Bibliometric Analysis of Studies on Corporate Social Responsibility and Profitability

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ABSTRACT

In this study, it is aimed to examine the subject of corporate social responsibility (CSR) and profitability with the bibliometric analysis method. Within the framework of this main purpose, this article contains 376 studies in SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI databases in chronology, discipline, source, center, country and citations. analyzed according to its parameters. The data set consists of articles in scientific journals published in the 1985-2021 period. In addition, information on articles on corporate social responsibility and profitability was taken from the Web of Science database electronically and transferred to the R program, and all calculations and operations for tables and graphics were carried out through the Rstudio program. According to the results of the analysis, it has been determined that the subject of corporate social responsibility and profitability is an area that has increased and developed significantly in the last ten years. The results obtained are important in terms of revealing the general situation of the studies on this subject.

Key Words: *Bibliometric Analysis, Corporate Social Responsibility, Profitability.*
JEL Classification: *I21, M14, M41*

Kurumsal Sosyal Sorumluluk ve Karlılık Konulu Çalışmaların Bibliyometrik Analizi

ÖZ

Bu çalışma ile kurumsal sosyal sorumluluk ve karlılık konusunun bibliyometrik analiz yöntemiyle incelenmesi amaçlanmıştır. Bu temel amaç amaç çerçevesinde, bu makale SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI veri tabanlarında yer alan 376 çalışmayı kronoloji, disiplin, kaynak, merkez, ülke ve alıntı parametrelerine göre analiz etmektedir. Veri seti, 1985-2021 döneminde yayınlanan makalelerden oluşturmaktadır. Kurumsal sosyal sorumluk ve karlılık konulu makalelere ilişkin bilgiler Web of Science veri tabanında elektronik ortamdan alınarak R programına aktarılmış, tüm hesaplamalar ile tablolara ve grafiklere yönelik işlemler Rstudio programı üzerinden gerçekleştirilmiştir. Analiz sonuçlarına göre, kurumsal sosyal sorumluluk ve karlılık konusunun son 10 yılda önemli ölçüde artan ve gelişen bir alan olduğu belirlenmiştir. Elde edilen sonuçlar, bu konudaki çalışmaların genel durumunu ortaya koyması açısından önem arz etmektedir.

Anahtar Kelimeler: *Bibliyometrik Analiz, Kurumsal Sosyal Sorumluluk, Karlılık.*
JEL Sınıflandırması: *I21,M14, M41*

INTRODUCTION

Corporate social responsibility is a management concept based on quality and environmental management (Zemigała, 2017: 230). In its broadest sense, corporate social responsibility (CSR) is an effective strategy designed as a firm's or

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brand's commitment to maximize long-term economic, social and environmental well-being through business practices, policies and resources (Du et al., 2011: 1528).

The dimensions of corporate social responsibility include various activities in a very different range, from strategic planning of a business to customer satisfaction, from the need to report performance correctly, to voluntary work that supports the local economy. The stakeholders of the business are directly or indirectly affected by these activities carried out within the scope of corporate social responsibility. In the literature, it is stated that businesses have four main stakeholders: shareholders/investors, employees, customers and public stakeholders such as government and society (Maignan and Ferrell, 2001: 459-460).

The most basic function of an article is to allow researchers to see what developments are taking place in their fields. For this reason, it is impossible for researchers to make a meaningful contribution without knowing the past knowledge. The way to contribute even a little to the accumulations is through the researchers following each other and following the researches done in the field. In this respect, it can be said that the articles prepared the environment of the process of doing science (Önce and Başar 2010, 55).

The aim of this study is to make a bibliometric analysis of corporate social responsibility and profitability. In the research, the concept of CSR and profitability in the Web of Science was chosen as the subject and focused on 376 studies conducted from 1985 to 2021. In order to set a clear time frame for our study, data collection ended in November, 2021 and the articles with online availability as of that date were not considered in the analysis. In addition, the studies included in the Web of Science core collection SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI indexes, which were formed as a result of this limitation, were taken as the scope. Information on the articles on digital supply chain were taken from the Web of Science database electronically and transferred to the R program, and all calculations and operations for tables and graphics were carried out through the Rstudio program. It is expected that the evaluation of the subjects that constitute the concepts of corporate social responsibility and profitability in the research by limiting them to fields such as Accounting, Management Science, Business, Economics, Finance, will contribute to the literature.

It is thought that the findings obtained as a result of the research are important in terms of providing a general perspective regarding bibliometric analysis and thus providing useful information to researchers.

1. LITERATURE REVIEW

There are different opinions about when bibliometric studies first started. For example, Lawani (1981: 295) claims that the first bibliometric study in the literature was made by Cole and Eales in 1917 (Çetinkaya Bozkurt and Çetin, 2016: 234). It is accepted that the first bibliometric study in Turkey was "Growth in Turkish Positive Basic Sciences" published by Özinönü in 1970 (Hotamışlı and

Erem, 2014: 3; Akgün and Karataş, 2017: 21; Temelli and Karcioglu, 2018: 248). In the literature, it is possible to come across bibliometric studies related to many disciplines. These studies are generally in the form of examining the articles written in a certain field, examining the theses as content, examining the activities with interaction opportunities such as congresses, symposiums, or examining the articles published in a journal (Çoban Çelikdemir, 2019: 326; Özbek and Badem, 2018: 219).

Hotamışlı and Erem (2014) aimed to examine the bibliometric features of the articles published between 2005 and 2013 in the Journal of Accounting and Finance, which is published four times a year, in January, April, July and October. In the research, 562 articles were examined and it was seen that financial performance, public economy and financial market issues were emphasized. Considering the evaluation according to the sources; It has been determined that journals are in the first place, other sources are in the second place, books are in the third place, and papers are in the last place.

