

Scientific Contribution in the Field of Nonprofit Governance: A Bibliometric Analysis



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Abstract The topic of Governance is an emerging research area within the Third Sector. However, the majority of bibliometric analyses in the field of governance tends to focus on the corporate dimension rather than on the nonprofit field. A bibliometric analysis on governance of nonprofit organizations (NPO) was conducted to identify publication trends. The sample consists of 71 articles selected from the Web of Science database based on the theme “nonprofit governance”. Publications included were published between 1996 and 2021. The bibliometric analysis was conducted using the VOSviewer software involving, among others, the analysis of co-citations. The results of this study show the most productive countries, journals, and authors in this area. Cluster analysis highlighted two major research themes in nonprofit entities governance: the functioning of Boards and the relationship between Boards’ characteristics and organizations’ Performance. Our findings are limited by the use of a single database and the type of publication chosen (articles). Notwithstanding the limitations, this research offers valuable insights to the literature, providing a theoretical map of the intellectual structure of Nonprofit Governance.

Keywords Nonprofit Governance · Third sector · Bibliometric analysis · Systematic literature review

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1 Introduction

In recent years, there has been a growth in the Third Sector, which is responsible for providing social and cultural support and for suppressing some of the gaps evidenced by the state in relation to the population (Salamon & Anheier, 1997). However, this sector is also known for its inequalities, mainly due to its dependence on public funds, which may require governance agreements (Cornforth, 2011).

In terms of management, nonprofit organizations (NPOs) use models and practices from the business sector, as there is scarce information available in the nonprofit one (Carvalho & Braga, 2010). NPOs adopt a business perspective by showing a mimetic isomorphism attitude (DiMaggio & Powell, 1983) and implementing some of the best governance practices of the profit sector (Brown, 2002). In the perspective of Speckbacher (2008) nonprofit governance is associated with the creation of value and cooperation among stakeholders towards a collective goal. For this reason, the Third Sector is challenged with the need to create and develop a governance model adapted to its characteristics (Speckbacher, 2008).

Previous literature has explored the mechanisms adopted by these organizations, according to theories such as the Agency Theory and the Resource Dependence Theory. The Agency Theory preconizes the separation between ownership and management. In this way, non-executive directors must supervise and control the actions of executive directors (Jensen & Meckling, 1976, 2000). Since there is no shareholder figure in Third Sector organizations, it is the responsibility of the administrators to ensure that the organization's mission is fulfilled, avoiding conflicts of interest and power that result from different perspectives and motivations within the organization (agency conflicts), particularly between managers or governance boards and private or public donors (Bradley et al., 2003). It is expected that both parties execute their functions effectively and, if not, donors should solve these divergences by using convenient incentives for the agent, known as agency costs (Jensen & Meckling, 1976). Rather, the Resource Dependence Theory, states that boards of directors should recruit resources for organizations to enhance their performance (Brown, 2005). Some theoretical approaches (Alexander & Weiner, 1998a; Callen et al., 2003; Carvalho et al., 2017a) focus almost exclusively on internal agency problems, emphasizing a "principal-agent" relationship between members of the organization and organizational stakeholders such as their staff, trustees, donors, or clients. Despite not having owners in the sense of shareholders, organizational stakeholders have a stake in the organization and, therefore, can be considered as principals (Jegers, 2009). However, since principals have different objectives (Balser & McClusky, 2005; Jegers, 2009), a comprehensive principal-agent approach of nonprofit organizations must consider multiple principals. In his work, Steinberg (2010) applies the Agency Theory to NPOs and concludes that the existence of multiple principals, with different objectives, hinders the potential of Agency Theory to solve questions of nonprofit accountability, such as disclosure. According to Carvalho et al. (2017a), the Stakeholder-Agency Theory contributes to the understanding of how management

can satisfy the competing interests of stakeholders in the Third Sector, recognizing their interests and assuming they have equal importance in the accountability process.

Whilst some bibliometric analyses have been carried out on the corporate dimension, there is still very little scientific understanding of the nonprofit aspect. Thus, this study seeks to obtain data which will help to address these research gaps by mapping the intellectual structure of nonprofit governance and identifying the main research trends. According to Pritchard (1969), the bibliometric methodology makes it possible to identify the trends and growth of a specific research area; to measure the impact of publications and studies; to understand the amplitude of publication sources; and to know the productivity patterns of the different authors.

Regarding the structure of this paper, in the section below we present the literature review contextualizing the topic of nonprofit governance. The following chapter describes the methodology adopted for the development of the research. A summary of the main findings, together with the literature network analysis is then provided. Finally, the last section provides the most relevant research trends and the main conclusions of this investigation.

