SOCIAL SCIENCES

# Scientific evolution of Corporate Social Responsibility. A bibliometric analysis with mapping analysis tools

SANDRA ESCAMILLA-SOLANO, JESSICA PAULE-VIANEZ, PAOLA PLAZA-CASADO & SUSANA DÍAZ-IGLESIAS

**Abstract:** When the term Corporate Social Responsibility (CSR) is heard today, a multitude of concepts such as Corporate Social Responsibility, Social Responsibility, Sustainable Development or Sustainability comes to mind where, without losing the essence of what its implementation entails, it implies not the existence of a consensus that unifies everything into a theory. The objective of this study is to obtain a better understanding of the current situation and trends in this area of research. Thus, in this paper, bibliometrics is used to evaluate performance and productivity in CSR, and scientific maps to extract and classify the most important research topics in this area. The results obtained when analyzing the period 1978-2017 show the conceptual evolution of CSR research, demonstrating the growth potential of CSR, as well as its great development, being the main thematic areas identified: *Financial Performance, Corporate Reputation, Ethics, Consumers, Employees* and *Risk*.

**Key words:** Bibliometric analysis, corporate Social Responsibility, co-word analysis, scientific maps.

## INTRODUCTION

The change brought about by society since the beginning of the new millennium together with the development of new technologies has as a main consequence a change in the needs and behaviors of society, which leads to a change in the business environment, where creativity and innovation capacity are the order of the day.

The appearance of Corporate Social Responsibility (CSR) and stakeholder theory revolutionized the way we see the company, the objective is not only to maximize the profit but also the maximization of value of the company and its distribution to all stakeholders. Today, the society is entitled to reward or punish the actions carried out by companies and governments.

This new paradigm incorporates concepts such as CSR, sustainability, sustainable development, etc. both in social life, as in business and academic. The main problem with CSR is the lack of consensus as a theory although it is agreed that the origin is philanthropic. Today ethical values are essential for a company internal and external way.

The objective of this study will be to perform a global bibliometric analysis of the CSR. The bibliometrics will allow to treat and study the data that come from scientific publications and to be able to evaluate what results the scientific production on CSR is obtaining from all fields of study. The thematic scope has generated debate, so it is considered pertinent to see in what situation the CSR is and offer a broad vision of the term. All the articles that deal with

CSR from the Web of Science (WOS) platform have been extracted from 1978 to 2017 to follow the conceptual evolution of CSR. To carry out the analysis, the SciMAT software will be used to analyze and evaluate scientific production of the research area as well as the most prominent themes from the co-word analysis through scientific maps.

The present study makes a double contribution it clarifies the performance and scientific production in CSR since its inception and it extracts the most outstanding themes that have been addressed in this area of research from a dynamic approach, analyzing their temporal evolution. Thus, this study distinguishes itself by performing a co-word analysis based on indexed articles in WOS that treat CSR, thus covering a gap detected.

The results obtained show that consolidated scientific production in CSR is growing at a very rapid pace as society and new technologies evolve. There are six major thematic areas: *Financial Performance*, *Corporate Reputation*, *Ethics*, *Consumers*, *Employees* and *Risk*, highlighting the thematic areas of *Financial Performance* and *Corporate Reputation*, demonstrating the great interest generated regarding the benefits of the implementation of CSR measures in the corporate reputation and enterprise value.

In the article there is a first approximation of the concept in the theoretical framework; next the methodology necessary to analyze the data, then the results the results are presented, and finally the most relevant conclusions obtained, and the limitations founded.

## THEORETICAL FRAMEWORK

The most modern conception of the company introduces new ways of doing business such as CSR, considering the company as a social entity where interest groups become the main objective of the corporate strategy, a company without an environment is not conceived (De la Cuesta 2004). Due to this, business transparency and the disclosure of CSR policies become aspects to consider, given that society today can legitimize companies based on their way of working and their impact on citizenship (Dhaliwal et al. 2014, Eckert 2017, Chen et al. 2018, Lock & Schulz-Knappe 2019), in addition to helping to increase their reputation (Yang et al. 2020).

Throughout the twentieth century, there were big debates about CSR policies in companies. The main question was if is necessary a responsibility beyond the legality (McGuire 1963, Sethi 1975, Carroll 1979, Robbins 1994, De la Cuesta & Valor 2004, Czinkota et al. 2018); if CSR policies had a positive impact on the company's results (Waddok & Graves 1997, Griffin & Mahon 1997, McWilliams & Siegel 2000, Orlitzky et al. 2003); whether or not it affected shareholders' performance (Friedman 2007, Harjoto & Laskmana 2018, Yi et al. 2020), or if, in any case, the implementation of CSR policies must be voluntary or mandatory (Takala & Pallab 2000, De la Cuesta & Valor 2004, Ramírez 2006, Sheehy 2015, Lock & Seele 2016, Gatti et al. 2019) or defending the establishment of mandatory minimums (Fernández 2007). The debate lived at both academic and business levels in recent decades, and the notoriety acquired in all social spheres (Gatti et al. 2019) shows that CSR is not a fashion, (Lin et al. 2020) but a way of working (García-Hernández et al. 2017), in which it is no longer only part of business strategy, but also acts as an element to be taken into account in the internal control of the company and in the performance of business innovation (Li 2020).

The first author to defend that social and economic value should go together was Bowen (1953). Following this position, Porter & Kramer

(2003) advocate the benefits generated by the implementation of CSR measures. The main detractor of the implementation of the CSR is Friedman (2007), who consider that the sole objective of companies is to maximize the value of their shareholders, as they are the ones who provide the funds to make the investments.

The quest for a universal concept leads to one of the main problems of CSR, which is that there is no consensus on CSR as a theory (Gatti et al. 2019). A disparity of expressions can be found that each time speak of the same thing, "Corporate Social Responsibility", "Company Social Responsibility", "Company Responsibility", "Business Responsibility", "Corporate Responsibility", "Social Responsibility", "Business Ethics" and even going further, it is confused with "Sustainable Development" or "Sustainability" (Lu et al. 2019). These different expressions do not affect the very essence of CSR, but rather prevent the existence of both academic and business consensus.

Traditionally, CSR has always been associated with philanthropy, that is, it took a beneficial nuance on the part of companies that sought to improve social welfare (Escamilla-Solano et al. 2016). Likewise, it was considered the actions done by large companies or multinationals, although the current conception extends them also to medium and small companies (Castillo-Muñoz et al. 2017). Nowadays, the implementation of CSR must harmonize and balance the objectives of creating business value, ensuring sustainable development, and improving social well-being (Ntanos et al. 2018).

Globalization and the development of new technologies has increased the relationships of agents in the world. The inclusion of ethical values in the strategy, the need to increase reputation and legitimacy (Díez-Martín et al. 2014), as well as assess the human capital of the company (Rodrigo & Arenas 2008, Clacher & Hagendorff

2012) have changed the business paradigm (Barauskaite & Streimikiene 2020). Companies must act in a global world where their social, environmental, and economic actions will be judged, in addition to contributing to improving social well-being (Barauskaite & Streimikiene 2020). Hence, a differentiating element is the disclosure of its actions to citizens (Escamilla-Solano et al. 2019), especially in sectors whose social and environmental impact is greater, becoming a competitive advantage (Escamilla-Solano et al. 2016), in a way that allows the company to know how society reacts to the disclosure of such information (El Akremi et al. 2018).

