Investigation Of Studies In Risk Management and Banking Sector With Bibliometric Analysis

Gözde ELBİR MERMER*

ÖZ

Bankalar, ulusal ve küresel finansal sistemlerin temel taşlarıdır. Bu nedenle ekonominin geri kalanı üzerinde de geniş kapsamlı etkileri olmaktadır. Bankacılık sektöründe risk yönetimi oldukça önemli bir süreçtir. Web of Science veri tabanında "risk yönetimi" ve "bankacılık sektörü" anahtar kelimeleri ile araştırma yapıldığında, 2004 ve 2024 yılları arasındaki dönemde toplam 377 yayına ulaşılmıştır. Yıllar bazında son beş yıla ait yayın adetleri 2020 yılında 41, 2021 yılında 27, 2022 yılında 33, 2023 yılında 37 ve 2024 yılında 7 adettir. Bu konuda, Çin, 30 yayın ile en yüksek yayın sayısına sahip olan ülkedir. Hindistan 25 makaleye, İngiltere ve Amerika Birleşik Devletleri ise her biri 24 makaleye sahiptir. Türkiye ise 16 makale ile dokuzuncu sıradadır. Makaleler, ekonomi (122), işletme finansı (121), yönetim (61), işletme (58) gibi bilim dallarında yayımlanmıştır. Bununla birlikte, anahtar kelime analizi, en sık kullanılan anahtar kelimelerin "risk yönetimi", "bankacılık sektörü", "kredi riski", "banlalar", "bankacılık" ve "risk" olduğunu ortaya koymaktadır.

Anahtar Kelimeler: Risk yönetimi, Bankacılık sektörü, Bibliyometrik analiz

JEL Sınıflandırması: G32, Y10

Risk Yönetimi ve Bankacılık Sektörü ile İlgili Çalışmaların Bibliyometrik Analiz İle İncelenmesi

ABSTRACT

Banks are fundamental institutions in both national and global financial systems. Also, banks have extensive implications on the rest of the economy. Therefore, risk management in the banking sector is a highly significant process. When making a search with the keywords "risk management" and "banking sector" in the Web of Science database, a total of 377 articles are identified between the years 2004 and 2024. The annual publication counts in the last five years are as follows: 41 publications in 2020, 27 publications in 2021, 33 publications in 2022, 37 publications in 2023, and 7 publications in 2024. In the subject, China has the highest number of publications with 30 studies. Following them, India has 25 articles, while England and USA have 24 articles each. Turkey ranks nineth with 16 articles. The articles are published in the branches of science which are economics (122), business finance (121), management (61), business (58) et al. However, the keyword analysis reveals that the most frequently used keywords are "risk management", "banking sector", "credit risk", "banks", "banking" and "risk".

Key Words: Risk management, Banking sector, Bibliometric analysis

JEL Classification: G32, Y10

INTRODUCTION

In contemporary finance, banks play a significant role in the financial intermediation process (Fungacova and Poghosyan, 2011: 481). The primary purposes of corporate managements in the banking sector revolve around

*Dr., gozdeelbir1@gmail.com, ORCID Bilgisi: 0000-0002-6463-9319

(Makale Gönderim Tarihi: 17.01.2024 / Yayına Kabul Tarihi:25.04.2024) Doi Number: 10.18657/yonveek.1421581 Makale Türü: Araştırma Makalesi increasing the value of company assets. Achieving this purpose necessitates taking certain risks. The risks faced by the financial sector in pursuit of this goal can be summarized as interest rate risk, credit risk, market risk, technology and operational risks, country risk, foreign exchange risk, liquidity risk, and insolvency risks (Ertürk, 2010: 62). However, based on the research findings, the disclosures made by banks on their websites regarding risk management policies and the variety of risks they address vary. For instance, on the website of one bank, risks such as reputation risk, environmental and social risk, operational risk, market risk, structural interest rate risk, structural exchange rate risk, liquidity risk, credit risk, counterparty credit risk, concentration risk, and risks in affiliated partnerships are included within their risk management policies. In addition to these risks, another bank includes risks such as surplus risk, country risk, earthquake risk, and climate risk within its risk management policies.