2 Literature Review

Governance emerged as a topic of interest for scientific studies in the nineties. During this period, the collapse of companies and accusations of fraud against directors stimulated the interest in matters such as accountability, performance monitorization and creation of auditing guidelines for private sector firms (Siebart & Reichard, 2004). In their research, Gibelman and Gelman (2001) found that governance is a subject that needs scientific development, as the presence of irregularities in Third Sector organizations is suggestive of failures or bad practices on governance.

However, considering the novelty of the nonprofit governance approach in NPOs and the wide scope of the subject of governance, the term has been wrongly appropriately by the scientific community. In fact, it is a generic and complex concept that is used in different contexts and, consequently, displays a diversity of meanings that vary according to the person who use or interprets it (Hyden & Court, 2002).

According to Schmitter (2002), governance is a procedure used in the resolution of several problems, in which the different actors make decisions and cooperate with each other to implement them. Likewise, other authors argue that governance includes a combination of methods that are aimed at solving issues in public and private organizations (Kooiman, 2003) and promoting social movements with common goals (Dodgson et al., 2002; Stoker, 1998).

Nowadays, governance models promote more responsibility over management practices. Corporate Governance is predominantly used in the second sector of civil society, while Nonprofit Governance is responsible for the implementation of management mechanisms considered crucial for the development of NPOs (Alexander & Weiner, 1998a). As noted by Alexander and Weiner (1998b), the governance methods presented by Third Sector organizations arise from the fusion of the

two (corporate and nonprofit) models. The adoption of this “hybrid” model results from the contact and demand of companies whose services include consulting, and from the recruitment of employees from the business sector (Powell & DiMaggio, 2019). In general terms, this model demonstrates the importance and impact of board composition in reducing the likelihood of management failure. Therefore, researchers have focused their attention on the factors that influence the composition of nonprofit governance boards. The concept of “inclusive governance”, introduced by Brown (2002), argues that governance boards should opt to recruit differentiated individuals, since heterogeneous groups are more likely to be innovative and productive. Furthermore, the size of the organization is also a variable that influences the composition and formalization of governance boards (Carvalho et al., 2017b; Cornforth & Simpson, 2002). The underrepresentation of women in governance positions should also be taken into consideration. In his investigation, Shaiko (1996) found four organizational/structural factors that inhibit women at attaining “high governance positions”: budget, age, geographical location of the organization; and the presence of other female members on governance boards.

3 Methodology

Bibliometric studies are a very popular method among researchers (Ding et al., 2014) due to the emergency of scientific databases and the development of bibliometric software, which date back to the fifties (Wallin, 2005). This quantitative and statistical technique is often used to measure the production and dissemination of scientific knowledge in several fields of research (Pritchard, 1969).

The techniques for bibliometric analysis can be divided in two categories: the performance analysis and the science mapping (Donthu et al., 2021). The performance analysis is descriptive in nature and aims to examine the contributions of different research elements such as the authors, institutions, countries and journals (Cobo et al., 2011). There are many different metrics for performance analysis, but the most popular are the number of publications and citations by year or by research elements. Whilst the measurement of the number of publications concerns the productivity, the number of citations is an indicator of impact and influence in the research field (Noyons et al., 1999). On the other hand, science mapping verifies the relationships that are established between research elements (Cobo et al., 2011) by analyzing intellectual interactions and structural links. The most common used techniques for science mapping include citation analysis, co-citation analysis and keyword co-occurrence analysis. Citation analysis is the process in which the citations obtained reflect the intellectual linkages among the publications (Appio et al., 2014). Since the number of citations determines the impact of each publication, articles with a higher number of citations have a stronger influence on the development of the field of research. The co-citation analysis allows to classify cited references, authors, and publication sources. According to Small (Small, 1973) co-citation is the number of times two articles are cited together. Usually, the publications that are cited

together have similar thematic (Hjørland, 2013). So, the co-citation analysis allows to find the most influential publications and the thematic clusters in the research area. Finally, in the co-occurrence analysis, the words used are extracted from the title and abstract of each publication, as well as from the list of keywords provided by the authors. This technique is particularly useful in exploring the contents of the publications and identifying the research areas. The combination of these techniques with the respective network analysis is crucial for the construction of the bibliometric and intellectual structure of the research field (Tunger & Eulerich, 2018).

In the present investigation, we conducted a bibliometric analysis on nonprofit governance using data from Web of Science, which is one of the most distinguished databases of scientific citation. In a first approach we used “nonprofit governance” as a research topic (combination of title, abstract, author keyword, and keywords plus) having identified a total of 90 publications. Then we applied two filters restricting the analysis only to articles and to the Social Science Citation Index (SSCI). After the application of the filters, a sample of 71 articles was collected between 1996 (the year of the first publication) and 2021 (Table 1).

According to Donthu et al. (2021), if the research field is still small, within 50 to 300 articles, it does not warrant the use of bibliometric analysis. Instead, the authors suggest the use of alternative review methods, such as meta-analysis or systematic literature reviews.