For all these reasons, it is necessary to know what the development of research in CSR in order has been to show, on the one hand, which were the thematic areas on which it is based and, on the other hand, to see where future studies are headed.

## METHODOLOGY

This study aims to obtain the intellectual structure of the CSR that allows to know the evolution, performance and productivity of this research area, as well as to know the different themes on which it is based, its evolution and its impact. To achieve this objective, a bibliometric analysis was proposed. Bibliographic data imported from databases can be organized and analyzed using different software for bibliometric analysis (De Souza Vanz & Chittó Stumpf 2010). In this study, the SciMAT software, developed by the SECABA group of the University of Granada (Cobo et al. 2012), was selected. SciMAT was chosen over other software (VOSviewer, CiteSpace or Bibexcel) due to its flexibility when selecting measurements to obtain and visualize bibliometric networks. This tool also provides a wide range of pre-processing techniques that

allow us to refine the results obtained from the database, improving their quality (Cobo et al. 2012, Paule-Vianez et al. 2020).

Bibliometrics is a science that allows the treatment and study of quantitative data from scientific publications providing useful and objective tools in the processes of evaluation of the results of scientific activity (Bordons & Zulueta 1999). There are two procedures to address the bibliometric study: the evaluation and analysis of performance and scientific production through bibliometric indicators, and the creation and analysis of scientific maps (Cobo 2012), being the objective of this research address both procedures (Paule-Vianez et al. 2020).

The analysis of scientific maps (also known as bibliometric maps) is a bibliometric technique whose objective is to monitor a scientific area to understand its structure and its evolution, as well as its main participants (Noyons et al. 1999). This technique is performed using part of the information contained in the documents collected from the bibliographic databases. The different types of information that can be used are known as units of analysis, with the unit of analysis selected in this study being the keywords (Paule-Vianez et al. 2020).

Among the keywords, the type of relationship selected has been the co-ocurrence analysis (Callon et al. 1983). The co-occurrence relationship occurs when two elements appear together in a document, so there will be a co-occurrence relationship between two elements $i$ and $j$ if both elements appear in the same document. This analysis allows identifying the basic themes of a scientific area showing conceptual and cognitive aspects of it (Cobo 2012).

To obtain significant information on the area through this analysis, the bibliometric network obtained through the co-occurrence of keywords (co-words) must be normalized. The normalization of the network allows relativizing the relationships between two units of analysis, giving greater importance to those units with a low frequency, but with a high frequency of co-appearance, compared to those units with a high frequency, but a low frequency of co-appearance (Cobo 2012). The standardization measure used in this paper has been the equivalence index, $c_{ij}^2 / e_i e_j$, (Callon et al. 1991) where $c_{ij}$ denotes the co-occurrence of the elements $i$ and $j$, and $e_i$ and $e_j$ denotes the frequency of the elements $i$ and $j$. This measure was chosen over others such as Salton's Cosine and the Jaccard index following Michelet (1998), Callon et al. (1991) and Van Eck & Waltman (2009) who determine that he most appropriate measure for normalizing co-occurrence frequencies is the equivalence index.

Once the network has been standardized, the scientific map can be created by applying clustering techniques with which to divide the set of elements into different subsets whose nodes are strongly linked to each other (clusters), and poorly linked to the rest, thus obtaining the themes. In this paper, the clustering algorithm based on simple centers is used, which has the advantage of return automatically the clusters labeled with the most central node of the cluster (Cobo 2012).

In each topic/theme obtained, represented by various nodes or keywords, the size of the sphere of each node is proportional to the number of documents associated with that keyword and the thickness of the lines between two keywords is proportional to its equivalence index (Cobo 2012) (Figure 1).

theme in the area, the different clusters will be on the well-known Strategic Diagram established by Callon et al. (1991). The Strategic Diagram allows positioning different themes in
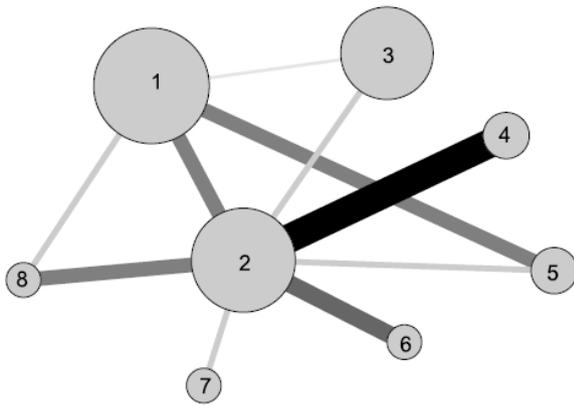
**Figure 1. Cluster Structure. Source: Cobo (2012).**

it according to their centrality (x axis) and their density (y axis).

The measure of centrality determines the degree of interaction of a theme with the rest of the themes, that is, it measures the strength of the external links of a topic with the rest, defining as: $c = 10 \cdot \Sigma e_{kh}$ Where k is a keyword of the cluster and h a word of another cluster. Thus, the centrality allows to evaluate the importance of a theme in the global development of the scientific area (Cobo 2012).

The density measurement measures the degree of internal cohesion of a theme, so that it measures the internal strength of the different links of the nodes within a cluster. It is defined as: $d = 100 \frac{\Sigma e_{ij}}{w}$, where i and j are two words belonging to the cluster. Thus, the density of a topic informs the level of development of that topic (Cobo 2012).

Depending on the centrality and density of the themes, we can classify the different themes into four categories in the Strategic Diagram (Cobo 2012) (Figure 2).

- Upper-right quadrant: they are known as motor themes of the area since they have a strong centrality and density. They are well developed and important topics/ themes in the scientific area.

- Upper-left quadrant: these are very specialized themes, which are highly developed but isolated from the rest, so they have marginal importance in the scientific area.
- Lower-left quadrant: these are very underdeveloped and marginal topics/ themes, so they represent emerging or disappearing topics/themes.
- Lower-right quadrant: these are topics that are enough related to the rest but not well developed, so they represent basic or transversal themes of the scientific area.

In this paper, apart from detecting the main themes addressed by the CSR, the objective is to know their evolution forming the thematic areas. For this, a longitudinal analysis is carried out.

