

A Bibliometric Analysis of the Relationship between Governance Banking and Performance (2004-2023)

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Abstract:

Positive bank performance is considered a crucial and significant factor in economic growth. Through their traditional role, banks collect deposits from surplus holders and provide them as loans to investors, who, in turn, contribute to overall economic growth. Additionally, banks utilise various modern financing techniques. Given their critical role in the global economy, banks seek to increase their performance and combat potential deviations, which necessitates compliance with the directives of international financial bodies and the recommendations of various researchers regarding the importance of strengthening corporate governance mechanisms owing to their significant role in improving performance levels. Considering the vast body of literature addressing the relationship between bank governance and performance, we employed bibliometric analysis to examine this relationship. We addressed all the performance indicators recommended for such analyses (providing a comprehensive overview) and analysed the scientific mapping of keywords and contributing countries via the "VOSviewer" tool. We analysed a total of 586 articles retrieved from the Scopus database. The study's results revealed a growing interest in this topic over the last 20 years (2004-2023), ultimately allowing us to identify five main themes: board structure, environmental and social governance mechanisms, the performance of conventional banks, ownership structure, and Islamic banks.

Keywords: Governance Banking; Performance; Bibliometric Performance Analysis; Science Mapping

1. Introduction:

Good governance is considered an important factor in the success of banks, especially in light of the numerous financial shocks (such as the Asian crisis of 1997, the global financial crisis of 2008, and the COVID-19 crisis of 2019) that have affected financial institutions in general and banks in particular (Antwi et al., 2021; van Essen et al., 2013). Banks are regarded as the backbone of the global economy; the success of any country's economy is closely linked to the optimal performance of its banking sector (Al-Najjar & Clark, 2017). For this reason, various governments worldwide have sought to strengthen the governance structures of their banks, aiming for high levels of transparency and administrative excellence. Mechanisms such as environmental and social governance, board structure and size, ownership structure, characteristics of the audit committee, audit quality, independence of the board and audit committee, and foreign and domestic ownership are all considered drivers of banks' financial performance (Salim et al., 2016; Sharma, 2014).

This has made the topic widely discussed in academic circles in recent years, with a significant increase in scientific research, making it increasingly difficult for researchers to keep track of the relevant literature on bank governance and performance. This has necessitated the use of quantitative bibliometric methods, which can handle the

abundance of data by filtering out significant works, estimating their impact, and uncovering the underlying structure of the explored research field. Such methods reliably enhance the transparency of studies (Donthu et al., 2021), enabling researchers to examine the field more deeply and construct their views on the basis of the consolidated insights of others. They also help identify knowledge gaps, generate new research ideas, and determine how their contributions fit within the domain, which is often lacking in traditional literature review methods, which are criticised for being time-consuming and limited in the number of works analysed, as well as being prone to researcher bias (Zupic&Čater, 2015).

Bibliometric science demonstrates its applicability in managing vast amounts of scientific data and its significant contribution to influencing research through a variety of accessible bibliometric tools, such as *R*, *VOSviewer*, and scientific databases, such as *Google Scholar*, *Scopus*, and *Web of Science*, which facilitate the execution of this type of analysis. Moreover, the interdisciplinary impact of bibliometric methodology—from data science to operational research—plays an important role in its widespread adoption (Doulani, 2020).

Therefore, the primary aim of this study is to utilise bibliometric analysis via *VOSviewer* software, alongside an in-depth evaluation, to assess the development and identification of knowledge concerning the relationship between governance and bank performance at the international level from 2004–2023. To our knowledge, no existing studies have specifically examined the impact of bank governance on bank performance. As such, the main contributions presented in this chapter include publication statistics, identification of the most common keywords over the past twenty years, determination of the journals that have addressed our research topic, the most productive authors, institutional and country-level participation, and research trends within the 586 articles analysed. The key findings, gaps, and future research directions are discussed on the basis of the results and evaluation of current research trends.

We also aim to pursue the following detailed objectives:

1. To clarify significant patterns in the impact of bank governance on bank performance throughout the study period.
2. To identify key individuals who influence the discourse on the impact of bank governance on bank performance.
3. To examine the thematic concentrations in the literature on bank governance and its effect on bank performance and investigate their chronological development.
4. To assess the reliability and accuracy of alternative metrics as indicators of research impact.
5. Identifying future research directions in governance and bank performance (demonstrating that it is a promising area for all stakeholders).

This goal will be achieved through addressing the following research questions:

1. What are the research trends related to bank governance and performance worldwide during the study period (2004–2023)?
2. Which countries have contributed most to the literature on bank governance and performance?
3. Which academic journals have served as the leading platforms for research on the impact of bank governance on bank performance?
4. Which authors influenced bank governance and performance the most during the study period?
5. What are the main research areas in which scholars have contributed to studying the impact of bank governance on bank performance?
6. Which research institutions have significantly contributed to producing literature linking bank governance to bank performance?
7. What are the intellectual structure and transformative findings of research on bank governance regarding key keywords and international collaboration? Moreover, how did the topic of its impact on bank performance emerge during the study period (2004–2023)?

3. Methodology

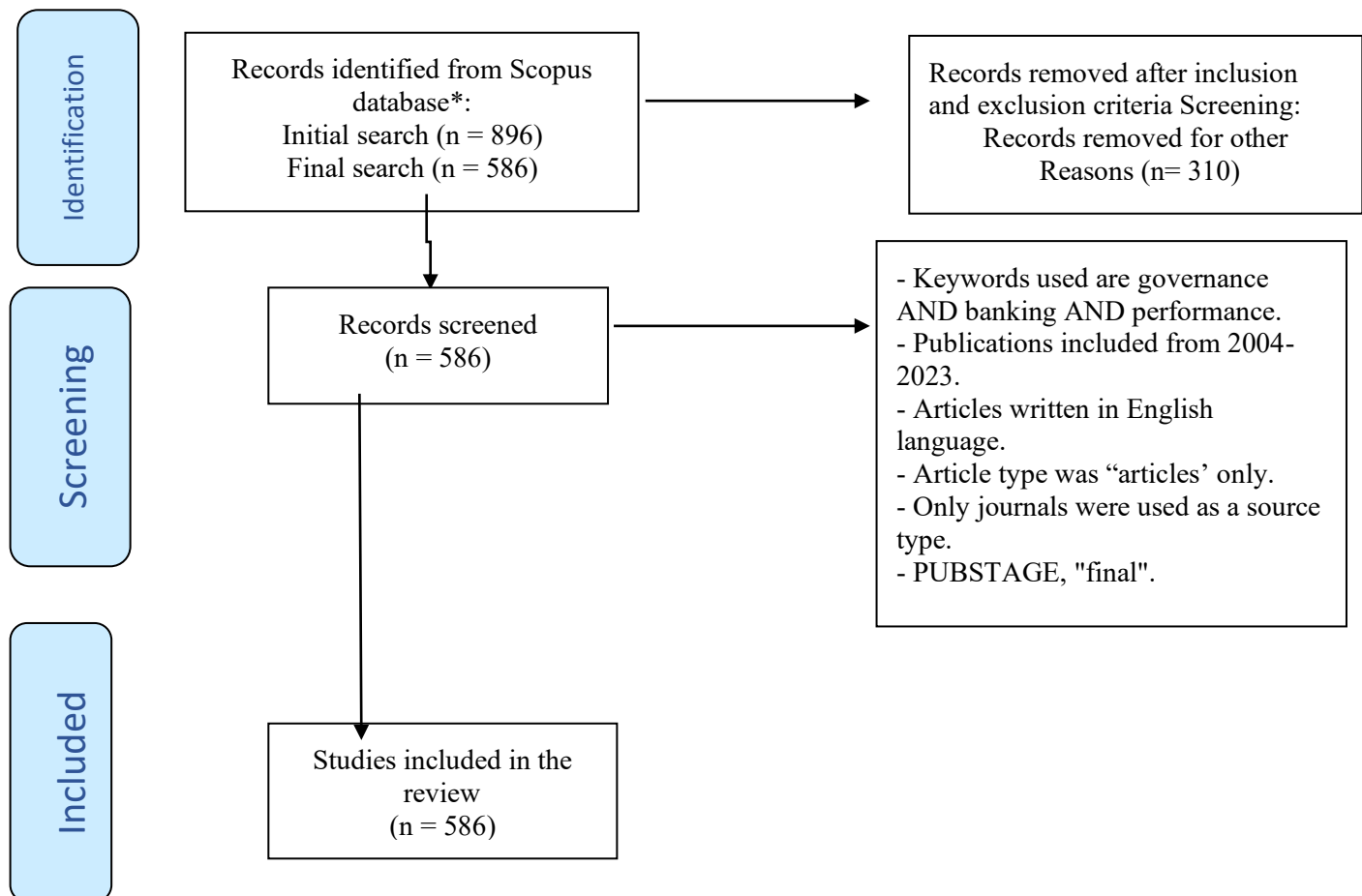
First: Research Design (Data Collection):