Risk is the probability of an unforeseen event occurring in the future. Financial risk, from a financial perspective, is the likelihood of the realized return deviating from the expected return (Aydın, Basar and Coskun, 2015: 306). In general, banking is considered a risky business. Typically, risk management practices in the banking industry aim to control an institution's exposure to potential losses and safeguard the value of its assets (Türsoy, 2018: 1). Furthermore, risk management in banking refers to the comprehensive array of processes and models that enable banks to adopt risk-based policies and practices. These encompass all the techniques and management tools necessary for measuring, monitoring, and controlling risks (Bessis, 2002). The risk management process can be summarized in the following three steps. The first step involves identifying and assessing potential risks in the banking sector. The second step is to develop and implement an action plan to deal with and manage activities that may lead to potential losses. The third step entails the continuous review and reporting of risk management practices once implemented. The overall goal of the risk management process is to assess potential future losses for banks and take measures to address these potential issues when they arise (Türsov, 2018: 3).

The purpose of this research is to conduct a bibliometric analysis of articles on the topics of risk management and banking sector published in the Web of Science (WoS) database between 2004 and 2024. The acquired data is transformed into tables, networks, and visuals using VOSviewer software. In the literature, there are limited number of articles about risk management and banking sector as a bibliometric analysis. This study can make a meaningful contribution to the finance literature.

The remainder of the paper is as follows: Section 2 provides a summary of the literature, Section 3 explains the data and methodology, Section 4 presents the empirical findings, and Section 5 concludes the paper.

I. LITERATURE REVIEW

The studies investigate based on the review results are presented in Table 1. These examined articles are authored by individuals from different countries. Table 1 includes fundamental information about the studies examined in the 348

literature review, such as articles, authors, database, sample period, and program. These studies observe that Biblioshiny (R program), VOSviewer software, HistCite software and Web of Science analysis results are utilized for bibliometric analysis.

Bradea, Delcea and Paun (2015), research the publications about healthcare risk management by using VOSviewer software. The data is obtained via WoS database from 2005 to 2014. The research areas, number of published papers, countries, type of papers, number of citations are examined for bibliometric analysis. Ahmad (2021) et al., seeks to employ bibliometric analysis in the field of financial risk management. The data is obtained from 2004 to 2018 by using WoS. An analysis was conducted on a total of 30.605 documents. The obtained WoS analysis results are interpreted. The primary purposes of this research encompass identifying trends in publications and citations related to financial risk management, determining the key research areas, identifying the most influential papers based on citation counts and examining the top supporting funding agencies. Nobanee et al. (2021), aim to analyze the literature related to keywords like sustainability and risk. The bibliometric analysis is employed by VOSviewer software from 1990 to 2020, 1,233 documents are obtained in Scopus. The current papers, institutes, authors and keywords are investigated. Sulistivowati, Suef and Singgih (2021), examine on risk management and quality improvement project publications. The sample period is from 2000 to 2020. They are used Scopus database to reach the data and 2000 articles are attained. They are examined in terms of the type of document, the subject area of document, countries, key words et al. VOSviewer software is used to examine the bibliometric investigation. Ammu et al. (2022), search credit risk management in banks using Biblioshiny, the R software package. Publications are derived from Web of Science database. "Credit risk management" and "Banks" are used as keywords for 1998-2020. The citation analysis and network analysis are explored to give information about credit risk management field. Galletta, Mazzu and Naciti (2022), search a bibliometric analysis of environmental, social, and governance (ESG) performance in the banking industry. The sample spans from 1986–2021 and is reached 271 publications. This article presents several findings, such as citations, distribution of keywords, leading authors both at the journal and institutional levels, highly referenced works, collaboration among authors, and the most influential journals and authors. Janbaz et al. (2022), examine political risk in banking for the sample period from 1985 to 2019. Bibliometrix R package is used for keywords evolution, descriptive analysis, and illustrations. VOSviewer is used the co-citation and citation analyses of studies, authors, and journals and also HistCite software is used. They search the keywords which are "banking", "banks" and "financial institutions" in Web of Sciences database. Pan, Wang and Feng (2022), research risk management in foreign direct investment via a bibliometric analysis. The data of the study spans from 1995 to 2022 and 1.231 publications are obtained by using WoS database. The data analysis includes publication trend, cooperation networks, influential indicators, citiation analysis

