance and their implications for sustainable development	NA	8.47
	Buallay; Hamdan; Barone; Hamdan (2022)	Increasing female participation on boards: Effects on sustainability reporting	NA	8.29
	Ehnert; Parsa; Roper; Wagner; Muller-Camen (2016)	Reporting on sustainability and HRM: A comparative study of sustainability reporting practices by the world's largest companies	Comparative HRM; Global reporting initiative; Sustainability reporting; Sustainable HRM	7.58
2. Corporate resilience, CSR, financial development	Ding; Levine; Lin; Xie (2021)	Corporate immunity to the COVID-19 pandemic	Corporate governance; Corporate resilience; CSR; Financial risk; Supply chain	37.23
	Djankov; La Porta; Lopez-de-Silanes; Shleifer (2008)	The law and economics of self-dealing	Corporate governance; Financial development	27.12
	Lin; Lu; Zhang; Zheng (2020)	State-owned enterprises in China: A review of 40 years of research and practice	China; Literature review; State-owned enterprises (SOE)	10.47
3. Crash risk, financial reporting transparency, portfolio risk, factor markets	Kim; Li; Li (2014)	Corporate social responsibility and stock price crash risk	Corporate social responsibility; Crash risk; Financial reporting transparency.	23.64
	Hoskisson; Wright; Filatotchev; Peng (2013)	Emerging multinationals from mid-range economies: The influence of institutions and factor markets	Emerging economies; Factor markets; Institutions; Mid-range emerging economies	22.85
	Berger; Kick; Schaeck (2014)	Executive board composition and bank risk taking	Age; Banks; Education; Executives; Gender; Portfolio risk	12.42
4. Sustainable corporate governance, gender diversity, environmental disclosure and firm performance	Nicolò; Zampone; Sannino; De Iorio (2022)	Sustainable corporate governance and non-financial disclosure in Europe: Does the gender diversity matter?	Corporate governance; Corporate social responsibility; Directive 2014/95/EU; ESG disclosure; Gender diversity; Sustainable corporate governance	9.85
	Albitar; Hussainey; Kolade; Gerged (2020)	ESG disclosure and firm performance before and after IR: The moderating role of governance mechanisms	Board size; Environmental disclosure; Gender diversity; Governance disclosure; Integrated reporting; Ownership concentration; Social disclosure	7.88
	Elzahar; Hussainey (2012)	Determinants of narrative risk disclosures in UK interim reports	Content analysis; Financial reporting; Information disclosure; Interim reports; Narrative risk disclosure; Reports; Risk management; United Kingdom	4.15

Table 14. Thematic clusters of CG research in business (Part 2)

Theme	Author(s)	Title	Author's keywords	TNC
5. Roles of institutions (informal and formal), shareholders and board	Bell; Filatotchev; Aguilera (2014).	Corporate governance and investors' perceptions of foreign IPO value: An institutional perspective	NA	11.05
	Estrin; Prevezer (2011)	The role of informal institutions in corporate governance: Brazil, Russia, India, and China compared	BRIC; Corporate governance; Emerging economies; Institutions (informal and formal); Shareholder rights; Suppliers of finance	8.13
	Chen; Crossland; Huang (2016)	Female board representation and corporate acquisition intensity	Board characteristics; Corporate governance; Director gender; Mergers and acquisitions; Strategic leadership	6.25
6. Socially responsible firms, firm performance, firm value	Ferrell; Hao; Renneboog (2016)	Socially responsible firms	Agency costs; Corporate governance; Corporate social responsibility (CSR)	15.71
	Li; Gong; Zhang; Koh (2018)	The impact of environmental, social, and governance disclosure on firm value: The role of CEO power	NA	12.07
	Ciftci; Tatoglu; Wood; Demirbag; Zaim (2019)	Corporate governance and firm performance in emerging markets: Evidence from Turkey	Corporate governance mechanisms; Emerging markets; Family capitalism; Firm performance; Institutions; Turkey	10.06
7. Executive compensation and incentives, tax avoidance	Kim; Li; Zhang (2011)	CFOs versus CEOs: Equity incentives and crashes	CFO; Compensation; Corporate governance; Crash risk; Equity incentives	16.17
	Armstrong; Blouin; Jagolinzer; Larcker (2015)	Corporate governance, incentives, and tax avoidance	CEO incentives; Corporate governance; FIN 48; Tax aggressiveness; Tax avoidance	13.24
	Armstrong; Guay; Weber (2010)	The role of information and financial reporting in corporate governance and debt contracting	Board structure; Corporate governance; Debt contracts; Executive compensation; Financial accounting; Informal contracts	11.87