The information available in the *Scopus* database (authors, coauthors, keywords, titles, journals, institutions, abstracts, and both local and global citation counts) supports the implementation of bibliometric analysis by applying bibliometric techniques (Cobo et al., 2011). It is considered an excellent source for bibliometric analysis, as it reduces the risks, biases, and potential omissions associated with using a limited selection of journals. Furthermore, since 1996, the *Scopus* citation database has offered broader coverage of the social sciences, particularly bank governance. It also facilitates easy retrieval of the bibliographic data required by bibliometric analysis software (Mongeon & Paul-Hus, 2016).

In this study, we exported the data from the *Scopus* database in Excel for the next step (performance analysis). To ensure the accuracy and quality of our research, we followed the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines (Moher et al., 2009), as illustrated in Figure 1, through which we aimed to search for articles that examine the relationship between bank governance and performance.

Figure 1

PRISMA Framework



1. Identification

Database Selection:

On 26 August 2024, we conducted a comprehensive search by searching the *Scopus* database, which is highly suitable for our study.

Search strings:

To ensure careful and precise research, we searched the *Scopus* database via the document title, abstract, and keyword fields (Article Title, Abstract, Keywords) with the following search string: *governance AND banking AND performance*. The search was performed automatically, covering the study period from 1993--2024. Eight hundred ninety-six documents were retrieved (including articles, theses, books, book chapters, conference papers, blogs, etc.) in all significant research languages (English, French, and Portuguese). All fields and journals were included in the search scope.

2. Screening and Selection

During this phase, the following search query was applied:

TITLE-ABS-KEY (governance AND banking AND performance) AND PUBYEAR > 2003 AND PUBYEAR < 2024 AND (LIMIT-TO (DOCTYPE, "ar")) AND (LIMIT-TO (LANGUAGE, "English")) AND (LIMIT-TO (SRCTYPE, "j")) AND (LIMIT-TO (PUBSTAGE, "final"))

The inclusion and exclusion criteria, as detailed in Table 1, reduced the number of publications to 586 articles, with 310 documents excluded. The following outlines the exclusion process in more detail:

1. **Year filter applied:** Only documents from 2004–2023 were retained, resulting in 756 selected documents.
2. **A publication stage filter was applied,** reducing the number to 746 by including only documents in the "final" publication stage.
3. **Language filter applied:** Only documents written in English were retained, narrowing the selection to 739.
4. **A document type filter was applied:** only documents classified as "articles" were included, resulting in a final selection of 586 articles.

3. Inclusion and Reporting

The results of this bibliometric analysis are presented on the basis of the framework and guidelines of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) (Moher et al., 2009), as illustrated in Figure 1 above.

Table 1

Inclusion and Exclusion Criteria

Inclusion Criteria	Exclusion Criteria
General research (across all fields) on the relationship between bank governance and performance.	
Publications during the period 2004–2023.	Publications prior to 2004 and those published in 2023.
Articles published in English.	Articles in other languages.
Articles only.	Theses, conference papers, books, book chapters, blogs.
Journals as the source type.	All other source types.
Articles published in their final version.	Articles not yet published (in press or incomplete versions).

Note. Source: The authors prepared the materials on the basis of the method described in *Review and Teknologi* (2024).

3. Bibliometric Performance Analysis

Performance analysis evaluates the performance of various scientific entities through a set of bibliometric indicators developed on the basis of publication and citation data. It provides an overview of the research field used to assess the publishing and citation performance of researchers, authors, institutions, universities, countries, and journals. The simplest way to begin bibliometric research is through a descriptive analysis of the core performance characteristics of the scientific entities in the relevant field (Cobo et al., 2011).

Just as an empirical research paper typically begins with descriptive statistics about the findings, bibliometric research should also start with an overview of the related literature. In this context, performance analysis constitutes a fundamental component of bibliometric research, although the study should move beyond this stage (Öztürk et al., 2024).

The following table presents the various bibliometric indicators used to evaluate scientific output performance:

First: Analysis of Total Article Production

From 2004–2023, 586 articles were produced, with an average of 29 articles per year. In 2004 and 2005, only two articles were published each year. However, production increased significantly in 2006, with a 250% increase compared with that in 2005. This increasing trend continued in most of the following years, particularly in 2018, when 43 articles were published. The year 2022 recorded the highest number of publications, with 85 articles.

The total number of citations received by the 586 articles was 16,592, averaging 28 citations per article and approximately 830 citations per year. The highest number of citations in a single year was recorded in 2019, with 1,826 citations, despite the number of articles that year did not exceed 49. Interestingly, the highest citation rate per article was recorded in 2006, with an average of 115 citations per article.

The following table clearly illustrates this:

Table 2

Number of Articles Produced from 2004–2023, Along with Citation Counts

Year	Articles	Citations
2004	02	27
2005	02	431
2006	07	802
2007	08	703
2008	12	1019
2009	16	936
2010	13	533
2011	18	582
2012	22	1631
2013	24	660
2014	20	239
2015	34	1151
2016	27	583
2017	24	817
2018	43	981
2019	49	1826
2020	44	752
2021	56	1096
2022	85	1270
2023	80	553

Note. Source: Prepared by the authors on the basis of data from the *Scopus* database.

To enhance our analysis of the annual evolution in the number of published articles during the study period, we divided the timeline (2004–2023) into three distinct phases. The global financial crisis of 2008 marked the beginning of the second phase, whereas the COVID-19 crisis served as the key turning point for the third phase. The periods are detailed as follows:

First Period (2004–2008):

During this period, the trend in publication was upwards, with only 31 articles published out of a total of 586, representing approximately 5% of the total output. In the first two years, only two articles were published annually (Mehran, 2004), indicating that interest in governance and its relationship with bank performance was still limited before the 2008 global financial crisis.

Upon examining the articles published in this phase, we find that researchers have focused primarily on the impact of ownership concentration on bank profitability. The consensus was that ownership concentration had little effect on profitability in European countries and the United States, particularly in government-owned banks (Berger & Bonaccorsi di Patti, 2006; Berger et al., 2005; Micco et al., 2007). However, in nonEuropean countries, especially African nations, ownership concentration in state-owned banks hurts profitability (Beck et al., 2005; Omran, 2007). In contrast, private banks have a positive effect (Boubakri et al., 2005; Santos & Rumble, 2006).

A secondary area of focus concerns the relationship between bank performance and CEO turnover. An inverse relationship was observed in European and U.S. banks (Santos & Rumble, 2006; Barros et al., 2007), whereas a strong positive relationship was found in banks located in developing countries (Choi & Hasan, 2005; Bernotas, 2005).

The total number of citations during this period was 2982, with an average of approximately 597 per year and 96 citations per article.