To perform the longitudinal analysis, it is necessary previously to divide the sample into consecutive periods. Thus, being $T^t$ the set of the themes detected in the period of time t, where $U \in T^t$ represents each of the themes detected in the period t, and being $V \in T^t$ the set of the themes detected in the next period of time $t +$

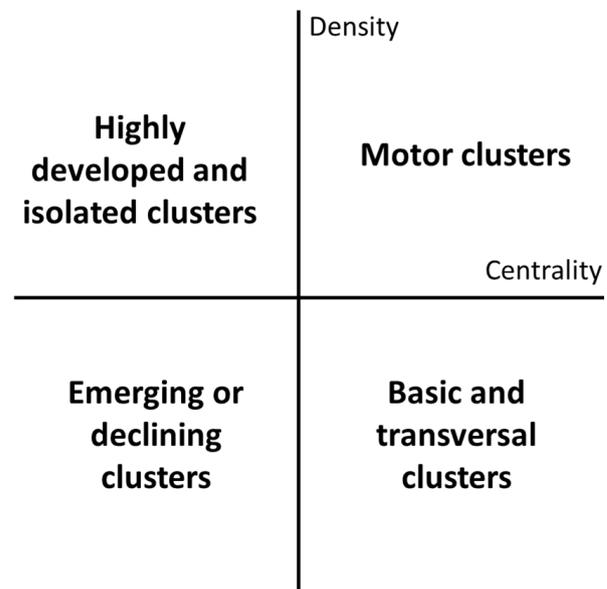

**Figure 2. Strategic diagram. Source: Cobo (2012).**

*1*, it will be said that there is an evolution from theme *U* to theme *V* when the networks of both themes share at least one keyword *k*. In this way, the keywords $k \in U \cap V$ will be considered as the "thematic nexus" of evolution (Cobo 2012).

The importance of a "thematic nexus" can be measured through several indexes, the inclusion index being chosen, $\#(U \cap V)/min.(\#U, \#V)$, where # is the number of keywords in the set (Rip & Courtial 1984). This index has been selected because it is the most suitable for measuring the similarity between sets compared to other indices. In this way, a thematic area is defined as a group of themes that have evolved over several consecutive periods of time (Cobo 2012).

Figure 3 shows the relationships between the themes in different periods of time. Solid lines indicate that the linked topics or themes share the same name: both topics were labeled with the same keyword (Line 1), or the label of one of the topics is part of another topic (Line 2); and dashed lines determine that the themes share elements that do not match the cluster label (Line 3). In addition, the thickness of the links between two themes is proportional to the value of the index of inclusion between both themes. Cluster *D¹* has not been continued over time, and Cluster *D²* can be considered as the beginning of a new thematic area (Cobo 2012).

## DATA

Those articles published until 2017 in a large sample of indexed scientific journals will be analyzed, extracting data from the Thomson Reuters, Web of Science (WOS) platform. WOS has been selected compared to other platforms because of the large number of journals it collects since 1900 and because the famous impact factor of a journal indexed in Journal Citation Reports (JCR) is elaborated on WOS, considered a key
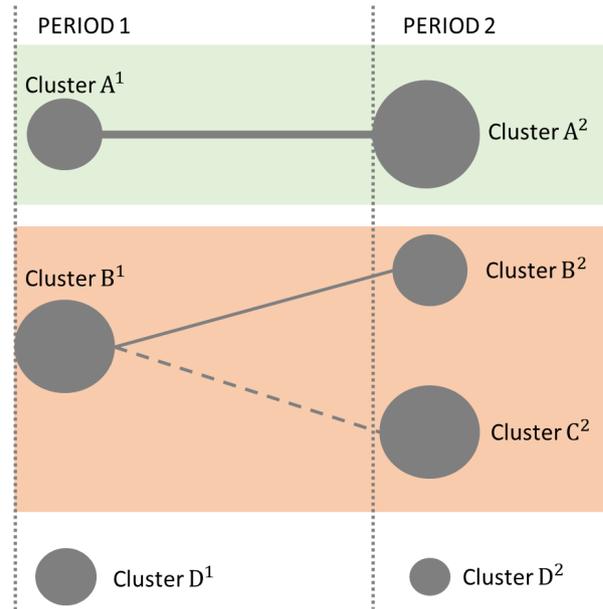


**Figure 3. Thematic Evolution. Source: Cobo (2012).**

indicator to assess the quality of the scientific activity of a researcher (Bordons & Zulueta 1999).

The search is carried out on July 2, 2018, selecting only the articles of journals belonging to the Social Sciences Citation Index Database (SSCI), which is the WOS database that covers scientific journals in the field of Sciences Social.

To obtain the widest possible sample of articles that investigate CSR, in this study the concepts of "Social Responsibility", "Corporate Social Responsibility" and "CSR" have been used, performing the search by themes, which select the articles that contain these concepts in the title, summary and keywords. The query has therefore been TS = ("Corporate Social Responsibility" and "Social Responsibility" and "CSR"). Because with the sample of articles obtained, several papers were found under the keyword "CSR" that do not investigate in CSR, a manual debugging has been carried out eliminating all the articles that do not correspond to the area under study.

In this way, they were obtained 3,163 articles published until 2017.

## RESULTS

### Evaluation and analysis of performance and scientific production

Next, the results obtained are collected, initially those of a descriptive nature. Starting with the volume of documents, 3,163 publications in WOS have been obtained within the CSR area. The first article found dates back to 1978 and is the article "Functions of Marxist-Leninist philosophy in the CSR" by Hanzel (1978) and published in Deutsche Zeitschrift fur Philosophies. From the first article, if the evolution of the publications is analyzed year by year (Figure 4), it is observed how the study area has had a particularly marked growth since 2003. At which time a trend in General increase in the number of publications, with 11 documents published in WOS in 2003, going to 183 publications in 2009, and 515 in 2017, being this year the one with the greatest scientific production on the study area.

Analyzing the authors who have conducted CSR studies, it is observed in Table I how the most productive author has been Isabel-María García-Sánchez of the University of Salamanca with 22 documents published in WOS.

Focusing on the most cited articles in the area, it is observed in Table II how the 10 most cited articles have been published in different journals, the "Journal of Marketing" is the only journal that contains two of the 10 most cited articles within its publications. The most cited article in the area is "Strategy and Society" by Michael E. Porter and Mark R. Kramer published in 2006 in the "Harvard Business Review", which has 1,727 citations so far.

As for the journals in which more articles of CSR have been published, there are 587 journals, the 10 journals that have published the most articles are those shown in Table III, which collect 42.40% of total items. The journal that has published more articles on CSR has been the "Journal of Business Ethics" with 670 articles (21.18% of the total).