Nevertheless, the mapping of the intellectual structure of the nonprofit governance thematic should be considered since scientific progress is the basis for the economic and cultural development of each country. For this reason, a bibliometric analysis was chosen to gain a detailed understanding of the position held by the different countries. Moreover, the outcomes obtained by using this method contribute to the provision of government funds for scientific research (Okubo, 1997; Weingart, 2005) and help to predict the development of each country in the future (Allik, 2008; Moed, 2005).

Once the methodology has been justified, the sample size that will be used in the bibliometric analysis must be validated. Regarding the sample size, Lehmann et al. (2008) and Sjöstedt et al. (2015) recommend the use of, at least, 50 articles to generate conclusions with a low degree of uncertainty. Additionally, the studies conducted by Glänzel and Moed (2013) and Seglen (1994) advocate for the use of

Table 1 Systematic literature review characteristics

Search stage	Details
Database	Web of Science
Search	“nonprofit governance” (title, abstract, author keywords, and keywords plus)
Document types	Articles
Research categories	Year of publication: 1996–2021
Outcomes	Selection of 71 articles from 1996 to 2021

a size sample of approximately 50 to 100 articles. Together, these studies seem to suggest that the sample size chosen in the current study (71 articles) is adequate.

The structure of a scientific field can be identified through its research activity (Ronda-Pupo, 2017). To perform the data analysis the software VOSviewer was used.

4 Results

Considering Fig. 1 it is possible to observe a gradual increase in the number of publications in recent years. Specifically, the period between 2011 and 2021 was responsible for the publication of 46 articles, which represents about 64.7% of the sample. The data also show that, from the year of the first publication (1996) until 2021, only in five years there were no publications of scientific papers related to this theme.

It is also pertinent to mention that 2012 and 2020 correspond to the years during which the highest number of publications occurred, with a total of 9 articles per year.

A possible explanation for the overall increase in the number of publications between 2009 and 2012 is the financial crisis that occurred in 2008. According to Marx and Davis (2012), in 2010 the United States of America (country with the highest number of publications in our sample) was recovering from the worst economic crisis since “The Great Depression”. Thenceforth, the studies aimed to improve the performance of nonprofit management (Marx & Davis, 2012) and to assess the relationships between the governance boards (Reid & Turbide, 2011) during turbulent economic times. Similarly, the peak of publications observed in 2020 coincided with the Covid-19 pandemic that allowed researchers to dedicate more time to the development of scientific research, particularly regarding the adaptations of

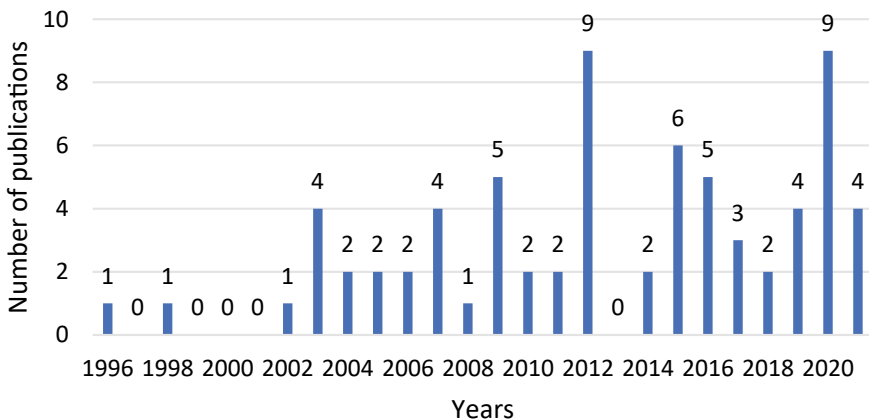


Fig. 1 Evolution of number of publications per year on Nonprofit Governance topics (1996–2021)

governance boards in terms of management and leadership (McMullin & Raggo, 2020).

Regarding the countries responsible for producing the largest number of articles, the United States stands out with 42 articles published, which represents more than half of the articles in the sample (59.15%), followed by Canada, with 7 articles published (see Table 2).

The 71 articles in the sample have a total of 1677 citations; seven were never cited and one had a total of 149 citations (maximum of citations). Table 3 emphasizes the top 5 most cited publications.

The most cited article, “Understanding the behavior of nonprofit boards of directors: A theory-based approach” from Miller-Millesen (2003) attempts to contribute to the development of nonprofit governance boards. The author defined three main objectives: to establish a link between theory and practice, for example, by identifying the theoretical premises that are the basis of the literature; to present a theoretical framework related to the behaviour of nonprofit boards of directors; and to provide potential research topics. The theoretical perspectives addressed by the author are useful to understand the behaviours adopted by nonprofit boards of directors and how they influence organizational performance. Firstly, the Agency Theory predicts that nonprofit boards of directors should select members in charge of supervising the administrative activity to guarantee that their interests are aligned with the expectations of their constituents. Alternatively, the Resource Dependency Theory proposes that the board of directors should hire new members who might facilitate the access to significant resources, promoting the survival and development of the organization. Lastly, the Institutional Theory seeks to explain the structure and functioning of organizations as a socially constructed reality. From this point of view, organizations are seen as entities that act according to the rules, procedures, beliefs, and values that prevail in each context. The author suggests that future research should verify empirically the influence of each theory on the behaviours adopted by the board of directors.

