Female Representation and Leadership: An Exploratory Bibliometric Analysis of a Selected WoS-Indexed Sample

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Abstract

This study provides an exploratory bibliometric overview of 119 English-language journal articles indexed in Web of Science (WoS) between 1999 and 2025 addressing female representation, women's leadership, glass-ceiling barriers, and related governance and decision-making contexts. Using the R package bibliometrix and its Biblioshiny interface, the study examines annual production, global citation impact, author-level indicators, and Keywords Plus co-occurrence. Publication activity increased particularly after 2016. Citation impact was strongly right-skewed, with a mean of 33.52 and a median of 7 citations, while the ten most cited articles accounted for 69.12% of all citations. The findings apply only to the selected WoS-indexed sample.

Keywords

Women's leadership; Glass ceiling; Gender diversity.

Introduction

Gender diversity in leadership has emerged as a critical topic in academic and policy discourse, given its documented impact on organizational performance, decision-making quality, and equitable representation (Post & Byron, 2015; Hoogendoorn et al., 2013; Gaio et al., 2024; Hussain et al., 2024; Yang & Konrad, 2025). Recent studies further confirm that women's participation in boards and management remains relevant for debates on governance quality, corporate performance, sustainability, and inclusive leadership. An increasing body of evidence shows that inclusive leadership teams contribute to stronger governance, enhanced innovation, and more effective risk management, while also advancing broader societal goals such as social justice and economic resilience.

Despite these documented benefits, women remain significantly underrepresented in top leadership positions across sectors. Persistent structural and cultural barriers—including the "glass ceiling," organizational bias, and restricted access to influential professional networks—continue to constrain their advancement (Daily et al., 1999; Burgess & Tharenou, 2002; Laique et al., 2023). Understanding how these barriers have evolved across different institutional contexts is necessary to design effective interventions and promote inclusive leadership cultures.

Although prior studies have examined women on corporate boards, gender diversity in management, quotas, environmental, social, and governance (ESG) disclosure, and links between leadership diversity and performance, the existing literature remains fragmented across governance, finance, ethics, and organizational studies (Post & Byron, 2015; Hazaea et al., 2023; Gaio et al., 2024; Hussain et al., 2024; Yang & Konrad, 2025). Less attention has been paid to how research on female representation and women's leadership has developed across organizational, governance, and decision-making contexts. The research gap addressed in this article concerns the limited bibliometric attention devoted to the connections among female representation, leadership, glass-ceiling barriers, and related governance and decision-making themes. Rather than claiming exhaustive or domain-specific coverage, this study provides an exploratory overview of publication trends, citation characteristics, influential contributors, and thematic orientation within a selected WoS-indexed sample.

This article builds on the authors' previous study on gender equality and innovation in Slovak organizations (Mikulášová & Skorková, 2025), but it differs in both scope and research focus. While the previous study focused on innovation in Slovak organizations and combined survey data with a bibliometric analysis of a narrow national context, the present article examines female representation and women's leadership across broader international and organizational contexts. The current study also extends the previous approach by using a larger WoS-indexed dataset and more clearly identifying influential authors, publications, and citation-based indicators in the field under analysis.

The main aim of this article is to provide an exploratory bibliometric overview of the development, citation characteristics, influential contributors, and thematic orientation of a selected sample of WoS-indexed articles, i.e. articles indexed in Web of Science (WoS) scientific database, addressing female representation, women's leadership, glass-ceiling barriers, and related governance and decision-making contexts. This aim is achieved through a bibliometric analysis of 119 scientific articles indexed in WoS between 1999 and 2025, processed using the R package bibliometrix and its Biblioshiny interface.

The article is structured as follows. Section 1 summarizes key concepts and previous findings on female representation, leadership, and financial decision-making. Section 2 explains the bibliometric research design, data source, search strategy, and refinement procedure. Section 3 presents the main bibliometric findings, including dataset characteristics, author impact, and the most relevant publications. Section 4 interprets the findings, outlines implications, and addresses research limitations. Conclusion Section summarizes the main contributions and suggests directions for future research.

1 Literature Review

Research on female representation and women's leadership spans corporate governance, leadership diversity, financial performance, risk management, organizational decision-making, and sustainability-oriented contexts. The literature generally agrees that gender diversity in boards and top management teams is not only a matter of equal opportunity, but also a governance mechanism that can influence oversight quality, transparency, ethical conduct, and strategic choices (Post & Byron, 2015; Gaio et al., 2024; Yang & Konrad, 2025). At the same time, previous studies also show that the effects of female representation are not automatic; they depend on institutional context, the level of authority held by women, the presence of a critical mass, and whether women are included in positions where strategic and

financial decisions are actually made (Cohen & Huffman, 2007; Hazaea et al., 2023; Laique et al., 2023).

Several earlier studies established the foundations of this research stream. Daily et al. (1999) showed that women made progress in board membership but not to the same extent in Chief Executive Officer (CEO) and executive-suite positions, indicating a persistent gap between formal board inclusion and real executive authority. Burgess & Tharenou (2002) argued that the underrepresentation of women on boards cannot be explained by one single barrier, but by a combination of organizational, cultural, and structural obstacles. Cohen & Huffman (2007) further demonstrated that women in management reduce gender wage inequality mainly when they occupy higher-status managerial roles, highlighting the difference between symbolic representation and substantive power. Post & Byron (2015), in a meta-analysis of 140 studies, found a positive relationship between women on boards and accounting-based financial performance, especially in countries with stronger shareholder protection. Ho et al. (2015) provided evidence from financial reporting, showing that female CEOs are associated with more conservative accounting practices and greater ethical sensitivity in financial decision-making.