Cluster 1 consists of 112 articles on CG for innovation, sustainability reporting. The top-three TNC articles in this cluster are Scherer and Voegtlin (2020), Buallay et al. (2022), Ehnert et al. (2016) with TNC of 8.47, 8.29 and 7.58 citations, respectively. Scherer and Voegtlin (2020) discussed corporate governance for responsible innovation: approaches to CG and their implications for sustainable development. The paper offers examples of innovative CG that can help to generate innovations that do good and avoid harm. It also illustrates the governance challenges and the role of responsible innovation in the advent of the new coronavirus pandemic (COVID-19). Buallay et al. (2022) addressed the increasing female participation on boards and effects on sustainability reporting. They found that board diversity tends to be higher with banks endowed with low financial leverage and high assets. Cross-country analysis shows that Central America evinces the highest levels of board diversity among banks. In Europe, however, repose the highest levels of environmental and social disclosure among banks. In contrast, the highest level of governance disclosure among banks obtains in Australia. Given the effect of the latter on the former uncovered by this research, regulators ought to mandate quotas of female participation on bank boards to engender sustainable increases in the level of ESG reporting on the part of banks. Ehnert et al.'s (2016) findings suggest, first and against expectations, that the overall disclosure of HRM-related performance is not lower than that of environmental performance. Second, companies report more on their internal workforce compared to their external workforce. Finally, international

differences, in particular those between companies headquartered in liberal market economies and coordinated market economies, are not as apparent as expected.

Cluster 2 consists of 105 articles on corporate resilience, CSR, financial development. The top-three TNC articles in this cluster are Ding et al. (2021), Djankov et al. (2008), Lin et al. (2020) with TNC of 37.23, 27.12 and 10.47 respectively. Ding et al. (2021) evaluated the connection between corporate characteristics and the reaction of stock returns to COVID-19 cases using data on more than 6700 firms across 61 economies. The pandemic-induced drop in stock returns was milder among firms with stronger pre-2020 finances, less exposure to COVID-19 through global supply chains and customer locations, more corporate social responsibility activities, and less entrenched executives. They also found that stock markets positively price small amounts of managerial ownership but negatively price high levels of managerial ownership during the pandemic. Djankov et al. (2008) presented a new measure of legal protection of minority shareholders against expropriation by corporate insiders: the anti-self-dealing index. Lin et al. (2020) studied SOEs in China. Although SOEs are generally considered inefficient in operations, China's economy, which relies heavily on SOEs, has been highly successful over the last four decades.

Cluster 3 consists of 83 articles on crash risk, financial reporting transparency, portfolio risk, factor markets. The top-three TNC articles in this cluster are Kim et al. (2014), Hoskisson et al. (2013), and Berger et al. (2014) with TNC of 23.64, 22.85 and 12.42 respectively. Kim et al. (2014), investigated

whether CSR mitigates or contributes to stock price crash risk. They found that firms' CSR performance is negatively associated with future crash risk after controlling for other predictors of crash risk. Moreover, the mitigating effect of CSR on crash risk is more pronounced when firms have less effective CG or a lower level of institutional ownership. The results are consistent with the notion that firms that actively engage in CSR also refrain from bad news-hoarding behavior, thus reducing crash risk. This role of CSR is particularly important when governance mechanisms, such as monitoring by boards or institutional investors, are weak. Hoskisson et al. (2013) extended earlier work by the authors (in 2005). They argued that there is a need for a more fine-grained understanding of the country context along two dimensions: 1) institutional development and 2) infrastructure and factor market development. Specifically, they proposed an enriched typology of emerging economies with a focus on mid-range emerging economies, which are positioned between traditional emerging economies and newly developed economies. They outlined directions for further research based on this typology in terms of 1) government influence, 2) resource orchestration, 3) market entry, and 4) CG regarding the internationalization strategy of these emerging multinationals from mid-range economies. Berger et al. (2014) investigated how age, gender, and educational composition of executive teams affect the portfolio risk of financial institutions. Using difference-in-difference estimations that focus exclusively on mandatory executive retirements for the entire population of German bank executive officers, they demonstrated that younger executive teams increase portfolio risk, as do board changes that result in a higher proportion of female executives, although this latter effect is weaker in terms of both statistical and economic significance. In contrast, when the board changes to increase the representation of executives holding Ph.D. degrees, portfolio risk declines.

Cluster 4 consists of 78 articles on sustainable CG, gender diversity, environmental disclosure and firm performance. The top-three TNC articles in this cluster are Nicolò et al. (2022), Albitar et al. (2020) and Elzahar and Hussainey (2012) with TNC of 9.85, 7.88 and 4.15, respectively. Nicolò et al. (2022) examined the impact of boardroom gender diversity on environmental social governance (ESG) disclosure practices in the European listed firms' context. They found that the presence of women directors on the boards played a positive role in enhancing ESG disclosure, both at the overall and specific (individual ESG scores) level. Moreover, the practical implications of creating a heterogeneous and diversified board of directors may support implementing a "sustainable CG" recently claimed by the European Union. Accordingly, it can contribute to enhancing the practical and theoretical understanding of the pivotal role that gender diversity may exert in strengthening CG and, in turn, corporate transparency and accountability behaviors about non-financial issues. Albitar et al. (2020) investigated the effect of environmental, social and governance disclosure (ESGD) on firm performance (FP) before and after the introduction of integrated reporting (IR) further exploring a potential moderation effect of CG mechanisms on this relationship. The results showed a positive and significant relationship between ESGD score and FP before and after 2013, among a sample of FTSE 350. Additionally, they found that firms voluntarily associated with IR tend to achieve better firm financial performance. Elzahar and Hussainey (2012) used empirical analysis that showed 1) large firms are more likely to disclose more risk information in the narrative sections of interim reports, 2) industry activity type is positively associated with levels of narrative risk disclosure in interim reports, 3) statistically insignificant impact of other firm-specific characteristics (liquidity, gearing, profitability, and cross-listing) and corporate governance mechanisms on narrative risk disclosure.

