



RESEARCH TRENDS OF SERVICE EXPORT: A BIBLIOMETRIC STUDY¹

Talha KARADAYI

Istanbul Commerce University, Turkey

Doğan Mert AKDEMİR

Istanbul Commerce University, Turkey

Received: May 10, 2020

Accepted: May 26, 2020

Published: June 01, 2020

Abstract:

Export is the first stage of internationalization for companies to enter new markets with the aim of marketing their products and services, promoting growth, and reducing risk. Service export, on the other hand, can be defined as the service provided by a resident company to individuals or companies residing abroad. Service exports have become increasingly important thanks to developments that will facilitate the physical distances to be exceeded, such as increased transportation facilities, the widespread of the Internet, and the fact that portable smart devices become more important in our daily life. Within the scope of this study, using the bibliometric analysis method, academic studies published on the Web of Science (WoS) database for 45 years, including 1975 and 2019 years, were analyzed and the thematic development of the service export topic was examined by scientific mapping. With this study, it is aimed to reveal the interest of service exports, which increase the popularity of businesses and promise a high value-added income, and to determine which themes and dynamics are explored with service export. The study also aims to provide awareness and perspective to researchers who want to carry out studies in this field. In the research conducted with the title constraint on Web of Science, 312 studies were determined, 92 of these studies were excluded because they were irrelevant to the subject, and examinations were made for the remaining 220 studies. Accordingly, the number of publications, citations, themes, research areas, the distribution of publications by years, the b-index, and the document type, institution, country data on this issue were examined. The paper shows that research interest in the service export theme has been growing in recent years, and mainly some topics such as developing countries, productivity, innovation, and human capital have emerged as the thematic areas in the field of service export.

Keywords:

service export, international trade, bibliometric analysis, VOSviewer, scientific mapping

Abbreviations:

Web of Science: WoS, Organization for Economic Cooperation and Development: OECD, Foreign Direct Investments: FDI, Gross Domestic Product: GDP,

JEL Code:

F19

1. Introduction

When the changes and developments experienced in the world and business ecosystem in the last 100 years are looked at, it is realized that it has been progressing at a dizzying speed. In particular, after World War II, the passion of the companies to open up to foreign markets, to address different geographies, cultures, and needs increased (Altınbaşak et al., 2008). In this context, countries have become competitive with each other in the context of the internationalization strategy. Thanks to the cut-throat competition between countries, the transfer of not only products but also services to other countries has gained importance in the light of technological developments.

¹ Paper online presented at the 5th InTraders International Conference on International Trade, 13-14 April 2020

According to the definition of Organization for Economic Cooperation and Development (OECD), service trade in the simplest way; It refers to the value of services exchanged between those who are resident in an economy and those who are not. Service trade; guides the exchange of ideas, know-how and technology (OECD, 2020).

Services are an essential part of the global economy and produce more than 66% of global GDP. At the same time, the service sector accounts for over 75% of foreign direct investment in developed economies. It employs the most workers worldwide and continues to create new jobs worldwide (OECD, 2020).

The service sector has come to the forefront by leaving behind the agriculture and industry sectors in developed economies since the 1950s. This sector started to show itself not only in developed economies but also in developing economies in the following years. Therefore, the importance given to the services sector in developed and developing countries has increased. For this reason, it can be stated that both developed and developing countries have shifted many of their investments to the service sector to increase their shares in service trade. Because, the services sector has a superiority that increases the welfare and development level of all the countries of the world (OECD Services Trade, Restrictiveness Index: Policy trends up to 2020, 2020: 1). In a globalizing world economy, companies or firms tend to export services rather than products. To increase the export of services in a country, the service sector must be developed in that country (İşleyen et al., 2018: 953).

When we look at the countries that export the most services in the world, we see that these countries are also the most developed in the service sector. The service export figures of these countries in 2018 are in Table 1 as follows:

Table 1: Top Services Exporters with Export Figures of 2018.

Top Service Exporters	Value (USD Billions) in 2018
United States of America	823
United Kingdom	397
Germany	343
France	294
People’s Republic of China	234

Source: OECD. (January 2020). OECD Services Trade, Restrictiveness Index: Policy trends up to 2020

These countries account for 35% of the global trade in services (OECD Services Trade, Restrictiveness Index: Policy trends up to 2020, 2020: 1).