Recent empirical studies illustrate the continuing breadth of research on board gender diversity and organizational outcomes. Alkhawaja et al. (2023) reported a positive association between gender-diverse boards and ESG disclosure in a global sample, while Gharios et al. (2024) examined the relationship between board gender diversity, liquidity, and the performance of European firms. Pham et al. (2025) emphasized the importance of women directors' executive roles and experience in an emerging economy. In contrast, Sahu et al. (2025) investigated the interaction between board gender diversity, ESG factors, and firm performance. These studies demonstrate that substantive conclusions concerning female representation remain dependent on the institutional setting, characteristics of women directors, governance arrangements, and the performance measures employed.

The present study is positioned in relation to several recent systematic and integrative reviews. Hazaea et al. (2023) and Hussain et al. (2024) synthesized evidence on board gender diversity, female directorship, and financial performance, while Laique et al. (2023) mapped two decades of heterogeneous findings on board gender diversity and financial outcomes. Gaio et al. (2024) reviewed 370 articles on gender diversity in management and corporate financial performance, and Yang & Konrad (2025) synthesized 503 articles from a political-capital perspective. Unlike these broader reviews, the present study does not seek to estimate the general effect of gender diversity on firm performance or claim exhaustive coverage of the field. Its contribution lies in providing an exploratory bibliometric profile of a deliberately delimited WoS-indexed sample covering female representation, women's leadership, glass-ceiling barriers, and related governance and decision-making contexts. It combines annual publication patterns, global citation characteristics, author-level indicators, and Keywords Plus co-occurrence patterns within this selected sample.

The literature also provides more specific evidence on financial decision-making and risk. Datta et al. (2021) showed that top executive gender and board gender diversity influence corporate debt maturity choices, indicating that gender diversity may shape financing decisions and risk preferences. More recently, studies on financing and risk management have examined whether female directors influence leverage, debt structure, equity financing, and corporate

risk-taking. This stream is directly relevant to the present article because financial decision-making roles include not only board membership, but also participation in capital structure decisions, risk oversight, budgeting, accounting policy, investment decisions, and corporate reporting.

For this article, the key terms defined by the article's authors are understood as follows.

- *Female representation* refers to the presence and active participation of women in corporate governance, boards, executive roles, and financial decision-making positions.
- *Financial decision-making roles* refer to positions that influence financial strategy, accounting policy, budgeting, investment decisions, risk management, debt and equity financing, and the allocation of organizational resources.
- *The glass ceiling* is understood as a set of invisible but persistent organizational and social barriers that prevent qualified women from advancing into senior leadership positions despite formal equality of opportunity.
- *Board gender diversity* refers to the proportion and role of women on boards of directors (Liu et al., 2020).
- *Substantive representation* means that women not only occupy formal seats but also possess decision-making authority, access to committees, independence, expertise, and influence.

Different perspectives in literature can be interpreted through several complementary theoretical lenses. Agency theory suggests that gender-diverse boards may strengthen monitoring, oversight, and managerial accountability, while resource dependence theory emphasizes the additional knowledge, experience, networks, and stakeholder connections that women may bring to boards and management teams; together, these theories support the business-case perspective (Post & Byron, 2015; Hazaea et al., 2023; Gaio et al., 2024). Critical mass theory and the political-capital perspective explain why numerical representation alone may be insufficient: women's influence is expected to increase when they are represented beyond a token level, participate in key committees, hold independent positions, and possess recognized expertise (Yang & Konrad, 2025). Institutional theory helps explain the role of regulatory pressure and gender quotas in changing board composition, although formal compliance may not transform internal power structures or career pipelines (Bertrand et al., 2019; Alkhawaja et al., 2023). Finally, social role theory highlights gender stereotypes and expectations that may continue to shape the evaluation, authority, and advancement of women even after they attain leadership positions (Burgess & Tharenou, 2002; Oliver et al., 2017). These theoretical perspectives also support a contingency interpretation, according to which the outcomes associated with female representation depend on institutional context, organizational characteristics, and women's substantive decision-making authority.

The present authors' position aligns with the contingency and substantive representation perspective. This article does not assume that the mere numerical presence of women in leadership automatically improves all financial outcomes. Instead, it argues that female representation in leadership and decision-making roles should be analyzed as a multidimensional organizational and governance issue shaped by institutional frameworks, organizational culture, access to influential networks, and the distribution of real authority.

2 Methodology

This study applies a bibliometric analysis to 119 articles indexed in the WoS between 1999 and 2025. In the Biblioshiny output, the term *documents* refers to individual publications included in the dataset, while the term *sources* refers to publication outlets, such as journals, books, or other indexed source titles. The authors' final dataset contains only scientific journals. Conference proceedings, books, and other kinds of sources have been intentionally excluded. Therefore, instead of the term *source* the term *journal* is used and instead of the term *document* the term *article* is used. The final dataset consists of 119 analyzed articles published in 97 journals.