Regarding publication sources, the 71 articles in the sample were published in 35 academic journals and had a total of 1677 citations. Table 4 shows that Nonprofit and Voluntary Sector Quarterly (19 articles) and Nonprofit Management Leadership (10 articles) are the journals with the most published articles. Closer inspection of the Table 4 also shows that there are three publication sources that stand out regarding the

Table 2 Most productive countries on nonprofit governance topic

Countries	No. of papers	% of papers
United States	42	59,15
Canada	7	9,85
England	6	8,45
Spain	4	5,63
Australia	3	4,23
Germany	3	4,23

Table 3 Top 5 most cited papers

Total of citations	Paper	Author	Year of publication
149	Understanding the behavior of nonprofit boards of directors: A theory-based approach	Judith Miller-Millesen	2003
141	Board composition, committees, and organizational efficiency: The case of nonprofits	Jeffrey Callen, April Klein and Daniel Tinkelman	2003
123	Acting in the public interest? Another look at research on nonprofit governance	Melissa Stone and Francie Ostrower	2007
121	When government becomes the principal philanthropist: The effects of public funding on patterns of nonprofit governance	Chao Guo	2007
108	Nonprofit Governance Research: Limitations of the Focus on Boards and Suggestions for New Directions	Chris Cornforth	2012

number of citations: the Nonprofit and Voluntary Sector Quarterly (861 citations), Nonprofit Management Leadership (163 citations) and the Public Administration Review (121 citations).

Concerning authorship, 126 authors are responsible for the 71 articles in the sample. As shown in Table 5, Francie Ostrower and Melissa Stone are the most cited

Table 4 Most productive and cited publication sources

Publication sources	No. of articles	Publication Sources	No. of citations
Nonprofit and Voluntary Sector Quarterly	19	Nonprofit and Voluntary Sector Quarterly	861
Nonprofit Management Leadership	10	Nonprofit Management Leadership	163
Voluntas	7	Public Administration Review	121
Journal of Business Ethics	2	Voluntas	79
American Review of Public Administration	2	Journal of Policy Analysis and Management	74
Fordham Law Review	2	Administration and Society	53

Table 5 Most productive and cited authors

Authors	No. of articles	Authors	No. of citations
Cornforth, C	3	Ostrower, F	174
Willems, J	3	Stone, M	174
Ostrower, F	2	Miller-millesen, J	149
Stone, M	2	Callen, J	141
De andres-alonso, P	2	Klein, A	141
Bradshaw, P	2	Tinkelman, D	141

authors, with 174 citations each and Chris Cornforth and Jurgen Willems appear as the authors with the most articles published, with 3 publications each.

In the next section, the literature networks are presented and analyzed, namely the co-occurrence networks of references, publication sources and authors. A co-occurrence analysis of the keywords is also presented to enhance understanding of the nonprofit governance thematic.

5 Literature Network Analysis

Prior to the co-citation analysis of the references, the initial sample of 71 articles was filtered to aggregate only articles with at least 9 citations. The respective co-citation network was built based on this new sample. The figure below (Fig. 2) illustrates the formation of two clusters.

Table 6 presents an overview of the publications that constitute the two clusters: cluster 1 (red) related to the performance of the governance boards and its impact on organizational effectiveness; and cluster 2 (green) connected to issues about the composition and characterization of governance boards.

The articles in cluster 1 focus their attention on the impact that governance boards have on organizational effectiveness, exploring the best governance practices that affect the performance of the boards. In general, the articles considered in this cluster aim to improve the performance of governance boards and, overall, the effectiveness of the organizations. Several articles from cluster 2 have resorted to the Agency Theory to analyse the composition and characterization of governance boards. This perspective preconizes the separation between ownership and management, preventing the existence of conflicts of interest between managers and administrators. Thus, the Agency Theory is crucial, arguing that different agents should share the same expectations and motivations to ensure the fulfilment of the organization’s mission, despite personal interests.

The co-citation network concerning publication sources was generated for a minimum of 25 citations per source (Fig. 3).