Cluster 5 consists of 73 articles on institutions (informal and formal), shareholders and board. The top-three TNC articles in this cluster are Bell et al. (2014), Estrin and Prevezer (2011) and Chen et al. (2016), with TNC of 11.05, 8.13 and 6.25 respectively. Bell et al. (2014) investigated stock market responses to different constellations of firm-level CG mechanisms by focusing on foreign initial public offerings (IPOs) in the US. They built on sociology-grounded research on financial market behavior and used a nested legitimacy framework to explore the US investor perceptions of foreign IPO value. Using a fuzzy set theoretic methodology, they demonstrated how different combinations of monitoring and incentive-based corporate governance mechanisms lead to the same level of investor valuation of firms. Moreover, institutional factors related to the strength of minority shareholder protection in a foreign IPO's home country represent a boundary condition that affects the number of governance mechanisms required to achieve high-value perceptions among the US investors. The findings contribute to the sociological perspective on comparative CG and the dependencies between organizations and institutions. Estrin and Prevezer (2011) argued that the role of informal institutions as well as formal ones is central to understanding the functioning of corporate governance. They focused on the four largest emerging economies: Brazil, Russia, India, and China-commonly referred to as the BRIC countries. The analysis was based on the Helmke and Levitsky's (2003) framework of informal institutions and focuses on two related aspects of CG: firm ownership structures and property rights and the relationship between firms and external investors. They argued that for China and some states of India, "substitutive" informal institutions, whereby informal institutions substitute for and replace ineffective formal institutions, are critical in creating CG leading to enhanced domestic and foreign investment. In contrast, Russia is characterized by "competing" informal institutions whereby various informal mechanisms of corporate governance associated with corruption and clientelism undermine the functioning of reasonably well-set-out formal institutions relating to shareholder rights and relations with investors. Finally, Brazil is characterized by "accommodating" informal institutions which get around the effectively enforced but restrictive formal institutions and reconcile varying objectives that are held between actors in formal and informal

institutions. Chen et al. (2016) examined the impact of female board representation on firm-level strategic behavior within the domain of mergers and acquisitions (M&A). Using a comprehensive, multiyear sample of the US public firms, they found strong support for their hypotheses. They demonstrated the robustness of their findings through the use of a difference-in-differences analysis on a subsample of firms that experienced exogenous changes in board gender composition as a result of director deaths.

Cluster 6 consists of 52 articles on socially responsible firms, firm performance, firm value. The top-three TNC articles in this cluster are Ferrell et al. (2016), Li et al. (2018) and Ciftci et al. (2019), with TNC of 15.71, 12.07 and 10.06, respectively. Ferrell et al. (2016), given their identification strategy by means of an instrumental variable approach, found that well-governed firms that suffer less from agency concerns (less cash abundance, positive pay-for-performance, small control wedge, strong minority protection) engage more in CSR. They also found that a positive relationship exists between CSR and value and that CSR attenuates the negative relation between managerial entrenchment and value. Li et al. (2018) used a large cross-sectional dataset comprising FTSE 350 listed firms, they investigated whether superior ESG disclosure affects firm value. They found 1) a positive association between ESG disclosure level and firm value, suggesting that improved transparency and accountability and enhanced stakeholder trust play a role in boosting firm value 2) higher chief executive officer (CEO) power enhances the ESG disclosure effect on firm value, indicating that stakeholders associate ESG disclosure from firms with higher CEO power with a greater commitment to ESG practice. This evidence is strong and consistent for three different measures of ESG-related disclosure: the ESG, environmental and social disclosure scores. Ciftci et al. (2019) studied the relationship between context, internal corporate governance and firm performance, looking at the case of Turkey, an exemplar of family capitalism. They found more concentrated ownership, often in the hands of families, led to firms performing better; concentrated ownership means that controlling families bear more of the risks of poor performance. They also noted that an increase in cross-ownership did not influence market performance, but was negatively associated with accounting performance. Conversely, they found that a higher proportion of family members on boards had no discernable effect on performance.