The WoS database was selected because it provides curated, peer-reviewed, and internationally indexed publications with standardized bibliographic metadata suitable for bibliometric analysis. The period 1999–2025 was chosen to capture the long-term development of the research field from the earliest relevant records identified in the dataset to the most recent publications available at the time of data collection. The year 2026 was excluded because it represented an incomplete publication year at the time of data collection.

Only English-language articles were included in the final dataset. This criterion was applied to ensure consistency in bibliographic metadata, keywords, abstracts, and citation records, and to enable comparable processing of the dataset in Biblioshiny.

Focusing on themes such as female representation in corporate leadership, financial decision-making, and governance structures, the analysis uses the R package bibliometrix and its Biblioshiny interface to map publication trends, citation patterns, influential scholars, and emerging conceptual frameworks in the field. Based on this objective, the study addresses the following research questions (RQs):

RQ1: How did annual scientific production develop within the selected WoS-indexed sample between 1999 and 2025?

RQ2: Which authors and publications achieved the highest global citation impact within the selected WoS-indexed sample?

RQ3: Which thematic orientations emerge from the frequency and co-occurrence analysis of Keywords Plus within the selected WoS-indexed sample?

A bibliometric approach was selected because it enables a systematic examination of publication trends, citation characteristics, influential contributors, and thematic orientation within a defined body of literature. In line with the study's exploration scope, the analysis focused on descriptive characteristics of the dataset, publication trends, global citation impact, author-level indicators, and the most-cited publications globally. Because cited-reference metadata was unavailable, the study does not claim to provide a comprehensive mapping of the field's intellectual structure. It does not include co-citation analysis or bibliographic coupling. The findings should therefore be interpreted as an exploratory overview of the selected WoS-indexed sample.

The bibliometric analysis was conducted using a deliberately delimited search strategy based on five predefined exact phrases connected by the OR operator: "female representation", "glass ceiling", "women leadership", "financial leadership", and "financial decision making". These phrases were selected to capture the intersection of women's representation,

leadership roles, decision-making processes, and gender inclusion in economic and managerial contexts. No separate domain-specific AND block or truncation was applied in the original search; instead, the thematic relevance of the retrieved records was assessed during the subsequent screening process described in Table 1. The search was not intended to provide exhaustive coverage of all research on women in boards, management, or corporate governance. Consequently, the final dataset should be interpreted as a selected exploratory sample of WoS-indexed articles relevant to the defined topic. The dataset was exported in BibTeX format and processed using the R package Bibliometrix and its Biblioshiny interface. For the keyword co-occurrence analysis in Figure 2, the Keywords Plus metadata available for 109 articles were normalized by converting terms to lowercase and standardizing whitespace. The network includes the 22 most frequent terms, with links remaining when two terms co-occurred in at least 3 articles. Node size and color represent term frequency, while edge thickness represents co-occurrence frequency. To ensure the quality and relevance of the data, a multi-step refinement process was carried out. The methodology involved 6 key stages, as outlined in Table 1.

Tab. 1 *Steps in the literature review procedure*

Step Number	Step Description	Details
1	Criteria for reviewing existing literature (inclusion and exclusion)	**Classification**: English-language scientific journal articles indexed in WoS and relevant to female representation, women's leadership, glass-ceiling barriers, or related governance and decision-making contexts. **Exclusion**: Conference papers, books, book reviews, dissertations, and records that did not meet the predefined topical eligibility criteria. Articles were assessed for relevance to the research topic rather than excluded based on a case-study research design.
2	Literary research	**Database**: WoS Core Collection. **Search query**: TS = ("female representation" OR "glass ceiling" OR "women leadership" OR "financial leadership" OR "financial decision making"). **Filters**: English-language scientific journal articles published between 1999 and 2025.
3	Refine the selection of articles	**Screening**: The retrieved records were assessed using the available bibliographic metadata against the predefined topical eligibility criteria. Articles addressing female representation, women's leadership, glass-ceiling barriers, or related governance and decision-making contexts were retained, while clearly unrelated records were excluded. **Final sample**: 119 eligible scientific journal articles.

Step Number	Step Description	Details
4	Preparation of the final dataset	The 119 eligible articles were published in 97 scientific journals. The bibliographic records were exported in BibTeX format and prepared for analysis using the R package bibliometrix and its Biblioshiny interface.
5	Analysis of selected articles	The selected articles were analyzed using descriptive bibliometric methods, focusing on publication trends, global citation impact, author-level indicators, and the most-cited articles globally. The analysis was used to provide an exploratory overview of the selected WoS-indexed sample.
6	Presentation of findings	The findings were presented in terms of publication trends, global citation characteristics, influential authors, and the most-cited articles globally within the selected WoS-indexed sample. Substantive conclusions concerning barriers to women's advancement, governance, and financial decision-making were attributed to the reviewed literature rather than treated as direct results of the bibliometric analysis.