and keywords by using CiteSpace 6.1 R1. Vashisht, Sarva and Mundi (2022), analyse risks measurement in banking by using a bibliometric and content analysis. The data drives from Scopus database and the period is from 1967 to 2021. Bibliometrix is used to analyse. Authors, key sources of publications, network of authors studying in this field, countries, keywords are analyzed. Yildirim (2022), examine of the studies in banking risk management via the Social Network Analysis (the CiteSpace 5.5 software). The sample period is from 2010 to 2020. The keyword search is conducted using the concept of "banking risk management". Publication types, titles, languages, author names, bibliography, citation information, keywords, countries and abstract. Arvati, Khomsiyah and Harahap (2023), search business risk management papers via WoS database. The sample period is from 2004 to 2023. As a result of this research, they are obtained 510 studies related to the subject. They use Biblioshiny to evaluate the data. In the analysis, they focus on a lot of topics such as annual publication trends, journals, references, authors, countries and author affiliations. Judijanto et al. (2023), investigate financial risk management. The data spans from 1976 to 2024. VOSviewer software is used for bibliometric analysis. They search a lot of topics such as citiation years, author's collaborations, indexes and keywords. Sapountzoglou (2023), investigatess two elements which are risk and space. VOSviewer software is used for a bibliometric analysis. The data is obtained from Scopus database and is reached 6.375 publications. Tircovnicu and Hategan (2023), search enterprise risk management (ERM) by using a bibliometric analysis. The data is collected from WoS. The sample period is between 2013 and 2022 and 34.297 articles are obtained. They interpret the results obtained using the VOSviewer software. Zhang, Ling and Lin (2023), examine about risk management in East Asia by using bibliometric analysis. The sample period is from 1998 to 2021. The data is obtained 7.154 pubications from WoS database. Vosviewer is used to evaluate publications. Annual indicators, types, the information of publications in terms of countries and authors, research directions are analyzed. Oi et al. (2023), investigate bank risk literature using bibliometric analysis. The period is from 1978 to 2022. They use "bank risk" keyword to detect all publication via Scopus database. R package and VOSviewer program are employed. They give an information about authors, documents, countries, keywords, citiations as a related to the keyword "bank risk". Jadwani, Parkhi and Mitra (2024), investigate operational risk management in Banks via bibliometric analysis (Biblioshiny and VOSviewer). The data is extracted from Scopus and Web of Science. The sample period is from 2010 to 2023. They search document selection, network analysis, bibliometric analysis and content analysis.