According to World Bank data, while the volume of service exports in the world was \$ 208 billion in 1976, 42 years later, this figure reached \$ 5 trillion 92 billion in 2018. Likewise, while the volume of service exports in Turkey was \$ 549 million in 1975, by 2018, it reached \$ 49 billion (World Bank, 2020). The change in the volume of service exports worldwide can be examined more easily from the figure below.

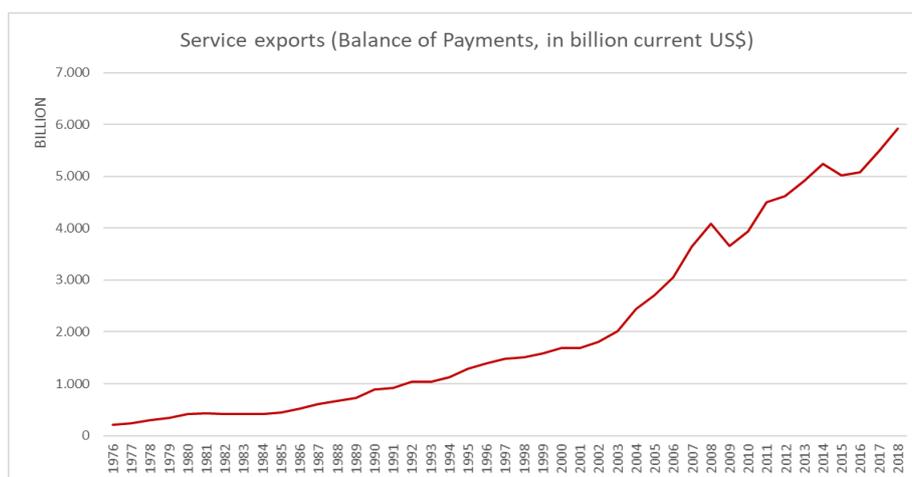


Figure 1: Worldwide Chart of Service Export Volume in Billion \$

Source: (<https://data.worldbank.org/indicator/BX.GSR.NFSV.CD?end=2018&start=1960&type=shaded&view=chart>)

When we look at the 2019 employment rate of Turkey, we see that 5 million 97 thousand people in agriculture, 5 million 561 thousand people in the industry, 1 million 550 thousand people construction and 15 million 872 thousand people were employed in the service sector. When the employment figures are taken into consideration, it is easily realized that only the job opportunities provided by the service sector are more than the sum of other sectors. Compared to 2018, the number of employed people decreased by 200 thousand in agriculture, 113 thousand in industry, 442 thousand in construction but increased 98 thousand in the services sector (TÜİK, 2020).

In their study, İşleyen et al. (2018: 953) investigated the effects of service exports and tourism expenditures on economic growth in Turkey between the years 1996-2017. According to the results, they showed that there is a positive relationship between "service exports and tourism expenditures" and "economic growth". It was observed that the increases in these two sectors had a positive effect on economic growth.

Ahmad et al. (2017: 113) tried to empirically examine the determinants of service exports based on the period 1985-2012 in the developing Asian countries (China, Hong Kong, South Korea, India, Iran, Indonesia, Malaysia, Philippines, Singapore, Thailand, Kuwait, Saudi Arabia, and Turkey) they selected in their research. As a result of the study, it has been determined that exchange rates, foreign revenues, foreign direct investments (FDI), the added value of services and existing communication facilities may affect service exports in these countries. This result shows that developing countries can increase their service exports as a result of focusing on the factors mentioned above and developing their potential. Thus they have the opportunity to compete globally.

When the development of the service sector and related service exports in the last 50 years are analyzed, it can be seen that the service sector has developed and gained importance more than ever in the last 20 years. In addition to this, it is understood that the service sector -especially service exports- is an indispensable trade area for the economic development and global competitiveness of a country. Therefore, "countries" and "businesses in the countries" are expected to export services, thereby contributing to economic development and competitiveness.

In this study, we present a bibliometric analysis by examining the scientific publications on service exports in the academic community from different perspectives in the last 45 years. With this study, we aim to provide an overview of the last 45 years of the adventure of scientific publications on service exports. We hope that this study will shed light on their literature review studies in this field.

2. Bibliometric Analysis

Bibliometrics is defined as a quantitative analysis of the publications produced by institutions or individuals in a particular area, in a specific time, and in a particular theme (Ulakbim, 2020; Pritchard, 1969). Bibliometrics stands out as an increasingly important tool that measures scientific quality and productivity and evaluates scientific outputs produced by researchers (Moed et al., 1995). Thanks to the bibliometric studies, scientific studies can be assessed, and determinations can be made regarding the current situation in the study area. In light of the findings, the phases of the subject that were investigated can be determined, and future predictions can be made (Şakar & Cerit, 2013).