Source: Own using methodology in (Senyo et al., 2019)

The available documentation permits reporting of the database, the exact search query, the applied filters, the topical eligibility criteria, and the final sample. However, detailed counts of the intermediate screening stages, duplicate handling, and the resolution of borderline cases were not retained and cannot be reliably reconstructed retrospectively. The records were assessed using the available bibliographic metadata and retained when they addressed female representation, women's leadership, glass-ceiling barriers, or related governance and decision-making contexts. The final dataset comprises 119 eligible articles published in 97 scientific journals. This limitation reduces the reproducibility of the selection process and should be considered when interpreting the findings. As shown in Table 2, the selected sample has an annual publication growth rate of 8.33% and an average article age of 6.35 years. However, the growth rate should be interpreted with caution because it is sensitive to the small number of articles published at the beginning of the analyzed period and to the choice of the first and final years.

The articles in the selected sample received a mean of 33.52 global citations and a median of 7 citations. The citation distribution is strongly right-skewed (skewness = 7.24), indicating that a small number of highly cited articles account for a substantial proportion of the total citations (TC) count. Post & Byron (2015) alone received 1,021 citations, representing 25.60% of all 3,989 citations, while the ten most cited articles jointly accounted for 2,757 citations, or 69.12% of the total. Therefore, the mean citation count should not be interpreted as evidence of uniformly high scholarly engagement across the selected sample. The dataset contains 356 Keywords Plus entries available for conceptual-structure analysis. Because the number of entries alone does not capture thematic diversity, the keyword metadata was examined

separately using frequency and co-occurrence analyses. The results of this analysis are presented in Section 3.

Tab. 2 *Summary information of the publications collected for this study*

Description	Results
Timespan	1999–2025
Sources (scientific journals)	97
Documents (journal articles)	119
Annual growth rate	8.33%
Document average age in years	6.35
Average citations per document (article)	33.52
References	0
Keywords Plus (ID)	356

Source: Own

The value “0” for “References” in Table 2 indicates that cited reference metadata were not included in the exported dataset processed in Biblioshiny. Therefore, analyses requiring cited reference lists, such as co-citation analysis or bibliographic coupling, were not conducted.

The bibliometric analysis in this article is based on the available metadata, including publication years, authors, journal titles, citation counts, keywords, and article-level information.

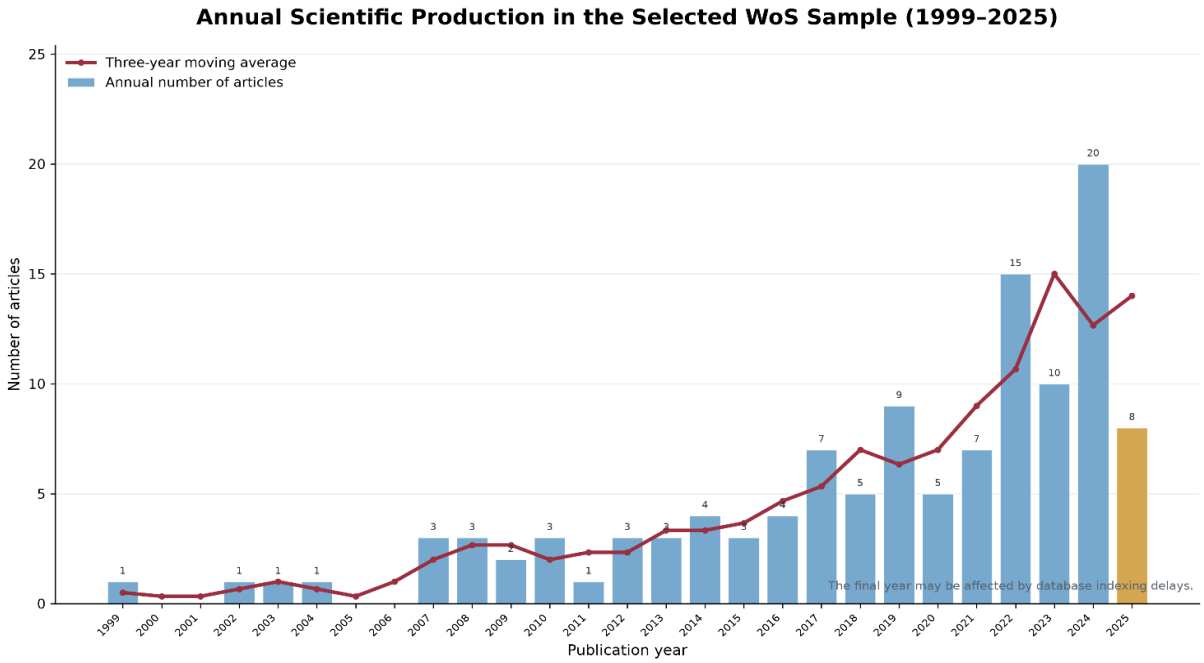
These findings reflect a continuous and growing academic interest in the intersection of gender representation, leadership, and financial decision-making, particularly within economic, managerial, and governance frameworks. The steady increase in publication volume and citation activity indicates a dynamic evolution of the field, underscoring the rising relevance of inclusive leadership and gender-informed strategies in organizational and financial contexts.

3 Results

The results presented in this section are based on the final dataset of 119 articles indexed in WoS. The dataset-level H-index is 26, indicating that 26 articles received at least 26 global citations each. Descriptive indicators, publication trends, citation counts, and dataset-level statistics were calculated using all 119 articles. Author impact indicators and the ranking of the most globally cited publications were generated from the same dataset using the R package bibliometrix and its Biblioshiny interface. The complete list of the 119 articles and their bibliographic metadata is freely available as an online supplement (Mikulášová, 2026).