Fahimnia et al., (2015) analyzed more than 1000 studies and identified research clusters established for topological analysis, identification of key research topics, interrelationships, and patterns of collaboration using bibliometric tools. As a result of the study, it was determined that most of the influent articles appeared in the middle of the last decade. Again, the geographical distribution of the studies has been found to have the highest number of works in Europe, while North America is not far behind, although it has very few effective publications.

Erbaşı et al. (2017) examined The Journal of Selçuk University Social Sciences Vocational School bibliometrically. In the study, 405 articles published between 1998-2017 were included in the analysis and descriptive analysis and content analysis techniques were used. Considering the findings of the study, the compliance of the journal with Pareto law, Price law and Lotka law, number of articles per author, multi-authorship status of the articles, title distribution and institutions of the article authors, the most productive authors of the journal, the average number of keywords used in the articles, It is seen that the average number of pages of the articles, the rate of mentioning the keywords in the title, the average number of published articles per year, the distribution of the publication language, the distribution of the methods used in the articles and the average number of bibliographies.

Temelli and Karcıoğlu (2018) examined 123 articles published in the Journal of Accounting and Taxation Studies between 2010 and 2017 in terms of their bibliometric properties. According to the results of the study, the majority of 123 articles published in the journal are multi-author, and 123 articles published between 2010-2017 were written by 171 different authors. It has been determined that the articles published in in the Journal of Accounting and Taxation Studies do not comply with the Pareto and Lotka Law, but the Price Law. In addition, when the distributions according to titles are examined, it has been determined that the most contribution to the journal is made by the academicians who have the title of assistant professor.

Dinç and Cengiz (2019) aimed to examine 225 refereed articles published between 2010 and 2017 in the Journal of Financial Analysis, which was published six times a year in January, March, May, July, September and November. As a result of their examination, they stated that the articles were mostly applied studies. In addition, they found that the most work was done by the authors from Akdeniz University, Istanbul University and Private Sector.

Ye et al. (2020) applied a bibliometric analysis using the "CiteSpace" software to analyze and visualize the knowledge map of CSR related to sustainable development. Main findings show that the CSR involvement in SD is a lasting but recent prosperous research topic. The top 3 influential journals in this area are Corporate Social Responsibility and Environment Management; Sustainability; and Journal of Cleaner Production. Porter ME, Carroll AB, etc., are the most productive authors.

Ji et al. (2020) conducts co-authorship and co-citation network analyzes on CSR literature in communication. The sample included 290 peer-reviewed articles published in 61 communication journals between 1980 and 2018. In addition, 9288 foundation publications and 4596 original publications referenced by these articles were examined. The results of this study reveal limited collaborations within and outside the communication discipline or among researchers with expertise in different communication sub-disciplines. The results also show a significant impact on the invisible college of CSR research in communication from management and marketing perspectives.

Kırdar and Benli (2020) examined the articles published in the Journal of Social Security between 2011-2019 in the context of their bibliometric properties and included 138 articles within the scope of the analysis. According to the findings of the study, it was determined that individual studies were preferred mostly, and the authors mostly published articles with the titles of professor doctor and doctor lecturer. In addition, it was observed that the institutions with the highest number of publications were respectively Hacettepe University, Ankara University and Gazi University. 84 percent of the articles were written by universities and 16 percent by other institutions.

Sanchez-Camacho et al. (2021) analyzes 1800 articles published on CSR in the field of using SciMAT software by common word analysis. These; Business activity-financial performance, Attitude and Marketing plan, Sustainable tourism, Sustainability, Government, Environmental awareness and motivation and major events. The implications of the bibliometric analysis are shown for further interpretation of the master plan and discussion of CSR in the tourism field.

Çiğdem (2021) conducted a bibliometric analysis of 8036 articles on digitalization in supply chains published in the Web of Science Core Collection between 1991-2021. The Bibliometrics package of R software was used to analyze and visualize the data. As a result of the study, the most important actors of the digitalization trend in the supply chain were determined as China and the USA. In addition, in the keyword analysis, 4 clusters were obtained: blockchain, information technology, game theory and inventory management.

2. METHOD

In this study, bibliometric analysis method, one of the qualitative research methods, was used. According to Pritchard (1969), the concept of bibliometric analysis includes the authors, keywords, origin, citations, affiliated institutions of the authors, sources and publication years of academic publications in a particular field. It is based on mathematical and statistical methods with the help of data (Lawani, 1981: 294; Tabak et al., 2016: 119).

The purpose of this research is to examine the concept of "corporate social responsibility and profitability" from a bibliometric perspective. Within the scope of the research, 376 studies published in the Web of Science database were analyzed according to the author, network, resource, keyword, country, chronology, titles and journal parameters. The data were evaluated using descriptive analysis and content analysis techniques.

The research sought answers to the following questions;

- Who are the most productive authors in the articles in WoS?
- What is the clustering situation among the authors in the articles in WoS?
- Who are the most cited authors in the articles in the WoS?
- What is the distribution of keywords used in articles in the WoS?
- Which countries stand out in the articles in the WoS?
- What is the distribution of articles in the WoS by years?
- What are the concepts that are mostly focused on periodically in the articles in the WoS?
- What are the thematic distribution of the articles in the WoS and what are the periodically studied topics?

The keyword "corporate social responsibility (CSR) and profitability" was written on the WoS platform and a search was made according to the "topic" setting. As a result of the limitation made in the subject category,

3. FINDINGS

In this part of the research, Table 2 provides information on all publications on relationship between "corporate social responsibility and profitability" published in journals indexed in SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI. The bibliometric analysis is examined in the sub-titles.