Cluster 7 consists of 49 articles on executive compensation and incentives, tax avoidance. The top-three TNC articles in this cluster are Kim et al. (2011), Armstrong et al. (2015) and Armstrong et al. (2010) with TNC of 16.17, 13.24 and 11.87 respectively. Kim et al. (2011), using a large sample of the US firms for the period 1993–2009, provided evidence that the sensitivity of a chief financial officer's (CFO) option portfolio value to the stock price is significantly and positively related to the firm's future stock price crash risk. In contrast, they found only weak evidence of the positive impact of CEO option sensitivity on crash risk. Finally, they found that the link between CFO option sensitivity and crash risk is more pronounced for

firms in non-competitive industries and those with a high level of financial leverage. Armstrong et al. (2015) examined the link between CG, managerial incentives, and corporate tax avoidance. Similar to other investment opportunities that involve risky expected cash flows, unresolved agency problems may lead managers to engage in more or less corporate tax avoidance than shareholders would otherwise prefer. Consistent with the mixed results reported in prior studies, they found no relation between various CG mechanisms and tax avoidance at the conditional mean and median of the tax avoidance distribution. However, using quantile regression, they found a positive relation between board independence and financial sophistication for low levels of tax avoidance, but a negative relation for high levels of tax avoidance. These results indicate that these governance attributes have a stronger relation with more extreme levels of tax avoidance, which are more likely to be symptomatic of over- and under-investment by managers. Armstrong et al. (2010) reviewed recent literature on the role of financial reporting transparency in reducing governance-related agency conflicts among managers, directors, and shareholders, as well as in reducing agency conflicts between shareholders and creditors, and offer researchers some suggested avenues for future research. Key themes include the endogenous nature of debt contracts and governance mechanisms with respect to information asymmetry between contracting parties, the heterogeneous nature of the informational demands of contracting parties, and the heterogeneous nature of the resulting governance and debt contracts.

5. CONCLUSION

In recent years, especially after the world financial crisis in 2008, CG became a crucial aspect of modern business. There has been a growing body of research on the topic, exploring different aspects of CG and incorporating a multidisciplinary research fashion which in turn enriched the topic and connected it to many issues related to organizations and countries around the world.

A bibliometric analysis of 3126 articles on CG published from 2008 to 2022 in leading international journals indexed in the Scopus database was conducted in an attempt to design the intellectual structure and trends of CG, revealing several interesting findings. One of the most notable is the significant growth in the number of publications on the topic over the past few decades. This growth is indicative of the increasing importance placed on CG in business and academic circles. Another key finding is the dominance of certain countries in the research. The UK, the USA, and Australia were found to be the most prolific countries in terms of publishing research on CG. This suggests that these countries have a particularly strong interest in the topic, perhaps due to the size and complexity of their economies.

Finally, the bibliometric analysis revealed seven key clusters of thematic research groups that have emerged in CG research. These groups include sustainability reporting, corporate resilience, CSR, crash risk, the roles of institutions (informal and formal) and boards of directors, the impact of CG on

firm performance, environmental disclosure, executive compensation and the importance of stakeholder engagement. These thematic clusters provide a useful framework for future research. First, the impact of globalization on CG shows that as companies become more global, there is a growing need for international standards and regulations to ensure that companies operate in a responsible and ethical manner. Enterprises are deeply affected by the local macro environment such as politics, economy and culture. Su et al. (2022) found that non-state-owned parent-subsidiary companies' geographic distance has a positive effect on CSR, while the SOE had a negative effect. Future research should focus on the development of these standards and regulations, as well as the role of international organizations such as the United Nations and the World Bank in promoting responsible CG. Second, the functioning of CG mechanisms has become increasingly important, with the quantity and quality of information playing a crucial role. The impact of new data technologies, such as big data, on the functioning of CG mechanisms is an area of interest for future research. The adoption of technologies like blockchain, artificial intelligence, and big data has the potential to revolutionize the way that companies are managed and controlled, making it important to understand how these technologies will impact CG practices such as accountability and transparency (Lin et al., 2020). Third, the role of institutional investors and major owners, such as pension funds and mutual funds, is also becoming increasingly influential in CG. As these investors control large amounts of capital, they have the power to influence corporate decisions and hold companies accountable for their actions. It has been suggested that concentrated ownership by institutional investors might lead to a higher level of CG (Albitar et al., 2020). Future research should also investigate whether different objectives of different types of investment institutions may affect CG applications (Walls et al., 2012). Fourth, the application of research on CG has yielded contradictory results in recent years. Traditional agency perspectives view the board as a mechanism to protect shareholders' interests, but the shareholder-primacy model of corporate governance can be challenged. Boards may act as mediating bodies that balance and manage conflicting stakeholder interests, and in some cases, boards may prioritize public interests over shareholder interests. This highlights the need to develop a future theoretical framework of CG or further explore evolving experiences, such as the Chinese SOEs, which apply social enterprise

theory (Lin et al., 2020). SOEs differ from for-profit and not-for-profit organizations, integrating both social logic and financial logic. This structure allows them to balance the demands of multiple stakeholders effectively, creating social value while pursuing value maximization. SOEs can also sacrifice profits and efficiency to fulfill social roles when necessary. The CG of SOEs is a nexus of formal and informal institutions, contracts, and policies that address conflicting objectives between insiders and outsiders. Exploring Chinese SOEs can enrich future studies regarding CG (Lin et al., 2020). Fifth, culture, environment, and political ecosystems also play significant roles in CG. Different cultures have different expectations and norms for CG practices, such as accountability and transparency. Future research should focus on how cultural differences impact CG and how companies can adapt to these differences to improve their governance practices. Participation of women on an organization's board of directors can also build ESG strengths (Buallay et al. 2022; Walls et al., 2012). Sixth, future research should also focus on the role of stakeholders in CG. Stakeholders, including employees, customers, and suppliers, have a significant impact on how companies are managed and controlled. Research should explore how companies can better engage with stakeholders to improve their governance practices and how stakeholders can be held accountable for their actions.