Second Period (2009–2019):

This period was marked by the publication of 290 articles over 11 years, representing an annual average of approximately 26.36. It recorded the highest volume of research output on the study topic. The 2008 global financial

crisis had a significant impact on banks worldwide and the global economy, leading to a heightened interest in governance and its effect on bank performance.

During this phase, researchers examined various governance variables, including board size, composition, committees, executive remuneration, audit and supervisory committee size, and female board membership and CEO duality, linking these factors to various market-based and accounting-based performance measures. The findings varied from one country to another and between public and private banks, with some studies reporting positive relationships and others reporting negative relationships (Ghosh, 2018; Fratini & Tettamanzi, 2015; Zagorchev & Gao, 2015; Hajer & Anis, 2018).

Notably, within this period, 2019 attracted the highest level of attention from researchers and decision-makers globally, with 49 articles published. During this phase, the number of citations totaled 9,939, averaging approximately 34 citations per article and 523 citations per year.

Third Period (2020–2023):

Although this period spans only four years, it recorded the highest annual average number of publications, with 66 articles per year and 265 articles. The publication peak occurred in the third year (2022), with 85 articles published.

In addition to the variables studied during the second period, researchers in this phase focused heavily on the board of directors. A well-structured board with a high level of transparency was found to encourage innovation in times of crisis, such as the COVID-19 pandemic, by increasing trust and sending positive signals to depositors and other stakeholders, ultimately leading to improved bank performance (Mutarindwa et al., 2020; Elnahass et al., 2021; Demir & Danisman, 2021; Lankono et al., 2023).

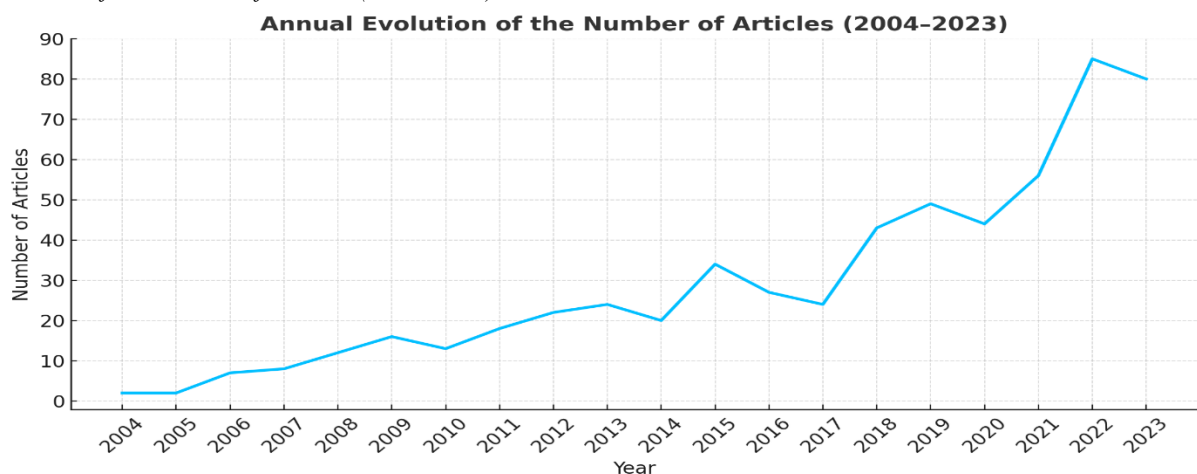
Researchers have also focused on Islamic banks. In addition to the governance mechanisms studied in conventional banks, Islamic banks employ additional structures such as Shariah supervisory boards, review units, the Islamic International Rating Agency, and the Islamic Financial Services Board—key institutions responsible for overseeing the Islamic banking industry. These mechanisms have proven effective in enhancing the performance of Islamic banks (Nomran & Haron, 2020; Ben Abdallah & Bahloul, 2021; Safiullah et al., 2022).

During this period, the annual average number of citations reached its highest level, at 918 per year, with an average of 14 citations per article. The total number of citations during this phase was 3,671.

Graph 2 illustrates the annual trend in the number of published articles over the entire study period.

Figure 2

Annual evolution of the number of articles (2004–2023)



Source: Prepared by the authors on the basis of data from the *Scopus* database.

Third: Country-level production analysis

Analysing the most influential and highly cited countries in terms of article production is another valuable addition to bibliometric analysis. It assists researchers in shaping their academic strategies. It supports international and

regional organisations and stakeholders in understanding the developmental trajectory of research fields, enabling them to formulate plans on the basis of the findings from such analyses.

Therefore, identifying the most frequently cited countries can help researchers justify potential proposals for international research and may also open avenues for establishing collaboration agreements among students, faculty members, research groups, and even universities (Drahansky et al., 2016). This analysis often treats the country as a proxy for the author's institutional affiliation. It serves as an indicator for evaluating national scientific performance and the global impact of research (Alashqar et al., 2022).

This means that the country count will increase by one for each article with three authors from different countries—for example, the United States, the United Kingdom, and Malaysia. Therefore, each article is counted three times, resulting in the total production index exceeding the number of articles. In our case, while the total number of articles was 586, the total production index reached 775, and the unique country count was 581.

Table 3 presents the number of publications produced by the ten most influential countries in the field of study out of 75 contributing countries.

Table 3

Number of Articles Produced by Each Country from 2004–2023, Along with Total Citations and Average Citations per Article

Country	Number of Articles	Total Citations	Average Citations per Article
United Kingdom	67	2194	32.75
United States	63	4756	75.49
Malaysia	56	1408	25.14
Indonesia	43	330	07.67
Italy	40	3051	76.28
India	36	457	12.69
Tunis	32	419	13.09
China	30	993	33.1
Spain	24	1427	59.46
Pakistan	21	434	20.67

Note. Source: Prepared by the authors on the basis of data from the *Scopus* database.

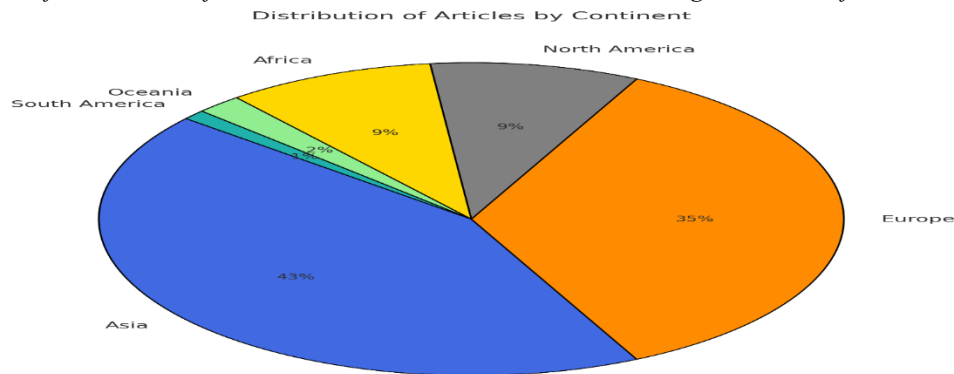
Developed countries dominate the literature in this field, with the United Kingdom (67 articles), the United States (63 articles), and Malaysia (56 articles) leading the way. These are accompanied by the following total citation counts: 2,194, 4,756, and 1,408, respectively. This is noteworthy, although unsurprising, given that the UK is considered a pioneer in corporate governance through the issuance of the Cadbury Report in 1992 (McKnight & Weir, 2009), and the United States has also introduced various legislations to address corporate governance issues (Arslan & Alqatan, 2020).

Aside from these leading nations, most of the literature originates from emerging economies, particularly Asian countries. As illustrated in Figure 3, the geographical distribution of the literature shows that Asia alone accounts for 330 mentions, with half of its countries appearing among the top ten globally. A total of 27 countries from the continent are represented, a result likely influenced by the long-term repercussions of the 1997 Asian financial crisis, which heightened the importance of the topic over time.

