

# Governance Challenges in Women's Leadership and Professional Competencies in Decision-Making: A Bibliometric Approach

Veronica Margarita Guevara Villacres<sup>1\*</sup>, Nicole Cevallos Andagoya<sup>2\*</sup>

<sup>1\*</sup> Universidad Estatal de Milagro, Guayas (Ecuador). Ciudadela Universitaria Km. 1.5 via al Km. 26, [vguevarav@unemi.edu.ec](mailto:vguevarav@unemi.edu.ec)

<sup>1\*</sup> Universidad Estatal de Milagro, Guayas (Ecuador). Ciudadela Universitaria Km. 1.5 via al Km. 26, [ncevallosa3@unemi.edu.ec](mailto:ncevallosa3@unemi.edu.ec)

ARTICLEINFO	ABSTRACT
Received: 17 Nov 2024	<p>Gender equality is a concern in our society. Goal 2 of the Sustainable Development Goals states that professional women still face a lack of job opportunities, and those who are employed encounter legal barriers that limit their economic development. Furthermore, governance practices ensure transparency and high financial performance, strengthening an organization's reputation. One of the research gaps in corporate governance mechanisms lies in gender diversity, particularly the participation of women in leadership roles, highlighting the challenges, structural, and cultural barriers that hinder their access and effectiveness. This study seeks to answer the question: What are the governance challenges in women's leadership and professional competencies in decision-making? To address this, we conducted a bibliometric co-reference analysis based on a dataset of 206 articles, selected using the PRISMA methodology. Our findings identified four key clusters: Cluster 1 - Gender Governance and Corporate Participation, Cluster 2 - Sustainable Governance and Female Leadership, Cluster 3 - Local Governance and Women's Empowerment and Cluster 4 - Governance and Information Quality Management. These clusters emphasize the stagnation that women in leadership and positions of power continue to face. Additionally, they highlight the urgent need to develop and implement truly inclusive and transformative policies. While these policies are necessary, they are not sufficient to create real change, as they must address deeply rooted patriarchal power structures embedded in most organizations. Achieving true gender equity requires radical transformation, including continuous oversight, revisions, and adjustments to policies and practices that go beyond simply allowing women to be heard.</p> <p><b>Keywords:</b> Governance, mechanisms, bibliometrics, gender diversity, women as leaders</p>
Revised: 29 Dec 2024	
Accepted: 12 Jan 2025	

## 1. INTRODUCTION

Gender dynamics must be addressed when analyzing how women can contribute to an organization (Kong et al. 2024). This perspective not only acknowledges the inclusion of women at the top of organizational leadership but also highlights the need for governance practices to evolve by incorporating perspectives that enhance diversity (Panadan 2013). The presence of women on boards of directors is not merely an issue of gender justice or legal compliance; they drive change and possess a deep understanding of power structures both inside and outside the boardroom (Chen y Henry 2012). Women in these leadership positions must know how to navigate these dynamics, build strategic coalitions, adequately prepare for board sessions, and take an active role in key decision-making processes that directly influence corporate governance (Chan 2015).

This debate holds value not only from a theoretical perspective but also makes a practical impact. Organizations benefit from change by gaining access to a diverse range of opinions, which enhances board efficiency. Moreover, gender equality appears to contribute to better corporate performance and governance.

## 1.1. Theoretical Implications

The agency theory, as described in the work "Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure", by Jensen & Meckling (1976), explores agency costs and managerial behavior, emphasizing the need for a contractual relationship between managers and owners. This argument forms the basis of the agency theory's study objective. Similarly, Jensen and Fama present another significant work, "The Separation of Ownership and Control", where Fama & Jensen (1983b), focus on agency problems arising from contractual structures that separate management, decision-making control, and risk assumption. The authors argue that these issues stem from the unclear delegation of decision-making and risk responsibilities, which are not explicitly stated in contracts. As a result, managers may lack incentives to safeguard owners' interests, as they bear no accountability for decisions or residual risks.

For Shleifer & Vishny (1997), their research emphasizes the cultural and financial market aspects influencing agency problems. They highlight investor distrust, as owners fear delegating capital management to agents who may pursue personal gains rather than maximizing investment returns. Due to incomplete contracts and legal gaps, agents may exploit residual costs for self-interest, a practice they term capital expropriation, ultimately harming the organization's reputation and future investment potential. Thus, enhancing governance mechanisms is essential to protect minority and external investors' interests (La Porta et al., 1998; La Porta et al., 2000). Studies by Daily & Dalton, (1994); Rechner & Dalton, (1991) analyze governance mechanisms such as the board of directors, CEO leadership, CEO duality, and their effectiveness in organizational performance.

Additionally, Eagly & Karau (2002) in their work "Role Congruity Theory of Prejudice Toward Female Leaders", propose a theory on the prejudices faced by female leaders. Their study focuses on the perceived incongruity between traditional female gender roles and leadership, suggesting that this perception results in two forms of prejudice: A negative evaluation of women as potential candidates for leadership roles, deeming them less suitable compared to men, and Harsher criticism of leadership behaviors when performed by women, reinforcing biased perceptions. These prejudices lead to more negative attitudes toward female leaders compared to their male counterparts, hindering their access to leadership positions and limiting their success. The theory provides a framework to understand how gender-role incongruence perceptions affect women's leadership opportunities, emphasizing the importance of gender diversity in leadership dynamics and the persistence of discrimination.

In her proposed model for "Gendered Organization Theory", Acker (1990) argues that organizational structures and processes are inherently gendered, systematically discriminating against women while granting unearned advantages to men. Acker challenges the assumption of gender neutrality in organizations, demonstrating how job roles and hierarchies implicitly favor a normative male worker, whose life revolves around full-time, uninterrupted work, often supported by domestic labor traditionally performed by women. This framework marginalizes women and reinforces gender segregation by aligning managerial and professional tasks with male identities while relegating care-related responsibilities to lower organizational statuses. Acker's analysis calls for a critical recognition of how deeply embedded gender assumptions are within organizational practices and emphasizes the urgent need to reassess these structures to achieve true gender equality in the workplace.

## 1.2. Governance Dynamics

Corporate governance is an essential strategy for enhancing economic performance, strengthening trust, and reducing market risk. Implementing a governance model requires adapting policies and practices based on standards set by policymakers, ensuring transparency, accountability, and sustainable business operations. (Congress of the USA 2002; Standard & Poor's 2004; Witherell 2004; Şahin, Artan, y Tuysuz 2015).

### **1.3. Ownership structure**

The ownership structure consists of a company's owners, and ownership may be divided among multiple stakeholders. Owners are responsible for decision-making within the organization and bear the associated risks. According to agency theory Jensen & Meckling (1976), owners must delegate corporate control to the board of directors and establish contractual links to ensure that managers act in their best interests, ultimately aiming to maximize the company's value.

### **1.4. Board of Directors**

Composed of a group of managers delegated by the owners to exercise corporate control, their activities are defined by contractual relationships designed to safeguard the owners' interests over their own Shleifer & Vishny (1997). This scenario represents a key issue in agency theory, known as the conflict of interest, where managers may prioritize personal gains over owners' objectives. The board of directors is responsible for planning and executing strategies in alignment with owners' decisions to ensure corporate governance effectiveness (Jensen y Murphy 1990).

### **1.5. Chief Executive Officer - CEO**

This role refers to the individual responsible for executing and implementing corporate strategies (Pearce y Zahra 1991). One of their key responsibilities is presenting the annual report and addressing the board, providing an overview of the company's current status. This enables owners to make timely decisions, safeguarding their interests and ultimately maximizing the company's value.

