

A Study on Trends and Innovations in Corporate Social Responsibility

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Abstract: *In the past two decades, the connection between innovation and corporate social responsibility (CSR) has received a lot of attention. Despite the fact that numerous studies have investigated the impact of CSR on innovation. While a number of studies have looked at how CSR affects innovation, few have tried to use bibliometric methods to look at how CSR and innovation have changed over time. In this exploration, 1279 Scopus of Science (WoS) distributed papers on CSR and innovation were gathered and broke down utilizing VOS viewer, CiteSpace, and Bibliometrix R-bundle and the MK pattern test.*

Keywords: Analysis, co-citation clustering analysis, and research frontiers were all used in the analysis, as were the most productive journals.

I. INTRODUCTION

Recently, corporate social obligation (CSR) has gotten broad attention from researchers and organizations the same. CSR is basically "a concept whereby companies decide voluntarily to contribute to a better society and a cleaner environment," according to the European Commission. In addition, the ISO26000 Global Network of Stakeholders (UN, 2018), which was established to promote CSR and sustainable development, and the Millennium Development Goals (UN, 2005) have demonstrated their commitment to CSR. These advancements have brought CSR to numerous regional and international organizations. The existing literature in this area has expanded as a result of the introduction of new research directions that combine CSR and innovation by nations to maintain a competitive position in the globalized world economy. This is because the global focus on CSR issues and the development of new technologies and skills both drive innovation. Today, for businesses to be successful and innovative, they must take into account the social and environmental effects of their operational processes, encourage employee creativity, and work together with suppliers, customers, and other businesses. Companies must plan and foster new and inventive items and administrations, which closely link corporate social obligation and development.

There has been research on the connection between CSR and innovation for almost 20 years, and many scholars have come up with useful conclusions during this time. Official documentation demonstrated the significance of the link between CSR and innovation in 2001. However, there is disagreement regarding the relationship between CSR and innovation. According to Wagner, despite the fact that many academics agree theoretically that CSR and innovation are linked, empirical research is limited and only leads in one direction—from CSR to innovation. On the company's path to maturity, this connection, according to other authors, is a positive feedback cycle that ultimately leads to the tightly integrated use of CSR and innovation. As a result, the recent increase in research on innovation and corporate social responsibility (CSR) indicates that these research fields have grown rapidly in recent years. Case studies and empirical studies from a single perspective may not provide a comprehensive understanding of the relationship between CSR and innovation. Furthermore, no researchers have carried out a systematic review and bibliometric analysis of the research that has been conducted in this field. By combining bibliometric methods, comprehensively analyzing the research structure and quantitative information in this field, providing a visual mapping to outline the overall framework of research in this field for scholars, and showing the focus of research in this field, this year's development trend, and predictions for the future, this paper aims to summarize the current research on CSR and innovation.

II. MATERIALS AND METHODS

The bibliometric analysis of CSR and innovation. It examines publications, authors, national collaborations, cluster analysis, research perspectives, and the evolving trends in the field over time.

The following are the reasons why bibliometric analysis was chosen:

1. It uses computer analysis with mathematical, statistical, and graphical tools to accurately analyze large amounts of data over a period of time
2. It provides research ideas for researchers around the world who are studying core literature and core clusters
3. The tools VOSviewer, CiteSpace, Bibliometrix R-package, and the Mann-Kendall (MK) trend test used for This study examined all Web of Science Core Collection™ articles on CSR and innovation

Bibliometric Analysis: Four types of analyses of the data were performed using statistical software because Web of Science (WoS) publications are regarded as the most acceptable database for collecting and analyzing scientific papers. Additionally, WoS has a large number of journals and papers that all meet the requirements for peer review. a) diary, creator, and nation investigation, (b) watchword examination, (c) group analysis, and (d) research outskirts examination. To achieve this objective, all data were analyzed to filter the top ten journals, authors, and countries and to analyze the important indicators associated with them.

The first analysis is an analysis of journals, authors, and countries that will provide information about the most productive journals, authors, and countries for the study (RQ2).

Second, a VOSviewer-based network diagram of the authors' collaboration was presented. The network diagram was color-coded into various clusters and illustrated with a table for each cluster.

Thirdly, the MK trend test and the bibliometrix R package were utilized for the analysis of international collaboration. Utilizing the software VOSviewer and bibliometrix R-package, a collaborative analysis was carried out in the second analysis to identify the most recent hot topics in CSR and innovation research (RQ3).

Initially, the CSR and innovation knowledge base's most popular and emerging topics were analyzed using the software VOSviewer and keyword co-occurrence.