Table 1. Literature review

Articles	Authors	Database	Sample period	Program	
Healthcare Risk Management Analysis – A Bibliometric Approach	Bradea, I., Delcea, C., & Paun, R. (2015)	Web of Science	2005- 2014	Web of Science analysis results	
Bibliometric analysis of Financial Risk Management	Ahmad, I., Shahid I., Y., Naz, F. & Jamil, S. (2021)	Web of Science	2004- 2018	Web of Science analysis results	
A Bibliometric Analysis of Sustainability and Risk Management	Nobanee, H. et al. (2021)	Scopus	1990- 2020	VOSviewer	
Risk Management on Quality Improvement Project: Literature Review and Bibliometric Analysis	Sulistiyowati, W., Suef, M., & Singgih, M. L. (2021)	Scopus	2000- 2020	VOSviewer	
Bibliometrics Analysis In Articles Of Credit Risk Management In Banks	Ammu et al. (2022)	Web of Science	1998- 2020	Biblioshiny, the R software package	
A bibliometric analysis of ESG performance in the banking industry: From the current status to future directions.	Galletta, S., Mazzù, S., & Naciti, V. (2022)	Web of Science	1986– 2021	VOSviewer	
Political risk in banks: A review and agenda	Janbaz et al. (2022)	Web of Science	1985– 2019	Bibliometrix R package, VOSviewer, HistCite software	
A Bibliometric Analysis of Risk Management in Foreign Direct Investment: Insights and Implications	Pan, L., Wang, L. & Feng, Q. (2022)	Web of Science	1995- 2022	CiteSpace 6.1 R1	
Risks measurement in banking: A bibliometric and content analysis.	Vashisht, S., Sarva, M., & Mundi, H. S. (2022)	Scopus	1967– 2021	Bibliometrix	
Investigation of the Studies in the Field of Banking Risk Management via the Social Network Analysis	Yildirim (2022)	Web of Science	2010– 2020	The Social Network Analysis (the CiteSpace 5.5 software)	
Enterprise risk management: A bibliometric analysis of research Trends	Aryati, T., Khomsiyah, K., & Harahap, C. (2023)	Web of Science	2004- 2023	Biblioshiny (R program)	
Mapping the Financial Risk Management Landscape: A Bibliometric Analysis of Recent Trends and Influential Contributions	Judijanto, L. et al. (2023)	Web of Science	1976- 2024	VOSviewer	
A bibliometric analysis of risk management methods in the space sector	Sapountzoglou, N. (2023)	Scopus	1957- 2021	VOSviewer	
Trends in Enterprise Risk Management Research: A Bibliometric Analysis	Tircovnicu, G. I., & Hategan, C. D. (2023)	Web of Science	2013- 2022	VOSviewer	
Risk management research in East Asia: a bibliometric analysis	Zhang, L., Ling, J., & Lin, M. (2023)	Web of Science	1998- 2021	VOSviewer	
Bank Risk Literature (1978–2022): A Bibliometric Analysis and Research Front Mapping.	Qi et al. (2023)	Scopus	1978– 2022	R package and VOSviewer	
Operational Risk Management in Banks: A Bibliometric Analysis and Opportunities for Future Research	Jadwani, B., Parkhi, S., & Mitra, P. K. (2024)	Web of Science and Scopus	2010- 2023	Biblioshiny and VOSviewer	

II. DATA AND METHODOLOGY

The studies encompass topics related to "risk management" and "banking sector". These studies, published between 2004 and 2024, are examined using the Web of Science (WoS) database. The database determines the sample period as 2004-2024 since the search is conducted with the keywords "risk management" and "banking sector" on the Web of Science database, resulting in this range. As a result of the research, the WoS database identifies a total of 377 studies. Bibliometric analysis is conducted using the VOSviewer program based on the acquired data. Risk management and banking sector keywords, the sample period and the number of studies conducted during this period are included in the Table 2.

Table 2. Research data

Database	Web of Science		
Number of the articles	377		
Sample period	2004-2024		
Key words	"risk management" and "banking sector"		
Method	Bibliometric Analysis (VOSviewer)		

Bibliometric analysis is useful for interpreting large volumes of data rigorously to explain and map the attained scientific knowledge. Therefore, well-conducted bibliometric studies can establish strong foundations for advancing a field. They provide researchers with a comprehensive overview, help identify knowledge gaps, inspire new ideas for research, and enable meaningful contributions to relevant fields (Donthu et al., 2021: 284). The bibliometric research process comprises three stages: defining search criteria and identifying sources, extracting data, and preprocessing, followed by data analysis and interpretation.

VOSviewer serves as a software tool designed for the generation and exploration of maps derived from network data. This tool investigates various linkages such as co-authorship, citation, co-occurrence, co-citation and bibliographic coupling offering three potential representations: network, density visualization or overlay (Arruda, 2022: 392). In this study, the process of creating a map using the VOSviewer program involves specific steps, as illustrated in Figure 1 of the bibliometric analysis process. Firstly, the VOSviewer mapping program is downloaded and installed from the official website. Following this, keywords (risk management and banking sector) are entered from the WoS database, and a time range (2004-2024) is specified. The obtained data (377 articles) is then loaded into the VOSviewer program. Various titles for the visual, such as publications, citations, countries, authors, affiliations, keywords are selected. Threshold values for the criteria are entered into the program. These threshold values can be either automatically determined by the VOSviewer program or decided by the researcher. In the last step, relevant visuals are obtained by transforming the maps, and the findings are explained.