### **1.6. Impact of Female Leadership on Business Performance**

Studies have shown that female directors add positive value to board oversight and have a favorable impact on corporate risk disclosure (Kabeer et al. 2023). The approaches discussed relate to the tendency of male CEOs to underestimate risks, which can lead to hasty decisions with unfavorable outcomes. Additionally, having women on boards of directors is associated with better financial performance and greater transparency, strengthening corporate governance and business sustainability (Jones, Luque, y Murphy 2018).

### **1.7. Leadership and its Impacts**

To achieve the goals of the new organizational strategies, effective leadership is critical. Studies show that leadership styles impact organizational effectiveness. "Adjusting leadership styles can enhance organizational performance, particularly in response to challenges arising in a changing environment" (Hakovirta et al. 2023; Nzwirashe R. Magomana et al. 2025). Now, more than in the past, the promotion of innovation by leaders and their guidance towards specific goals oriented towards decisive results has become vital as part of correct decision-making."

According to research by de Huse & Grethe Solberg (2006) & Ba et al. (2019) it was highlighted that female leadership has a positive impact on innovation and collaboration, which is crucial in dynamic business environments. 'Female leaders tend to be more collaborative and empathetic, which is important for innovation and agility within dynamic business settings,' leading to better organizational decisions and the advancement of equality for half of the population. With this, Kirton & Healy (2013) provide an approach that, with the succession of these administrations, brings benefits and, therefore, promotes broader support for women in leadership.

### **1.8. Applications of the PRISMA methodology in research on governance and gender equity**

The PRISMA approach has enabled a systematic and methodical review of the literature on governance and gender equity. Through its practical guidelines, key patterns and gaps have been identified in the current body of research. New studies offer a nuanced view of gender relations in governance systems. For example, in Dadashzadeh et al. (2022), there is a clear lack of specific studies on safety and access to transportation for women, which highlights a significant problem in governance that needs attention in planning and rule-making. This aligns with what was found by Ojeda et al. (2025), who mention that

although there are some studies on women in leadership positions and their presence at work, there is a significant lack of diversity in how the studies were conducted. This problem demonstrates the need for different approaches to better understand the challenges and opportunities to improve diversity in leadership positions. Hussain et al. (2024), they indicate that different cultures and jobs have variety issues that are broad and vary in specific situations. This difference clarifies the need for specific studies that could help create more appropriate management rules to effectively address the differences between men and women. The use of PRISMA has been key in highlighting both the steps and the limitations in current writing on governance and gender equity. However, it is important that future research adopts more comprehensive and fair approaches to create better and equal policies. Expanding studies to less visible areas and adding cross-analysis are necessary steps to move towards a truly open and fair governance (Guedes et al. 2024). Therefore, this work aims to answer the following question: What are the challenges and professional competencies that women have in leadership decision-making in organizations? To answer this question, we undertake a thematic evolution analysis of the bibliometric measures of the document corpus from research related to governance, gender equity indicators, leadership, and decision-making. This analysis will allow us to establish specific emerging conceptual structures related to the study topic, and to inform new research gaps that are growing in interest as new measures or variables that are evaluated with quantitative, qualitative, and mixed approaches.

## 2. METHODOLOGY

### 2.1. Document selection

In the process of selecting documents related to the challenges of governance in leadership and the professional competencies of women in decision-making, the PRISMA methodology was applied. (Guedes et al. 2024; Ojeda et al. 2025; Rahnamaei et al. 2024). In Figure 1, the designed flowchart is shown, where two database sources, SCOPUS and Web Of Science – WOS, were selected. Scopus, with its rapid expansion, offers a broader coverage in terms of records and journals (Elango y Kozak 2024), which potentially offers a more comprehensive view of the existing literature, especially in emerging or interdisciplinary areas. On the other hand, WoS maintains a historical depth that is invaluable for studies requiring access to retrospective research (Khalifah, Kasri, y Aslan 2024). Therefore, both databases compile high-impact documents that have undergone a review process before being approved for publication. With the selected databases, the corresponding search equations were designed. See Table 1.

Figure 1. PRISMA methodology flowchart adapted to the number of documents selected

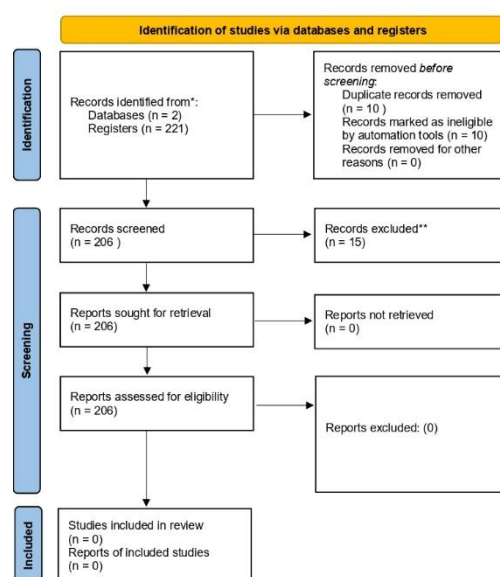


Table 1 Structural search equations for searching documents

Data bases	Search equation	Records recovered
Scopus	TITLE-ABS-KEY ( ( woman OR female OR gender ) AND leadership AND "decision making" AND governance ) AND ( LIMIT-TO ( SUBJAREA , "BUSI" ) OR LIMIT-TO ( SUBJAREA , "ECON" ) )	52
Web Of Science	(woman or female or gender) (All Fields) and governance (All Fields) and (Leadership and "decision making") Document Type: Article	169
Total		221

## 2.2. Selection, integration and categorization of documents

For the bibliometric analysis of the document corpus, a preliminary processing to clean up the records was required. Below, the workflow carried out in this research is detailed:

1. The documents were downloaded in .bib format, a total of four files, from their respective database sources.
2. Through the execution of a custom code, written in Python 3.13.0, all files were integrated into a new .bib file, and during this process, duplicate documents were removed, ultimately obtaining 216 articles for analysis (Azeez y Aboobaker 2024; Sossa et al. 2024).
3. Through the execution of a custom code, developed in Python 3.13.0, three CSV files were created for later use in network visualization (Govardhan et al. 2025; Moldabekova et al. 2020; Sharma et al. 2025).
4. With the new file from step 2, which contains the entire body of integrated documents, it was processed in the Biblioshiny application of Bibliometrix to extract the summary of bibliometric measures (Vătămănescu et al. 2024; Yunita, Utomo, y Sundjaja 2024; Zahiruddin y Wijaya 2024).
5. Finally, using the co-reference network and thematic evolution tool available in Biblioshiny, the challenges of governance in leadership and professional competencies of women in decision-making were determined (Akhter, Javed, y Akhter 2023; Steiner, Makarenko, y Yuhai 2024).

## 2.3. Computer tools used

For the development of this work, computer tools under the GNU free access license were used for bibliometric analysis. Considering the origin of the document sources and the original formats .bib and .csv, the development of custom code in Python 3.13.0 was also required, see Table 2.

Table 2 Computer tools used

Software	Version	details	Url
Biblioshiny	4.0	Visualizing bibliometric metrics.	<a href="https://www.bibliometrix.org/home/metrics/">https://www.bibliometrix.org/home/metrics/</a>
Python	3.13.0	Extraction, classification and categorization of documents, and bibliometric metrics.	<a href="https://www.python.org/downloads/">https://www.python.org/downloads/</a>
VOSviewer	1.6.20	Visualizing network graphs.	<a href="https://www.vosviewer.com/download">https://www.vosviewer.com/download</a>



### 3. RESULTS

#### 3.1. Analysis of bibliometric measures

Figure 2 shows the bibliometric measures, which were extracted from 206 articles covering the period from 1996 to 2025; it allows us to have a complete view of the evolution of governance and female leadership in the professional field and in decision-making. Therefore, the number of publications in this period indicates a level of production that is diversified and complex at the same time.