There are two primary purposes of bibliometric studies (Noyos et al., 1999). One of them is performance analysis, which refers to the analysis of citations, and distributions of literature based on journals, institutions, research areas, countries, and authors. Science mapping, the other one, aims to reveal direct results by using varied visualization techniques (Tang et al., 2018).

In this study, VOSviewer software, which is one of the functional software, and allows us to interpret data easily in bibliometric studies (Van Eck & Waltman, 2009) is used as a graphical representation as a part of bibliometric mapping.

The "service export" title has been scanned in the Web of Science (WoS) database, one of the most widely accepted multidisciplinary databases in the academic community for over 115 years globally (Michigan State University, 2020). The concept of service export was searched in four databases within the body of WoS (Web of Science Core Collection, KCI-Korean Journal Database, Russian Science Citation Index, SciELO Citation Index) with the limitation of title, and years (1975-2019). As a result of the search, a total of 312 publications were found. Ninety-two publications, which were found to be irrelevant from the subject, were excluded from the study, and this analysis was made on 220 publications.

In the analyses made by using the statistics provided by Web of Science, the number of publications related to this topic, the distribution of by years, by countries and by research categories, citation analysis were examined and

visualized with various graphics. While making these analyses, the Web of Science database excluded some studies from the analysis on the grounds that it does not contain the necessary information to be analyzed. In the study, such situations were partly encountered, and these limitations were mentioned in the relevant sections of the study. In addition, keyword analysis was done through VOSviewer, one of the data visualization software used in the field of scientific mapping to facilitate understanding of data in the study. The data taken from the WoS database was uploaded to the VOSviewer software in the appropriate format for keyword analysis by making necessary adjustments. Necessary adjustments here; these are the changes made by combining synonym data in the data taken from the WoS database and reducing the risk of the deviation of the analysis in order to be uploaded into the VOSviewer software and analyze keyword from there.

2.1. Web of Science-Assisted Analyses

The Web of Science database also provides its statistics for scientific publications within its body. These statistics provide researchers with some numerical and verbal data based on the subject being searched in order to provide more qualified results in light of the reported data. Making the analyses included in the study, the data which is showing the total number of publications of WoS and the distribution of these publications according to years, countries, organizations, categories, and types of publications were used.

A total of 220 publications in the Web of Science (WoS) database, which were produced between 1975-2019 and included service export in their title, were identified. WoS could not generate a citation report for three studies that did not have sufficient data for the analysis. For this reason, the three publications mentioned were left out of the analysis, and the remaining 217 publications were examined. This situation can be observed in Figure 2 in 2011, 2016, and 2017 years respectively.

Based on the annual average of 220 publications produced over the course of 45 years and evaluated within the scope of analysis, it is possible to say that 4.88 publications enter the WoS database annually.

When the data of the 220 publications included in the study are examined, it is seen that the level of publication production of the researchers has increased significantly after 2005.

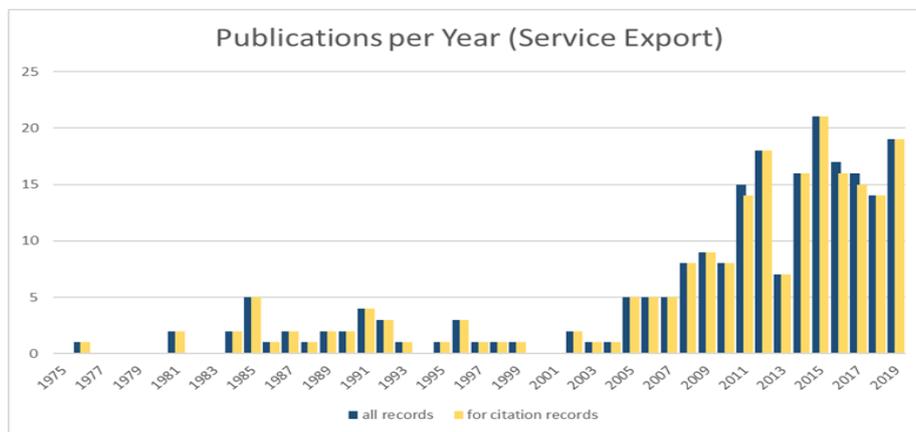


Figure 2: Publication per Year About Service Export

Resource:(http://ezproxy.ticaret.edu.tr:2110/CitationReport.do?product=UA&search_mode=CitationReport&SID=D68p2ygeLwVZb8cUwkN&page=1&cr_pqid=1&viewType=summary&from_ML=true)

From 1975 to 2020 (2020 is not included), it is seen that the total number of citations is 755, with an average of 16.77 citations per year, and each publication has an average of 3.53 citations, and the h-index is 15.