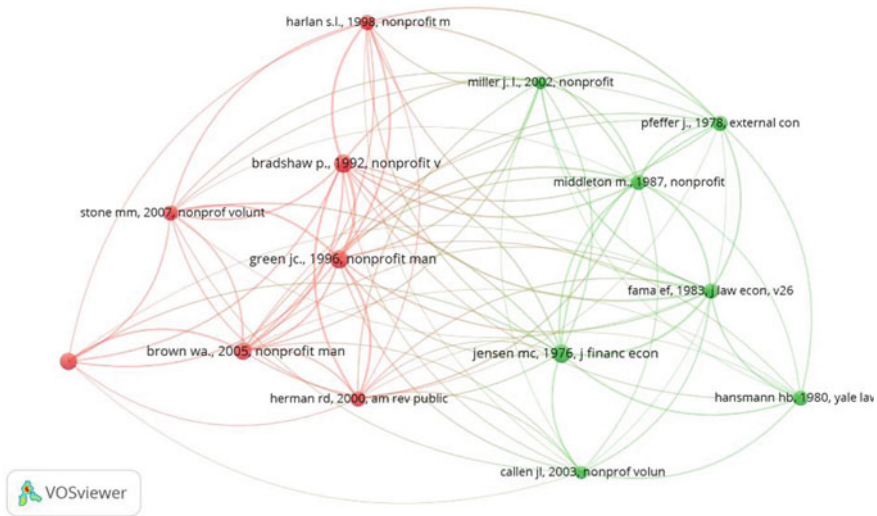


Fig. 2 Co-citation map of cited references

Table 7 shows the three clusters that were created in the co-citation network of publication sources. Cluster 1 (red) refers to sources in the field of public administration and social problems, cluster 2 (green) illustrates publications in the field of management, and cluster 3 (blue) includes journals from the economics and finance fields.

Considering the author co-citation network (Fig. 4), the authors with the most co-citations are Bradshaw (39 citations), Brown (36 citations), Cornforth (38 citations), Herman (51 citations) and Ostrower (37 citations).

Table 8 shows the clusters referring to the most cited authors. As can be seen from the table, in cluster 1 (red) the authors are mostly related to the areas of management and economics; in cluster 2 (green) the authors are mainly focused on the areas of organizational behaviour and nonprofit governance; and in cluster 3 (blue) there are predominantly authors from the management area.

To increase the knowledge and understanding of the topic, a co-occurrence analysis of keywords was performed. The co-occurrence networks are formed by words extracted from the title and abstract of the publication, as well as from the list of keywords provided by the author. The map of the keyword co-occurrence network can be seen in Fig. 5.

The results from the co-occurrence network of keywords are set out in Table 9. The terms in cluster 1 (red) are related to the performance of governance boards and their impact on organizational effectiveness; cluster 2 (green) presents practices adopted by nonprofit governance; cluster 3 (blue) identifies functions involved in the governance of organizations; cluster 4 (yellow) illustrates characteristics of nonprofit governance boards; and cluster 5 (purple) suggests potential research topics in the nonprofit governance area.

Table 6 Clusters from the co-citation network of references

Paper	Main conclusions
Cluster 1 —Performance of the governance boards and its impact on organizational effectiveness	
Do Nonprofit Boards Make a Difference? An Exploration of the Relationships Among Board Structure, Process, and Effectiveness (Bradshaw et al., 1992)	This article reveals that strategic planning, common vision for the organization, engaging in daily operations, acting according to the guidelines of good management, and avoiding conflicts among the team contributes to organizational effectiveness. It also shows that the board of directors does not have a significant impact on increasing the budget, despite playing an important role in the financial health of the organization (keeping the finances positive).
Exploring the Association Between Board and Organizational Performance in Nonprofit Organizations (Brown, 2005)	The main findings of this study are the following: larger organizations tend to present directors who have better performance and, consequently, may obtain a better financial result; defending the organization’s mission, values and social purposes shows positive levels of correlation with organizational performance; organizations with better performance tend to be represented by boards that supply strategic guidance; the discussion of important issues is correlated with profit/revenue; and promoting group processes and developing relationships between board members is positively correlated with organizations that operate with considerable financial resources.
Nonprofit Governance Research: Limitations of the Focus on Boards and Suggestions for New Directions (Cornforth, 2011)	The author analyzed three limitations of the studies on nonprofit governance. Firstly, most of the investigations are restricted to the board of directors; neglecting the supervisory structures and the internal actors that contribute to the execution of governance tasks. Secondly, the studies focus predominantly on the boards of directors of unitary organizations, although many organizations already present more complex governance structures. Finally, the empirical research has paid more attention to the characteristics and the behaviour of the board of directors, instead of focusing on the evolution and development of governance structures and their practices.