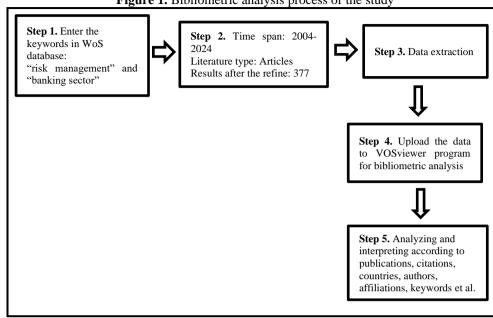
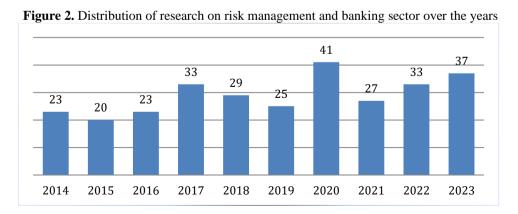


Figure 1. Bibliometric analysis process of the study

III. EMPIRICAL FINDINGS

A. Web of Science Analysis Results

When making a search with the keywords "risk management" and "banking sector" in the Web of Science database, a total of 377 articles are identified between the years 2004 and 2024. The distribution of articles accessed from the Web of Science database over the years is illustrated in Figure 2. When examining the figure, the last ten years are visible. Less than 25 publications are made each year between 2014 and 2016. Particularly, there is a noticeable rise in the number of publications starting from the year 2017. The highest number of publications occurred in 2020 (41 publications).



The distribution of studies accessed from the Web of Science database by countries is illustrated in Figure 3. When examining the productivity of countries based on the number of publications, it is observed that 88 countries contribute to publications in this field. Figure 3 displays the top 10 countries with the highest number of publications. In the subject, China is the countries with the highest number of studies, having 30 publications. India has 25 publications, while USA and England have 24 articles each. Turkey ranks sixth with 16 publications.

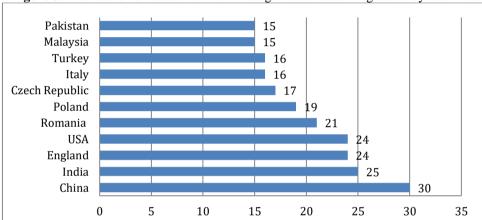


Figure 3. Distribution of research on risk management and banking sector by countries

The distribution of studies accessed from the Web of Science database by branches of science is illustrated in Figure 4 which displays the top 10 branches of science with the highest number of publications. The studies are published in the branches of science which are economics (122), business finance (121), management (61), business (58) et al.

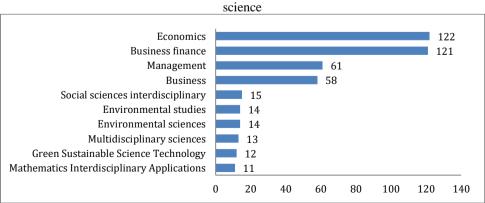
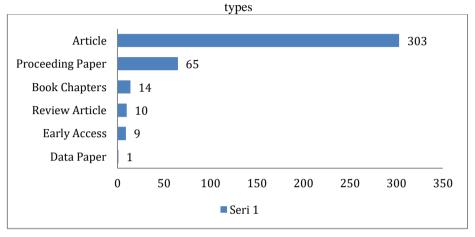


Figure 4. Distribution of research on risk management and banking sector by branches of

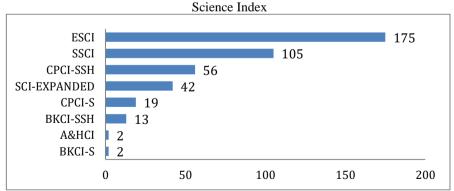
The distribution of studies accessed from the Web of Science database by document types is illustrated in Figure 5. The document types are article (303), proceeding paper (65), book chapters (14), review article (10), early access (9) and data paper (1).

Figure 5. Distribution of research on risk management and banking sector by document



The distribution of studies accessed from the Web of Science database by Web of Science Index is illustrated in Figure 6. The three of Web of Science Indexes are Emerging Sources Citation Index (ESCI) (175), Social Sciences Citation Index (SSCI) (105) and Conference Proceedings Citation Index – Social Science & Humanities (CPCI-SSH) (56).