Table 2. Main Information About Data

Timespan	1985:2021
Sources (Journals, Books, etc)	188
Documents	376
Average years from publication	5,19
Average citations per documents	59,15
Average citations per year per doc	5.868
References	16887
DOCUMENT TYPES	
article	356
article; book chapter	15
article; proceedings paper	5
DOCUMENT CONTENTS	
Keywords Plus (ID)	737

Author's Keywords (DE)	1031
AUTHORS	
Authors	917
Author Appearances	968
Authors of single-authored documents	61
Authors of multi-authored documents	856
AUTHORS COLLABORATION	
Single-authored documents	61
Documents per Author	0,41
Authors per Document	2,44
Co-Authors per Documents	2,57
Collaboration Index	2.72

3.1. Author Profile and Network Analysis

A total of 356 articles published between 1985 and 2021 were written by 917 authors. While 61 publications are single-authored, the remaining 295 are multi-authored. Number of Documents Per Author is 0.41. Co-Authors Per Document is 2.44. Figure 1 shows the authors working on the concept of corporate social responsibility and profitability as a result of the bibliometric analysis.

Figure 1. Author Profile of Articles
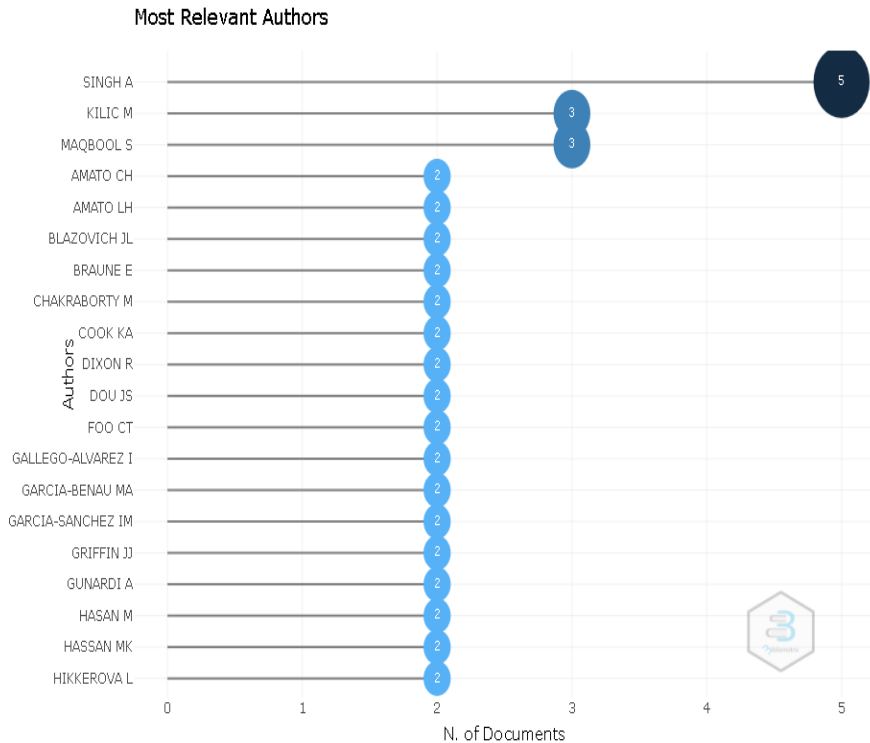
From a relational point of view, the author network was examined in the Rstudio program. The most relevant authors are Singh A., Kılıc M. and Maqbool S. The figure above shows the most relevant authors.

Figure 2. Authors' Network Analysis
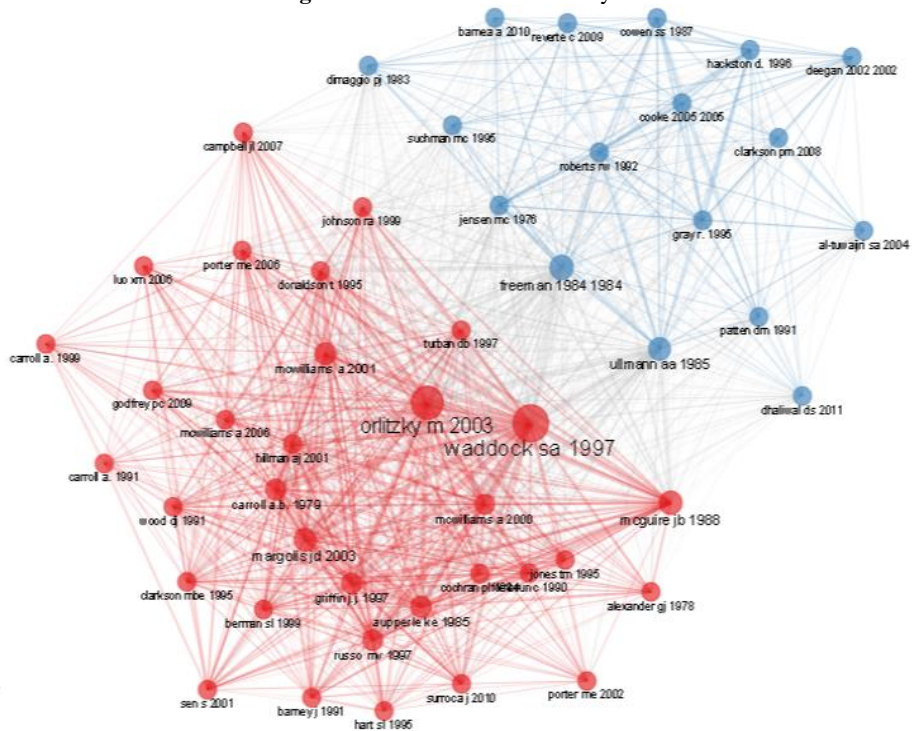
When the network analysis is examined on the scale of the authors, it is seen that they are gathered in two different clusters. The Figure 1 shows the relationship between the authors using the network analysis method. Each different colour was clustered by the program by establishing the connection between the authors. In Figure 2, the authors' network analysis is shown as a result of the bibliometric analysis.