Advanced European economies also show significant interest in this topic, accounting for 35% of appearances across 29 countries. This is attributed primarily to the prominent role of the Organisation for Economic Cooperation and Development (OECD) as a strong advocate of governance practices.

North America appeared 74 times across four countries, with the majority, 85%, coming from the United States. Africa followed, with 68 appearances across eight countries, where Tunisia held the largest share with 32 mentions, ranking seventh globally. In contrast, South America and Oceania combined accounted for only 32 appearances.

Only 12 Arab countries participated in the 75-country list, collectively appearing 108 times, which is equivalent to a relatively low share of 13.94%. Tunisia had the highest count, with 32 appearances, although the total number of citations was relatively modest, at 419.

Figure 3*Distribution of the Number of Articles Produced on Each Continent During the Period of 2004–2023*

Source: Prepared by the authors on the basis of data from the *Scopus* database.

As observed from this analysis, the number of citations is not necessarily correlated with the number of articles produced. For instance, although Italy ranked fifth in article output, it came second in total citations. Conversely, despite producing 43 articles and being ranked fourth in output, Malaysia recorded one of the lowest citation counts. The above table clearly and comprehensively illustrates all the points discussed in this part of the bibliometric analysis related to country-level contributions.

Third: Journal Production Analysis

This type of analysis is among the most important components of bibliometric performance analysis, as it identifies the journals contributing to the body of literature in the field. It significantly benefits researchers and stakeholders by facilitating quicker access to relevant information for immediate reference or future exploration (Ellegaard & Wallin, 2015).

Our study identified contributions from 159 journals that produced 586 articles over 20 years (2004–2023). Among these:

- 57 journals published one article each,
- 43 journals published two articles each,
- 25 journals published three articles each,
- 15 journals published four articles each,
- Six journals published five articles each, and
- Four journals published six articles each.

This distribution is illustrated in greater detail in Figure 4.

Figure 4*Number of Articles Produced by Each Journal (2004–2023)*

Source: Prepared by the authors on the basis of data from the *Scopus* database.

As shown in Table 4, the top ten journals with the highest number of publications on governance in the banking sector and its relationship with performance are listed in descending order, along with their respective citation counts. *Sustainability Switzerland* is the leading journal, publishing the most articles (22), representing 19.64% of the total articles published by the top ten journals. It is followed by *Banks and Bank Systems* with 17 articles, *Corporate Ownership and Control* in third place with 14 articles, *Corporate Governance Bingley* in fourth with 13 articles, and fifth place, the *Journal of Banking and Finance* with 10 articles.

Table 4

Number of Articles Published in Each Journal from 2004–2023, along with Their Publisher, Citation Count, and CiteScore.

Journal	Number of Articles	Total Citations	Publisher	Cite Score
Sustainability Switzerland	22	575	MDPI	06.8
Banks And Bank Systems	17	109	Business Perspectives	02.6
Corporate Ownership And Control	14	38	Virtus Interpress	0.2
Corporate Governance Bingley	13	361	Emerald Publishing	11.2
Journal Of Banking And Finance	10	2780	Elsevier	06.4
Corporate Governance: An International Review	08	665	Emerald Publishing	04.8
Managerial Finance	08	173	Emerald Publishing	07
Journal Of Islamic Accounting And Business Research	07	133	Emerald Publishing	05.7
International Journal Of Finance And Economics	07	126	John Wiley & Sons	03.3
Corporate Social Responsibility And Environmental Management	06	464	John Wiley & Sons	17.2

Note. Source: Prepared by the authors on the basis of data from the *Scopus* database.

With respect to citation count, the *Journal of Banking and Finance*, published by Elsevier, recorded the highest number of citations (2,780), despite ranking fifth in article output. Conversely, *Corporate Ownership and Control*, published by Virtus Interpress, registered the lowest number of citations—only 38—even though it ranked third in article count. Moreover, *Sustainability Switzerland*, which had the highest article output (22 articles), accumulated only 575 citations. The MDPI publishes this journal. The performance of the remaining journals is detailed in Table 4.

Notably, Emerald Publishing accounts for 4 of the top 10 journals. The CiteScore for 2023 is calculated as follows (James et al., 2019):

Total citations from 2020–2022 divided by the number of documents published during the same period,

Corporate Social Responsibility and Environmental Management recorded the highest CiteScore, 17.2, followed by *Corporate Governance Bingley*, 11.2, and then *Managerial Finance*, also under Emerald Publishing, at 7.0. On the other hand, *corporate ownership and control* had the lowest citation count and the lowest CiteScore, at just 0.2. The CiteScores for the remaining journals are presented in Table 4.

Fourth: Author Analysis

Bibliometric reviews offer a key advantage: they can identify researchers active in each specific field, thus highlighting intellectual leadership within the domain. Analysing the most highly cited authors helps scholars identify those who serve as authoritative references in the area under study, encouraging attention to their most recent

publications. However, it is important to note that an author's total number of citations (TCs) is not necessarily linked to the number of published articles (Drahansky et al., 2016).

As shown in Table 5, we list the ten most influential authors, ranked in descending order by the number of articles published. This is accompanied by their total citations, geographical affiliation, and *h*-index. The analysis revealed that 159 unique authors contributed to the 586 articles included in the dataset.

Table 5

*Number of articles published by the top 10 authors from 2004–2023, along with geographical affiliation, total citations, and the *h* index*

Author	Number of Article	Total Citations	<i>h</i> -index	Country
Aras, G.	5	162	14	Turkey
El-Chaarani, H.	5	76	12	Lebanon
Nawaz, T.	5	171	10	United Kingdom
Haron, R.	4	173	17	Malaysia
Abraham, R.	3	72	13	United States
Ahmad, M.I	3	44	13	Pakistan
Aslam, E.	3	44	10	Malaysia
Azad, M.A.K.	3	18	18	Bangladesh
Bachiller, P.	3	27	09	Spain
Bouteska, A.	3	21	18	Romania

Note. Source: Prepared by the authors on the basis of data from the *Scopus* database.

Three authors produced five articles each: Nawaz, T., Aras, G., and El-Chaarani, H., with citation counts of 171, 162, and 76 and *h*-indices of 10, 14, and 12, respectively. These authors are affiliated with the United Kingdom, Turkey, and Lebanon. Haron, R., authored four articles and recorded the highest citation count among the top ten authors, with 173 citations and an *h*-index of 17. He is affiliated with Malaysia. The remaining authors each contributed three articles, with citation counts not exceeding 75 per author (see Table 5). The highest *h*-index values, 18, were recorded by Azad, M.A.K. and Bouteska, A., affiliated with Bangladesh and Romania, respectively.

Notably, half of the ten most productive authors are affiliated with institutions in Asia, which aligns with the earlier finding that Asia is the most productive continent in terms of article output.

Fifth: Research Fields

Analysing the subject area or research field is fundamental in organising information, particularly within library and information science, bibliometrics, and knowledge management. This process primarily aims to identify, describe, and classify the intellectual content of a document or body of work on the basis of its subject matter. This enhances the efficiency of information retrieval, classification, and dissemination, ensuring that users can access relevant materials according to their informational needs. Consequently, this increases the likelihood of the work being discovered by other researchers, which can increase its impact on citations and engagement within the scientific community (Drahansky et al., 2016).

Table 6 below presents the various fields that have addressed the topic of governance and performance in the banking sector. Most publications are concentrated in economics, finance, and accounting, accounting for 63.21% of the total. The social sciences field also contributes significantly, with 150 articles representing 14.19%, reflecting the growing interest and increasing reliance on empirical studies in this area.

Other fields, such as environmental science, engineering, and mathematics, show more modest to low representation. On the basis of these findings, future research is expected to continue exploring the impact of governance on bank performance, primarily within economics, finance, and accounting, with the potential for expansion into other areas, particularly the social sciences and the humanities.

Given the interdisciplinary reach of this research domain, this analysis offers valuable insights into current trends and future directions.