The annual scientific production of the selected WoS-indexed sample is presented in Figure 1. To describe the overall direction without relying solely on the endpoint-sensitive annual growth rate, the figure presents annual article counts and a 3-year moving average.

As shown in Figure 1, only 7 articles were published during 1999–2007, compared with 26 articles during 2008–2016 and 86 articles during 2017–2025. Annual production reached its highest level in 2024 with 20 articles. The decline to 8 articles in 2025 should be interpreted with caution due to potential database indexing delays. Despite annual fluctuations, the three-year moving average indicates an increase in publication activity, particularly after 2016. This trend applies only to the selected WoS-indexed sample.

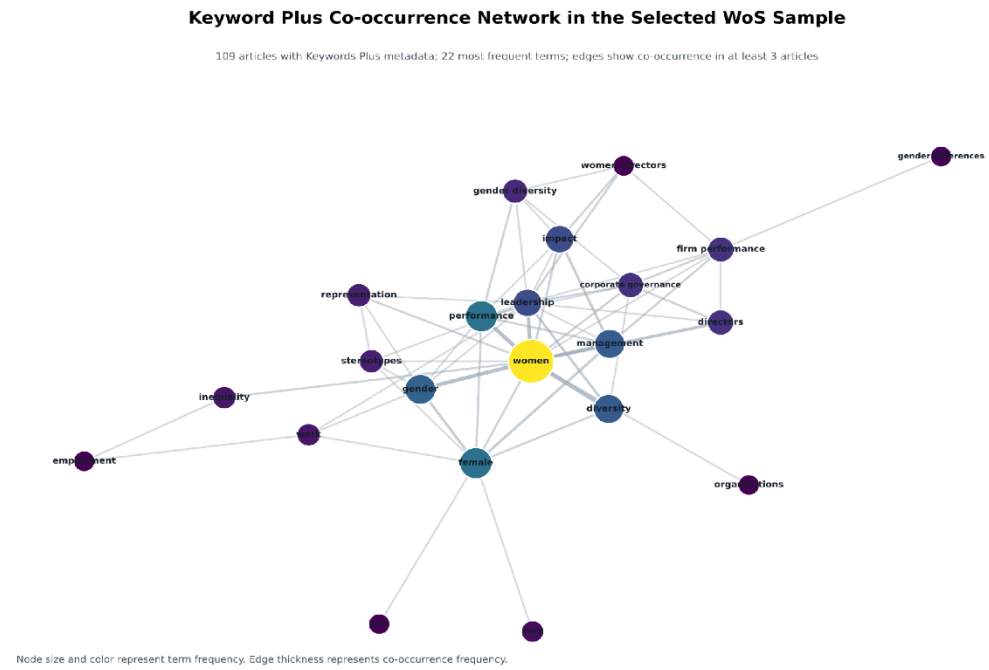


Source: Own processing based on WoS data

Fig. 1: *Annual scientific production in the selected WoS-indexed sample (1999–2025)*

Keywords Plus metadata were available for 109 of the 119 articles. The frequency analysis identified “women” as the most frequently occurring term, with 42 occurrences, followed by “female” and “performance” with 20 occurrences each, “gender” with 18, “management” and “diversity” with 17 each, and “leadership” and “impact” with 15 each. Other frequently occurring terms included “firm performance”, “corporate governance”, and “directors”, each with 12 occurrences. The most frequent pairwise co-occurrences were “diversity–women”, “gender–women”, “performance–women”, “leadership–women”, and “management–women”. The keyword patterns indicate three interconnected thematic orientations within the selected sample: women’s representation and leadership, corporate governance and boards of directors, and organizational performance and impact. These patterns describe the conceptual orientation of the analyzed literature and should not be interpreted as evidence of causal relationships between the identified concepts.

As shown in Figure 2, “women” occupies the central position in the keyword network and is strongly connected with diversity, gender, performance, management, and leadership. Corporate governance is particularly linked to directors, firm performance, leadership, and women, underscoring the importance of board-level governance in the selected literature. The network therefore identifies 3 interconnected thematic orientations: women’s representation and leadership, corporate governance and boards of directors, and organizational performance and impact. These relationships represent patterns of keyword co-occurrence and do not demonstrate causal relationships between the concepts.



Source: Own processing based on WoS data

Fig. 2: *Keyword Plus co-occurrence network in the selected WoS-indexed sample*

The global citation impact of authors represented in the selected sample is summarized in Table 3. The indicators were calculated for articles included in the dataset using their global WoS citation counts. Choi Sungjoo records the highest TC value, with 63 citations across two articles, while Glass, Christy, is the most productive author in the sample, with three articles and 46 citations. Moldovan Octavian contributes two articles, whereas each of the remaining listed authors contributes one. Since no author contributes more than three articles, the selected sample does not indicate a clearly established core group of researchers. Instead, authorship appears dispersed among scholars who contribute only a small number of articles. These indicators describe global citation impact within the selected sample and should not be interpreted as local citation relationships among its articles.