On the other hand, they identified an annual growth rate of 3.86% in publications, see Figure 3, which suggests that this is continuously increasing. This corroborates that the volume of publications is constantly rising, indicating that it is a developing field with new perspectives and research. This figure underscores the changing nature of leadership and governance studies that continuously face new challenges and scenarios requiring innovation and new studies.

Accordingly, the average age of the documents is 4.71 years, suggesting that most studies have been conducted recently and are relevant to the current state of female leadership and governance. This element is very important for explaining how the practice and theory of leadership are adapting to rapid sociocultural and professional changes in real time.

Furthermore, the average number of citations per document is 3.325. This means that, although the area is specialized, the publications are being cited, reflecting their impact and relevance in the field. Having 12,756 references in the bibliography not only strengthens and deepens the documents but also the topics themselves, illustrating the effort in utilizing various previous studies.

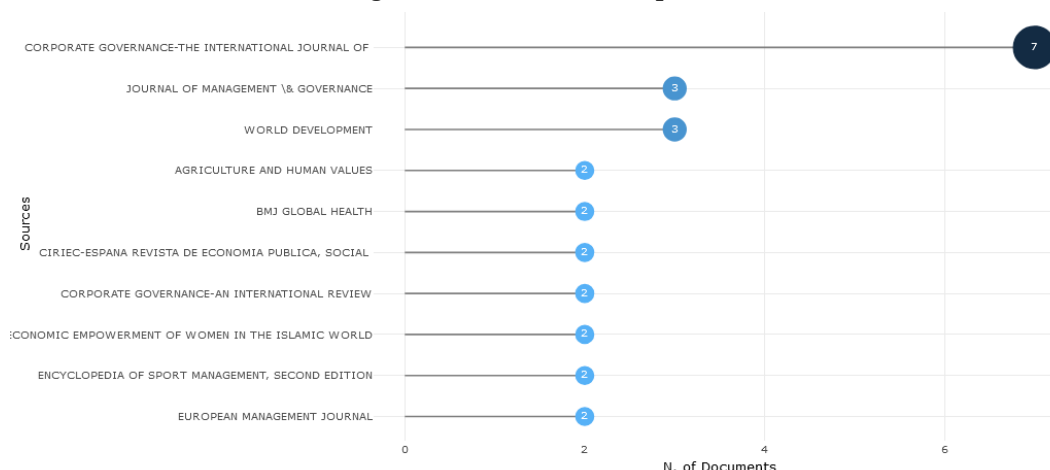
Additionally, the analysis of keywords provided us with information on over 654 keywords and 132 author keywords, showing the range of topics and subtopics captured, reflecting the complexity and diversity of approaches studied in leadership and governance in the context of female empowerment

Figure 2. Summary of bibliometric metrics



Note: Report obtained from Biblioshiny: "Overview >Main Information" on the 206 articles

Figure 3. Production of publications



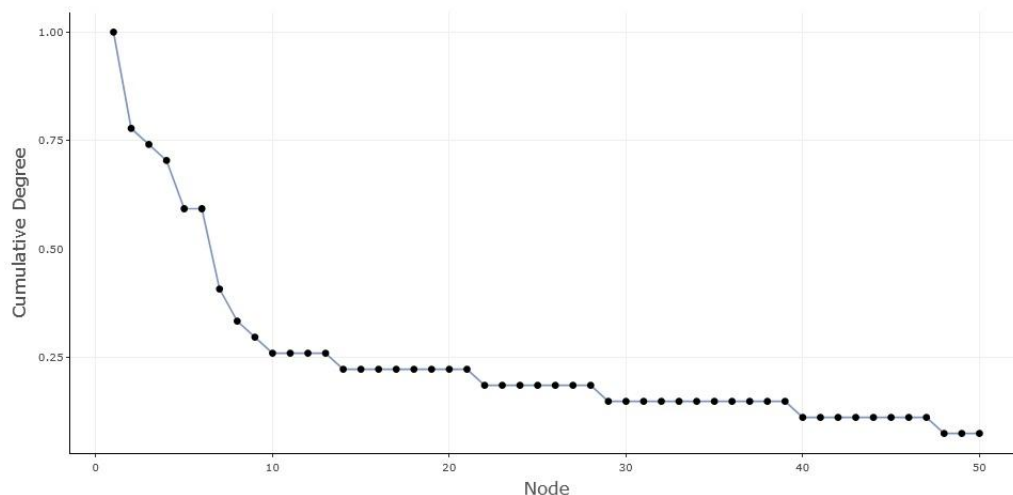
Note: Report obtained from Biblioshiny, Sources > Most Relevant Sources, on the 170 sources of origin of the 216 articles.

### 3.2. Co-reference network analysis

#### 3.2.1. Clave Key Node Identification

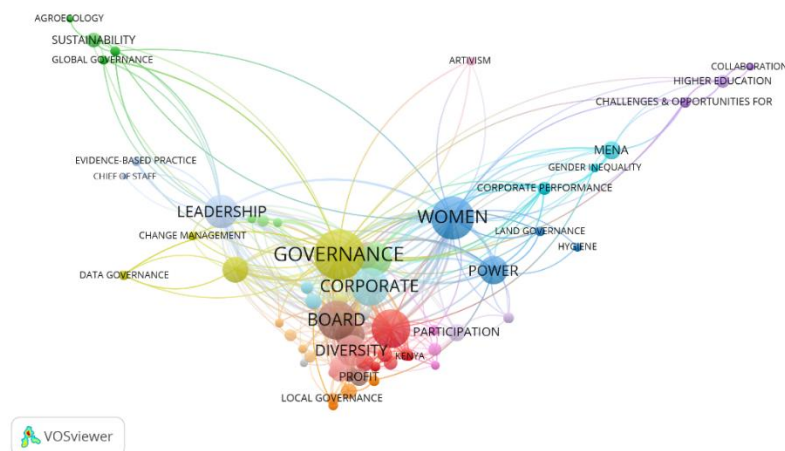
Figure 4 represents the Degree Plot, where 4 clusters are defined, which we call Cluster 1 - Gender Governance and Corporate Participation, Cluster 2 - Sustainable Governance and Female Leadership, Cluster 3 - Local Governance and Women's Empowerment, and Cluster 4 - Governance and Information Quality Management, which concentrate more than 0.70 of the total conceptual terms defined by the authors of the analyzed document corpus.

Figure 4. Degree plot graph



Note: Graph obtained from the co-reference processing of 206 documents using the Biblioshiny tool. It shows 4 clusters that concentrate more than 0.50 of the terms related to our context.

Figure 5. Co-reference Network Governance challenges in leadership and professional skills of women in decision-making



Note: The co-reference network graph generated with VosViewer version 1.6.20

Next, we perform the analysis and review of the literature related to these 4 defined clusters:

### **3.2.1.1. Cluster 1: Gender Governance and Corporate Participation.**

Cluster 1, named 'Gender Governance and Corporate Participation', is shown in Figure 5 where we observe the co-reference network graph of the terms defined by the authors in this cluster. This cluster reflects a dynamic of efforts directed towards an effective integration of women's participation in leadership and decision-making positions. This approach is based on a set of practices and policies designed to integrate gender equity at the decision-making levels of organizations, establishing quotas or parities and fostering an environment where the professional skills and competencies of women are equally recognized and valued, allowing them to assume roles of effective leadership and strategic decisions. (Aloysius Edward, Joseph Charles Tamilmaran, y Parathanath 2024; N.R. Magomana et al. 2025).