Second, the bibliometrix R-bundle was utilized to separate the gathered articles from 2002 to 2021 into four stages, eachspanning five years: (a) From 2002 to 2006, from 2007 to 2011, from 2012 to 2016, and from 2017 to 2021. After that, for each phase, a quantitative analysis of keywords was carried out. Utilizing CiteSpace software, the third analysis sought to identify the knowledge structure of CSR and innovation research (RQ4). It's important to note that a given research area's main research directions can be represented by the knowledge structure.

A co-citation cluster analysis was used to determine the knowledge structure of innovation and CSR research. In order to generate a clustering map based on co-cited literature, the node type "Reference" was first selected in the CiteSpace software, referring to the chosen start time of January 2002 and end time of December 2021. Second, the co-cited literature's keywords were clustered, and the co-cited literature was divided into various clusters. Thirdly, the literature that is co-cited is clustered with the literature that is related to it. The final kind of analysis was done with CiteSpace software to predict upcoming research in CSR and innovation as well as emerging trends (RQ5). The keywords were first visualized. Second, twenty burst keywords were made and looked at.

Keyword Analysis

This segment created a catchphrase co-event network as displayed in Figure 8. This analysis was carried out with VOSviewer. The color of the nodes was used to differentiate between the various clusters, and the size of each circle represented the frequency of keyword occurrences and the relevance of the keywords. At least seven interactions were found for the keywordselection, which led to the identification of 92 keywords. As a result, eight clusters of varying colors were created to identify the study's focus. As displayed in Table 5, the red group features the significance of "firm performance" and comprises of 17 ventures. 13 items make up the green cluster, which is centered on "innovation" and "sustainable development." The blue cluster with 12 items is called three. The yellow cluster with 11 items related to "sustainable development" is number four. The purple cluster, with 10 items, is centered on "corporate sustainability." Six is the light blue cluster, which has 11 items and is associated with "CSR." The orangecluster, which is related to "stakeholder engagement," is number seven. It is an alluvial diagram of the thematic evolution of research in the field of CSR and innovation over the last 20 years in different time phases. Eight is the pink cluster, which focuses on "corporate social responsibility volution of CSR and Innovation Research from 2002 to 2021."

The time period is divided into four stages, each spreading over 5 years, addressed in blocks. There was only one cluster of research on "corporate social responsibility" during the first phase (2002–2006), but during the second phase (2007–2011), there were six clusters of research on "smes," "sustainability development," "corporate social performance," "innovation," and "CSR." With 14 clusters and the addition of new clusters such as "entrepreneurial orientation," "collaboration," and "service innovation" during the third phase (2012–2016), the field experienced rapid growth. Figure 9 also shows that there are multiple curve variations between blocks, which result in the merging of subsequent phases and the formation of new clusters during the maturing stage, which is the fourth stage. First, from 2002 to 2016, the alluvial diagram depicts the various variations among the blocks in the three phases. A large portion of these bend flows are ultimately joined with "corporate social obligation" and "manageability" in the final period of 2017-2021. Second, innovation was the main cluster from 2007 to 2011, with a break after 2011. This does not mean that research on innovation stopped; rather, it merged with the CSR and environmental management clusters to form new research topics. The dominance of CSR was evident from 2002 to 2016. Thirdly, the fact that there was only one keyword for "corporate social responsibility" during the first phase (2002–2006) was followed by "innovation," "sustainability," "sustainable development," "firm performance," and "green innovation," indicating that research in this field is still developing rapidly. The Intellectual Structure of CSR and Innovation Research Citation–author co-citation analysis is based on the combination of cited authors and references between different articles and can therefore be used to identify the research focus of a specific field and the influential authors in that field. It is also important to note that the research on innovation is diversifying into "service innovation," "green innovation," and "product innovation." The co-citation relationships in the collected dataset are analyzed in this conclusion using CiteSpace. First, CiteSpace was utilized to produce writers and article a long time by setting the hub type to "reference" . Second, the visual clusters in Figure 8 were generated by extracting the most popular terms from the abstracts of the most cited articles within the clustering labels as clustering criteria.

III. LIMITATIONS

Despite the commitment of this paper to the field of CSR and advancement, there are some limits. First, although the web of science database is likely one of the most significant bibliographic databases on the planet, it only contains a small number of articles. For the study to be more convincing, it is necessary to search various databases for articles on CSR and innovation. Second, the research in other countries and regions where English is not the first language cannot be systematically analyzed because the article only analyzes articles written in English. Third, albeit the article evolves the catchphrases of the primary examinations utilizing an alluvial outline and groups the co-reference investigation, other data about the more profound level of the exploration points involved, including the system and hypothetical foundation, isn't investigated more completely and completely. Future examination ought to keep on following this region to acquire further bits of knowledge

IV. CONCLUSION

This study analyzed the literature in the field of CSR and innovation in the WoS database with the intention of conducting an econometric analysis of the CSR and innovation fields and identifying the knowledge map between these two topics. Additionally, additional content analysis was performed on the authors' high-frequency co-cited articles and journals. Utilizing the VOSviewer, CiteSpace, and bibliometrix R-package, quantitative analysis and visualization of the CSR and innovation domains were carried out in this study. We focused on the journal, author and country, author collaboration, country collaboration, keyword and keyword evolution, clustering, and emergent word analysis of articles.