In the analysis of productivity by country, it is observed that CSR studies are located in 92 different countries, being the countries with the greatest number of published articles United States (759), United Kingdom (509) and Spain (307) (Table IV). This result agrees with the observations of Reverte (2009) and Gras-Gil et al. (2016) in relation to the prominent position of
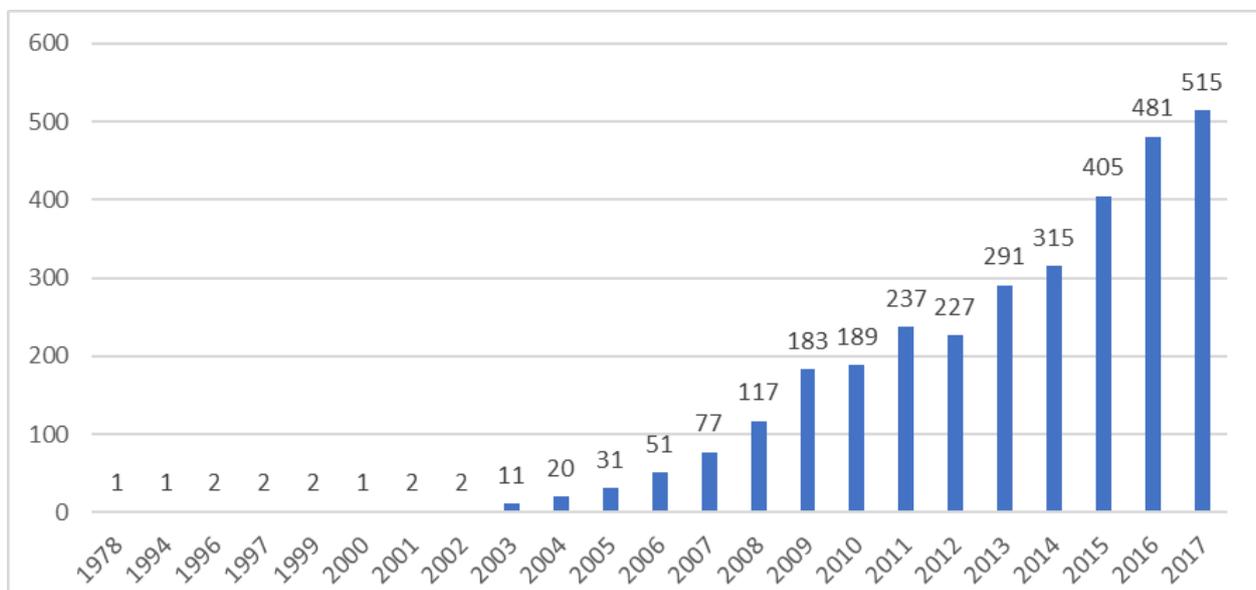


**Figure 4.** Evolution of CSR publications.

**Table I. Production of the authors in CSR.**

| Authors | Nº Doc. |
|---|---|
| García-Sánchez, I.-M. | 22 |
| Jamali, D. | 20 |
| Pérez, A. | 19 |
| Lee, S. | 19 |
| Moon, J. | 17 |
| Lindgreen, A. | 16 |
| Kolk, A. | 15 |
| Rodríguez del Bosque, I. | 15 |
| Mattila, A. S. | 14 |
| Bhattacharya, C. B | 14 |
| Sen, S. | 14 |

production in the US and the UK of CSR research. For its part, Spain's third place may be motivated by the exponential increase in awareness of the importance of CSR compared to other countries.

## Creation and analysis of scientific maps

In addition to evaluating and analyzing the performance and productivity of CSR as a whole, this study tries to evaluate the themes that define this area of research and what has been its evolution over time. Thus, the total sample has been divided into four periods, taking into account the importance that CSR acquired by companies and society, and determining events such as the subprime crisis and the European crisis:

1) From 1978 to 2006: 240 documents.
2) From 2007 to 2010: 612 documents.
3) From 2011 to 2014: 935 documents.
4) From 2015 to 2017: 1,035 documents

## Research themes

### First period (1978-2006)

Following the Strategic Diagram (Figure 5), in this period 4 have been the topics on which research has focused on CSR (*Consumers, Ethics, Financial Performance* and *Corporate Reputation*). During this period, research in CSR has been characterized by the debate raised both conceptually and its impact on the company. The thematic areas that are observed are mainly determined by studies on advantages or disadvantages, arguments for or against, as well as the impact of implementing CSR measures.

The motor themes found have been *Ethics* where research refers to topics related to the CSR concept itself, as well as to ethics in small and medium enterprises. Regarding the *Consumers* theme, this refers to the perception that consumers have about CSR initiatives by companies. *Financial Performance* is a theme that this first period has a great weight derived from the existence of defenders and detractors of the implementation of CSR in companies. The latter stated that companies should only create value for shareholders and direct all their efforts to generate greater profit. On the contrary, the defenders of the CSR stated that the implementation of CSR measures goes beyond what is legally established, assuming a source of competitive advantages that companies should take advantage of. Therefore, the majority of the research carried out in that period do reference to measure the impact at the business level and with the stakeholders. The emerging theme found has been *Corporate Reputation* that, linked to the previous themes, begins a research line that analyzes the impact of CSR measures on the reputation of companies.

According to the performance measures (Table V), the theme that has presented a greater number of documents and H Index in this period has been *Ethics*, however, the theme with a greater number of citations has been *Financial Performance*. Regarding the theme with lower performance, *Corporate Reputation* is

**Table II. Most cited articles in Corporate Social Responsibility.**

| Tittle Article | Authors | Journal | Year | N Citations |
|---|---|---|---|---|
| Strategy and Society: The link between competitive advantage and corporate social responsibility | Porter, M. E. & Kramer, M. R. | Harvard Business Review | 2006 | 1.989 |
| Corporate social responsibility: A theory of the firm perspective | McWilliams, A & Siegel, D. S. | Academy of Management Review | 2001 | 1.727 |
| Does doing good always lead to doing better? Consumer reactions to corporate social responsibility | Bhattacharya, C. B. & Sen, S. | Journal of Marketing Research | 2001 | 1.275 |
| The company and the product: Corporate associations and consumer product responses | Brown, T. J. & Dacin, P. A. | Journal of Marketing | 1997 | 1.246 |
| Corporate social responsibility and financial performance: Correlation or misspecification? | McWilliams, A. & Siegel, D. S. | Strategic Management Journal | 2000 | 927 |
| Putting the S back in corporate social responsibility: A multilevel theory of social change in organizations | Rupp, D. E., Aguilera, R. V., Williams, C. A. & Ganapathi, I. | Academy of Management Review | 2007 | 800 |
| Corporate social responsibility, customer satisfaction, and market value | Luo, X. M. & Bhattacharya, C. B. | Journal of Marketing | 2006 | 731 |
| How Corporate Social Responsibility is Defined: An Analysis of 37 Definitions | Dahlsrud, A. | Corporate Social Responsibility and Environmental Management | 2008 | 670 |
| Concepts and definitions of CSR and corporate sustainability: Between agency and communion | Van Marrewijk, M. | Journal of Business Ethics | 2003 | 558 |
| Doing better at dong good: When, why, and how consumers respond to corporate social initiatives | Bhattacharya, C. B. & Sen, S. | California Management Review | 2004 | 524 |

Source: Own elaboration.

found with only 3 documents in this period and an H Index of 3, however, the important number of citations that sum up these 3 documents (1,710), clearly showing the emerging character of this topic.

### Second period (2007-2010)

In this second period, the contributions made have a double contribution, on the one hand, academic, to shed light on its definition, dimensions, and importance in the company, stating that it is not a fashion, but that it is essential to integrate it into the company's strategy. And on the other hand, business derived from the importance that companies have to disclosure CSR information. In these four years, research in CSR focuses on 8 themes

(*Large Firms*, *Partnerships*, *Behavior*, *Financial Performance*, *Earnings*, *Sustainability*, *Industry* and *Governance*) (Figure 6).