However, as can be seen in Figure 2, only three scientific outputs were published about “service export” from 1975 to 1984, and as shown in Figure 3, no citations were available in the publications produced until 1987. Taking this into account, it was emphasized that the average of the citations between 1987-2019 was 22.87. 2019 is the year in

which the most publications were produced after 2015 with 19 publications, and the highest number of citations were made in the 45-year period with 83 citations.

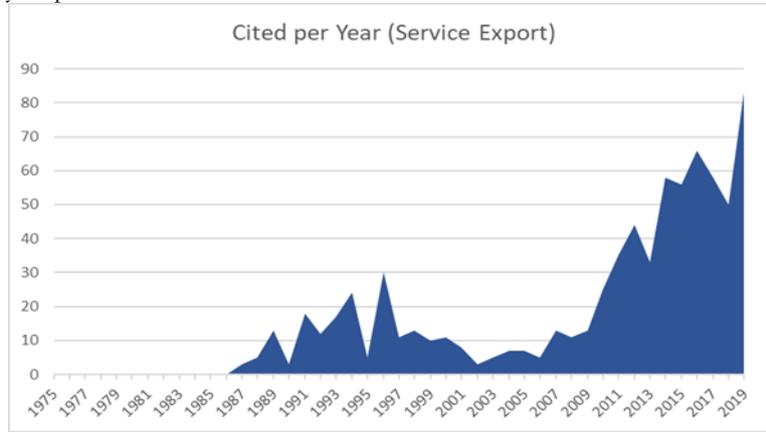


Figure 3: Sum of Times Cited per Year About "Service Export"

Resource:(http://ezproxy.ticaret.edu.tr:2110/CitationReport.do?action=home&product=UA&search_mod e=CitationReport&cr_pqid=24&qid=24&isCRHidden=&SID=E5QhloDRhmCpwYz34At)

When analyzed in Figure 2 and Figure 3, it can be seen that the interest in service exports has made fluctuating progress until 2005 in terms of the number of publications and 2007 in terms of the number of citations. In the following years, an increasing trend has been observed in the context of service export. This indicates that the interest in the issue of service exports in academic publications continues to increase and will continue to increase as long as there are no radical developments.

The published records are in various document types, and it is seen that 71% of the publications in the database are articles, while the others are conference papers, books, editorials, reviews, and letter types. 61% of these publications were in business economics, 10% in international relations, 9% in public administration and the rest in other areas.

Besides, the number of publications on service exports has been examined from the point of institutions. It has been concluded that a total of 220 publications have been presented in 238 institutes. The reason for this is that some publications have been published in more than one institute. Considering the number of publications of institutions within the context of service exports, it is remarkable that the leading institution is the World Bank. With this statistic, the World Bank has left many universities behind.

The top ten most-cited articles that include the "service export" term in their titles have been shown in Table 2 as follows:

Table 2: Top 10 Most Cited Publications in Web Of Science

No	Title	Source	Times Cited
1	Export Services In Postindustrial Society	Papers Of The Regional Science Association	91
2	Export Of Health Services From Developing Countries: The Case Of Tunisia	Social Science & Medicine	63
3	Service Exports And Regional Growth In The Postindustrial Era	Journal Of Regional Science	53
4	Gateway Cities - The Metropolitan Sources Of United-States Producer Service Exports	Urban Studies	47
5	Exporting And Productivity In Business Services: Evidence From The United States	International Business Review	40
6	The Influence Of Human Capital Investment On The Exports Of Services And Goods: An Analysis Of The Top 25 Services Outsourcing Countries	Management International Review	34

7	The Determinants Of Export Behaviour In Uk Service Firms	Service Industries Journal	28
8	Impact Of Medical Travel On Imports And Exports Of Medical Services	Health Policy	27
9	Executive Insights: Exporting Services To Southeast Asia: Lessons From Australian Knowledge-Based Service Exporters	Journal Of International Marketing	27
10	Self-Selection Into Export Markets By Business Services Firms - Evidence From France, Germany And The United Kingdom	Structural Change And Economic Dynamics	23

Finally, it will be useful to examine the distribution of academic studies by country. Looking at the countries of origin of the studies, the USA ranks first with 35 publications, while China ranks second with 17 publications. At the beginning of the study, it was emphasized that the USA was in first place with 823 billion dollars in service exports according to 2018 data, and Britain was in second place with 397 billion dollars. Accordingly, while the USA's sectoral interest and academic interest are in parallel, the same parallelism for England is not in question within the database examined.