When we look at the publications of the authors studying on corporate social responsibility and profitability over the years, it is seen that Amato made its first studies in 2007. It is possible to see the stability of Singh's regular study in this field in the years 2008-2021 in the chart below. Recently, it can be said that the study of Chakraborty and Hasan has intensified. In Figure 3, the studies of authors studying on the concept of corporate social responsibility and profitability as a result of bibliometric analysis are shown according to years.

Figure 3. Top Authors' Production Over The Years
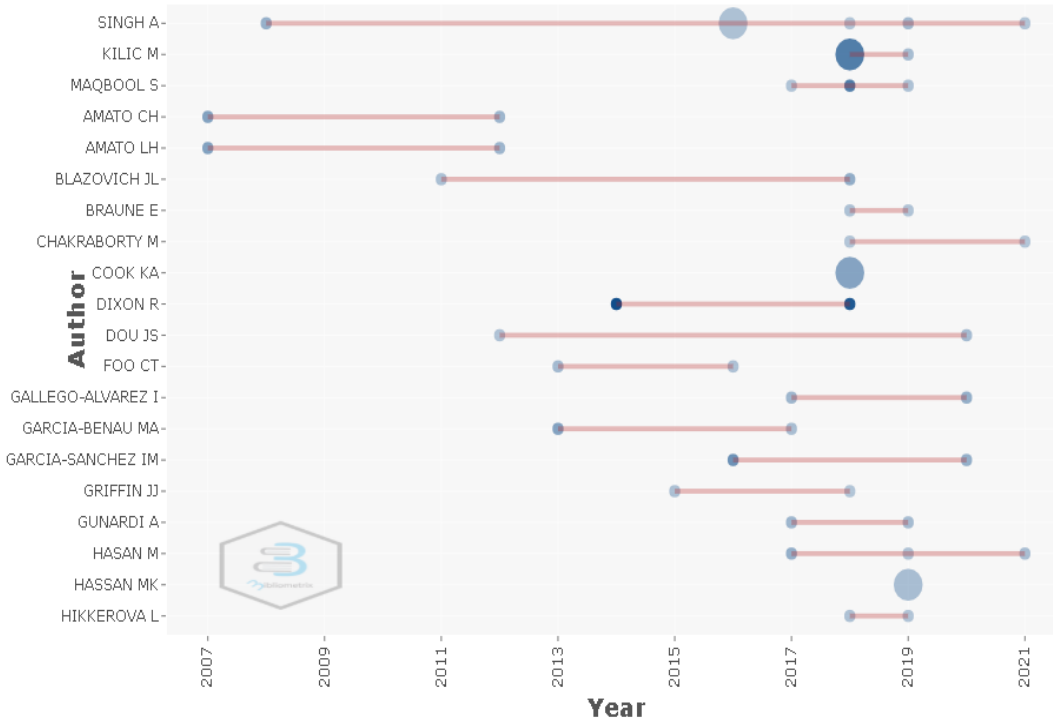
## 3.2. Relationship Between Distribution of Resources

The distribution of the resources that guide the literature is given in the figure below. Accordingly, it is possible to say that Waddock, Ullman, and Mcguire are among the major works in the literature, starting from the basic citations. On the scale of the authors, it is possible to say that Waddock and Singh, fed from almost all the literature, focus on corporate social responsibility and profitability, corporate social responsibility, corporate governance and financial performance. Figure 4 shows the relationship between the distribution of resources in the literature.

**Figure 4.** Relationship Between Distribution of Resources
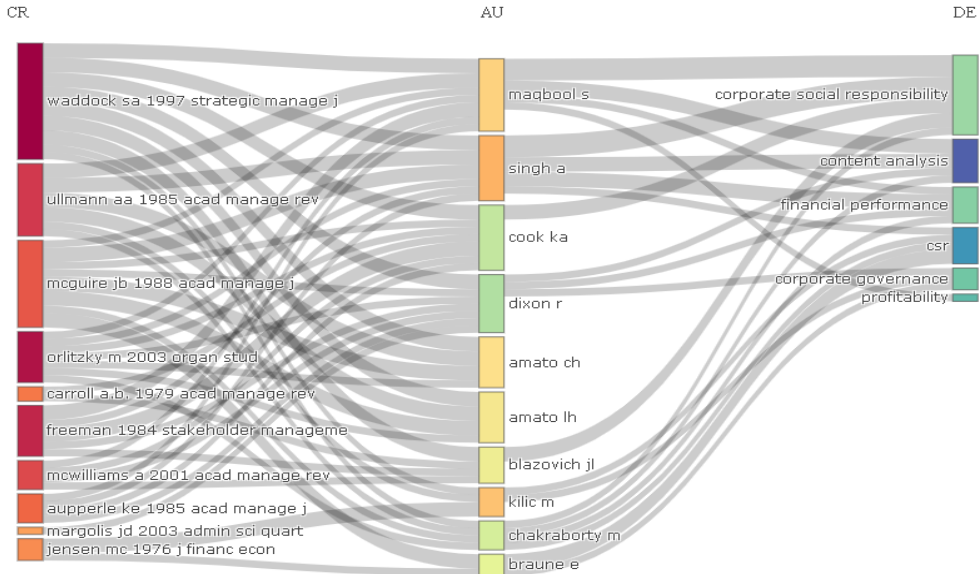
When the network analysis of the resources is examined in the Rstudio program, it has been determined that it consists of two clusters. Accordingly, Freeman and Jamali are the most cited works in the blue cluster, Waddock, Orlitzky and Mcwillams in the red cluster. Figure 5 shows the clusters formed as a result of the network analysis.