In conclusion, CG is an area of increasing importance in modern business. Future research should focus on a number of key areas, including the development of a theoretical framework of CG, exploring evolving experiences such as Chinese SOEs, cultural differences in CG practices, and the role of stakeholders in corporate governance. By addressing these areas, companies can improve their governance practices and operate in a responsible and ethical manner.

The dataset in this study is confined only to the Scopus database of English articles. It also considers papers directly related to the field of CG in business and economics. Moreover, the authors' subjectivity in assigning keywords may skew the results. Certain authors may utilize keywords incorrectly, resulting in a keyword that does not accurately reflect the substance of their research. Moreover, the meaning of keywords in articles might change from one context to the next, and it can evolve, even if it is impossible to determine how close the new keywords are to the originals. The study used thresholds to extract trends based on the authors' judgment in obtaining sound results, among other things.

REFERENCES

1. Adams, R. B., Hermalin, B. E., & Weisbach, M. S. (2010). The role of boards of directors in corporate governance: A conceptual framework and survey. *Journal of Economic Literature, 48*(1), 58–107. https://doi.org/10.1257/jel.48.1.58
2. Ahmed, S., Alshater, M. M., El Ammari, A., & Hammami, H. (2022). Artificial intelligence and machine learning in finance: A bibliometric review. *Research in International Business and Finance, 61*, Article 101646. https://doi.org/10.1016/j.ribaf.2022.101646
3. Albitar, K., Hussainey, K., Kolade N., & Gerged, A. M. (2020). ESG disclosure and firm performance before and after IR: The moderating role of governance mechanisms. *International Journal of Accounting & Information Management, 28*(3), 429–444. https://doi.org/10.1108/IJAIM-09-2019-0108

4. Alshater, M. M., Hassan, M. K., Khan, A., & Saba, A. (2021). Influential and intellectual structure of Islamic finance: A bibliometric review. *International Journal of Islamic and Middle Eastern Finance and Management, 14*(2), 339–365. https://doi.org/10.1108/IMEFM-08-2020-0419

5. Alshbili, I., Elamer, A. A., & Beddewela, E. (2018). Ownership types, corporate governance and corporate social responsibility disclosures: Empirical evidence from a developing country. *Accounting Research Journal, 33*(1), 148–166. https://doi.org/10.1108/ARJ-03-2018-0060

6. Andersen, N. (2021). Mapping the expatriate literature: A bibliometric review of the field from 1998 to 2017 and identification of current research fronts. *The International Journal of Human Resource Management, 32*(22), 4687–4724. https://doi.org/10.1080/09585192.2019.1661267

7. Appio, F. P., Cesaroni, F., & Di Minin, A. (2014). Visualizing the structure and bridges of the intellectual property management and strategy literature: A document cocitation analysis. *Scientometrics, 101*(1), 623–661. https://doi.org/10.1007/s11192-014-1329-0

8. Armstrong, C. S., Blouin, J. L., Jagolinzer, A. D., & Larcker, D. F. (2015). Corporate governance, incentives, and tax avoidance. *Journal of Accounting and Economics, 60*(1), 1–17. https://doi.org/10.1016/j.jacceco.2015.02.003

9. Armstrong, C. S., Guay, W. R., & Weber, J. P. (2010). The role of information and financial reporting in corporate governance and debt contracting. *Journal of Accounting and Economics, 50*(2–3), 179–234. https://doi.org/10.1016/j.jacceco.2010.10.001

10. Baker, H. K., Kumar, S., & Pandey, N. (2020). A bibliometric analysis of managerial finance: A retrospective. *Managerial Finance, 46*(11), 1495–1517. https://doi.org/10.1108/MF-06-2019-0277

11. Baker, H. K., Kumar, S., & Pattnaik, D. (2021). Research constituents, intellectual structure, and collaboration pattern in the Journal of Forecasting: A bibliometric analysis. *Journal of Forecasting, 40*(4), 577–602. https://doi.org/10.1002/for.2731

12. Bebchuk, L., Cohen, A., & Ferrell, A. (2009). What matters in corporate governance? *The Review of Financial Studies, 22*(2), 783–827. https://doi.org/10.1093/rfs/hhn099

13. Bell, R. G., Filatotchev I., & Aguilera, R. V. (2014). Corporate governance and investors' perceptions of foreign IPO value: An institutional perspective. *Academy of Management Journal, 57*(1). https://doi.org/10.5465/amj.2011.0146

14. Berger, A. N., Kick, T., & Schaeck, K. (2014). Executive board composition and bank risk taking. *Journal of Corporate Finance, 28*, 48–65. https://doi.org/10.1016/j.jcorpfin.2013.11.006