*Financial Performance* continues to be a motor theme in the area, emerging *Behavior* as a new motor theme, trying to show that the behaviors of stakeholders can affect companies, therefore, the research found are linked to the behavior of stakeholders, as well as the perception they have of companies. In this period, *Sustainability*, *Industry* and *Governance* are basic or transversal themes. *Sustainability* begins to reveal conceptual differences in terms of sustainability and CSR, as also the need to disclosure information on the measures that companies apply. *Industry* refers to the fact that companies will extend the application of CSR

**Table III.** Most productive journals in Corporate Social Responsibility.

| Journal | Nº Doc. | % | Year Vol 1 | I.F.2017 |
|---|---|---|---|---|
| Journal of Business Ethics | 670 | 19,84 | 1982 | 2,917 |
| Corp. Soc. Responsib.  Environ. Mgmt. | 148 | 4,38 | 1993 | 4,918 |
| Journal of Cleaner Production | 98 | 2,90 | 1993 | 5,651 |
| Sustainability | 82 | 2,43 | 2009 | 2,075 |
| Business Ethics-A European Review | 77 | 2,28 | 1992 | 3,029 |
| Business & Society | 63 | 1,87 | 1960 | 3,214 |
| Journal of Business Research | 62 | 1,84 | 1973 | 2,509 |
| Public Relations Review | 55 | 1,63 | 1975 | 1,378 |
| Resources Policy | 46 | 1,36 | 1974 | 2,695 |
| Management Decision | 40 | 1,18 | 1967 | 1,525 |
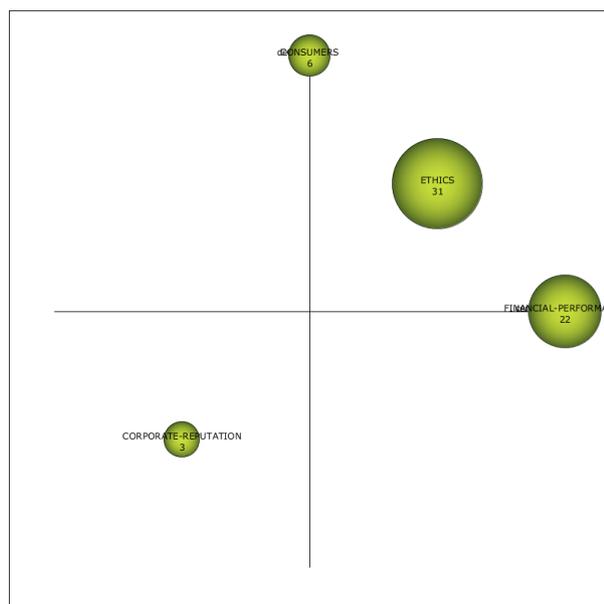


**Figure 5. Strategic diagram for the 1978–2006 period.**

**Table IV.** Most productive countries in Corporate Social Responsibility research.

| Country | Nº Doc. |
|---|---|
| USA | 759 |
| UK | 509 |
| Spain | 307 |
| China | 239 |
| Australia | 217 |
| Canada | 210 |
| France | 179 |
| Netherlands | 160 |
| South Corea | 150 |
| Germany | 123 |

measures to their supply chain due to increased concern and engagement in sustainable distribution and logistics. The term industry also encompasses the sectoral studies carried out on CSR. Regarding the *Governance*, this is determined by the many corporate scandals experienced, which led many companies to consider, on the one hand, the implementation of ethical and conduct codes and, on the other, to improve transparency that would reduce the open gap between society and companies. Therefore, the research found refers to codes of ethics, conduct, and transparency. Likewise, in this period, the topics *Large Firms*, *Partnerships* and *Earnings* are also very developed but isolated, which also carry out studies related to the supply chain and SMEs.

By Table VI, the theme with the highest performance in this period, standing out notably over the rest, has been *Financial Performance*

**Table V.** Performance of the themes in the 1978–2006 period.

| Cluster | Documents Count | H Index | Sum Citations |
|---|---|---|---|
| Financial Performance | 22 | 21 | 5,587 |
| Ethics | 31 | 28 | 3,689 |
| Consumers | 6 | 6 | 1,730 |
| Corporate Reputation | 3 | 3 | 1,710 |

with 129 documents published in this period, an H Index of 54 and 9,777 citations.

### *Third period (2011-2014)*

CSR research in this period focuses on 15 research topics (*Financial Performance*, *Consumers*, *Governance*, *Sustainability*, *Framework*, *Responsibility*, *Employees*, *Attributions*, *Risk*, *Resource Based View*, *Charismatic Leadership*, *Public Goods*, *Websites*, *Top Management* and *Values*) as seen in the Strategic Diagram (Figure 7). The research in this period is around the consolidation of the CSR. It is generally accepted both socially and in business that companies must be socially responsible if they want to endure over time.



**Figure 6.** Strategic diagram for the 2007–2010 period.

*Financial Performance, Consumers, Governance* and *Employees* are placed in this period as motor themes. Both *Financial Performance* and *Consumers* and *Governance* continue to consolidate within the CSR and the line of research is similar to those found in previous periods. The appearance of the term *Employees* within the research shows that the concern for these is consolidated, so the research that are found are related to satisfaction, commitment, employee perception, etc. *Sustainability* is maintained in this period and *Responsibility*; *Attributions* and *Framework* are new as basic themes. *Responsibility* and *Framework* refer to the conceptual development of CSR itself; therefore, the research that are found are related to the importance of establishing a CSR strategy in companies regardless the size of them. The specific themes little linked to the rest in this period are *Charismatic Leadership*, *Top Management*, *Public Goods* and *Resource Based View*. With these themes, it is clear that the CSR is present in many areas from business management to leadership of managers. *Websites*, *Values* and *Risk* are themes positioned as emerging in this period. Although the first two are derived mainly from the change that society as a whole suffers with the appearance of the social media and its impact on brand loyalty, values and legitimacy; *Risk* refers to research where CSR can affect both the cost of capital of companies and cash
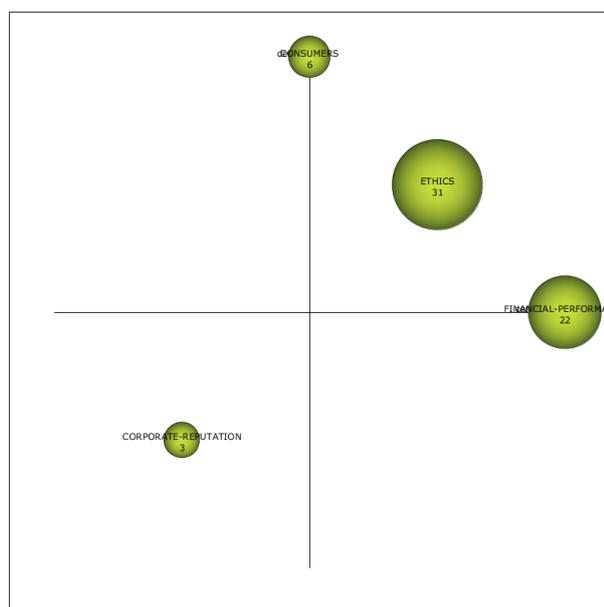
**Table VI. Performance of the themes in the 2007–2010 period.**

| Clúster | Documents Count | H Index | Sum Citations |
|---|---|---|---|
| Financial Performance | 129 | 54 | 9,777 |
| Governance | 39 | 25 | 1,667 |
| Industry | 37 | 25 | 2,407 |
| Behavior | 31 | 21 | 2,285 |
| Sustainability | 29 | 21 | 1,724 |
| Earnings | 9 | 9 | 747 |
| Partnerships | 4 | 4 | 225 |
| Large Firms | 4 | 4 | 228 |

flow, as well as the improvement of the business rating.