Figure 5. Distribution Set of Resources
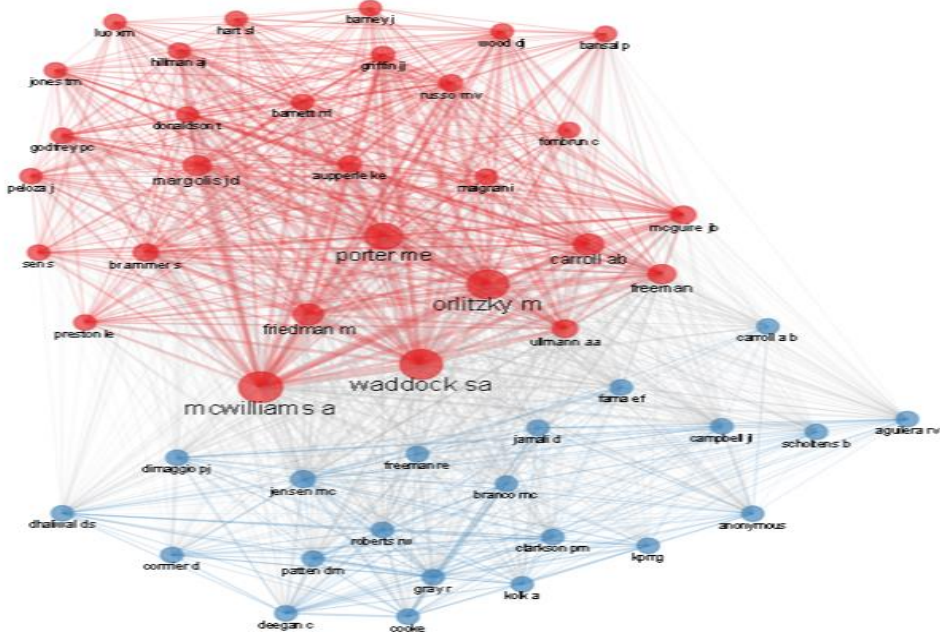
3.3. Network of Keywords

When the frequency of the keywords used in 376 studies was examined in the Rstudio program, it was seen that there were 3 dominant clusters. The first of these clusters is the red cluster formed with the concepts of corporate social responsibility and performance. The second is the blue cluster of financial performance and management concepts. Finally, the green cluster includes the concepts of profitability and social responsibility. In Figure 6, the network formed by the keywords used extensively in the studies as a result of the bibliometric analysis is shown.

Figure 6. Network of Keywords
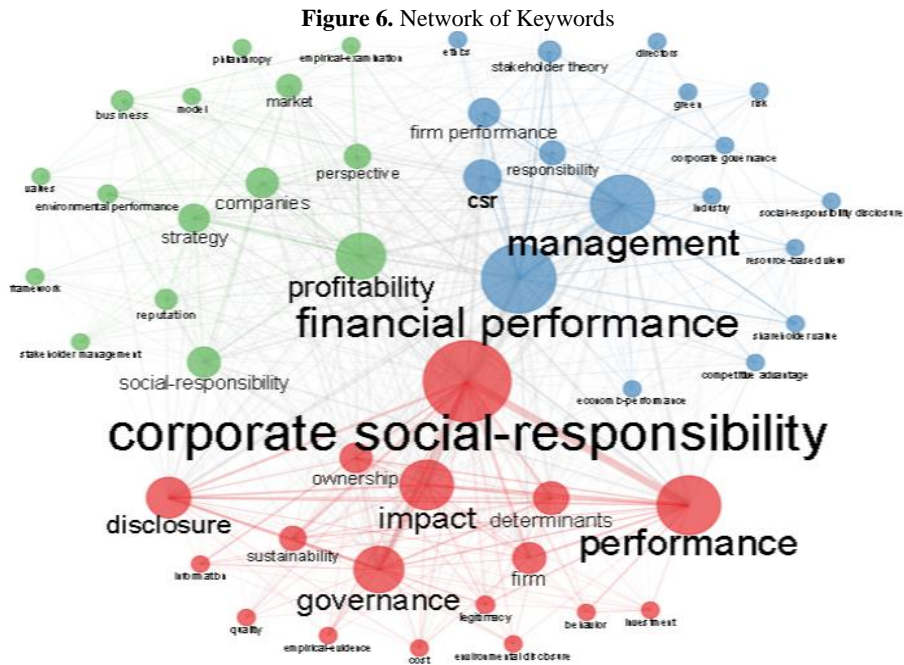
Also, when the keywords frequently used in the studies are visualized in word cloud format, it is more clearly seen that there is a focus on performance, profitability, impact and management.

**Figure 7.** Keywords Mostly Used in Studies

In Figure 7, the keywords that are frequently used in studies as a result of bibliometric analysis are shown.

3.4. Distribution by Country

When the network analysis of 376 documents on "corporate social responsibility and profitability" by country is analyzed in the Rstudio program, it has been determined that they are classified into four clusters. Accordingly, it is seen that most of the studies are based in the United States of America. Country groups with the United States at the center are in the purple cluster. Country groups with a high concentration of European states are in the blue cluster, while Mexico and Spain are in the purple cluster. The green cluster, which includes Turkey, includes China, Singapore, Australia, New Zealand and Pakistan. Figure 8 below shows the relational network of these clusters. Figure 8 below shows the relational network of these clusters.