Figure 6. Distribution of research on risk management and banking sector by Web of



B. Visualization topics

In this bibliometric study conducted using VOSviewer, analyses such as co-authorship of authors, citation of authors, citation of countries, citation of organizations, co-occurrence of keywords, bibliometric matching analysis, and

co-citation of co-authors are performed. The findings obtained as a result of the analyses are explained in this section.

• Co-authorship of authors

Voswiever map method explains co-authorship of authors in Figure 7. According to the co-authorship analysis of authors, a network map is constructed to identify the most connected and collaborative authors by establishing criteria of at least 1 publication and at least 1 citation. The most cited authors (A. Lehar 224 citations; Jun Bi, Yan Yang and Zhang Bing with 199 citations; Ginanjar Dewandaru, Ruslan Nagayev and Adama Ng with 114 citations) are not the most connected authors via Figure 5. Some of the authors with the highest number of publications are also among the most connected authors (Ahmed Samour, Simon Grima et al.).

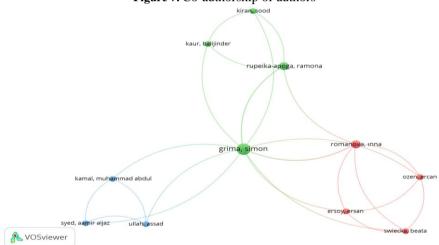


Figure 7. Co-authorship of authors

Citation of authors

To identify citation networks, a network map for author citation analysis is generated based on the criteria of at least 1 publication and at least 1 citation. The authors with the highest number of citations are A. Lehar with 224 citations. Following A. Lehar, Jun Bi, Yan Yang and Bing Zhang has 199 citations. Ginanjar Dewandaru, Ruslan Nagayev and Adama Ng has 114 citations. These three authors also rank among the top three in terms of total connectivity strength. The authors with the highest connectivity strength are Oana Marina Batae, Voicu dan Dragomir and Liliana Feleaga, respectively.

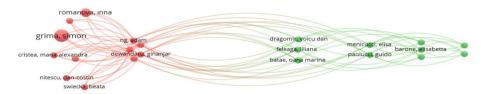


Figure 8. Citation of authors



Table 3 includes some of these studies, and the literature ranking is arranged in descending order based on citation counts. All the studes access and examine in the research are written in English.

Table 3. Top Ten Highest Cited Documents Related to "Risk Management and Banking Sector" Research from 2004 – 2024

Articles	Authors	Year	The name of Journal	Citiation number
Measuring systemic risk: A risk management approach.	Lehar, A.	2005	Journal of Banking & Finance	224
Tracking the implementation of green credit policy in China: Top-down perspective and bottom-up reform	Zhang, B, Yang, Y and Bi, J	2011	Journal of Environmental Management	199
The impact of social and environmental sustainability on financial performance: A global analysis of the banking sector	Nizam, E et al.	2019	Journal of Multinational Financial Management	114
The relationship between environmental, social, and financial performance in the banking sector: A European study.	Batae, O. M., Dragomir, V. D., & Feleaga, L.	2021	Journal of cleaner production	107
The Impact of Green Lending on Credit Risk in China	Cui, YJ et al.	2018	Sustainability	107
Sustainability reporting and firm's performance Comparative study between manufacturing and banking sectors	Buallay, A; Hamdan, A and Barone, E	2020	International Journal of Productivity and Performance Management	63
A network model of financial system resilience	Anand, K. et al.	2013	Journal of Economic Behavior & Organization	58
Twenty-five years of The European Journal of Finance (EJF): a retrospective analysis	Burton, B; Kumar, S and Pandey, N	2020	European Journal of Finance	51
Foreign currency borrowing by small firms in the transition economies	Brown, M; Ongena, S and Yesin, P	2011	Journal of Financial Intermediation	51
Renewable energy, banking sector development, and carbon dioxide emissions nexus: A path toward sustainable development in South Africa	Samour, A; Moyo, D and Tursoy, T	2022	Renewable Energy	46
Impact of big data analytics on banking sector: Learning for Indian banks.	Srivastava, U. & Gopalkrishnan, S.	2015	Procedia Computer Science	45