(continued)

Table 6 (continued)

Paper	Main conclusions
Board Performance and Organizational Effectiveness in Nonprofit Social Services Organizations (Green & Griesinger, 1996)	This study has shown that boards of directors of “effective” organizations compared to “less effective” ones tend to be more involved in functions related to policy formation, strategic planning, management and resource development, financial planning and control, and program review.
Contracting and Patterns of Nonprofit Governance (Saidel & Harlan, 1998)	One of the more significant findings to emerge from this study is that governance activities are carried out by both the members of the executive and the board of directors. Although the literature considers that governance structures are led by the executive in several activities, the results demonstrated that the administrative board also contributes with its resources. Additionally, administrative members provide contacts that play an important role at the decision-making level, thus improving the political capacity and the “political influence” of the organizations.
Board practices of especially effective and less effective local nonprofit organizations (Herman and Renz 2000)	The results of this investigation show that the most frequently used practices by “especially effective” boards are writing expectations about potential contributions, board self-evaluation, and the role of the chief executive in board nominations. This research also found that “effective” NPOs are composed of more prestigious boards compared to the “less effective” ones.
Acting in the Public Interest? Another Look at Research on Nonprofit Governance	According to the authors, there is a considerable gap between the research on public governance and on nonprofit governance. Nevertheless, recent literature on public management presents interesting approaches and topics for future research within the nonprofit governance field. It is fundamental to expand the focus of research beyond boards of directors. Further research needs to examine more closely the links between the governance of organizations and the general public; the incorporation of a wider vision of governance process that involves several actors; and other topics related to governance and performance.

Cluster 2—Composition and characterization of governance boards

(continued)

Table 6 (continued)

Paper	Main conclusions
Separation of ownership and control (Fama & Jensen, 1983)	This study identified four steps of the decision process: initiation (creating proposals); confirmation (deciding which proposals will be implemented); implementation (implementing the proposal); and monitoring (measuring the impact of the decision). The researchers argue that an efficient control system implies a separation of the confirmation and monitoring phases (control process) from the initiation and implementation phases (decision process). The efficiency level of any organization is based on this decision-support system.
Theory of the firm: managerial behavior, agency costs and ownership structure (Jensen & Meckling, 1976)	Considering the agency divergences between managers and directors/donors, the authors argue that these conflicts of interest could be solved through monitoring procedures, auditing and by creating an incentive system to achieve the organization's goals.
Board Composition, Committees, and Organizational Efficiency: The Case of Nonprofits (Callen et al., 2003)	The results of this investigation show that the proportion of administrative expenses in relation to the total expenses tends to decrease in proportion with the presence of significant donors on the board of directors and with their respective donations. Furthermore, the proportion of fundraising expenses in relation to total costs increases significantly as the size of the organization increases. Other major finding is that the presence of a large percentage of donors in the board finance department is positively correlated with the efficiency of the administrative expenses.
The Board as a Monitor of Organizational Activity The Applicability of Agency Theory to Nonprofit Boards (Miller, 2002)	The main findings of this study suggest that nonprofit administrative board members do not expect the existence of conflicts between the executive director and the purpose of the organization. The data also suggests that, despite situations of questionable behaviour, the members of the administrative board tend to defer to the executive director during critical periods of decision making.

(continued)

6 Discussion and Conclusion

Nonprofit governance presents a strong impact on management models and practices adopted by Third Sector organizations. The purpose of the current study was to map and analyze the scientific production in the nonprofit governance area, which

Table 6 (continued)

Paper	Main conclusions
The Role of Nonprofit Enterprise (Hansmann, 1980)	According to the author, the prohibition of profit distribution in NPO is known as the “nondistribution restriction”. The non-distribution of profits benefits NPO as it makes them more reliable when compared to for-profit companies in situations of “contractual failure”, since the governance board does not financially benefit from it.. In addition, the chances of “contractual failure” are lower when governance members are focused on the mission of the organization.
The External Control of Organizations: A Resource Dependence Perspective (Pfeffer & Salancik, 1978)	The aim of this article was to examine the external constraints that influence organizations. From a Resource Dependence perspective, topics concerning resource availability, manager’s responsibilities, interdependency between organizations, and organizational structure were discussed. According to the authors, organizations rely on the external environment to ensure their sustainability and the dynamics of dependence arise from the governments and resources of other organizations. The results also indicate that, generally, organizations with a greater dependence on governments are better able to adapt to their requests.
Nonprofit Boards of Directors: Beyond the Governance Function (Middleton, 1987)	This study has identified the four functions executed by the board of directors: representing the organization in external constituencies; establishing “exchange relationships” with constituencies in order to ensure the entry of resources into the organization and reduce resource dependency; ensuring the organization’s competitiveness in relation to the external environment; and protecting the organization from external information, by only communicating messages that are vital for its functioning. According to the Resource Dependence Theory, the duties and responsibilities of the board of directors involve ensuring that the necessary resources are available to achieve the organization’s goals.