Table 6

Number of Articles Produced by the Top 10 Research Fields During the Period from 2004–2023, Along with Their Geographical Affiliation, Total Citations, and h-Index

Fields	Number of Articles	Percentage (%)
Business, Management and Accounting	347	32.82
Economics, Econometrics and Finance	321	30.37
Social Sciences	150	14.19
Environmental Science	62	05.87
Engineering	36	03.41
Computer Science	34	03.22
Energy	34	03.22
Decision Sciences	22	02.81
Arts and Humanities	20	01.89
Mathematics	08	0.76
Multidisciplinary	08	0.76

Note. Source: Prepared by the authors on the basis of data from the *Scopus* database.

It is also important to highlight a critical observation when analysing research topics: the total number of articles across research fields often exceeds the number of articles retrieved in the initial search. In our case, the total number of articles identified through subject-area analysis was 1042, whereas 586 articles were retrieved through the *Scopus* database search.

This discrepancy arises because subject areas are typically assigned at the journal rather than the article level. As a result, many journals are classified under multiple subject categories, leading to articles being counted in more than one field, even if they were not explicitly selected for those categories in the original search criteria.

Sixth: Analysis of Research Institution Contributions

Analysing the most productive and cited institutions is another valuable dimension of bibliometric analysis, which can help guide researchers in shaping their academic plans. For example, researchers planning to undertake research training should be aware of the leading countries, institutions, and research centers globally in advance (Ahmad et al., 2020).

Institutional and research centre analyses, such as country-level production analysis, can also assist researchers in justifying potential international research proposals. They may also open doors for establishing collaborative agreements between students, academic staff, research groups, and even universities (Drahansky et al., 2016).

Various institutions worldwide have contributed to studies addressing the impact of governance on bank performance. The results are presented in the following table:

Table 7

Number of Articles Produced by the Top 10 Research Institutions from 2004–2023, Along with Their Countries of Affiliation

Institution	Number of Articles	Total Citations	Country
Bucharest University of Economic Studies	09	224	Romania
University of Sfax	09	141	Tunis

FSEG Sfax - Faculté des Sciences Économiques et de Gestion de Sfax	09	78	Tunis
Sapienza Università di Roma	08	161	Italy
Universiti Putra Malaysia	07	175	Malaysia
Université de Tunis	07	130	Tunis
UniversitiTeknologi MARA	06	321	Malaysia
International Islamic University Malaysia	06	168	Malaysia
Université de la Manouba	06	64	Tunis
Universiti Malaya	06	56	Malaysia

Note. Source: Prepared by the authors on the basis of data from the *Scopus* database.

The results presented in the Table above rank the ten most productive research institutions in terms of published articles. Notably, Malaysia and Tunisia are home to four institutions, with a combined output of 50 articles equally divided between the two countries. Malaysia's total number of citations reached 616, whereas Tunisia recorded 349. The remaining research institutions are based in Europe, contributing 17 articles.

These findings reflect the growing interest and awareness among research institutions in developing countries, highlighting the urgent need to establish an effective governance system within these nations.

Scientific Mapping Analysis

Science mapping examines the relationships between research components by analysing the field's intellectual interactions and structural connections. Techniques used in science mapping include citation analysis, cocitation analysis, bibliographic coupling, cword analysis, and coauthorship analysis. Combined with network analysis, these techniques reveal a research domain's bibliometric and intellectual structure (Kent Baker et al., 2020; Sedighi & Jalalimanesh, 2014).

This analysis was conducted after the study data were exported from the *Scopus* database in CSV format.

4. Keywords Co-occurrence Analysis

Keywords co-occurrence analysis is a content analysis technique applied to documents (such as articles, theses, and conference papers) on the basis of the keywords identified by the researcher to establish relationships and construct a conceptual structure for the field of study (Narong & Hallinger, 2023). The core idea behind this method is that when keywords frequently appear together in documents, it suggests that the underlying concepts are closely related. This is achieved by identifying pairs or groups of words that tend to cooccur and form an interconnected cluster. The technique leverages the actual content of documents to construct a similarity metric (Callon et al., 1983).

Moreover, this approach allows for the discovery of the main concepts addressed within the research domain, as it is a powerful tool for uncovering and describing interactions across different areas in scientific research by tracing the conceptual evolution of the field (Lozano et al., 2019).

Our study included only keywords that appeared at least 10 times. Out of a total of 1,816 keywords, only 42 exceeded this threshold. To ensure the credibility of our analysis, we also removed several duplicate terms (based on spelling similarities) and some terms not directly related to the subject. These were as follows:

We excluded the keywords "Banks" and "Banks" because of their similarity with "Banking". Moreover, "China" was removed because the analysis of country coauthorship was conducted and presented separately later.

This left us with 39 keywords, accounting for 1111 occurrences, an overall link strength of 1,245, and 382 links grouped into five clusters. Table 8 describes these clusters in detail, providing a descriptive overview of each group and their primary keywords throughout the study period (2004–2023).

Table 8

Results of keyword co-occurrence analysis on the basis of VOSviewer output

Keywords	Number of Occurrences	Total Links	Total Link Strength	Keywords	Number of Occurrences	Total Links	Total Link Strength
Cluster 01				Finance	16	20	49

Board Structure							
Board Structure							
Bank Performance	49	28	80	Financial System	19	28	86
Board of Directors	24	22	54	Performance Assessment	23	29	101
Corporate Governance	210	37	310	Social Responsibility	10	17	33
Efficiency	20	12	28	Sustainability	29	27	95
Financial Crisis	24	22	60	Sustainable Development	16	22	56
Gender Diversity	16	17	31	Cluster 03 – Performance of Conventional Banks			
Governance	44	26	68	Banking	127	339	35
Islamic Banks	23	15	27	Corporate Strategy	21	86	20
Ownership Structure	18	10	23	Governance Approach	48	173	31
Performance	52	28	87	Industrial Performance	13	18	47
Profitability	24	22	60	Ownership	12	13	37
Regulation	12	07	15	Panel Data	11	15	37
Risk Management	10	12	17	Cluster 04 – Ownership Structure			
Cluster 02 – Social and Environmental Governance Mechanisms				Agency Theory	10	09	16
Performance Banking	13	15	21	Banking Industry	17	15	25
Banking Sector	24	20	51	Executive Compensation	11	12	24
Content Analysis	11	14	21	Firm Performance	15	12	20
Corporate social responsibility	28	29	76	Cluster 05 – Performance of Islamic Banks			
Disclosure	10	14	27	Financial Performance	43	30	89
Emerging Markets	10	13	22	Intellectual Capital	10	15	24