Studies that reveal trends in the composition and impact of female leadership across various sectors. The presence and dynamism of women on boards of directors remain low, which can limit diversity in strategic decision-making (Palomo-Zurdo, Gutiérrez-Fernández, y Fernández-Torres 2017). According to Saad & Belkacem (2021 & Schadewitz & Spohr (2022), the inclusion of women in leadership roles has a positive impact on profitability and organizational efficiency, although this effect can vary depending on the context and gender ratio within each organization.

As pointed out by Timbalari et al. (2024), organizations face a variety of issues, such as persistent gaps in the unequal gender distribution with underrepresentation at the board level and in executive positions. Similarly, Al Hameli et al. (2024) & Haider et al. (2025), emphasize that these challenges require solutions ranging from leadership education to deep internal restructuring within companies to foster a more inclusive environment.

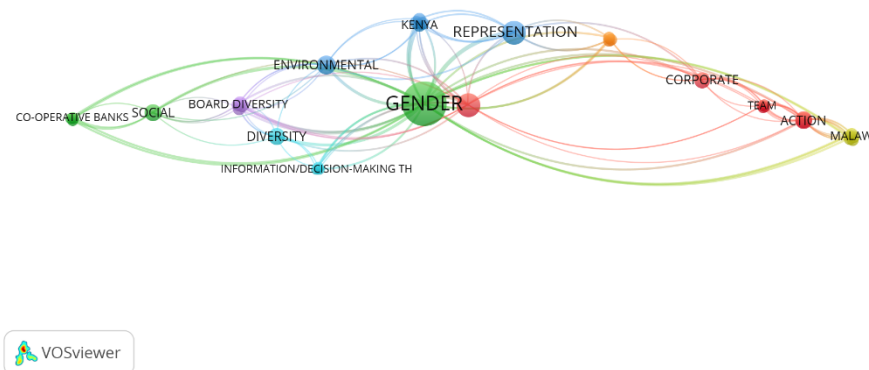
This further accentuates the need for policies such as gender quotas which should be considered fundamental yet preliminary actions, as they also require surrounding frameworks that inspire true camaraderie and recognition of women's roles and value (Vourvachis y Anagnostou 2024). According to Kanadli et al. (2020) y Saito (2024), such policies do not only serve women; they expand the breadth of perspectives in corporate decision-making processes, which, along with a wider range of experiences, enhance innovation and organizational effectiveness.

However, according to Saito (2024), despite progress, many women continue to face a gender gap in reaching dominant positions. Gender governance and corporate participation suffer from a lack of mentorship programs targeted at younger women, inadequate bias networks, and unionized systematic frameworks to advance governance and corporate and social participation at the company level. In relation, Kanadli et al. (2020) & Timbalari et al. (2024), are noting that along with inequalities in gender behavior for further stratified progress aimed at addressing cultural practices, less impact on structured exercise such as assertive behavior stemming from the chapter on division of labor with unequal gender gaps induces transformative leadership aimed not only at filling gender gaps but also at culturally addressing the root marks of structural inequality of sexism.

Thus, to achieve full integration of women at all levels of decision-making in management and at the administrative level, as well as the strategic level, under a single and unifying umbrella of ideological guidance necessary for change, dismantling, and fostering a truly equitable organization. This profound change cannot be an isolated event; it will require continuous refinement of policies, practices, and power retraining frameworks to enable women to actively join and support the fight against violence towards women without restrictions and allow them to vote or be voted for without any conditions.



Figure 6. Co-reference of cluster 1 - Gender Governance and Corporate Participation



Note: Co-reference network of conceptual terms defined by the authors in cluster 1. Generated by VosViewer Version 1.6.20.

### 3.2.1.2. Cluster 2: Sustainable Governance and Female Leadership

In Cluster 2, titled 'Sustainable Management and Female Leadership,' Figure 6 illustrates the graphical network of connections among the authors within this group concerning the words they used. This cluster brings together sets of practices and regulations that facilitate the inclusion of women in leadership positions and decision-making levels, resulting in a sustainably growing environment. This management approach not only seeks to achieve gender balance but also aligns with environmental responsibility principles, considering ecological boundaries while delivering long-term social and economic benefits. (Buchy, Elias, y Khadka 2023).

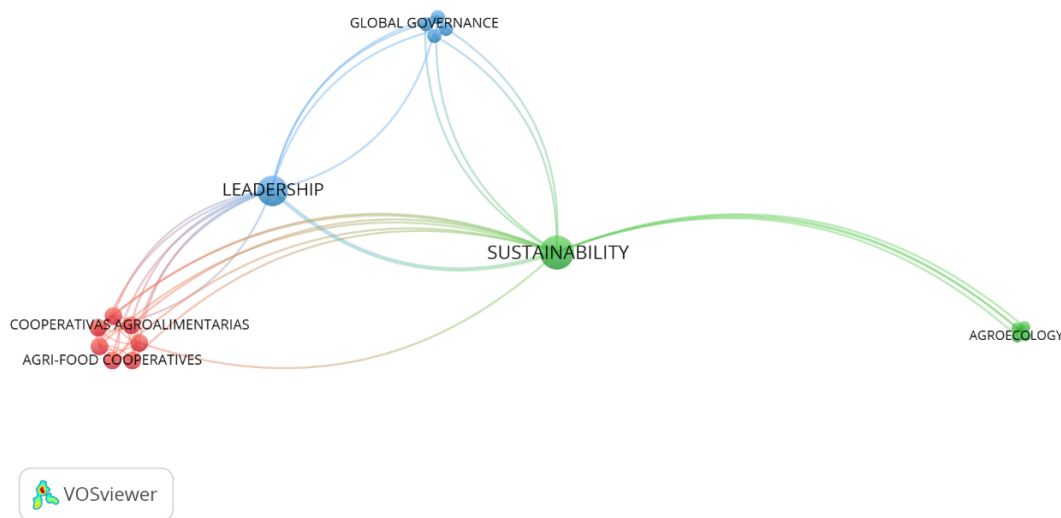
Kirton & Healy (2013b), García-Morán & Yates (2022), & Crossette-Thambiah et al.(2024), have stated that female leaders are more likely to adopt leadership styles that involve others and prioritize people's well-being, leading to a more inclusive and effective decision-making approach. These methods have also been shown to improve workplace atmosphere and contribute to fair and efficient labor practices. Additionally, an extra study by Hatano (2021b), highlights that women in international leadership roles have significant influence in shaping or reforming global regulations, particularly in areas such as human rights and sustainable development.

Additionally, Meagher et al. (2022) & Ndlovu & Maramura (2024), examine the impact of regulations on female leadership and how they can facilitate the implementation of gender equality initiatives within organizations. These regulations tend to be more responsive to the needs of women in leadership roles. Another study by Hernández Herrera (2024) supports this idea, stating that women in positions of power play a crucial role in addressing workplace discrimination and inequality.

The discussion on 'Sustainable Management and Women's Leadership' requires the integration of sustainable agriculture and agrifood groups, where women can play key roles in promoting the adoption of organic and sustainable production methods. According to Krech et al. (2023a), these spaces can serve as study models for how women can take the lead in sustainability innovation, leveraging their knowledge and skills in areas that have often been beyond their reach.

Thus, in both areas, women emerge as vital leaders for change, and where they are beginning to take on leadership roles, it should be an immediate concern. This objective implies that they will not only have to assume primary income responsibilities but also face significant macro-social challenges. Solanellas et al. (2023), illustrate how this can be achieved, including ensuring that organizations are not only fair and inclusive but also environmentally and socially responsible.