In Table 3, authors are ranked primarily by total global citations (TC) in descending order; ties are resolved alphabetically. *H-index* denotes the largest number *h* for which an author has at least *h* articles with at least *h* citations each. *G-index* gives greater weight to highly cited articles and represents the largest number *g* for which the top *g* articles have received at least g^2 citations. *M-index* expressed in formula (1) is the *H-index* divided by the number of years since the author's first publication in the selected dataset.

$$M - index = \frac{H{-}index}{2025{-}PY{-}start + 1} \quad (1)$$

where TC denotes total global WoS citations, NP is the number of articles included in the selected dataset, and *PY-start* is the publication year of the author's first article in the dataset. Author names were disambiguated by matching full names with the linked WoS ResearcherIDs reported in Table 3.

Tab. 3 *Authors' global citation impact in the selected WoS-indexed sample*

Author	WoS ResearcherID	H-Index	G-Index	M-Index	TC	NP	PY start
Choi Sungjoo	ESV-5813-2022	2	2	0.167	63	2	2014
Glass Christy	EUW-4677-2022	2	3	0.286	46	3	2019
Abrahams Scott	OCK-8631-2025	1	1	0.111	18	1	2017
Al Maaitah Hadeel	H-7566-2017	1	1	0.111	16	1	2017
Moldovan Octavian	AAC-8947-2019	2	2	0.143	15	2	2012
Aelenei Cristina	QGD-6089-2026	1	1	0.2	11	1	2021
Aibar-Guzman Beatriz	ABE-5257-2021	1	1	0.5	7	1	2024
Aibar-Guzman Cristina	ABE-5271-2021	1	1	0.5	7	1	2024
Ahmed Ammad	KDA-7435-2024	1	1	0.5	5	1	2024
Aksnes Dag W.	R-3607-2019	1	1	0.5	1	1	2024

Source: Own processing based on WoS data using the R package bibliometrix and its Biblioshiny interface

Following the author-level analysis, Table 4 presents 10 articles with the highest global citation counts within the selected WoS-indexed sample. The articles are ranked primarily by total global citations (TC), with global citations per year (TC/Y) used as a secondary criterion when TC values are equal.

Tab. 4 *Most cited articles globally in the selected WoS-indexed sample*

No.	Authors	Publication year	TC	TC/Y
1	Post & Byron	2015	1021	92.82
2	Cohen & Huffman	2007	289	15.21
3	Burgess & Tharenou	2002	278	11.58
4	Ho et al.	2015	266	24.18
5	Daily et al.	1999	261	9.67
6	Bertrand et al.	2019	226	32.29
7	Nekhili & Gatfaoui	2013	175	13.46
8	Dreher	2003	87	3.78
9	Oliver et al.	2017	77	9.63
10	Ng & Sears	2017	77	8.56

Source: Own processing based on WoS data

In Table 4, TC denotes total global WoS citations. TC/Y denotes global citations per year and was calculated using 2025 as the endpoint by formula (2).

$$\mathrm{TC/Y} = \frac{\mathrm{TC}}{2025 - \text{publication year} + 1} \tag{2}$$

In Table 4, concatenation of the "Authors" field with " (" and the "Publication year" and ")" results in the APA style reference to the source in the References Section.

Post & Byron (2015) present a comprehensive meta-analysis of 140 empirical studies investigating the relationship between female representation on corporate boards and firm financial performance. Their findings show a positive association with accounting-based

performance, particularly in countries with stronger shareholder protection, where boards are more likely to benefit from diverse perspectives. Although the effect on market-based performance is less consistent, the study demonstrates that societal gender equality and institutional context strongly influence how board gender diversity is perceived and translated into organizational outcomes. The authors also show that boards with higher female representation are more active in monitoring and strategic governance functions.

Cohen & Huffman (2007) examine whether the gender composition of management influences wage inequality among non-managerial employees. Using a large-scale dataset of U.S. workers, they show that a higher proportion of women in management can reduce the gender wage gap, but mainly when women hold higher-status managerial positions. Study is important because it distinguishes between symbolic representation and substantive authority. Its findings suggest that the mere presence of women in management is not sufficient; meaningful influence depends on whether women occupy positions with real decision-making power.

Burgess & Tharenou (2002) review women's participation on corporate boards and analyze the barriers that limit their advancement. The authors show that the glass ceiling is only one part of a broader system of organizational, cultural, and institutional obstacles. Their study identifies factors such as limited network access, stereotypes, recruitment practices, and organizational resistance as important barriers to women's board membership. At the same time, the authors argue that increasing women's representation on boards is both ethically and strategically important, especially when appointments are based on genuine expertise rather than tokenism.

Ho et al. (2015) focus on the relationship between CEO gender, ethical leadership, and accounting conservatism. Their study addresses how female executives approach financial reporting and key financial decisions. The authors find that firms led by female CEOs tend to adopt more conservative accounting practices, particularly in environments with higher litigation or takeover risk. These findings suggest that female leadership may contribute to more cautious, transparent, and ethically oriented financial reporting. The study therefore adds important evidence to discussions of gender diversity, accounting ethics, and financial decision-making.

Daily et al. (1999) examine whether women made progress in corporate leadership over 10 years period by analyzing their representation on boards of directors and in CEO positions. The study shows that although women achieved visible progress in board membership, this progress was not matched by similar advancement into executive-suite positions. Women remained significantly underrepresented in CEO roles and among inside directors, which are often viewed as important pathways to top leadership. The findings highlight a structural gap between formal board inclusion and genuine access to executive power.