Figure 8. Distribution by Country
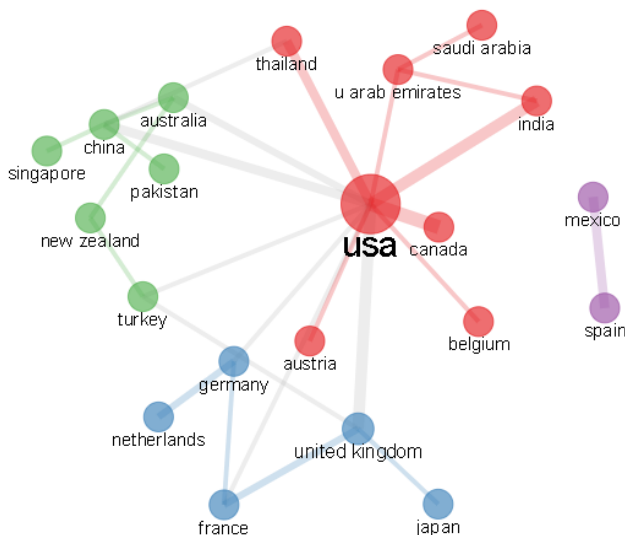
3.5. Journals with the Most Articles

Figure 9 shows the top 20 journals. The journal that publishes the most articles on corporate social responsibility and profitability is the "Journal of Buseiness Ethics" (31 Articles). In addition, "Corporate Social Responsibility and Environmental Management" and "Social Responsibility Journal" journals were determined to be in the second and third places. Figure 9 shows the journals that publish the most on corporate social responsibility and profitability as a result of bibliometric analysis.

Figure 9. Top Publishing Journals on Corporate Social Responsibility and Profitability
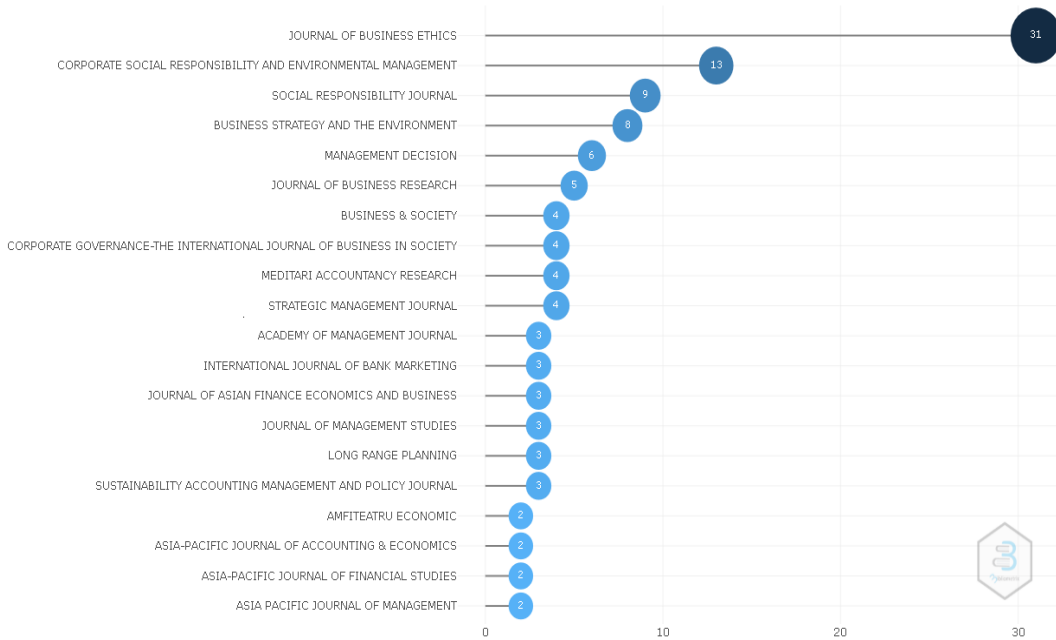
3.6. Trending Topics by Years

In the early 2000s, it was seen that most of the studies were conducted on social performance and competitive advantage. In 2015, it was determined that the authors focused on corporate governance and studies on the concept of corporate social responsibility began. In 2019, it was determined that studies were carried out on corporate governance, sustainability and panel data applications. In Figure 10, the trending titles according to the years as a result of the bibliometric analysis are shown.

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Figure 10. Trending Topics by Years
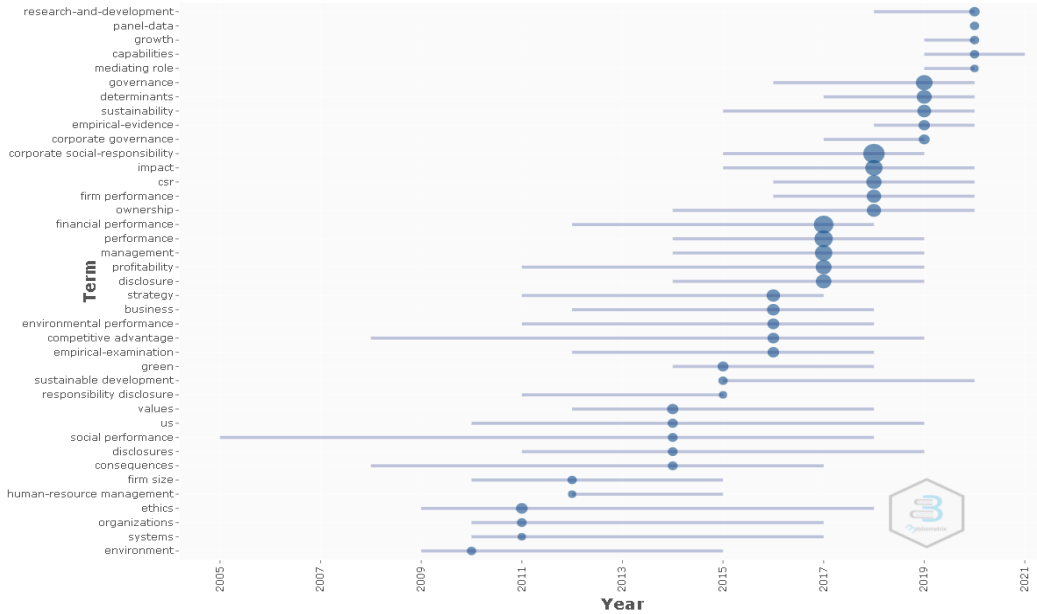
3.7. Thematic Map

Figure 11 shows the thematic map of studies on corporate social responsibility and profitability. The central themes that the studies focused on the most were determined as corporate social responsibility, profitability, management and strategy. In addition, concepts such as firm performance, financial performance and impact were used as basic themes in the studies. Again, firm size and business ethics were among the niche themes.