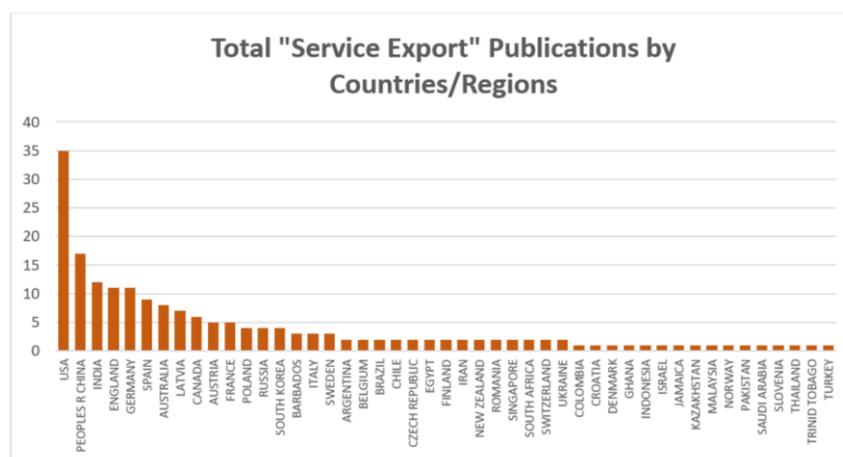


Figure 4: “Service Export” Publication by Countries/Regions

Resource:(http://ezproxy.ticaret.edu.tr:2241/RA/analyze.do?product=UA&SID=D2CEN4Y7kFh7vKJ21kl&field=CU_CountryTerritory_CountryTerritory_en&yearSort=false)

When the data of the top 5 countries in Figure 4 and the top 5 service exporter countries published by OECD in 2018 are compared; it is seen that China, which ranks 5th in terms of service exports, ranks 2nd in academic publications in this field, and India, which is not in the top five in service exports ranking, is in the 3rd place in academic publications. From this point of view, it can be anticipated that there will be an improvement in the service export figures of China and India in the coming years and will be higher in related export reports.

2.2. VOSviewer-Assisted Analyses

The keywords used by the authors in their studies are of great importance in order to accurately identify the subject investigated in the field of service exports and to determine the prominent research themes effectively (Xu & Yu, 2019). In order to identify the topics mentioned, the co-occurrence analysis feature of VOSviewer software, which focuses on keywords, was used.

As part of the study, 50 data selected from the KCI-Korean Journal database were not included in the keyword analysis since the keyword data could not be drawn from the system.

In accordance with the data obtained from the remaining 170 studies, the steps to perform the analysis are as follows:

1. Exporting the data of the related publications in text format from the Web of Science database,

services export are determined as the thematic titles. It is seen that India, one of the Asian countries, is among the themes as well.

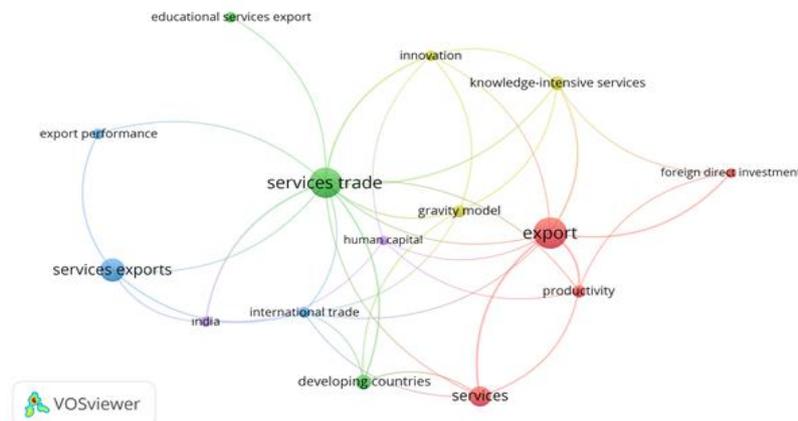


Figure 6: Service Export: The keyword co-occurrence network of publications (threshold level 5)

In terms of completeness, the density map was also included in the study (Figure 7). The use of yellow color moves in parallel with the usage intensity of the words. Words with intense yellow color represent the most used words in the keyword analysis. The color of the keywords that are used less frequently is shown in blue.