CSR and Development Exploration Becomes More extravagant and More Global First, in regards to the yearly distribution patterns of CSR and advancement research, research in this field from 2002, which filled gradually in 2002-2013, showed a significant growth trend after 2013, which is reliable with the investigation of Ratajczak and Szutowski. Secondly, in regards to diaries, the main three efficiency diaries are Sustainability, Journal of Cleaner Creation, and Corporate Social Obligation and Ecological Administration. This is predictable with the aftereffects of the bibliometric investigation of past examinations zeroed in on the CSR and supportability spaces . It's important to note that Sustainability has published far more papers in the last five years than any other journal, despite only starting to publish

papers on CSR and innovation between 2012 and 2016. Thirdly, in terms of authors, D. Gallardo-Vazquez is the most prolific, while N. Ahmad has the most extensive international collaboration network. Fourth, in regards to the examination of countries, European nations address half of the 10 most useful nations. It is important to note that China and the United States contribute the most to the production of papers in this field. In particular, China has the most publications and collaborations with other countries, while the number of citations for US articles is significantly higher than for other countries. Fifth, the outcomes show consistent development in the development of the concentrate concerning joint effort across nations, particularly in Asia, North America, and Europe.

Information Designs in CSR and Development Exploration Have Become More Complex First, our co-reference examination identifies Doorman M, Shelters F, and Bocken N as the most influential creators in CSR and advancement research. The fields of CSR and innovation have all received significant contributions from these authors. We also found that these co-citations influence various fields when we clustered them. For instance, Boons F and Bocken N are more significant in the fields of Boons F and Bocken N, whereas Porter M is highly regarded in the fields of social innovation and CSR practice. This distinction serves as a more concrete reference for more in-depth research on innovation and corporate social responsibility.

CSR, sustainability, innovation, financial performance, and other topics associated with these themes, such as sustainability, corporate sustainability, technology innovation, green innovation, environmental performance, etc., were grouped into seven distinct clusters following an analysis of the keywords. which are the focal point of examination today (e.g., [13,31,62-65])

CSR and Innovation Research Will Face Two Forward-Looking Directions First, innovation appears in other forms in the 2011 study when performing the keyword evolution analysis, such as: green innovation, service innovation, and so on. Similar to the current research trend (e.g., [66-70]), the co-citation analysis confirms that innovation becomes more diverse. This proposes that there ought to be horizontal development and vertical profundity in the investigation of CSR and advancement. Second, from the co-reference investigation and burst words, starting around 2005, there are papers with outstanding citations and burst words at each stage, which address the examination bearing at that time. For instance, the terms "business ethic" and "capability" remained popular for twelve and nine years, respectively. However, since 2016, the number of articles and keywords that had a significant impact has decreased. Specifically, the pace of development of breakout words has dialed back significantly in the beyond three years. As a result, additional new research directions must be included in the relationship between CSR and innovation.

REFERENCES

- [1]. Employment Commission, General Directorate of Employment and Social Affairs Advancing an European System for Corporate Social Obligation; The European Communities' Office of Official Publications: 2001, Luxembourg; Online availability:
- [2]. Nepal, N.; https://ec.europa.eu/commission/presscorner/detail/en/DOC_01_9 (accessed September 19, 2022). UNICEF. Goals for Millennium Development: A View from the Caribbean and Latin America; Publications of the United Nations 2005.
- [3]. Moratis, L. Signaling Responsibility? New York, NY, USA Applying Flagging Hypothesis to the ISO 26000 Norm for Social Obligation. Sustainability 2018,10, 4172. [CrossRef]
- [4]. R.B. Nyuur; D.F. Ofori; Amponsah, M.M. Corporate social obligation and upper hand: a viewpoint from a developing nation. Thunderbird Int. Bus. Rev. 2019,61, 551-564. [CrossRef]
- [5]. A. Lockett; Moon, J.; W. Visser. Research on corporate social responsibility: nature, prominence, and influencers' sources. Manag. J. Stud. 2006,43, 115-136. [CrossRef]
- [6]. Wagner, M. High-impact social innovation and corporate social performance: a quantitative investigation. J. Bus. Ethics, 94,581-594 (2010) [CrossRef]
- [7]. S.P. MacGregor; Fontrodona, J. Investigating the Fit among CSR and Development; Working Paper No. WP-759; The IESE Center for Business Society (CBS) at the University of Navarra: 2008, Pamplona, Spain; Accessible on the web: (Accessed on April 27, 2014) www.iese.edu/research/pdfs/DI-0759-E.pdf