Citiation of Countries

An analysis is conducted based on a network map of citations received by publications according to their countries. The criteria for creating the network map include at least 1 publication and 1 citation from a country. The analysis is performed on 74 observed units with relationships. The countries receiving the most citations are the England (336 citations), China (316 citations), USA (305 citations), India (237 citations), Austria (234 citations), Malaysia (216 citations) and Turkey (211 citations). The countries (Turkey, England, Malaysia, Romania and China) rank in the top five in terms of total connectivity strength.

spain
saudi arabia

India southkorea indenesia pakistan

singapore

peoples r china
poland romania

bahrain taly england

netherlands

Figure 9. Citation of countries

• Citation of Organizations

🤼 VOSviewer

An analysis is conducted on 397 observed units with relationships based on the criteria of at least 1 publication and 1 citation from an institution to create a network map of inter-institutional citations. The institutions of the publications receiving the most citations are presented in Figure 10.

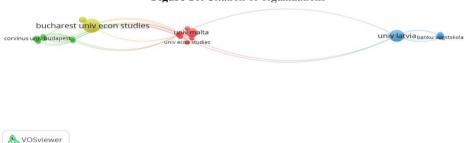


Figure 10. Citation of organizations

• Co-occurence of Keywords

The keyword analysis of the studies accessed from the Web of Science database is showed in Figure 11. The criterion for this analysis is the usage of a

keyword at least 2 times, and out of a total of 1214 keywords, 203 meet this criterion. The keyword analysis reveals that the most frequently used keywords are "risk management", "banking sector", "credit risk", "banks", "banking" and "risk".

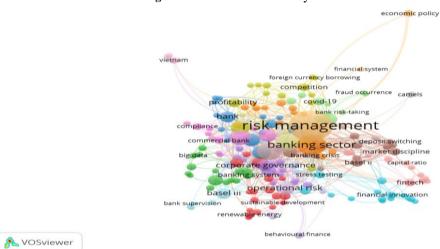


Figure 11. Co-occurence of keywords

Bibliographic Coupling of Documents

Bibliometric matching analysis, which is characterized by two different sources citing the same reference, indicates the strength of connections between studies. Figure 12 shows the connectivity strength of authors, according to the document. In obtaining this visualization, the minimum citation count for a document is set to "1". The top 5 documents with the highest total connectivity strength are selected, and they belong to Batae (2021), Naili (2022), Galetta (2022), Menicucci (2023) and Akhter (2023), who have the most bibliometric matching counts in the field of "risk management and banking sector". The publications with the highest bibliographic matching counts are Lehar (2005) with 224 citations, Zhang (2011) with 199 citations, Nizam (2019) with 114 citations, Batae (2021) and Cui (2018), both with 107 citations.

Figure 12. Bibliographic coupling of documents

• Bibliographic Coupling of Authors

Selecting a minimum of "1" for both the document count and citation count of an author obtain in Figure 13. The authors with the highest bibliographic matching counts are Ahmed Samour, Foday Joof, Turgut Tursoy, Mumtaz Ali and Simon Grima.

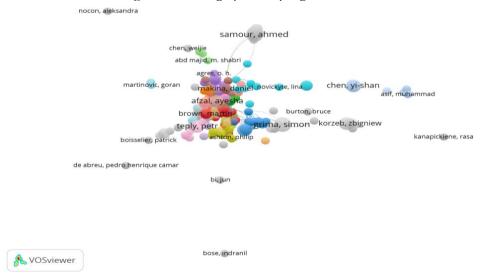


Figure 13. Bibliographic coupling of authors

Co-citation of Co-authors

The network visualization of cited authors is available in Figure 14. Selecting a minimum citation count of 3 for an author creates this network map. Out of 10.158 authors, 915 meet this criterion. The top three names that stand out are Berger, Beck, and Laeven.

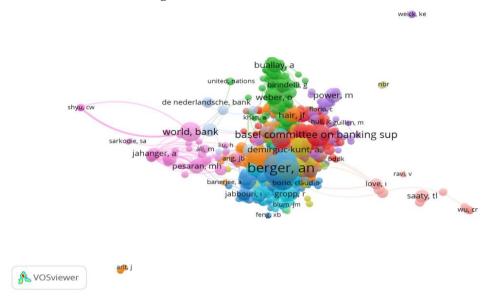


Figure 14. Co-citation of Co-authors

IV. CONCLUSION

The purpose of this research is to conduct a bibliometric analysis of articles on the topics of risk management and banking sector published in the Web of Science (WoS) database between 2004 and 2024. In this study, 377 articles published during the relevant years are examined. This research provides an opportunity for an assessment of the current state of the literature on risk management and the banking sector.