Figure 7. Co-reference of cluster 2 - Sustainable Governance and Female Leadership



Note: Co-reference network of conceptual terms defined by the authors in cluster 2. Generated by VosViewer Version 1.6.20.

### 3.2.1.3. Cluster 3: Local Governance and Women's Empowerment

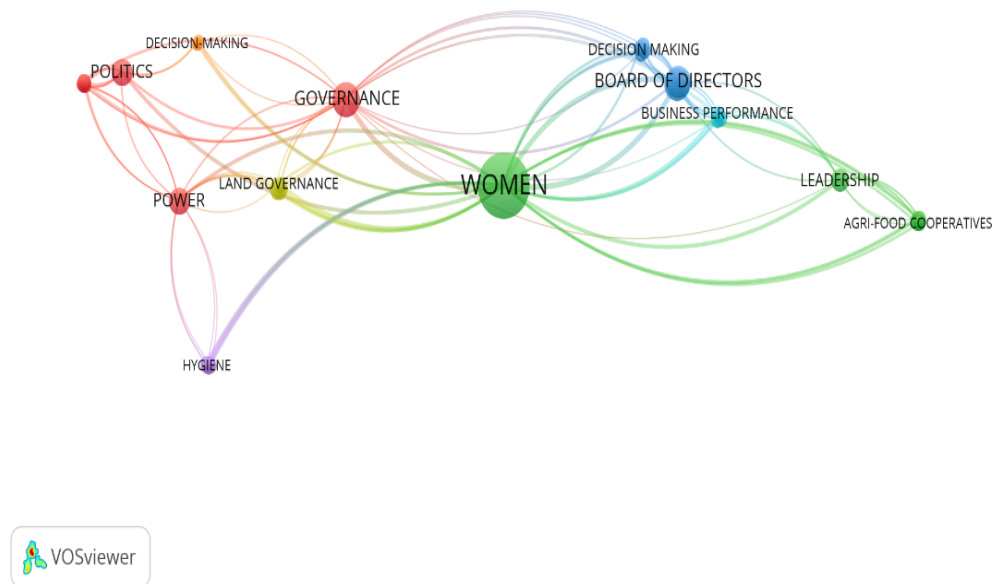
The third cluster, titled 'Local Governance and Women's Empowerment,' is illustrated in Figure 7, which presents the co-reference network diagram of the terms defined by the authors in this group. Here, we observe the local-level strategies and regulations that support women in leadership and decision-making roles. This framework aims not only to achieve gender balance but also to empower women in sustainable development and local resource management. Addressing the challenges associated with these roles requires a multifaceted approach to the issues faced by women (Sehring, ter Horst, y Said 2023).

The data demonstrate that female empowerment has been key to innovation in businesses and integrity (Imburgia et al. 2021; Akshita Arora 2022). According to Mandara et al. (2017) & Pena et al. (2022), women in leadership roles approach decision-making with a more inclusive and ethical perspective, which impacts a company's ability to respond and its efficiency in globally competitive environments.

Empowering women at the local level must include providing educational resources on leadership and management, as well as actively involving them in economic and political decision-making (Wicker, Feiler, y Breuer 2022). According to Campos-Garcia & Angel Zuniga-Vicente (2022), efforts should focus on enhancing the visibility and recognition of women within the community. Additionally, it is crucial to develop programs that support professional growth. These programs should include strong support networks and collaborations with other groups to enhance women's contributions to governance.

Trimble et al. (2022), state that barriers to local governance are greater than those arising from social norms and corporate practices. According to Nekhili et al. (2022), there has been a strong bias toward men, leading to a significant lack of women in key positions and advisory roles within local governments. To address these issues, there is a critical need to support policies that go beyond the simple approach of gender quotas and instead seek real changes in attitudes toward recognizing and valuing women's leadership skills.

Figure 8. Co-reference of cluster 3 - Local Governance and Women's Empowerment



Note: Co-reference network of conceptual terms defined by the authors in cluster 3. Generated by VosViewer Version 1.6.20.

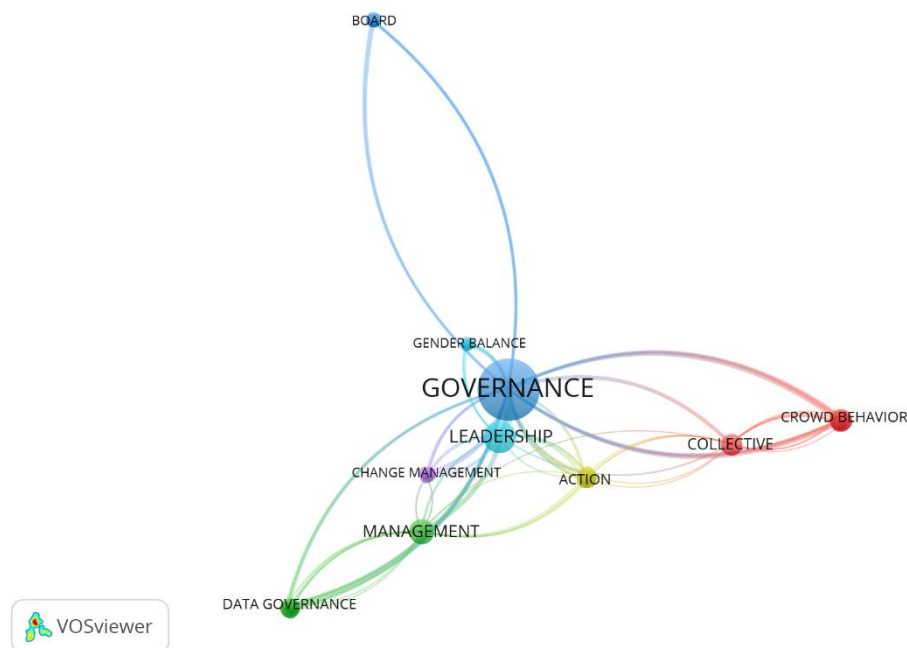
#### 3.2.1.4. Clusters 4: Governance and Information Quality Management..

In Cluster 4, titled 'Governance and Information Quality Management,' Figure 8 presents the co-reference network graph of the terms defined by the authors in this cluster. This cluster focuses on ensuring that the information used for decision-making is accurate and well-organized. This is a key process in workplaces where information-based decisions can determine the success or failure of a company's plans.

Regarding the role of women in information management, Villeger (2023), highlights issues such as gender disparities at decision-making levels. The lack of access to information often results in women being underrepresented in these levels and facing additional challenges that may hinder their full participation. According to Cikaliuk et al. (2023), implementing policies specifically aimed at addressing these barriers and improving opportunities for all must be expedited, as such measures can drive meaningful change within organizations.

On one hand, Arora (2022) states that improving information quality requires an excellent education and workplace system. For women in technology and information management, this could include access to mentorship and training programs that cover both technical and managerial aspects. Along the same lines, Schadewitz & Spohr (2022) argued that the effective inclusion of women in these roles not only enhances workplace diversity and equity but also improves the quality of decision-making. A diverse talent pool provides the opportunity for a deeper understanding of business challenges and the development of innovative solutions, highlighting the need for governance policies that promote inclusion (Foppiano-Vilo, Matus-Castillo, y Cornejo-Amestica 2022).

Figure 9. Co-reference of cluster 4 - Governance and Information Quality Management



Note: Co-reference network of conceptual terms defined by the authors in cluster 3. Generated by VosViewer Version 1.6.20.