Bertrand et al. (2019) investigate the effects of Norway's board quota law, which required a minimum level of female representation on corporate boards. Their findings show that the quota increased women's representation and improved gender equality at the board level. The study also challenges assumptions about tokenism, as newly appointed female directors were highly qualified. However, the authors find limited spillover effects on broader labor-market outcomes for women. This suggests that quotas can be effective in changing board composition, but additional measures are needed to transform deeper organizational structures and career pipelines.

Nekhili & Gatfaoui (2013) examine firm-level and individual-level determinants of women's presence on boards in French publicly traded companies. Their study shows that women's board representation is influenced by factors such as family ownership, firm size, board independence, education, and professional experience. The findings indicate that family-controlled firms are less likely to appoint women, whereas larger and more independent boards are more open to gender diversity. The study emphasizes that improving women's representation requires both organizational change and greater access to relevant qualifications, networks, and leadership experience.

Dreher (2003) explores factors that influence women's advancement to top leadership positions, with attention to organizational structures and leadership selection processes. The study highlights how existing promotion systems, informal networks, and work-life policies can either support or restrict women's career progression. It also points to the importance of organizational reforms that reduce structural barriers and create more transparent pathways to leadership. The article is relevant to the present study because it shows that women's underrepresentation in senior roles is not only an individual career issue, but also a consequence of organizational design and institutional practices.

Oliver et al. (2017) examine board chair orientations in relation to CEO gender, drawing on agency and stewardship theories. Their study shows that board chairs may adopt more collaborative orientations when working with female CEOs, but this can also be influenced by benevolent sexism and gender stereotypes. The effect is weaker in boards with higher female representation, suggesting that greater gender diversity can reduce stereotypical treatment of female leaders. The article contributes to the literature by showing that even when women reach top executive positions, gendered expectations may still shape governance relationships, authority, and leadership dynamics.

Ng & Sears (2017) investigate organizational factors that influence women's representation in management. Their study examines the role of CEO gender, recruitment practices, firm internationalization, and ownership structure. The findings show that organizations led by female CEOs and those actively recruiting women tend to have a higher proportion of women in management. However, some organizational characteristics may limit women's representation, depending on the broader corporate and institutional context. The study demonstrates that internal human resource practices and leadership commitment are crucial for improving gender balance in management.

4 Discussion

The discussion is structured around the 3 RQs formulated in Section 2.

In relation to RQ1, annual scientific output increased in the selected sample, from 7 articles published during 1999–2007 to 86 during 2017–2025. Production reached its highest level in 2024, with 20 articles, while the lower count in 2025 should be interpreted with caution due to possible database indexing delays.

Regarding RQ2, Choi records the highest author-level TC value, with 63 global citations, while Glass is the most productive author in the sample, with three articles. Post and Byron (2015) is the most globally cited publication, accounting for 1,021 citations, or 25.60% of all citations. The ten most cited articles jointly account for 69.12% of total citations, demonstrating a strong concentration of citation impact within a small proportion of the sample.

In relation to RQ3, the frequency and co-occurrence analysis of Keywords Plus identified 3 interconnected thematic orientations: women's representation and leadership, corporate governance and boards of directors, and organizational performance and impact. The central position of the term "women" and its frequent connections with diversity, gender, performance, management, and leadership indicate that these concepts form the main thematic core of the analyzed sample.

These results describe publication, citation, and keyword patterns within the selected WoS-indexed sample. They should not be generalized to the entire research field or interpreted as evidence of causal relationships.

The bibliometric results identify the authors, articles, and concepts that achieved the greatest visibility within the selected sample; they do not independently test or validate the substantive conclusions reported by the reviewed studies. For example, the high citation count of Post & Byron (2015) demonstrates the publication's strong scholarly visibility, rather than confirming that women's board representation necessarily improves firm performance in every context. Similarly, the keyword co-occurrence network identifies recurring conceptual relationships among women, diversity, leadership, governance, and performance, but does not establish causal relationships among these concepts.

The substantive findings reported in the reviewed literature are not uniformly consistent. Some studies report positive associations between women's representation, governance quality, ethical financial practices, and selected performance outcomes (Post & Byron, 2015; Ho et al., 2015; Gharios et al., 2024; Pham et al., 2025), whereas others identify mixed or context-dependent effects (Bertrand et al., 2019; Liu et al., 2020; Oliver et al., 2017; Yang & Konrad, 2025). These differences may reflect national institutional settings, industry characteristics, performance measures, governance arrangements, and the distinction between numerical representation and substantive decision-making authority. The overall pattern therefore supports a contingency and substantive-representation perspective: increasing the number of women in leadership is important, but organizational effects also depend on their authority, independence, expertise, committee participation, and access to influential decision-making positions.

Several limitations of this study should be considered. The broad OR-based search strategy yielded a sample that included female representation and leadership across multiple organizational, governance, and decision-making contexts, rather than one restricted exclusively to financial decision-making roles. The sample should therefore not be interpreted as a comprehensive or domain-specific representation of the field. The study is also limited to English-language journal articles indexed in WoS and may omit relevant research available in other databases or using alternative terminology. Detailed counts for the intermediate screening stages, duplicate handling, and the resolution of borderline cases were not retained, limiting the complete retrospective reconstruction of the selection process. Missing citation-reference metadata prevented co-citation and bibliographic coupling analyses. Moreover, global citation indicators favor older publications, the citation distribution is strongly right-skewed, and Keywords Plus were available for only 109 of the 119 articles. Consequently, the findings represent an exploratory overview of a selected sample of WoS-indexed studies and do not comprehensively map the field, assess the quality of individual studies, or establish causal relationships.