15. Bhimani, A. (2009). Risk management, corporate governance and management accounting: Emerging interdependencies. *Management Accounting Research, 20*(1), 2–5. https://doi.org/10.1016/j.mar.2008.11.002

16. Boyack, K. W., & Klavans, R. (2010). Co-citation analysis, bibliographic coupling, and direct citation: Which citation approach represents the research front most accurately? *Journal of the American Society for Information Science and Technology, 61*(12), 2389–2404. https://doi.org/10.1002/asi.21419

17. Brown, I., Steen, A., & Foreman, J. (2009). Risk management in corporate governance: A review and proposal. *Corporate Governance: An International Review, 17*(5), 546–558. https://doi.org/10.1111/j.1467-8683.2009.00763.x

18. Brown, T., Park, A., & Pitt, L. (2020). A 60-year bibliographic review of the Journal of Advertising Research: Perspectives on trends in authorship, influences, and research impact. *Journal of Advertising Research, 60*(4), 353–360. https://doi.org/10.2501/JAR-2020-028

19. Buallay, A., Hamdan, R., Barone, E., & Hamdan, A. (2022). Increasing female participation on boards: Effects on sustainability reporting. *International Journal of Finance and Economics, 27*(1), 111–124. https://doi.org/10.1002/ijfe.2141

20. Burton, B., Kumar, S., & Pandey, N. (2020). Twenty-five years of The European Journal of Finance (EJF): A retrospective analysis. *The European Journal of Finance, 26*(18), 1817–1841. https://doi.org/10.1080/1351847X.2020.1754873

21. Chen, G., Crossland, C., & Huang, S. (2016). Female board representation and corporate acquisition intensity. *Strategic Management Journal, 37*(2), 303–313. https://doi.org/10.1002/smj.2323

22. Ciampi, F., Giannozzi, A., Marzi, G., & Altman, E. I. (2021). Rethinking SME default prediction: A systematic literature review and future perspectives. *Scientometrics, 126*(3), 2141–2188. https://doi.org/10.1007/s11192-020-03856-0

23. Ciftci, I., Tatoglu, E., Wood, G., Demirbag, M., & Zaim, S. (2019). Corporate governance and firm performance in emerging markets: Evidence from Turkey. *International Business Review, 28*(1), 90–103. https://doi.org/10.1016/j.ibusrev.2018.08.004

24. Cisneros, L., Ibanescu, M., Keen, C., Lobato-Calleros, O., & Niebla-Zatarain, J. (2018). Bibliometric study of family business succession between 1939 and 2017: Mapping and analyzing authors' networks. *Scientometrics, 117*(2), 919–951. https://doi.org/10.1007/s11192-018-2889-1

25. de Andres, P., & Vallelado, E. (2008). Corporate governance in banking: The role of the board of directors. *Journal of Banking & Finance, 32*(12), 2570–2580. https://doi.org/10.1016/j.jbankfin.2008.05.008

26. Ding, W., Levine, R., Lin, C., & Xie, D. (2021). Corporate immunity to the COVID-19 pandemic. *Journal of Financial Economics, 141*(2), 802–830. https://doi.org/10.1016/j.jfineco.2021.03.005

27. Djankov, S., La Porta R., Lopez-de-Silanes, F., & Shleifer, A. (2008). The law and economics of self-dealing. *Journal of Financial Economics, 88*(3), 430–465. https://doi.org/10.1016/j.jfineco.2007.02.007

28. Donthu, N., Kumar, S., & Pattnaik, D. (2020). Forty-five years of Journal of Business Research: A bibliometric analysis. *Journal of Business Research, 109*, 1–14. https://doi.org/10.1016/j.jbusres.2019.10.039

29. Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research, 133*, 285–296. https://doi.org/10.1016/j.jbusres.2021.04.070

30. Dyck, A., Morse, A., & Zingales, L. (2010). Who blows the whistle on corporate fraud? *The Journal of Finance, 65*(6), 2213–2253. https://doi.org/10.1111/j.1540-6261.2010.01614.x

31. Ehnert I., Parsa, S., Roper, I., Wagner, M., & Muller-Camen, M. (2016). Reporting on sustainability and HRM: A comparative study of sustainability reporting practices by the world's largest companies. *The International Journal of Human Resource Management, 27*(1), 88–108. https://doi.org/10.1080/09585192.2015.1024157

32. Elzahar, H., & Hussainey, K. (2012). Determinants of narrative risk disclosures in UK interim reports. *Journal of Risk Finance, 13*(2), 133–147. https://doi.org/10.1108/15265941211203189

33. Erkens, D. H., Hung, M., & Matos, P. (2012). Corporate governance in the 2007–2008 financial crisis: Evidence from financial institutions worldwide. *Journal of Corporate Finance, 18*(2), 389–411. https://doi.org/10.1016/j.jcorpfin.2012.01.005