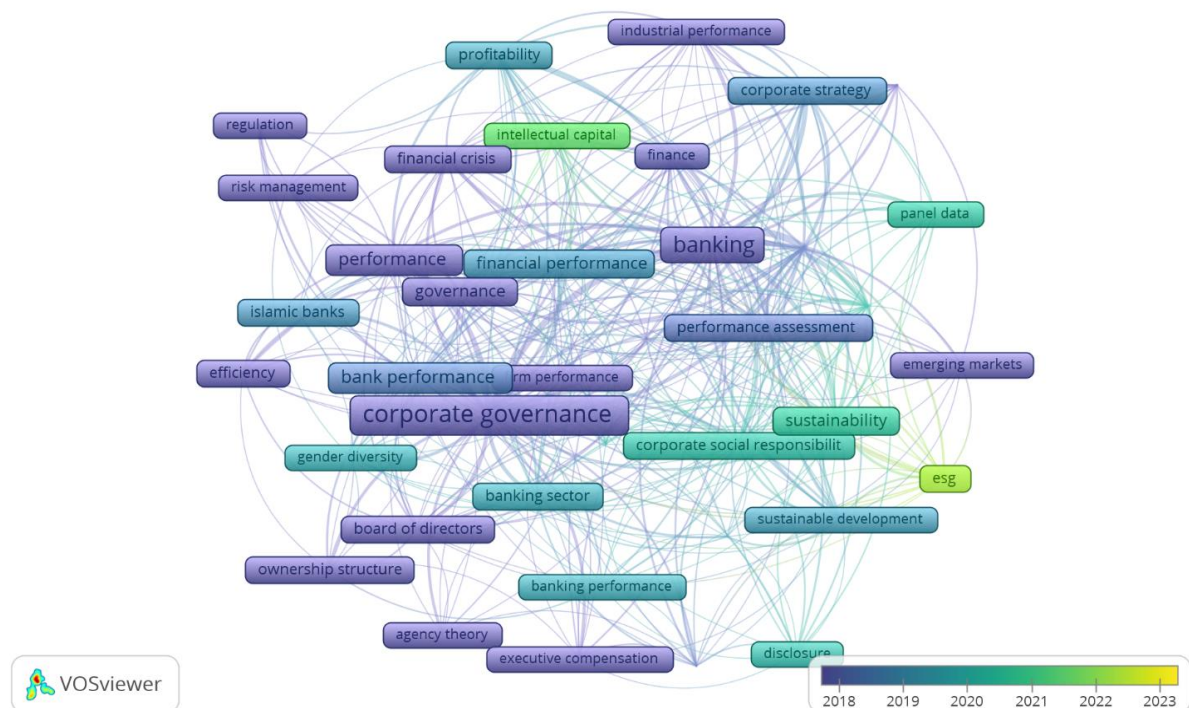
Environmental and Social Governance	19	19	47	Islamic Banking	19	14	28
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Note. Source: Prepared by the authors.

Figure 5 illustrates the network analysis (conducted via VOSviewer), showing the five main clusters from 2018–2023.

- Cluster 1 (*dark blue*) focuses on the board structure of banks.
- Cluster 2 (*light blue*) addresses social and environmental governance mechanisms and sustainability reporting.
- Cluster 3 (*dark purple*) concentrates on the performance of conventional banks.
- Cluster 4 (*light purple*) explores the ownership structure of banks.
- Cluster 5 (*green*) is dedicated to the performance of Islamic banks.

Figure 5. Map of keyword co-occurrence analysis results via VOSviewer



We summarised each cluster as follows:

Cluster 1 – Board structure of banks

This cluster concerns the composition of banks' boards of directors. It includes 13 primary keywords: *bank performance*, *board of directors*, *corporate governance*, *effectiveness*, *financial crisis*, *gender diversity*, *governance*, *Islamic banks*, *ownership structure*, *performance*, *profitability*, *systems*, and *risk management*. This cluster recorded 526 occurrences, 258 links, and a total link strength of 860. The keyword "corporate governance" dominated with 210 occurrences, 34 links, and a link strength of 310.

Within this cluster, the literature revealed significant efforts toward developing corporate governance indices for both conventional and Islamic banks, with a strong focus on board structure as the most crucial internal governance mechanism within banks (Farag & Mallin, 2017; Farag et al., 2018). Board composition—particularly gender diversity—is considered a key determinant of overall performance and can also reduce the severity of financial crises (Burki & Ahmad, 2010; Hashim et al., 2015). Moreover, it may provide organisational benefits such as enhanced marketing

strategies and the attraction of more substantial human capital, which can improve bank performance (Adams & Ferreira, 2009; Huang & Kisgen, 2013).

Significant associations were also found between financial risk and distress and the low representation of women on boards of directors (Yeo, 2012; Mittal & Lavina, 2018; Owen & Temesvary, 2018).

Among the most important features for determining an effective corporate governance model capable of protecting shareholders' rights are as follows:

- the number of independent directors (Chandani et al., 2014; Wang et al., 2012),
- the existence of subcommittees (Aliyu et al., 2014; Rahim et al., 2015; Leung et al., 2014),
- the separation of the roles of the CEO and the chairperson, and
- the number of shares owned by executive directors (Dedu & Chitan, 2013; Tam et al., 2021).

In practice, a board with too many directors may face difficulties coordinating its activities, limiting active participation by all members and resulting in ineffective oversight. This factor contributed to past financial crises (Pathan et al., 2007). Moreover, delegating responsibilities to subcommittees enhances the supervisory power of nonexecutive members, provided that the separation of CEO and chairperson roles ensures greater independence for the board (Fidanoski et al., 2014; Pathan & Faff, 2013).

Cluster 2 – Social and Environmental Governance Mechanisms and Sustainability Reporting

Cluster 2 focuses on social and environmental governance mechanisms and sustainability reporting. It also comprises 13 key terms, distributed as follows: *bank performance*, *banking sector*, *content analysis*, *corporate social responsibility governance*, *disclosure*, *emerging markets*, *environmental and social governance*, *financial resources*, *financial system*, *asset performance*, *social responsibility*, *sustainability*, and *sustainable development*. This cluster recorded 228 occurrences, 267 links, and a total link strength of 685. The keyword “corporate social responsibility governance” led the cluster with 28 occurrences, 29 links, and a link strength of 76.

Within this cluster, the research delves into the relationship between corporate governance in banks and its impact on performance. Sustainability is a crucial condition for setting long-term goals, necessitating more substantial involvement by banks in environmental and social activities, particularly in emerging market economies. This engagement sends stakeholders a positive message, enhancing banks' international reputation (Leblanc, 2007; Bătae et al., 2021).

By demonstrating commitment to community development and reducing the likelihood of engaging in practices that may harm stakeholders, banks can strengthen their ESG profiles through voluntary environmental, social, and governance initiatives. Achieving this goal requires a high degree of coherence and alignment between banks' communication strategies, external stakeholder expectations, and internal management and production processes, which is consistent with the objectives of sustainability reporting (Birindelli et al., 2018; Schaltegger & Wagner, 2006; Bătae et al., 2021).

Cluster 3 – Performance of Conventional Banks

This cluster pertains to conventional bank performance, comprising six key terms: *banking*, *strategic governance*, *governance approach*, *banking industry performance*, *ownership*, and *panel data*. It accounts for 232 occurrences, 132 links, and a total link strength of 719. The keyword “banking” ranked highest, with 127 occurrences, 35 links, and a total link strength of 339.

This cluster emphasises conventional banks' performance, which is shown to improve significantly by adopting a strategic governance approach. This approach typically requires an optimal board size, board independence, and particularly the independence of the audit committee, mainly in high-income regions (Pinto et al., 2017; Zemzem et al., 2017; Ghosh & Ansari, 2018).

Notably, most studies have assessed the impact of governance on the performance of conventional banks via panel data. This method enables researchers to evaluate trends and performance levels over time, making it particularly suitable for this study's topic.

Cluster 4 – Ownership Structure

This cluster relates to ownership structure and comprises four key terms: *agency theory*, *industrial banks*, *executive compensation*, and *performance*. It includes 53 occurrences, 48 links, and a total link strength of 85. The

keyword "industrial banks" had the most significant prominence within the cluster, with 17 occurrences, 15 links, and a link strength of 25.

This cluster focuses on the impact of ownership concentration on bank profitability and efficiency. Despite lower operating costs, most studies show that government-owned banks are less profitable than privately owned banks are (Iannotta et al., 2007; Cornett et al., 2010).

This body of research also investigates ways to mitigate agency problems between shareholders and managers, mainly through mechanisms derived from agency theory, such as managerial ownership, shareholder ownership, and the proportion of outside directors. The findings suggest that banks, where directors and board members hold more enormous equity stakes, tend to have fewer outside directors on their boards. This is because outside directors and insider ownership are considered substitute mechanisms for reducing conflicts of interest between managers and shareholders.

Accordingly, a bank may either increase outside director representation or adopt an ownership structure in which managers and board members hold significant shares, thus mitigating agency problems and improving performance (Belkhir, 2009; Tunay & Yüksel, 2017).