The data analysis reveals that the highest number of publications occur in the year 2020. In the subject, China is the countries with the highest number of studies, having 30 publications. The studies are published in the branches of science which are economics (122), business finance (121), management (61), business (58) et al. The document types are article (303), proceeding paper (65), book chapters (14), review article (10), early access (9) and data paper (1). The three of Web of Science Indexes are ESCI (175), SSCI (105) and CPCI-SSH) (56). It is observed that the most cited authors are A. Lehar with 224 citations. Following A. Lehar, Jun Bi, Yan Yang and Bing Zhang has 199 citations. Ginaniar Dewandaru, Ruslan Nagayev and Adama Ng has 114 citations, These three authors also rank among the top three in terms of total connectivity strength. The countries receiving the most citations are the England (336 citations), China (316 citations), USA (305 citations), India (237 citations), Austria (234 citations), Malaysia (216 citations) and Turkey (211 citations). The keyword analysis reveals that the most frequently used keywords are "risk management", "banking sector", "credit risk", "banks", "banking" and "risk". The top 5 documents with the highest total connectivity strength are selected, and they belong to Batae (2021), Naili (2022), Galetta (2022), Menicucci (2023) and Akhter (2023), who

have the most bibliometric matching counts in the field of "risk management and banking sector". The authors with the highest bibliographic matching counts are Ahmed Samour, Foday Joof, Turgut Tursoy, Mumtaz Ali and Simon Grima. According to co-citation of co-authors results, The top three names that stand out are are Berger, Beck, and Laeven.

There are studies in the literature that examine risk management in the field of banking from certain perspectives. The studies with findings similar to this study in terms of countries and keywords, Vashisht, Sarva and Mundi (2022), in their study about analyse risks measurement in banking, found that top 3 countries to be the USA, China, and England. Also Yildirim (2022), in the study on banking risk management, conducted that top 3 countries to be the USA, China, and England. In addition, Qi et al. (2023), in the research on bank risk, found that top 3 countries to be the USA, China, England. In this study, China is the first one, the others are India, England and USA. Therefore, according to the studies, it can be stated that these countries (the USA, China, and England) are the most productive countries in this field. Besides, Yildirim (2022) obtained similar keywords (risk, risk management, bank) with this study.

This study provides valuable insights and guidance for researchers engaged in relevant investigations and contribute to the existing literature. However, this research enables the understanding of how the literature on risk management and banking is evolved through bibliometric analysis. Researchers conducting studies on risk management and the banking sector can benefit from this study to enhance their understanding of the literature. For instance, thanks to the keyword analysis, it is learned which are the most frequently used keywords on the topic. Another example is following that researchers can understand which areas of science are more important about the topic by examining branches of science informations. Also researcher is utilizing the study, researchers determine the most productive researchers in this field and can choose guides to improve their work in this field. Additionally, researchers can gain insights into the methods used in articles related to risk management and the banking sector, thereby guiding their own studies. However, the study has certain limitations. The primary limitations include the examination of articles accessible only through the Web of Science database. Subsequent studies might extend bibliometric analysis to databases beyond Web of Science, such as SCOPUS or JSTOR. However, 377 publications are examined in this study. Access to these 377 publications was attained on March 26, 2024. After this date, the distribution of newly added publications to the database may vary by year in terms of citations, branches of science, document types, indices, authors, country counts, keywords, etc. Therefore, it is possible to obtain different findings in other studies. Researchers may find inspiration in this study to explore specific topics, years, publication types, and countries in their future research endeavors.

Araştırma ve Yayın Etiği Beyanı

Makalenin tüm süreçlerinde Yönetim ve Ekonomi Dergisi'nin araştırma ve yayın etiği ilkelerine uygun olarak hareket edilmiştir.

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