#### 4. CONCLUSIONS

The bibliometric analysis of 206 articles from 1996 to 2025 enabled an examination of the progress of women's leadership and governance within professional settings and decision-making positions. Bibliometric indicators, such as an annual growth rate of 3.86%, an average of 3,325 citations per document, and 12,756 references, highlight the attention and impact these fields of study have garnered. On average, these documents are 4.71 years old, indicating that the studies are relatively recent, adding value to the context of female leadership.

The construction of co-reference clusters, built around the concepts proposed by the authors, identified at least four clusters that successfully capture the multidimensional nature of governance and female leadership. These concepts range from corporate and sustainability governance to local empowerment and information quality management, all demonstrating the need to address gender equity at every level of decision-making.

Cluster 1 - Gender Governance and Corporate Participation highlights the effort to achieve the inclusion of women in leadership positions through the establishment of quotas and the promotion of a culture that values female potential. This consistently enhances organizational effectiveness by fostering a broader range of perspectives in corporate decision-making, leading to innovations and greater organizational efficiency.

Cluster 2 - Sustainable Governance and Female Leadership highlights the integration of sustainability with gender equity, emphasizing that women tend to adopt more inclusive and, therefore, more effective decision-making approaches. These decisions are not only linked to the organizational climate but also to equity and labor rights, as they contribute to the creation of fair and productive working conditions.

Cluster 3 - Local Governance and Women's Empowerment highlights how local public policies can increase the proportion of women participating in decision-making processes. Equally important is

ensuring access to education and the necessary resources for these women to actively engage in local economic and political life.

Finally, Cluster 4 on Governance and Information Management highlights the need to examine the information used in decision-making to ensure its quality and organization. In this regard, female leaders face unique challenges, such as gender imbalances in access to decision-making and limited access to critical information. Addressing these issues requires a strong commitment to training and professional development.

It is proposed for further studies to delve into the analysis from a long-term perspective on the changes achieved by the identified groups. The clusters facilitate more in-depth research that lays the groundwork for a new definition of concepts that can be addressed by formal studies such as factor analyses.

## 5. REFERENCES

- [1] Acker, Joan. 1990. «Hierarchies, Jobs, Bodies: A Theory of Gendered Organizations». *Gender and Society* 4(2):139-58.
- [2] Akhter, Afaf, Mohd Yousuf Javed, y Javaid Akhter. 2023. «Research Trends in the Field of Islamic Social Finance: A Bibliometric Analysis from 1914 to 2022». *International Journal of Ethics and Systems* ahead-of-print(ahead-of-print). doi: 10.1108/IJOES-03-2023-0044.
- [3] Al Hameli, A., C. Mertzanis, y I. Kampouris. 2024. «Women's Empowerment Conditions, Institutions and Firm Performance in the MENA Region». *Accounting Forum* 48(4):635-64. doi: 10.1080/01559982.2023.2179866.
- [4] Aloysius Edward, J., D. Joseph Charles Tamilmaran, y T. J. Parathanath. 2024. «Dismantling Boardroom Barriers: A Contemporary Examination of Gender Diversity and Corporate Financial Performance in India». *Studies in Systems, Decision and Control* 535:205-13. doi: 10.1007/978-3-031-63569-4\_18.
- [5] Arora, A. 2022. «Female Leadership and Firm Value in an Emerging Economy: A Panel Data Framework». *Vision*. doi: 10.1177/09722629221101153.
- [6] Arora, Akshita. 2022. «Female Leadership and Firm Value in an Emerging Economy: A Panel Data Framework». *Vision*.
- [7] Azeez, Fousia, y Nimitha Aboobaker. 2024. «Exploring new frontiers of experiential learning landscape: a hybrid review». *Learning Organization* 31(6):985-1007.
- [8] Ba, Alice, Kara Ellerby, Daniel Green, Daniel Kinderman, Stuart Kauffman, Matthew Weinert, y Saleem H. Ali. 2019. «Hybrid leadership councils: envisioning inclusive and resilient governance». *European Journal of Futures Research* 7(1):3. doi: 10.1186/s40309-019-0155-2.
- [9] Buchy, Marlene, Marlene Elias, y Manohara Khadka. 2023. «Invisible Women: Barriers for Women Professionals in the Water, Energy, Food, and Environment Sectors in Nepal». *FRONTIERS IN SUSTAINABLE FOOD SYSTEMS* 7.
- [10] Campos-Garcia, Irene, y Jose Angel Zuniga-Vicente. 2022. «Strategic Decision-Making in Secondary Schools: The Impact of a Principal's Demographic Profile». *LEADERSHIP AND POLICY IN SCHOOLS* 21(3):543-64.
- [11] Chan, Esther. 2015. «Complementarianism as Doctrine and Governance: Narratives on Women's Leadership among Second-Generation Asian Americans». *Review of Religious Research* 57(3):435-52. doi: 10.1007/s13644-014-0186-x.
- [12] Chen, Shushu, y Ian Henry. 2012. «Women in Management and Leadership in the Olympic Movement in Muslim Majority Countries: An Empirical Evaluation of Huntington's Clash of Civilisations Typology». *The International Journal of the History of Sport* 29(15):2131-44. doi: 10.1080/09523367.2012.724775.



- [13] Cikaliuk, Monique, Ljiljana Erakovic, Brad Jackson, Chris Noonan, y Susan Watson. 2023. «Diversity and Inclusion». *RESPONSIBLE LEADERSHIP IN CORPORATE GOVERNANCE: An Integrative Approach* 206-28.
- [14] Congress of the USA. 2002. «To protect investors by improving the accuracy and reliability of corporate disclosures made pursuant to the securities laws, and for other purposes».
- [15] Crossette-Thambiah, Grace, Daniel Berleant, y Ahmed AbuHalimeh. 2024. «An Information Quality Framework for Managed Health Care». *Journal of Healthcare Leadership* 16:343-64. doi: 10.2147/JHL.S473833.
- [16] Dadashzadeh, Nima, Taimaz Larimian, Ulysse Levifve, y Rok Marsetič. 2022. «Travel Behaviour of Vulnerable Social Groups: Pre, during, and Post COVID-19 Pandemic». *International Journal of Environmental Research and Public Health* 19(16):10065. doi: 10.3390/ijerph191610065.
- [17] Daily, C. M., y D. R. Dalton. 1994. «Bankruptcy and Corporate Governance: The Impact of Board Composition and Structure». *Academy of Management Journal* 37:1603-17. doi: <https://doi.org/10.2307/256801>.
- [18] Eagly, Alice H., y Steven J. Karau. 2002. «Role Congruity Theory of Prejudice toward Female Leaders.» *Psychological Review* 109(3):573-98. doi: 10.1037/0033-295X.109.3.573.
- [19] Elango, B., y Marcin Kozak. 2024. «Acceptance Times of Bibliometric Analyses on COVID-19 Literature». *International Journal of Information Science and Management* 22(4):79-90.
- [20] Fama, E. F., y M. C. Jensen. 1983. «The separation of ownership and control». *Journal of Law & Economics* 26(2):301-25. doi: <http://dx.doi.org/10.2139/ssrn.94034>.
- [21] Foppiano-Vilo, Gerard, Carlos Matus-Castillo, y Miguel Cornejo-Amestica. 2022. «Barriers, facilitators and strategies that influence women's participation on boards of directors of Chilean sports federations». *RETOS-NUEVAS TENDENCIAS EN EDUCACION FISICA DEPORTE Y RECREACION* (44):34-44.
- [22] García-Morán, Ana, y Julian S. Yates. 2022. «In between rights and power: Women's land rights and the gendered politics of land ownership, use, and management in Mexican ejidos». *World Development* 152:105804. doi: 10.1016/j.worlddev.2021.105804.
- [23] Govardhan, Snehal, Balkrishna Eknath Narkhede, Rakesh D. Raut, Linda L. Zhang, y Sudishna Ghoshal. 2025. «Significance of Industry 4.0 in Achieving Sustainable Performance Across Supply Chains—A Research Perspective». *Business Strategy and Development* 8(1).
- [24] Guedes, Walef Pena, Bruna Angela Branchi, Cibele Roberta Sugahara, y Denise Helena Lombardo Ferreira. 2024. «Gender-based climate (in)justice: An overview». *Environmental Science & Policy* 162:103934. doi: 10.1016/j.envsci.2024.103934.
- [25] Haider, Zulfiqar Ali, Douglas J. Cumming, y Zhenyu Wu. 2025. «Groupthink in the Board of Family Firms: The Case of Institutional Investment». *ENTREPRENEURSHIP THEORY AND PRACTICE*.
- [26] Hakovirta, Marko, Navodya Denuwara, Peter Topping, y Jorma Eloranta. 2023. «The Corporate Executive Leadership Team and Its Diversity: Impact on Innovativeness and Sustainability of the Bioeconomy». *Humanities and Social Sciences Communications* 10(1):1-10. doi: 10.1057/s41599-023-01635-9.
- [27] Hatano, Ayako. 2021. «Toward Aligning with International Gender Goals? Analysis of the Gender Equality Landscape in Japan under the Laws on Women's Economic and Political Participation and Leadership». *Law and Development Review* 14(2):589-632. doi: 10.1515/ldr-2021-0044.
- [28] Hernández Herrera, Claudia Alejandra. 2024. «Las mujeres y el acceso al liderazgo». *RIDE Revista Iberoamericana para la Investigación y el Desarrollo Educativo* 15(29). doi: 10.23913/ride.v15i29.2120.
- [29] Huse, Morten, y Anne Grethe Solberg. 2006. «Gender-related boardroom dynamics» editado por A. Broadbridge y J. Hearn. *Women in Management Review* 21(2):113-30. doi: 10.1108/09649420610650693.