However, some studies reported contrasting findings, showing no significant relationship between ownership structure (including ownership concentration, public ownership, private ownership, and foreign ownership) and banks' financial performance (Aymen, 2013; Lassoued et al., 2016).

Cluster 5 – Performance of Islamic Banks

This cluster highlights Islamic banks' performance analysis, comprising three key terms: *financial performance*, *intellectual capital*, and *Islamic banks*. A total of 72 occurrences, 59 links, and a total link strength of 141 were recorded. The keyword "financial performance" led the group with 43 occurrences, 30 links, and a link strength of 89.

This cluster focused on examining the efficiency of intellectual capital and its three main components—human capital efficiency, structural capital efficiency, and relational capital efficiency—in the performance of Islamic banks. The findings revealed that structural and relational capital efficiency are the primary value drivers in achieving high performance in Islamic banks. However, human capital efficiency hurts their performance (Ur Rehman et al., 2022a; Asutay&Ubaidillah, 2024).

Second: Country coauthorship analysis

To analyse international coauthorship on the basis of the number of coauthored articles, we included only countries that had published more than 10 articles. Twenty-two countries met this threshold, forming 78 links and a total link strength of 130.

These countries were divided into five clusters, each represented by a distinct color. Clustering reflects cooperative relationships between countries within the same group, implying that grouped countries have demonstrated a greater degree of collaboration.

- Cluster 1 (blue) includes seven countries: *France, Lebanon, Saudi Arabia, Tunisia, Turkey, the United Arab Emirates, and the United Kingdom*.
- Cluster 2 (Light Blue) comprises five countries: *Australia, Bangladesh, India, Indonesia, and Spain*.
- Cluster 3 (Dark Purple) consists of 4 countries: *China, Taiwan, the United States of America, and Vietnam*.
- Cluster 4 (Light Purple) includes three countries: *Malaysia, Nigeria, and Pakistan*.
- Cluster 5 (green) also includes three countries: *Germany, Italy, and Romania*.

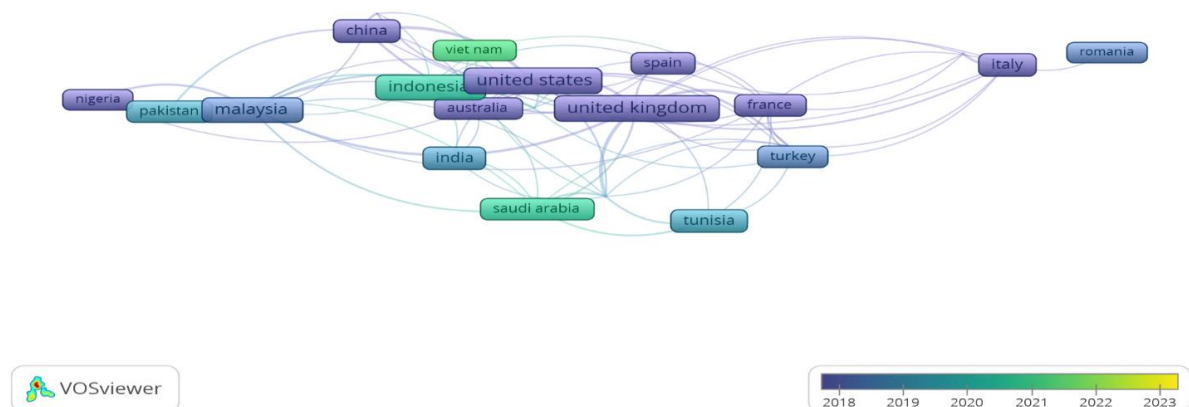
Importantly, the countries represented in Figure 6 vary in node size. According to the VOSviewer analysis, node size is determined by the degree—the number of connections a node has within the overall network. The more connections a country (node) has within the network, the **greater** its representation in the network visualisation, as illustrated in Figure 6.

In more detail, authors from countries in Cluster 1 were found to be highly influential in collaborative research with authors from other countries. They were followed by members of the other clusters, who demonstrated relatively lower levels of collaboration. The analysis further reveals that developing countries such as *Lebanon, Tunisia, and Saudi Arabia*, for example, presented higher levels of international cooperation than some developed countries with larger economies, such as the *United States* and *Germany*. This suggests a growing trend of collaboration between developed and developing countries aimed at enriching the global understanding of corporate governance. In addition, this analysis

suggests that several limitations may contribute to lower levels of coauthorship among countries in the bibliometric analysis presented in this study. Language differences are among the most notable barriers, which can pose significant obstacles to effective international research collaboration. Researchers, particularly those from countries such as *Tunisia*, *Saudi Arabia*, and *Lebanon*, who do not share a common language, may find it challenging to communicate and collaborate efficiently. Another potential barrier is political differences between countries, which can also limit international research collaboration. Researchers may face difficulties in obtaining visas or travel permits or may encounter restrictions on the types of research they are permitted to conduct in other countries. Moreover, cultural differences may present further challenges to international cooperation in research. Scholars from different countries may hold divergent values, beliefs, and working practices, which can hinder collaboration. These differences may also influence how they perceive and approach bank governance and its impact on performance (Mushir et al., 2023).

Figure 6

Map of country coauthorship analysis results via VOSviewer



Source: Country coauthorship overlay visualisation by VOSviewer.

5. Conclusion

Through the performance analysis of the bibliometric studies explored in our research, we answered six out of the seven research questions. These questions were designed to provide a descriptive analysis of research contributions from various perspectives, including the evolution of the topic over the study period and the identification of leading countries, institutions, research fields, prominent authors, and reputable journals. This allowed us to uncover a wide range of insightful findings.

Regarding the first research question:

"What are the research trends related to bank governance and performance worldwide during the study period (2004–2023)?"

We arrived at the following conclusions:

At the beginning of the study period, the production of literature on our topic was modest, particularly before the 2008 global financial crisis, which marked a turning point and significantly increased academic interest in bank governance and its impact on financial performance. Over the study period, 586 articles were published, with an average of 28 per year. The cumulative citation count for these articles reached 16,592 citations (as of 26 August 2024). Notably, 2022 had the highest publication volume, with 85 articles published. Initially, researchers focused on examining the impact of ownership concentration on bank profitability in European countries. Over time, this interest has evolved towards exploring the size, composition, and committees of the board of directors as critical governance variables with respect to banks' financial performance, using market- and accounting-based performance measures.

Moreover, significant attention has been given to innovation as a key variable influenced by a well-structured and organised board of directors, enhancing a bank's financial performance (Guest, 2008). Additionally, researchers have also shown growing interest in Islamic banks. Beyond the traditional governance variables found in conventional banks, Islamic banks are also governed by specific oversight bodies such as the Sharia Supervisory Board, the Sharia Audit Unit, the International Islamic Rating Agency, and the Islamic Financial Services Board, all of which serve as key monitoring entities (Bouheni& Ammi, 2015; Ben Abdallah & Bahloul, 2023). These mechanisms have demonstrated their effectiveness in improving the performance of Islamic banks (Azmi et al., 2021). The second research question is as follows:

"Which countries have made the greatest contributions to the literature on bank governance and performance?"

Our analysis led to the following findings:

A total of 75 countries contributed to the articles included in our study. Developed countries such as the United Kingdom, the United States, and Malaysia dominated the literature, collectively accounting for nearly onequarter of total output. This finding is unsurprising, considering that the UK has long been a pioneer in corporate governance (e.g., the Cadbury Report of 1992), and the OECD has emerged as a strong advocate for governance practices. Upon closer examination, Asian emerging economies have attracted considerable interest in this research topic. Five Asian countries ranked among the top ten in terms of article production globally. This trend can be attributed to the aftermath of the 1997 Asian financial crisis, which increased long-term attention to regional governance issues. In contrast, other developing countries have shown relatively limited engagement with this topic, with the exception of Tunisia, which produced 32 articles, placing it among the top ten most productive countries. The third research question is as follows:

Which academic journals have served as the primary platforms for research on the impact of bank governance on bank performance?