In the 2011-2014 period (Table VII), the *Financial Performance* theme continues to be the subject with the largest number of documents (362), highest H Index (55), and more citations (11,424).

### Fourth period (2015-2017)

As seen in the Strategic Diagram (Figure 8), in recent years, research in CSR has focused on 14 research topics (*Financial Performance, Consumers, Job, Disclosure, Ethics, Industry, Product, Diversity, International, Risk, Identification, Labor, Small Firms* and *Institutional Theory*). Research in this period shows that some thematic areas are from the beginning but that the change in the culture of society, the incorporation of new technologies and the access to information immediately has resulted in society and consumers have the power or ability to reward or punish companies and / or countries for their actions.

The motor themes found in the 2015-2017 period have been *Consumers, Financial Performance* and *Disclosure.* Although the term *Disclosure* was in previous periods included in thematic areas such as *Sustainability* or *Governance*, in this last period it is consolidated as a thematic area. The disclosure of non-financial and CSR information by companies makes it a competitive advantage. *International, Product, Ethics* and *Industry* are themes positioned as basic in this period, following the same line of research consolidation as in previous periods. *Labor, Identification, Diversity* and *Job* are located as highly developed but isolated themes during this period, the latter more connected to the rest. *Labor* and *Job* appear as new themes but the studies they have included encompass topics seen in previous periods such as those related to the supply chain and *Employees* respectively. A topic to consider is *Diversity* considering the relevance of studies on diversity and equality within companies. Therefore, the research found in this topic refers to studies related to management and business management by women, the employability of personnel belonging to minority groups, etc. Emerging or disappearing themes in recent years have been *Small Firms, Institutional Theory* and *Risk. Institutional Theory* refers to research related to legitimacy and commitment at institutional level, an emerging aspect, taking into account the importance of these variables when managing companies. The appearance as
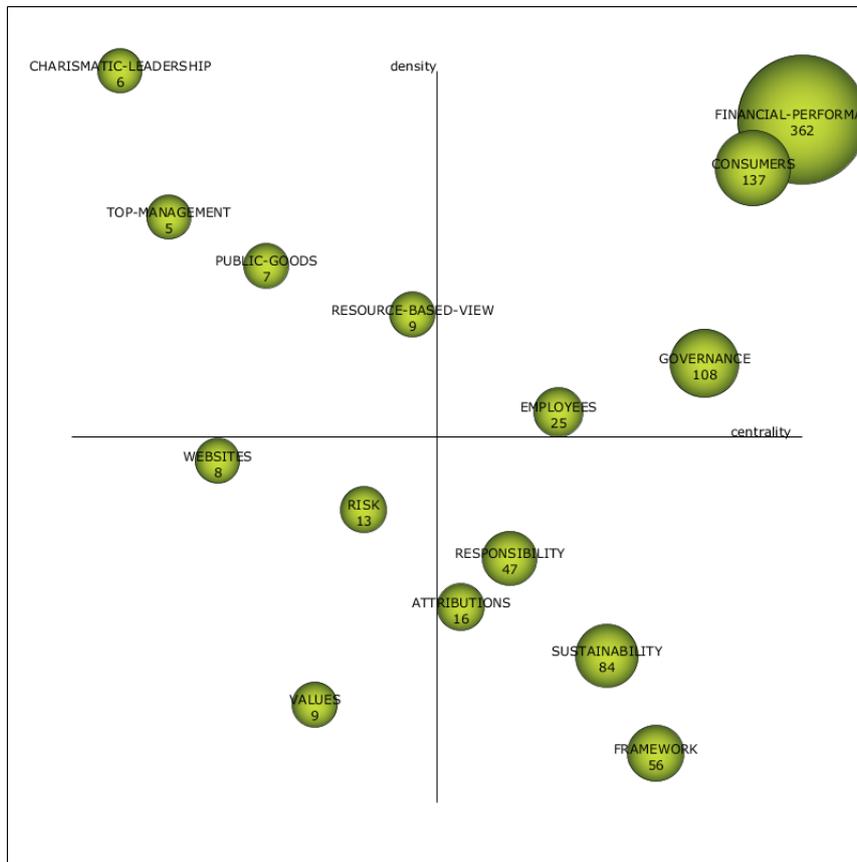
**Figure 7.** Strategic diagram for the 2011–2014 period.

a theme of *Small Firms* shows that not only large companies have to implement CSR, but that the great importance of SMEs in the business fabric of the countries cannot be left aside, so the research found is related to these types of companies. Regarding *Risk*, could be considered as a theme in possible future disappearance, the study of the risk assumed in CSR investments becoming less and less relevant in the academic field.

In the 2015-2017 period (Table VIII), *Financial Performance* continues to be the theme with the largest number of documents (556), highest H Index (23), and more citations (3,093).

## Thematic evolution

With these themes and their relationships in the different periods, the thematic areas that group the research in CSR were identified through a Longitudinal Analysis (Figure 9). Six main thematic areas were identified and are shown with different colors: *Financial Performance, Corporate Reputation, Ethics, Consumers, Employees* and *Risk*. Likewise, some themes were detected as not continued prominently over time, such as the *Partnerships*, which emerged in the 2007-2010 period, *Websites* and *Charismatic Leadership* that emerged in the 2011-2014 period but that do not have a link with other themes until 2017. It is worth highlighting the theme *Labor* that emerged in the 2015-2017 period for which one must wait a few years to learn about its future development.

The different thematic areas detected, as well as their evolution and performance (Table IX):

- **Financial Performance:** this thematic area, which has emerged since the beginning of research in CSR, stands as the most prominent in terms of its performance

**Table VII. Performance of the themes in the 2011–2014 period.**

| Cluster | Documents Count | H Index | Sum Citations |
|---|---|---|---|
| *Financial Performance* | 362 | 55 | 11,424 |
| Consumers | 137 | 34 | 3,343 |
| Governance | 108 | 32 | 3,387 |
| Sustainability | 84 | 27 | 2,038 |
| Framework | 56 | 24 | 1,475 |
| Responsibility | 47 | 20 | 1,027 |
| Employees | 25 | 13 | 555 |
| Atributions | 16 | 11 | 495 |
| Risk | 13 | 9 | 460 |
| Resource Based-View | 9 | 8 | 242 |
| Charismatic Leaderchip | 6 | 5 | 165 |
| Public Goods | 7 | 6 | 522 |
| Websites | 8 | 6 | 204 |
| Top-Management | 5 | 5 | 190 |
| Values | 9 | 6 | 135 |

in terms of H Index (87) and citations (31,021), and in the second position several documents published (1,115). Financial Performance encompasses the study of how CSR has an impact within the company, from a financial point of view, as well as in the creation of value.

• **Corporate Reputation:** stands in 2017 as the thematic area with the largest number of published documents (1,284), being very close in H index (86) and total citations (30,235) to *Financial Performance*. This thematic area highlights the importance of implementing CSR policies in the company's reputation.