- [30] Hussain, Syed Mujahid, Nisar Ahmad, Fatima Fazal, y Angeliki N. Menegaki. 2024. «The Impact of Female Directorship on Firm Performance: A Systematic Literature Review». *Review of Managerial Science* 18(3):913-39. doi: 10.1007/s11846-023-00677-2.
- [31] Imburgia, Laura, Henny Osbahr, Sarah Cardey, y Janet Momsen. 2021. «Inclusive Participation, Self-Governance, and Sustainability: Current Challenges and Opportunities for Women in Leadership of Communal Irrigation Systems». *ENVIRONMENT AND PLANNING E-NATURE AND SPACE* 4(3, SI):886-914.
- [32] Jensen, M. C., y W. Meckling. 1976. «Theory of the firm: managerial behavior, agency costs and ownership structure». *Journal of Financial Economics* 3(3):305-60. doi: [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X).
- [33] Jensen, Michael C., y Kevin J. Murphy. 1990. «Performance Pay and Top-Management Incentives». *JOURNAL OF POLITICAL ECONOMY*.
- [34] Jones, Eric C., Diana Luque, y Arthur D. Murphy. 2018. «Recovering ImpunityA Tale of Two Disasters and Governance in Northwest Mexico». *Mexican Studies/Estudios Mexicanos* 34(2):218-49. doi: 10.1525/msem.2018.34.2.218.
- [35] Kabeer, Naila, Nivedita Narain, Varnica Arora, y Vinitika Lal. 2023. «GROUP RIGHTS, GENDER JUSTICE, AND WOMEN'S SELF-HELP GROUPS: EXIT, VOICE, AND LOYALTY IN AN INDIGENOUS COMMUNITY IN INDIA». *Social Philosophy and Policy* 40(1):103-28. doi: 10.1017/S0265052523000390.
- [36] Kanadli, Sadi Bogac, Pingying Zhang, y Nada K. Kakabadse. 2020. «How Job-Related Diversity Affects Boards' Strategic Tasks Performance: The Role of Chairperson». *CORPORATE GOVERNANCE-THE INTERNATIONAL JOURNAL OF BUSINESS IN SOCIETY* 20(4):583-99.
- [37] Khalifah, Mohamad Handi, Rahmatina Awaliyah Kasri, y Hakan Aslan. 2024. «Mapping the evolution of ZAKAH theme publications years 1964-2021: a bibliometric analysis». *Journal of Islamic Accounting and Business Research* 15(2):265-90.
- [38] Kirton, Gill, y Geraldine Healy. 2013a. *Gender and Leadership in Unions*. New York: Routledge.
- [39] Kirton, Gill, y Geraldine Healy. 2013b. *Gender and Leadership in Unions*. New York: Routledge.
- [40] Kong, Lingfu, Muhammad Usman, Weili Yue, Fakhra Yasmin, y Marcela Sokolova. 2024. «Leadher: Role of Women Leadership in Shaping Corporate Innovation». *Humanities and Social Sciences Communications* 11(1):1-10. doi: 10.1057/s41599-024-03852-2.
- [41] Krech, Michele, Jorg Krieger, y Lindsay Parks Pieper. 2023. «A `token Gesture' in World Athletics Governance? The IAAF Women's Committee under Ilse Bechthold, 1990-2005». *SPORT IN SOCIETY* 26(5):901-19.
- [42] La Porta, R., F. Lopez-desilanez, A. Shleifer, y R. Vishny. 1998. «Law and finance». *Journal of Political Economy* 106(6):1113-55. doi: <http://dx.doi.org/10.1086/250042>.
- [43] La Porta, R., F. Lopez-desilanez, A. Shleifer, y R. Vishny. 2000. «Investor protection and corporate governance». *Journal of Financial Economics* 58:3-27. doi: <http://dx.doi.org/10.1086/250042>.
- [44] Magomana, N.R., M. Mkhize, S. Abel, y K. F. Aliamutu. 2025. «Gender Disparities and Board Representation in Zimbabwe». *International Journal of Economics and Financial Issues* 15(1):354-59. doi: 10.32479/ijefi.16852.
- [45] Magomana, Nzwirashe R., Msizi Mkhize, Sanderson Abel, y Kansilembo Aliamutu. 2025. «Gender Disparities and Board Representation in Zimbabwe». *International Journal of Economics and Financial Issues* 15(1):354-59. doi: 10.32479/ijefi.16852.
- [46] Mandara, Christina Geoffrey, Anke Niehof, y Hilje van der Horst. 2017. «Women and Rural Water Management: Token Representatives or Paving the Way to Power?» *WATER ALTERNATIVES-AN INTERDISCIPLINARY JOURNAL ON WATER POLITICS AND DEVELOPMENT* 10(1):116-33.