Conclusion

This study provides an exploratory bibliometric overview of 119 articles published in 97 journals indexed in WoS between 1999 and 2025. Annual scientific production increased particularly after 2016, while global citation impact was strongly concentrated: the median was 7 citations compared with a mean of 33.52. Post & Byron (2015) accounted for 25.60% of all citations, and the ten most cited articles accounted for 69.12%. Author contributions were dispersed, with no clearly established core group. At the same time, the Keywords Plus analysis identified three interconnected thematic orientations: women's representation and leadership, corporate governance and boards of directors, and organizational performance and impact.

These findings describe publication, citation, authorship, and keyword patterns within the selected sample and do not independently confirm the substantive conclusions of the reviewed studies. The literature reports positive, mixed, and context-dependent relationships among female representation, governance, and organizational outcomes. This supports the view that numerical representation alone is insufficient and that women's influence also depends on substantive authority, independence, expertise, committee participation, and access to strategic decision-making. Organizations should therefore combine representation targets with transparent recruitment, mentoring, succession planning, and meaningful participation in financial and governance decisions.

Future research should use broader search terminology, multiple bibliographic databases, and complete cited-reference metadata to examine a more comprehensive research corpus. Comparative, longitudinal, and intersectional studies could further investigate how institutional, geographic, sectoral, and organizational conditions shape women's representation and participation in leadership and decision-making roles. The present findings should therefore be understood as a foundation for further research rather than as a comprehensive representation of the entire field.

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Zastoupení žen a vedoucí pozice: Průzkumná bibliometrická analýza vybraného vzorku článků indexovaných ve WoS

Tato studie poskytuje průzkumný bibliometrický přehled 119 článků v anglických časopisech indexovaných v databázi Web of Science (WoS) v letech 1999 až 2025, které se zabývají zastoupením žen, ženským vedením, bariérami v podobě „skleněného stropu“ a souvisejícími kontexty správy a rozhodování. S využitím balíčku R bibliometrix a jeho rozhraní Biblioshiny studie zkoumá roční produkci, globální citační dopad, ukazatele na úrovni autorů a a souběžný výskyt klíčových slov v rámci Keywords Plus. Publikační aktivita se zvýšila zejména po roce 2016. Citační dopad vykazoval silnou pravostrannou asymetrii s průměrem 33,52 a mediánem 7 citací, přičemž deset nejcitovanějších článků představovalo 69,12 % všech citací. Zjištění se vztahují pouze na vybraný vzorek indexovaný v databázi WoS.

Vertretung von Frauen und Führungspositionen: Eine explorative bibliometrische Analyse einer ausgewählten, im WoS indexierten Stichprobe

Diese Studie bietet einen explorativen bibliometrischen Überblick über 119 englischsprachige Zeitschriftenartikel, die zwischen 1999 und 2025 im Web of Science (WoS) indexiert wurden und sich mit der Vertretung von Frauen, Frauen in Führungspositionen, Hindernissen durch die „gläserne Decke“ sowie damit verbundenen Governance- und Entscheidungsprozessen befassen. Mithilfe des R-Pakets „bibliometrix“ und dessen „Biblioshiny“-Schnittstelle untersucht die Studie die jährliche Publikationszahl, den globalen Zitationsimpact, Indikatoren auf Autorenebene sowie die Ko-Okkurrenz von „Keywords Plus“. Die Publikationsaktivität nahm insbesondere nach 2016 zu. Die Zitierwirkung war stark rechtsschief verteilt, mit einem Mittelwert von 33,52 und einem Median von 7 Zitaten, während die zehn meistzitierten Artikel 69,12 % aller Zitate ausmachten. Die Ergebnisse gelten nur für die ausgewählte, in WoS indexierte Stichprobe.

Reprezentacja kobiet i stanowiska kierownicze: Wstępna analiza bibliometryczna wybranej próbki artykułów indeksowanych w WoS

Niniejsze opracowanie przedstawia wstępny przegląd bibliometryczny 119 artykułów opublikowanych w anglojęzycznych czasopismach indeksowanych w bazie Web of Science (WoS) w latach 1999–2025, poruszających tematykę reprezentacji kobiet, przywództwa kobiet, barier w postaci „szklanego sufitu” oraz powiązanych kontekstów zarządzania i podejmowania decyzji. Wykorzystując pakiet R bibliometrix i jego interfejs Biblioshiny, w badaniu przeanalizowano roczną produkcję naukową, globalny wpływ cytowań, wskaźniki na poziomie autorów oraz współwystępowanie słów kluczowych w ramach Keywords Plus. Aktywność publikacyjna wzrosła zwłaszcza po 2016 roku. Wpływ cytowań wykazywał silną asymetrię prawostronną ze średnią wynoszącą 33,52 i medianą 7 cytowań, przy czym dziesięć najczęściej cytowanych artykułów stanowiło 69,12% wszystkich cytowań. Wyniki odnoszą się wyłącznie do wybranej próby indeksowanej w bazie danych WoS.