• **Ethics:** this thematic area has 656 published documents, an H Index of 59 and 14,629 citations. In the thematic area, *Ethics* investigates whether values, codes of conduct and ethical codes influence the management of the company.

• **Consumers:** the thematic area of *Consumers* has presented a performance until 2017 of 383 published documents, an H Index of 48 and a total of citations of 8,666. *Consumers* are characterized by analyzing consumers' perception of the company's actions as current and potential consumers.

• **Employees:** This thematic area, which emerged in the 2011-2014 period, has grouped a total of 149 published documents, an H Index of 17 and a total of 1,055 citations in the analyzed period. This thematic area analyzes how the application of CSR measures influences employee satisfaction, commitment, loyalty, as well as the sustainable human resource management.

• **Risk:** Within the thematic areas found, *Risk* together with *Employees* has been the thematic area that emerged later (2011-2014 period) and the one that presented the lowest performance both in the number of documents published (28), and in H Index (10) and total
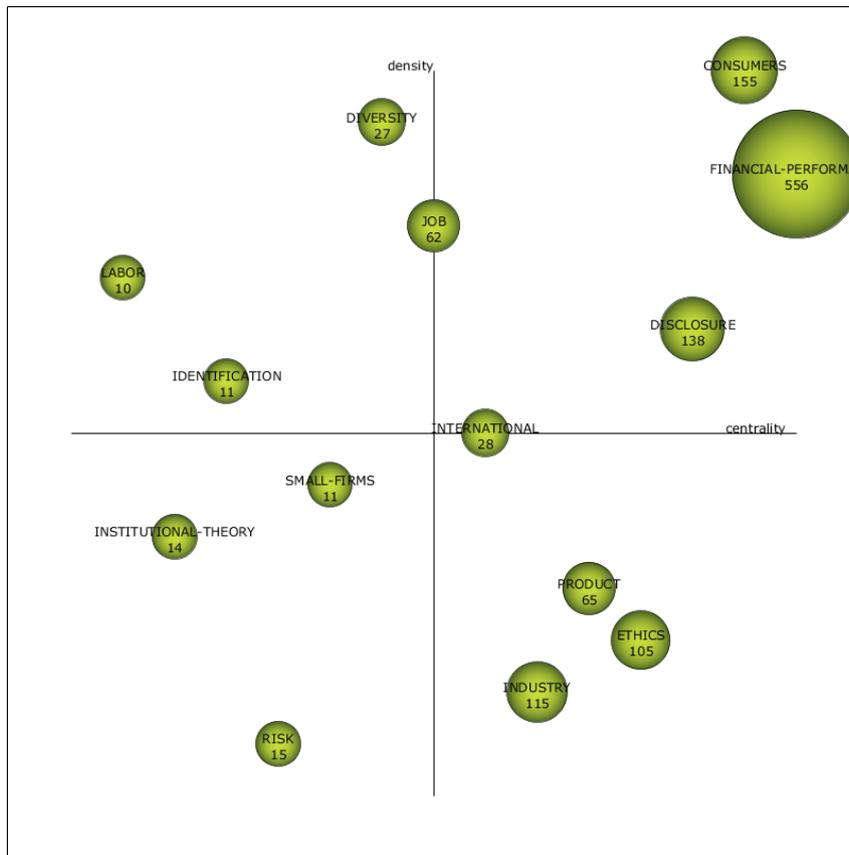
**Figure 8.** Strategic diagram for the 2015–2017 period.

citations (521). The thematic area of *Risk* addresses research that refers to whether the implementation of CSR measures can influence financial aspects such as the cost of capital, cost of debt, rating of the company, as well as the investment by shareholders.

## DISCUSSION AND CONCLUSIONS

The emergence of CSR has changed the business paradigm from a simple entity that generates economic benefits to an entity that goes beyond, changing the business objective of profit maximization, the maximization of the value of the company and its distribution to all stakeholders.

However, the main problem with CSR is that there is no consensus that unifies it as a theory. It is essential to know the intellectual structure of CSR, its evolution, performance and productivity as well as the different themes and its impact. Thus, this study is one of the first to use the bibliometric to study the intellectual structure of CSR. It has been analyzed, on the one hand, the performance and scientific production by author, article, journal, and country, and on the other, a co-word analysis with scientific mapping techniques have been performed, extracting the themes highlights in CSR and its evolution for the period 1978-2017.

The results obtained show, from the evaluation and analysis of scientific production, how CSR is an area of research with a significant growth since its inception, especially in recent years, demonstrating how it has not yet reached its maturation cycle.

United States, United Kingdom and Spain have been the most productive countries, and the author with the largest number of

**Table VIII. Performance of the themes in the 2015–2017 period.**

| Cluster | Documents Count | H Index | Sum Citations |
|---|---|---|---|
| Financial-Performance | 556 | 23 | 3,092 |
| Consumers | 155 | 13 | 765 |
| Disclosure | 138 | 14 | 673 |
| Ethics | 105 | 11 | 486 |
| Industry | 115 | 14 | 666 |
| Product | 65 | 8 | 271 |
| Job | 62 | 9 | 259 |
| Diversity | 27 | 7 | 159 |
| International | 28 | 11 | 279 |
| Risk | 15 | 5 | 61 |
| Identification | 11 | 3 | 46 |
| Labor | 10 | 7 | 108 |
| Small Firms | 11 | 6 | 86 |
| Institutional Theory | 14 | 4 | 65 |

publications in WOS the Spanish Isabel-María García-Sánchez of the University of Salamanca.

Regarding the most cited article is the "Strategy and Society" by Porter & Kramer (2006) in the "Harvard Business Review". The journal that has published more articles in the area of CSR has been the "Journal of Business Ethics" with 21.18% of the total. And also, it is found that one of the articles published in this journal is among the 10 most cited articles in CSR, specifically that of Van Marrewijk (2003).