Figure 11. Thematic Map
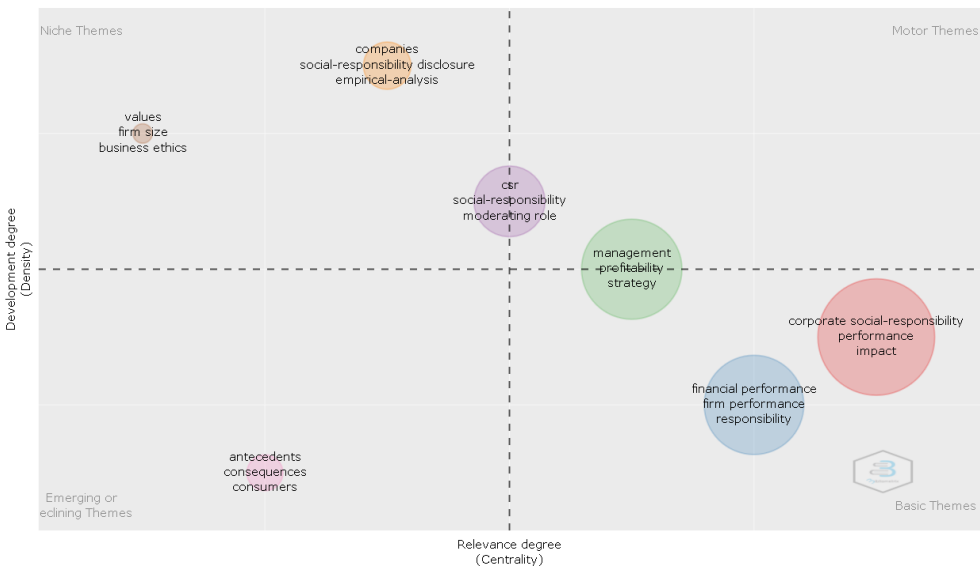
3.8. Distribution of Studies by Year

The distribution of 376 studies published between 1985 and 2021 according to years was examined. In the graphic below, it is possible to say that the production in the literature has increased significantly after 2013. Especially in 2019, it is seen that more than 50 publications were made on corporate social responsibility and profitability issues. Figure 12 shows the distribution of studies by years.

Figure 12. Distribution of Studies by Year

Annual Scientific Production
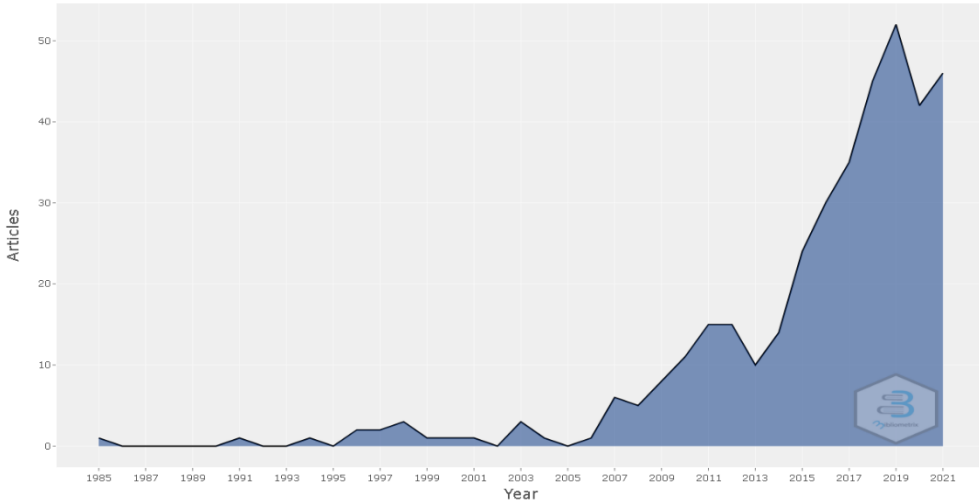
CONCLUSION

This article presents a bibliometric analysis to examine studies on corporate social responsibility and profitability. This analysis is based on a sampling of 376 articles published in journals scanned in SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI indexes. The dynamics of research on this topic grow chronologically. It has been observed that there has been a significant increase in the number of publications in 2013 and after. According to the findings, when the frequency of the keywords used in 376 studies was examined, it was seen that there were three dominant clusters. The first of these clusters is the red cluster formed with the concepts of corporate social responsibility and performance. The second is the blue cluster of firm performance and management concepts. Finally, the green cluster includes the concepts of profitability and social responsibility. It has been determined that Waddock, Ullman and Mcguire, who contributed to the field in terms of the number of articles, regularly work in this field.

Geographically, the most productive region is the United States (in terms of number of documents and total citations). It has been concluded that the journal that publishes the most articles on the concept of corporate social responsibility and profitability is the "Journal of Buseiness Ethics". As a result of the thematic map analysis, it has been determined that corporate social responsibility, profitability,

management and strategy issues are at the center and are included in the scope of all studies.

There are very few bibliometric analysis studies on corporate social responsibility and profitability in the literature. The study presents a wide range of trends or concentrations in terms of scientific fields, countries and thematic areas. Our results may facilitate the planning, design, conduct and publication of future research on this topic. In this study, it is limited as it only covers the issue of corporate social responsibility and profitability and only covers the period 1985-2021.