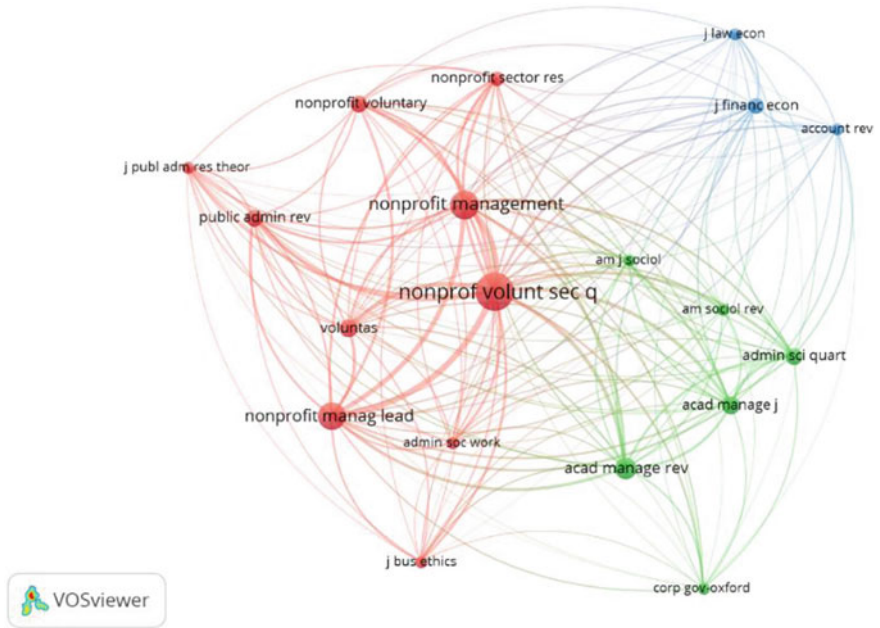


Fig. 3 Co-citation map of cited publication sources

Table 7 Clusters from the co-citation network of publication sources

Cluster 1	Cluster 2	Cluster 3
Administration in Social Work (29 citations)	Academy of Management Journal (60 citations)	Accounting Review (27 citations)
Journal of Business Ethics (25 citations)	Academy of Management Review (83 citations)	Journal of Financial Economics (42 citations)
Journal of Public Administration Research and Theory (29 citations)	Administrative Science Quarterly (52 citations)	Journal of Law & Economics (25 citations)
Nonprofit Management & Leadership (135 citations)	American Sociological Review (27 citations)	
Public Administration Review (53 citations)	Corporate Governance—an International Review (26 citations)	
Voluntas (57 citations)		

represents an important contribution to the rapidly expanding field of research in the Third Sector.

The bibliometric analysis conducted highlights a high number of publications in the nonprofit governance field in the last ten years. Between 2011 and 2021, 46

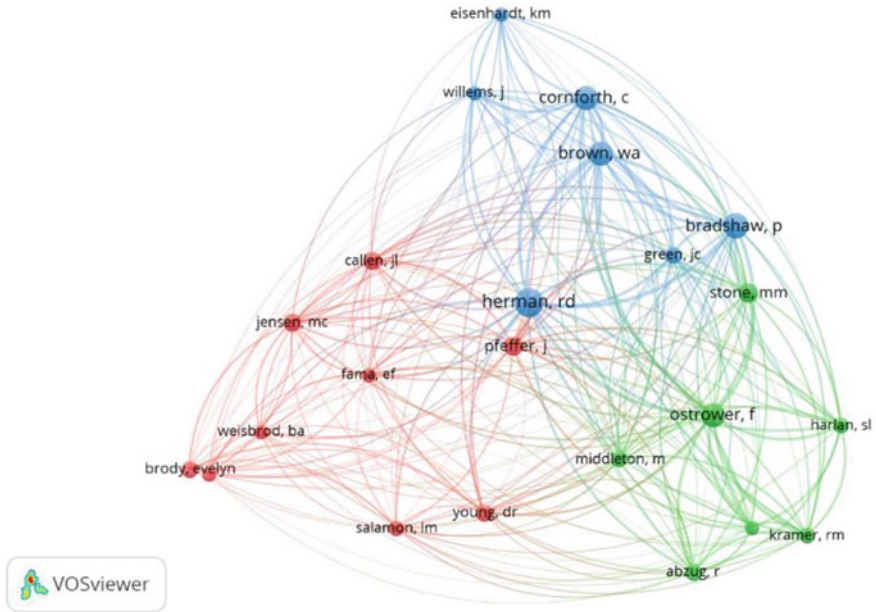


Fig. 4 Co-citation map of cited authors

Table 8 Clusters from the co-citation network of authors

Cluster 1	Cluster 2	Cluster 3
Brody, E. (19 citations)	Abzug, R. (18 citations)	Bradshaw, P. (39 citations)
Callen, J. (21 citations)	Harlan, S. (16 citations)	Brown, W. (36 citations)
Fama, E. (14 citations)	Kramer, R. (16 citations)	Cornforth, C. (38 citations)
Hansmann, H. (14 citations)	Middleton, M. (16 citations)	Eisenhardt, K. (14 citations)
Jensen, M. (21 citations)	Ostrower, F. (37 citations)	Green, J. (18 citations)
Pfeffer, J. (24 citations)	Stone, M. (23 citations)	Herman, R. (51 citations)
Salamon, L. (15 citations)	Zald, M. (14 citations)	Willems, J. (14 citations)
Weisbrod, B. (14 citations)		
Young, D. (18 citations)		