However, one of the great contributions of this study has been to clarify the different themes that make up the research in CSR and their evolution over time. Thus, the entire sample has been divided into four study periods; the studies from 1978 to 2006 have been characterized by questioning the advantages and disadvantages of implementing CSR measures in companies, emerging as first topics in the area *Ethics, Consumers, Financial Performance* and *Corporate Reputation*. The themes *Ethics* and *Financial Performance* stand out for their performance in the number of documents, the H Index and the citations. In the period from 2007 to 2010, the research in CSR has focused on shedding light on the definition, dimensions and importance of CSR in the company, as well as on the importance of its disclosure. *Large Firms, Partnerships, Behavior, Financial Performance, Earnings, Sustainability, Industry* and *Governance* occupied the research in this period. *Financial Performance* is highlighted in both positioning and performance, demonstrating how from this moment it gains strength the study on the consideration of the implementation of CSR measures to increase the value of the company. Between 2011 and 2014, research is centered on the consolidation of CSR in both social and business fields. The most prominent themes in this period are *Financial Performance, Consumers, Governance, Sustainability, Framework, Responsibility, Employees, Attributions, Risk, Resource Based View, Charismatic Leadership, Public Goods, Websites, Top Management* and *Values*. Although the prominent role of the *Financial Performance* theme persists, in this period the concern of companies for their employees is consolidated. Finally, from 2015 to 2017, the great influence that society and consumers have on companies has been revealed, with greater awareness regarding
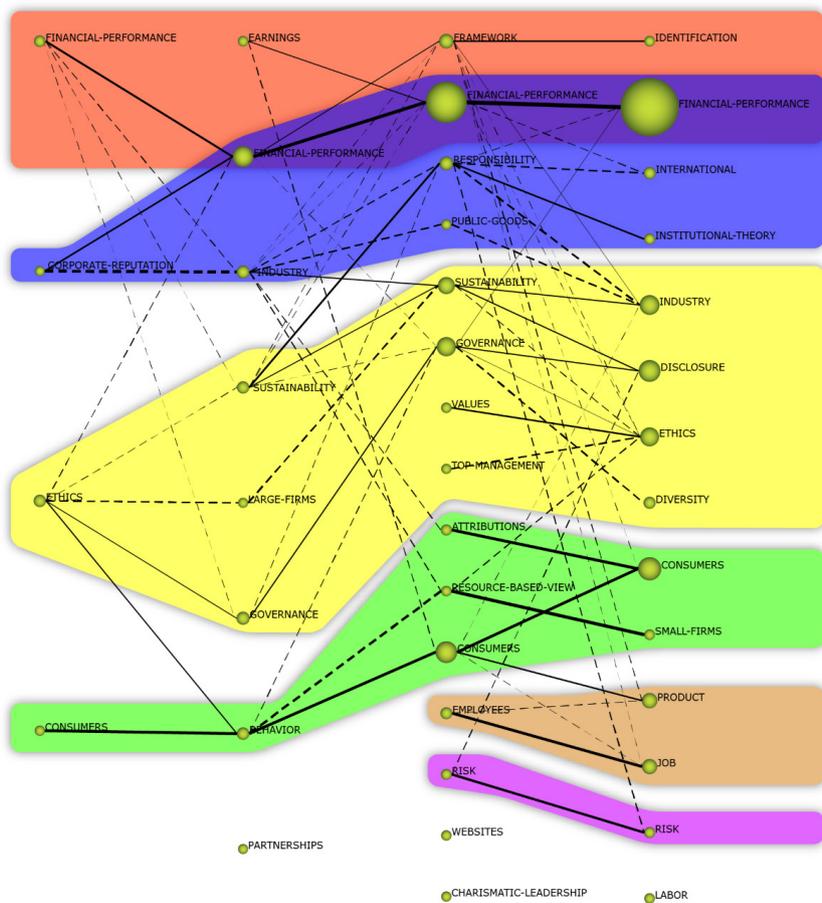
**Figure 9.** Thematic evolution of the Corporate Social Responsibility (1978–2017).

ethics and sustainable development. Thus, in this period the research has focused mainly on the topics *Financial Performance, Consumers, Job, Disclosure, Ethics, Industry, Product, Diversity, International, Risk, Identification, Labor, Small Firms* and *Institutional Theory*. In recent years, although *Financial Performance* has continued to remain a dominant concern for the academic community, the disclosure of information and CSR measures applied and their relevance as a competitive advantage to strength, especially derived from the change in the culture of society, the incorporation of new technologies and access to information immediately. One aspect to highlight in relation to disclosure is the implementation of regulations aimed at increasing the transparency of companies, whose impact on business results has been the subject of debate in recent years.

However, considering the evolution that the different topics have taken over time, the great thematic areas in CSR have been obtained, being *Financial Performance, Corporate Reputation, Ethics, Consumers, Employees* and *Risk*. The thematic areas of *Financial Performance* and *Corporate Reputation* stand out, showing the great interest generated regarding the benefits of implementing CSR measures in the reputation and value of the company. Likewise, there is a thematic area that seems to be increasingly losing importance and it is the perception of the risk derived from the application of CSR measures in companies. This may come from the fact that CSR in companies is no longer considered as an investment but as a long-term survival requirement of the company. In turn, the theme *Labor* is an isolated theme that emerged in the 2015-2017 period, which should

**Table IX.** Performance of the thematic areas.

| Thematic area | Documents Count | H Index | Sum Citations |
|---|---|---|---|
| *Financial Performance* | 1,115 | 87 | 31,021 |
| Corporate Reputation | 1,284 | 86 | 30,235 |
| Ethics | 656 | 59 | 14,629 |
| Consumers | 383 | 48 | 8,666 |
| Employees | 149 | 17 | 1,055 |
| Risk | 28 | 10 | 521 |

be expected to determine if it will become a thematic area of CSR research in the future.

This paper shows the importance that CSR has acquired over time, that its evolution has been consistent with the evolution of society itself, and makes it clear that it is not a fad as many of its detractors put manifested in its beginnings, but it is a form of business management that allows companies to differentiate themselves and obtain competitive advantages over those companies that even today consider that their implementation is an expense instead of investment.

This research has limitations, one of the main limitations found in carrying out this study was to establish the periods. The establishment of periods other than those described could have resulted in different maps.

Another important limitation derives from the selection of the database. In this study, the WOS database has been selected for the extraction of documents that investigate CSR due to a number of journals it has collected since 1900 and for the famous impact factor of a journal indexed in JCR. However, the selection of documents from another database could lead to the extraction of themes and thematic areas other than those found.

Likewise, the research on CSR has materialized in various media (articles, books, book chapters, conference communications, etc.), however, in this study only articles have been selected, which may lead to the selection of others supports different results.

In this paper, the analysis of co-occurrence of keywords has been selected to extract the different themes and thematic areas, taking the keywords provided by the authors and the database. It is possible that some themes related to CSR did not appear because the authors did not incorporate descriptive terms related to them, or because their frequencies were too low.

Finally, there are some limitations related to the parameters selected for the extraction of clusters and thematic areas with SciMAT. The establishment of different measures of size, frequency, normalization, clustering, relevance etc., influences the generated maps, therefore, the use of other measures could lead to other results than those obtained.

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**SANDRA ESCAMILLA-SOLANO**
https://orcid.org/0000-0001-9150-9467

**JESSICA PAULE-VIANEZ**
https://orcid.org/0000-0001-8918-582X

**PAOLA PLAZA-CASADO**
https://orcid.org/0000-0002-8869-6123

**SUSANA DÍAZ-IGLESIAS**
https://orcid.org/0000-0002-5840-3107

Rey Juan Carlos University, Business Economics Department, Paseo de Artilleros, s/n, 28032 Madrid, Spain

Correspondence to: **Sandra Escamilla-Solano**
*E-mail: sandra.escamilla@urjc.es*

## Author contributions

Sandra Escamilla Solano: Conceptualization, Data Curation, Research, Project Administration, Resources, Validation, Writing – Original Draft Preparation. Jessica Paule Vianez: Conceptualization, Data Curation, Formal Analysis, Research, Methodology, Project Administration, Resources, Software, Writing – Original Draft Preparation. Paola Plaza Casado: Supervision, Visualization, Writing – Review & Editing. Susana Díaz Iglesias: Visualization, Writing – Review & Editing.