Finally, it is possible to suggest that this study on the relationship between corporate social responsibility and profitability can make significant contributions to the literature, and it is possible to suggest corporate governance and panel data applications that are trending recently and are expected to come to the fore in the future for future studies.

Araştırma ve Yayın Etiği Beyanı
Makalenin tüm süreçlerinde Yönetim ve Ekonomi Dergisi'nin araştırma ve yayın etiği ilkelerine uygun olarak hareket edilmiştir.
Yazarların Makaleye Katkı Oranları
Makalenin tamamı Yazar tarafından kaleme alınmıştır.
Çıkar Beyanı
Yazarın herhangi bir kişi ya da kuruluş ile çıkar çatışması yoktur.

REFERENCES

Akgün, M. & Karataş, B. (2017). Muhasebe ve Denetime Bakış Dergisinde Yayımlanan Makalelerin Bibliyometrik Analizi 2000-2016. Muhasebe ve Denetime Bakış, 17 (52), 19-34.

Çetinkaya Bozkurt, Ö. & Çetin, A. (2016). Girişimcilik ve Kalkınma Dergisi'nin Bibliyometrik Analizi, Girişimcilik ve Kalkınma Dergisi, 11(2), 229-263.

Çiğdem, Ş. (2021). From EDI to Blockchain: A Bibliometric Analysis of Digitalization in Supply Chains. Gaziantep University Journal of Social Sciences, 20(2), 657-677.

Çoban Çelikdemir, Neşe (2019). Türkiye'de muhasebe standartları konusunda yapılan tezlerin incelenmesi, İşletme Araştırmaları Dergisi, 11(1), 325-336.

Dinç, Y. & Cengiz, S. (2019). Mali Çözüm Dergisinde Yayınlanan Makalelerin Bibliyometrik Analizi, Mali Çözüm, Eylül-Ekim 2019, 29(155), 33-54.

Du, S., Bhattacharya, CB. & Sen, S. (2011). Corporate Social Responsibility and Competitive Advantage: Overcoming The Trust Barrier, Management Sciene, 57(9), 1528-1545.

Erbaşı, A., Cabi, A., Gümrah, A. & Hakses, H. (2017). Selçuk Üniversitesi Sosyal Bilimler Meslek Yüksekokulu Dergisi"nin Bibliyometrik Analizi, Selçuk Üniversitesi Sosyal Bilimler Meslek Yüksekokulu Dergisi, 20(2), 206-214.

Fahimnia, B., Sarkis, J. & Davarzani, H. (2015). Green Supply Chain Management: A Review And Bibliometric Analysis, International Journal of Production Economics, 162, 101-114.

Hotamışlı, M. & Erem, I. (2014). Muhasebe ve Finansman Dergisi'nde Yayınlanan Makalelerin Bibliyometrik Analizi, Muhasebe ve Finansman dergisi, 63(3), 1-20.

Ji, Y.G., Tao, W. & Rim, H. (2020). Mapping Corporate Social Responsibility Research in Communication: A Network And Bibliometric Analysis, Public Relations Review, 46(5), 1-15.

Kırdar, E. & Benli, A. (2020). Sosyal Güvenlik Dergisi'nde Yayımlanan Makalelerin Bibliyometrik Analizi, SGD-Sosyal Güvenlik Dergisi, 10(1), 197-216.

Lawani, S. M. (1981). Bibliometrics: Its Theoretical Foundations, Methods And Applications, Libri, 31(1), 294-315.

Maignan, I. & Ferrell, O.C. (2001). Corporate Citizenship As a Marketing Instrument: Concepts, Evidence and Research Directions, European Journal of Marketing, (35) ¾, 457-484.

Önce, S. & Başar, B. (2010). Türkiye'deki Akademik Araştırma Dergilerinde Muhasebe Alanında Yazılmış Makalelerin Analizi: 2000-2008, Muhasebe ve Finansman Dergisi, (45), 55-68.

Özbek, C.Y. & Badem, A. C. (2018). Muhasebe Ve Vergi Uygulamaları Dergisi'nde Yayımlanmış Makalelerin Bibliyometrik Analizi (2008-2017), Muhasebe ve Vergi Uygulamaları Dergisi, 11(2), 216-247.

Pritchard, A. (1969). Statistical Bibliography or Bibliometrics, Journal of Documentation, 25, 348-349.

Sánchez-Camacho, C., Carranza, R., Martín-Consuegra, D. & Díaz, E. (2021). Evolution, Trends and Future Research Lines in Corporate Social Responsibility and Tourism: A Bibliometric Analysis And Science Mapping, Sustainable Development, 1–15.

Tabak, A., Barbak, A. & Öztürk, T. (2016). Kamu Politikası Disiplininin Kavramsal Gelişimini Bibliyometri Kullanarak Anlamak Mümkün mü? 1980-2014 Döneminin Bilimsel Haritalama Analizi, Lefke Avrupa Üniversitesi Sosyal Bilimler Dergisi, 7(2), 117-143.

Temelli, F. &Karcıoğlu, R. (2018). Muhasebe ve Vergi Uygulamaları Dergisinde Yayınlanan Makalelerin Bibliyometrik Analizi: 2010-2017 Dönemi, Muhasebe ve Vergi Uygulamaları Dergisi, 11(2), 248-268.

Ye, N., Kueh, T.B., Hou, L., Liu, Y. & Yu, H. (2020). A Bibliometric Analysis of Corporate Social Responsibility in Sustainable Development, Journal of Cleaner Production, 272, 1-15.

Zemigała, M. (2017). Application Of Social Responsibility Standards in Poland and The World, Ekonomia I Prawo. Economics and Law, 16(2), 229–240.