34. Estrin, S., & Prevezer, M. (2011). The role of informal institutions in corporate governance: Brazil, Russia, India, and China compared. *Asia Pacific Journal of Management, 28*, 41–67. https://doi.org/10.1007/s10490-010-9229-1

35. Ferrell, A., Hao, L., & Renneboog, L. (2016). Socially responsible firms. *Journal of Financial Economics, 122*(3), 585–606. https://doi.org/10.1016/j.jfineco.2015.12.003

36. Giroud, X., & Mueller, H. M. (2010). Does corporate governance matter in competitive industries? *Journal of Financial Economics, 95*(3), 312–331. https://doi.org/10.1016/j.jfineco.2009.10.008

37. Giroud, X., & Mueller, H. M. (2011) Corporate governance, product market competition, and equity prices. *The Journal of Finance, 66*(2), 563–600. https://doi.org/10.1111/j.1540-6261.2010.01642.x

38. Goodell, J. W., Kumar, S., Lim, W. M., & Pattnaik, D. (2021). Artificial intelligence and machine learning in finance: Identifying foundations, themes, and research clusters from bibliometric analysis. *Journal of Behavioral and Experimental Finance, 32,* Article 100577. https://doi.org/10.1016/j.jbef.2021.100577

39. Helmke, G., & Levitsky, S. (2003). *Informal institutions and comparative politics: A research agenda* (Working Paper No. 307) Kellogg Institute for International Studies, University of Notre Dame. https://kellogg.nd.edu/sites/default/files/old_files/documents/307_0.pdf

40. Hoskisson, R. E., Wright, M., Filatotchev, I., & Peng, M. W. (2013). Emerging multinationals from mid-range economies: The influence of institutions and factor markets. *Journal of Management Studies, 50*(7), 1295–1321. https://doi.org/10.1111/j.1467-6486.2012.01085.x

41. Iatridis, G. (2010). International financial reporting standards and the quality of financial statement information. *International Review of Financial Analysis, 19*(3), 193–204. https://doi.org/10.1016/j.irfa.2010.02.004

42. Iatridis, G. E. (2011). Accounting disclosure, accounting quality, and conditional and unconditional conservatism. *International Review of Financial Analysis, 20*(2), 88–102. https://doi.org/10.1016/j.irfa.2011.02.013

43. Institute of Directors in Southern Africa. (2002). *King reports on corporate governance for South Africa.* https://cdn.ymaws.com/www.iodsa.co.za/resource/collection/94445006-4F18-4335-B7FB-7F5A8B23FB3F/IoDSA_King_II_web_version.pdf

44. Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics, 3*(4), 305–360, https://doi.org/10.1016/0304-405X(76)90026-X

45. Kessler, M. M. (1963). Bibliographic coupling between scientific articles. *American Documentation, 14*(1), 10–25. https://doi.org/10.1002/asi.5090140103

46. Khan, I., Khan, I., & Afridi, M. A. (2021). Does board diversity matter for the quality of CSR disclosure? Evidence from the financial sector of Pakistan. *Revista Brasileira de Gestao de Negocios, 23*(1), 104–126. https://doi.org/10.7819/rbgn.v23i1.4091

47. Khatib, S. F. A., Abdullah, D. F., Hendrawaty, E., & Elamer, A. A. (2022). A bibliometric analysis of cash holdings literature: Current status, development, and agenda for future research. *Management Review Quarterly, 72,* 707–744. https://doi.org/10.1007/s11301-021-00213-0

48. Kim J.-B., Li, Y., & Zhang, L. (2011). CFOs versus CEOs: Equity incentives and crashes. *Journal of Financial Economics, 101*(3), 713–730. https://doi.org/10.1016/j.jfineco.2011.03.013

49. Kim, Y., Li, H., & Li, S. (2014). Corporate social responsibility and stock price crash risk. *Journal of Banking & Finance, 43*, 1–13. https://doi.org/10.1016/j.jbankfin.2014.02.013

50. Laeven, L., & Levine, R. (2009). Bank governance, regulation and risk taking. *Journal of Financial Economics, 93*(2), 259–275. https://doi.org/10.1016/j.jfineco.2008.09.003

51. Li, Y., Gong, M., Zhang, X.-Y., & Koh, L. (2018). The impact of environmental, social, and governance disclosure on firm value: The role of CEO power. *The British Accounting Review, 50*(1), 60–75. https://doi.org/10.1016/j.bar.2017.09.007

52. Lin, K. J., Lu, X., Zhang, J., & Zheng, Y. (2020). State-owned enterprises in China: A review of 40 years of research and practice. *China Journal of Accounting Research, 13*(1), 31–55. https://doi.org/10.1016/j.cjar.2019.12.001

53. Linnenluecke, M. K., Marrone, M., & Singh, A. K. (2020). Conducting systematic literature reviews and bibliometric analyses. *Australian Journal of Management, 45*(2), 175–194. https://doi.org/10.1177/0312896219877678

54. Linsley, P. M., & Shrives, P. J. (2006). Risk reporting: A study of risk disclosures in the annual reports of UK companies. *The British Accounting Review, 38*(4), 387–404. https://doi.org/10.1016/j.bar.2006.05.002