- [47] Meagher, Kristen, Hala Mkhallalati, Nassim El Achi, y Preeti Patel. 2022. «A Missing Piece in the Health for Peace Agenda: Gender Diverse Leadership and Governance». *BMJ Global Health* 7(Suppl 8):e007742. doi: 10.1136/bmjgh-2021-007742.
- [48] Moldabekova, Aisulu, Aknur Zhidebekkyzy, Sandigul Akhmetkaliyeva, y Elmira Baimukhanbetova. 2020. «Advanced technologies in improving the management of logistics services: Bibliometric network analysis; [Zaawansowane technologie ulepszania zarządzania usługami logistycznymi: Analiza sieci bibliometrycznej]». *Polish Journal of Management Studies* 21(1):211-23.
- [49] Nekhili, Mehdi, Fahim Javed, y Haithem Nagati. 2022. «Audit Partner Gender, Leadership and Ethics: The Case of Earnings Management». *JOURNAL OF BUSINESS ETHICS* 177(2):233-60.
- [50] Ojeda, Lucy, Matías Ginieis, y Eleni Papaoikonomou. 2025. «Gender Equality in Sustainability Reporting: A Systematic Literature Review». *Corporate Social Responsibility and Environmental Management* csr.3089. doi: 10.1002/csr.3089.
- [51] Palomo-Zurdo, Ricardo, Milagros Gutiérrez-Fernández, y Yakira Fernández-Torres. 2017. «La cuestión de género en los órganos de gobierno de la banca cooperativa». *CIRIEC-España, revista de economía pública, social y cooperativa* (89):137-66. doi: 10.7203/CIRIEC-E.89.8845.
- [52] Panadan, Davis. 2013. «GENDER POLITICS AND QUOTA FOR WOMEN IN INDIA». *Journal of Dharma* 38(3):303-18.
- [53] Pearce, John A., y Shaker A. Zahra. 1991. «The Relative Power of CEOs and Boards of Directors: Associations with Corporate Performance». *Strategic Management Journal* 12(2):135-53. doi: <https://doi.org/10.1002/smj.4250120205>.
- [54] Pena, Maria, Patrick McConney, Leisa Perch, y Terrence Phillips. 2022. «Capacities and Gaps in Caribbean Fisherfolk Organization Leadership». *GENDER TECHNOLOGY & DEVELOPMENT* 26(3, SI):503-21.
- [55] Rahnemaei, Fatemeh Alsatat, Ehsan Aghapour, Homeira Asgharpoor, Nastaran Safavi Ardabili, Zahra Atarodi Kashani, y Fatemeh Abdi. 2024. «Prenatal exposure to ambient air pollution and risk of fetal overgrowth: Systematic review of cohort studies». *Ecotoxicology and Environmental Safety* 280:116526. doi: 10.1016/j.ecoenv.2024.116526.
- [56] Rechner, Paula L., y Dan R. Dalton. 1991. «CEO Duality and Organizational Performance: A Longitudinal Analysis». *Strategic Management Journal* 12(2):155-60. doi: 10.1002/smj.4250120206.
- [57] Saad, Sourour Ben, y Lotfi Belkacem. 2021. «Does Board Gender Diversity Affect Capital Structure Decisions?». *Corporate Governance: The International Journal of Business in Society* 22(5):922-46. doi: 10.1108/CG-12-2020-0575.
- [58] Şahin, Kader, Seyfettin Artan, y Seda Tuysuz. 2015. «The Moderating Effects of a Board of Directors on FDI's International Diversification in Turkey». *International Journal of Organizational Analysis* 23(1):61-88. doi: 10.1108/IJOA-06-2013-0677.
- [59] Saito, Takaharu. 2024. «Female Legislators Decrease Epidemic Deaths». *DISCOVER PUBLIC HEALTH* 21(1).
- [60] Schadewitz, Hannu, y Jonas Spohr. 2022a. «Gender Diverse Boards and Goodwill Changes: Association between Accounting Conservatism, Gender and Governance». *Journal of Management and Governance* 26(3):757-79. doi: 10.1007/s10997-021-09607-4.
- [61] Schadewitz, Hannu, y Jonas Spohr. 2022b. «Gender Diverse Boards and Goodwill Changes: Association between Accounting Conservatism, Gender and Governance». *JOURNAL OF MANAGEMENT & GOVERNANCE* 26(3):757-79.
- [62] Sehring, Jenniver, Rozemarijn ter Horst, y Alexandra Said. 2023. «Water Diplomacy: A Man's World? Insights from the Nile, Rhine and Chu-Talas Basins». *JOURNAL OF HYDROLOGY X* 20.
- [63] Sharma, Ankit, Suresh Kumar Jakhar, Ilias Vlachos, y Satish Kumar. 2025. «Advances in hub location problems: a literature review and research agenda». *International Journal of Productivity and Performance Management* 74(1):24-55.

- [64] Shleifer, A., y R. W. Vishny. 1997. «A survey of corporate governance». *Journal of Finance* 52(2):737-83. doi: <https://doi.org/10.1111/j.1540-6261.1997.tb04820.x>.
- [65] Solanellas, Frances, Joshua Munoz, Francesc Genovard, y Josep Petchame. 2023. «Governance Policies in Sports Federations. A Comparison According to Their Size». *JOURNAL OF INFRASTRUCTURE POLICY AND DEVELOPMENT* 8(1).
- [66] Sossa, Jhon Wilder Zartha, Nolberto Gutiérrez Posada, Luis Horacio Botero Montoya, Adriana Maria Zuluaga Monsalve, Juan Carlos Palacio Piedrahíta, Gina Lia Orozco Mendoza, Lilibian Valencia Grisales, y Luis Fernando Gutiérrez Cano. 2024. «Foresight study using scenarios and the Delphi method in the leather agroindustrial chain to 2035 - Alignment of results with open innovation». *Journal of Open Innovation: Technology, Market, and Complexity* 10(3).
- [67] Standard & Poor's. 2004. «Standard and Poor's Corporate Governance Scores: Criteria, Methodology and Definitions».
- [68] Steiner, Bodo, Inna Makarenko, y Kateryna Yuhai. 2024. «Transparency of Sustainability Disclosure in Agri-Food Value Chain Management: Mapping the Scientific Landscape». *Problems and Perspectives in Management* 22(4):268-87. doi: 10.21511/ppm.22(4).2024.21.
- [69] Timbalari, Carolina, Aida Lavinia Neagoe (Barbu), y Mihai-Gabriel Cristian. 2024. «Clustering Corporate Governance and Leadership. A Bibliometric Analysis». *STUDIES IN BUSINESS AND ECONOMICS* 19(1):255-75.
- [70] Trimble, Linda, Jennifer Curtin, Meagan Auer, Angelia Wagner, y V. K. G. Woodman. 2022. «Works Well with Others: Gendered Mediation of Collaborative Leadership Skills». *JOURNAL OF WOMEN POLITICS & POLICY* 43(2):245-55.
- [71] Vătămănescu, Elena-Mădălina, Gandolfo Dominici, Victor-Emanuel Ciuciuc, Alexandra Vițelar, y Flavia Gabriela Anghel. 2024. «Connecting smart mobility and car sharing using a systematic literature review. An outlook using Bibliometrix». *Journal of Cleaner Production* 485.
- [72] Villeger, Amelie. 2023. «Couple's Entrepreneurship: Who Loves Me Follows Me». *MANAGEMENT-POLAND* 26(3):16-35.
- [73] Vourvachis, P., y M. Anagnostou. 2024. *Executive Positions*. Edward Elgar Publishing Ltd.
- [74] Wicker, Pamela, Svenja Feiler, y Christoph Breuer. 2022. «Board Gender Diversity, Critical Masses, and Organizational Problems of Non-Profit Sport Clubs». *EUROPEAN SPORT MANAGEMENT QUARTERLY* 22(2):251-71.
- [75] Witherell, Bill. 2004. «THE REVISED OECD PRINCIPLES OF CORPORATE GOVERNANCE: A MANAGEMENT ROADMAP FOR HEALTHY, WELL-GOVERNED COMPANIES».
- [76] Yunita, Trisnia, Prio Utomo, y Arta Moro Sundjaja. 2024. «Islamic Banking in the Age of Technology: A Five-Year Review of Trends and Technologies». *Global Business and Finance Review* 29(8):75-90.
- [77] Zahiruddin, Haikal, y Adi Wijaya. 2024. «The evolution and trends in IT governance research: A bibliometric analysis». *Journal of Information Technology Management* 16(2):112-31.