We analysed the top ten most productive journals, along with their citation counts and publishers, leading to the following findings:

A total of 159 journals contributed to the literature included in our study. *Sustainability Switzerland* ranked first with 22 articles, followed by *Banks and Bank Systems* with 17 articles, *Corporate Ownership and Control* with 14 articles, *Corporate Governance Bingley* with 13 articles, and *Journal of Banking and Finance* with 10 articles. The top ten journals collectively produced nearly one-fifth of all the articles. Notably, Emerald Publishing published four of the top ten journals. With respect to total citation count, the *Journal of Banking and Finance*, published by Elsevier, ranked first with 2,780 citations. Finally, corporate social responsibility and environmental management had the highest CiteScore, at 17.2. The fourth research question is as follows:

During the study period, which authors had the greatest influence in the field of bank governance and performance?

We arrived at the following results:

This research question primarily aimed to identify the most productive contributors regarding article output to determine the key authors who serve as references in the field. We found that the total number of publications among the most productive authors was not significantly different; however, the total citation counts revealed considerable variation, indicating differing levels of influence across these authors' contributions. Through this analysis, we identified three leading authors, Nawaz, T., Aras, G., and El-Chaarani, H., each of whom contributed five articles. They were followed by Haron, R., who authored four articles. The authors ranked fifth to tenth-Abraham, R., Ahmad, M.I., Aslam, E., Azad, M.A.K., Bachiller, P., and Bouteska, A.each contributed three articles. In total, 159 authors contributed to the articles analysed in this study. Notably, most of the top contributing researchers were affiliated with institutions in Asia, which is consistent with the findings from the second research question regarding the most productive continent. The fifth research question is as follows:

What are the main research fields in which scholars have contributed to studying the impact of bank governance on bank performance?

Our findings were as follows:

Most of the articles analysed in this study were concentrated in economics, finance, and accounting, accounting for a substantial 63.21% of the total output. This result is expected because our research topic falls primarily within this academic domain. In addition, 150 articles were contributed by the social sciences field, reflecting the increasing academic interest in this subject area, mainly through empirical research.

The importance of this analysis lies in its ability to ease the burden for researchers and stakeholders by helping them classify the intellectual content of the research domain. It facilitates efficient information retrieval, organisation, and dissemination-making relevant materials that are more accessible and usable. Finally, the sixth research question is as follows:

Which research institutions have contributed significantly to the production of literature linking bank governance and bank performance?

The following findings were reached:

Malaysia and Tunisia rank first in terms of the number of institutions (among the top 10 in terms of output) that contributed to the subject of our study, with four institutions from each country. In Malaysia, the contributing universities were Universiti Putra Malaysia, Universiti Teknologi MARA, International Islamic University Malaysia, and Universiti Malaya, with a total output of 25 articles. This is the same number of publications produced by the four Tunisian institutions: Université de la Manouba, University of Sfax, FSEG Sfax – Faculté des Sciences Économiques et de Gestion de Sfax, and Université de Tunis. The remaining institutions were based in Europe and collectively contributed 17 articles, which are detailed in the preceding section of the analysis. Malaysia's leading position in the number of contributing research institutions corresponds with our analysis of the most productive countries, where Malaysia ranks third globally in total article output. This analysis also enabled us to draw a significant conclusion: developing countries place substantial emphasis on banking governance and its relationship with performance within their academic institutions. This highlights the need for official bodies in these countries to adopt the findings of such studies to establish an effective governance framework. Moreover, researchers and institutions from other countries should seek to establish academic and research collaborations with these institutions in recognition of their extensive expertise in the subject matter of our study.

Finally, for the seventh and final research question, which remained after addressing the previous six within the bibliometric performance analysis, we turned to science mapping analysis—a crucial component in preparing bibliometric studies. This method enabled us to identify key patterns in our research topic, understand the thematic structure of the field, and uncover collaborative relationships among authors from different countries. We utilised the VOSviewer tool, which provides a highly detailed visual representation of keyword co-occurrence and country coauthorship, categorised into clusters on the basis of shared characteristics.

The research question was as follows:

What are the intellectual structure and transformative discoveries in bank governance research regarding key keywords and international collaboration? Moreover, how did its impact on bank performance emerge during the study period (2004–2023)?

To address this question, we included keywords that appeared at least 10 times from a total pool of 1816 keywords. After several methodological refinements, we identified 39 keywords that met our criteria. These keywords collectively accounted for the following:

- 1111 total occurrences,
- 1245 total link strength, and
- 382 co-occurrence links.

This analysis enabled us to derive the following core findings:

The most prominent keywords used by researchers were corporate governance, corporate social responsibility governance, banking, industrial banks, and financial performance. *Corporate governance* was the most frequently used, appearing 210 times. The analysis results also revealed the formation of five principal clusters, which comprehensively covered the core themes of our research. These clusters were as follows:

1. Board structure
2. Social and Environmental Governance Mechanisms
3. The performance of conventional banks,
4. Ownership structure and
5. Performance of Islamic Banks.

Board structure, in particular, is defined by several features: the number of independent directors, the presence of subcommittees, role separation between the CEO and chairperson, and female board membership. It has emerged as a critical governance variable because of its strong influence on bank profitability and performance. Furthermore, board structure plays a key role in risk mitigation, especially during periods of financial crisis, by helping reduce factors that

may constrain financial growth. Beyond these aspects, it also provides significant organisational benefits that enhance bank effectiveness in conventional and Islamic banking contexts (Andres & Vallelado, 2008; Mollah & Zaman, 2015). Enhancing the understanding of governance by incorporating variables such as disclosure of banks' corporate social responsibility (CSR) and environmental governance is crucial to improving financial performance, particularly in emerging economies. These factors play a distinctive role in strengthening a country's reputation. When considered collectively, such governance elements form the cornerstone of institutional sustainability (Buallay, 2019; Azmi et al., 2021). Most studies that have assessed the performance of conventional banks in terms of governance variables have utilised panel data. This approach enables researchers to achieve greater statistical validity in programme evaluation and empirical research, offering a more robust research design than techniques based solely on cross-sectional data (Hajer & Anis, 2018).

Panel data also facilitate the collection of broader information on each governance variable examined. Through Cluster 3, we find that conventional banks' performance significantly improves when an optimal approach to governance mechanisms is implemented—for example, an appropriately sized and independent board and the independence of its committees (Germain et al., 2014; Ting et al., 2017). The ownership structure variable aligns closely with agency theory, from which the concept of governance initially emerged. It has received considerable attention from researchers, particularly with respect to ownership concentration in government-owned banks. Most studies have shown that such banks exhibit lower profitability than their privately owned counterparts do.

Internal ownership is also considered an important mechanism for mitigating agency problems between shareholders and executive managers. Numerous studies have shown that banks in which executive managers and board members hold significant ownership stakes tend to experience fewer conflicts of interest, which in turn positively influences bank performance (Iannotta et al., 2007; Mateev & Bachvarov, 2021; Pathan & Faff, 2013). This analysis did not exclude Islamic banks, which have also received notable attention from researchers. Several studies have explored the relationship between intellectual capital and the performance of Islamic banks. One of its components, human capital efficiency, was found to hurt performance, whereas the other two components—structural capital efficiency and relational capital efficiency—were identified as key drivers of improved performance (Ousama & Fatima, 2015; Ur Rehman et al., 2022b).

We analysed international collaboration between countries for the second part of the seventh research question. We included only countries involved in more than 10 coauthored articles, which resulted in 22 countries grouped into five clusters. The majority, 12 countries, were from Asia. This analysis led us to a significant finding: there is strong collaboration between developing and developed countries in researching the relationship between bank governance and performance. The shared goal is achieving long-term sustainability through knowledge exchange and establishing integrated and robust governance systems.

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