55. Liu, Z., Yin, Y., Liu, W., & Dunford, M. (2015). Visualizing the intellectual structure and evolution of innovation systems research: A bibliometric analysis. *Scientometrics, 103*(1), 135–158. https://doi.org/10.1007/s11192-014-1517-y

56. Lopes, P. T., & Rodrigues, L. L. (2007). Accounting for financial instruments: An analysis of the determinants of disclosure in the Portuguese stock exchange. *The International Journal of Accounting, 42*(1), 25–56. https://doi.org/10.1016/j.intacc.2006.12.002

57. Nicolò, G., Zampone, G., Sannino, G., & De Iorio, S. (2022). Sustainable corporate governance and non-financial disclosure in Europe: Does the gender diversity matter? *Journal of Applied Accounting Research, 23*(1), 227–249. https://doi.org/10.1108/JAAR-04-2021-0100

58. Ntim, C. G., Lindop, S., & Thomas, D. A. (2013). Corporate governance and risk reporting in South Africa: A study of corporate risk disclosures in the pre- and post- 2007/2008 global financial crisis periods. *International Review of Financial Analysis, 30*, 363–383. https://doi.org/10.1016/j.irfa.2013.07.001

59. Pattnaik, D., Hassan, M. K., Kumar, S., & Paul, J. (2020). Trade credit research before and after the global financial crisis of 2008 — A bibliometric overview. *Research in International Business and Finance, 54*, Article 101287. https://doi.org/10.1016/j.ribaf.2020.101287

60. Pattnaik, D., Kumar, S., & Burton, B. (2021). Thirty years of the Australian Accounting Review: A bibliometric analysis. *Australian Accounting Review, 31*(2), 150–164. https://doi.org/10.1111/auar.12332
61. Pritchard, A. (1969). Statistical bibliography or bibliometrics? *Journal of Documentation, 25*(4), 348–349.
62. Scherer, A. G.,& Voegtlin, C. (2020). Corporate governance for responsible innovation: Approaches to corporate governance and their implications for sustainable development. *Academy of Management Perspectives, 34*(2). https://doi.org/10.5465/amp.2017.0175
63. Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *The Journal of Finance, 52*(2), 737–783. https://doi.org/10.1111/j.1540-6261.1997.tb04820.x
64. Stremersch, S., Verniers, I., & Verhoef, P. C. (2007). The quest for citations: Drivers of article impact. *Journal of Marketing, 71*(3), 171–193. https://doi.org/10.1509/jmkg.71.3.171
65. Su, F., Liang, X., Cai, S., Chen, S., & Fahad, S. (2022). Assessment of parent-subsidiary companies' geographical distance effect on corporate social responsibility: A case of A-share listed companies. *Economic Research-Ekonomska Istraživanja, 35*(1), 4922–4946. https://doi.org/10.1080/1331677X.2021.2019597
66. Tahamtan, I., Safipour Afshar, A., & Ahamdzadeh, K. (2016). Factors affecting number of citations: A comprehensive review of the literature. *Scientometrics, 107*(3), 1195–1225. https://doi.org/10.1007/s11192-016-1889-2
67. Taylor, J. B. (2012). *The financial crisis and the policy responses: An empirical analysis of what went wrong.* Stanford University. https://web.stanford.edu/~johntayl/FCPR.pdf
68. Terjesen, S., Sealy, R., & Singh, V. (2009). Women directors on corporate boards: A review and research agenda. *Corporate Governance: An International Journal, 17*(3), 320–337. https://doi.org/10.1111/j.1467-8683.2009.00742.x
69. Ullah, S., Akhtar, P., & Zaefarian, G. (2018). Dealing with endogeneity bias: The generalized method of moments (GMM) for panel data. *Industrial Marketing Management, 71*, 69–78. https://doi.org/10.1016/j.indmarman.2017.11.010
70. Vafeas, N. (1999). Board meeting frequency and firm performance. *Journal of Financial Economics, 53*(1), 113–142. https://doi.org/10.1016/S0304-405X(99)00018-5
71. van Eck, N. J., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics, 84*(2), 523–538. https://doi.org/10.1007/s11192-009-0146-3
72. Verma, S., & Gustafsson, A. (2020). Investigating the emerging COVID-19 research trends in the field of business and management: A bibliometric analysis approach. *Journal of Business Research, 118*, 253–261. https://doi.org/10.1016/j.jbusres.2020.06.057
73. Walls, J. L., Berrone, P., & Phan, P. H. (2012). Corporate governance and environmental performance: Is there really a link? *Strategic Management Journal, 33*(8), 885–913. https://doi.org/10.1002/smj.1952
74. Yermack, D. (1996). Higher market valuation of companies with a small board of directors. *Journal of Financial Economics, 40*(2), 185–211. https://doi.org/10.1016/0304-405X(95)00844-5
75. Zupic, I., & Čater, T. (2015). Bibliometric methods in management and organization. *Organizational Research Methods, 18*(3), 429–472. https://doi.org/10.1177/1094428114562629