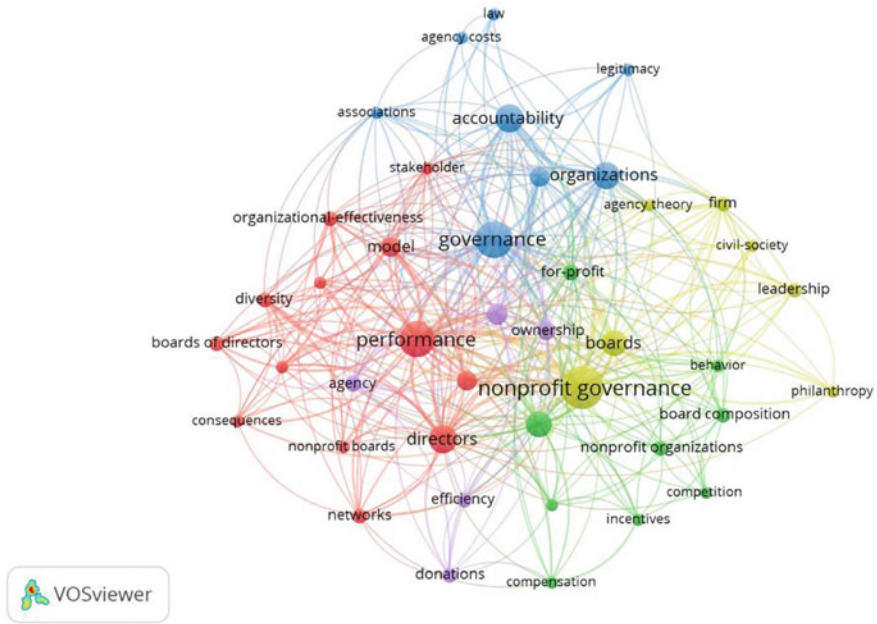


Fig. 5 Co-occurrence keyword map

Table 9 Most representative keywords

Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5
Directors (14 occurrences)	Corporate Governance (17 occurrences)	Accountability (15 occurrences)	Boards (12 occurrences)	Agency (5 occurrences)
Model (7 occurrences)	Nonprofit Organizations (4 occurrences)	Governance (24 occurrences)	Nonprofit Governance (33 occurrences)	Donations (4 occurrences)
Performance (22 occurrences)	Incentives (3 occurrences)	Management (7 occurrences)	Firm (4 occurrences)	Efficiency (4 occurrences)
Power (7 occurrences)	Compensation (3 occurrences)	Organizations (13 occurrences)	Leadership (4 occurrences)	Nonprofit (8 occurrences)
Organizational-effectiveness (4 occurrences)	Competition (3 occurrences)	Law (3 occurrences)	Philanthropy (3 occurrences)	Ownership (6 occurrences)
	Firm Performance (3 occurrences)	Agency costs (3 occurrences)	Civil-Society (3 occurrences)	

articles were published, which represent 64.7% of the sample. Regarding the publication sources, *The Nonprofit and Voluntary Sector Quarterly*, *Nonprofit Management Leadership* and the *Public Administration Review* stand out as the most cited. In relation to authors, the most cited are Francie Ostrower and Melissa Stone, while Chris Cornforth and Jurgen Willems are responsible for the highest number of publications. Concerning the keyword network, the most frequent terms are “directors”, “performance”, “accountability”, “corporate governance”, “organizations”, “boards”, “governance”, and “nonprofit governance”.

The findings reported here shed new light on the theoretical mapping of the intellectual structure of nonprofit governance. There are two worth considering. The first one is related to the performance of the governance boards and its impact on organizational effectiveness. Most of the articles included in this theme address the performance of the governance boards according to different theories and focus on the causality between performance and organizational effectiveness, identifying the factors and variables which contribute positively to this correlation. In contrast, the second theme highlights the composition and characterization of the governance boards, theorizing the characteristics of the governance structures, as well as the relationships that are established, especially between the administrative and executive elements. A notable perspective in the literature is the Agency Theory, which advocates the separation between ownership and management. Further research regarding the role of governance in the Third Sector and its application to existing models in nonprofit organizations is required. In particular, the variables founded in the conceptual structure and in the clusters have significant implications for the performance and management practices of NPOs.

Nevertheless, this research has some limitations. The major limitation of this study is the use of a single database (Web of Science), despite being one of the most recognized databases within the academic community. Another limitation lies in the fact that the sample only includes articles in detriment of other types of publications.

Notwithstanding the limitations, this work offers valuable insights into Nonprofit Governance. Based on this bibliometric analysis, a research project will be carried out to identify the nonprofit governance factors that influence organizational performance and the variables that will be used come from the keyword network presented founding in this research.

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