Figure 7: Service Export: The keyword co-occurrence density of publications (threshold level 5).

3. Conclusion

Nowadays, countries are in a tight race to export goods and services to other countries in a rapidly globalizing world and business ecosystem. Export is the first step of entering international markets and has less risk than other internationalization stages. Opening up to new markets, reaching other people in different geographies for introducing products and services that will respond to their needs and wishes immediately, means profit and growth potential for businesses and plays a crucial role in internationalization. Therefore, most of the large and small-sized enterprises are considering the export option in order not to stay out of the race in the global competitive market. So, they are willing to export frequently and operate in this field.

Service export, on the other hand, is the term given to any services presented by a person or company in one nation to another person or company located in another nation. When the developments in terms of exports in recent years are analyzed, it is seen that the share of service exports on the global GDP has reached 70%. While developed economies have intensified their investments in service exports since the 1950s, it is observed that the importance given to service exports has also increased in developing countries in recent years. Consequently, service exports have started to overgrow all over the world and emerge as a significant trend.

In this study, it is aimed to develop a perspective on academic studies in the field of service exports between 1975 and 2020. For this purpose, the bibliometric analysis method was used to demonstrate the effectiveness of scientific publications and other related data such as country, institutions, citations, trend themes concerning these publications. In this context, Web of Science (WoS) database, one of the most widely accepted databases in social sciences, has been scanned, academic publications have been scanned, the analysis offered by the database has been examined, and the themes related to service exports have been identified through the VOSviewer software.

Approximately 220 publications on "service exports" may appear less in a half-century period compared to other research topics. However, it is not difficult to understand why the number of publications has been low up to the last 20 years, as the importance of service exports has increased parallel the ease of transportation, the spread of the internet and the introduction of technological devices. While there were 33 publications on service exports from 1975 to 2000, there were 184 publications between 2000-2019.

It is not surprising that 71% of the publications made in the database appear as articles. In parallel, the results of the analysis can be observed in many other research areas. The fact that the World Bank is far ahead among the broadcasting organizations was in parallel with the World Bank's mission to support international trade, but it was surprising that there was no remarkable organization among the universities. The fact that the USA, which exports the most services in the world, ranks first in the academic studies in this field has shown that the sectoral and academic interest is parallel.

Contrary to the USA, India, which could not be in the top five in the world rankings in service exports, was ranked 3rd in academic publications and included in the most frequently used and researched themes together with service exports as a result of the analysis made using the VOWviewer software. Unlike the USA, India, which could not be in the top five in the world ranking in service exports, attracted attention by being ranked 3rd in academic publications and being among the most frequently used themes researched together with service exports as a result of the analysis made using VOWviewer software. Accordingly, we anticipate that India will follow an interesting trend in service exports in the coming years.

"Innovation, human capital, international trade, productivity, export performance, educational services export and knowledge-intensive services" themes used with India were the expected results. Because innovation from these concepts is a concept used in every field of the economy today and other concepts are directly related to either the service sector or export. However, the "developing countries" and "foreign direct investment" themes can offer us different tips in this area. The fact that "service export" is explored with "developing countries" indicates that there is much more to be talked about in this area. Besides, it is worth exploring why the concept of "service exports" (services offered from within the borders of the country to other countries) and "foreign direct investments" have been mentioned so much together.

References

- Ahmad, S. A., Kaliappan, S. R., & Ismail, N. W. (2017). Determinants of service export in selected developing Asian countries. *International Journal of Business and Society*, 18(1), 113-132.
- Altınbaşak, I., Akyol, A., Alkibay, S., Yolaç, G., Yalçın, F. A., Ünüsan, Ç., ... Gegez, A. E. (2008). *Küresel Pazarlama Yönetimi* (1st ed.). Istanbul: Beta Basım Yayın.
- İşleyen, Ş., Altun, Y., & Görür, Ç. (2018). Hizmet İhracatı ve Turizm Harcamalarının Ekonomik Büyümeye Katkısı Üzerine Ampirik Bir Analiz: 1996-2017 Türkiye Örneği. *Anemon Muş Alparslan Üniversitesi Sosyal Bilimler Dergisi*, 6(6), 953-960.
- Michigan State University, MSU Libraries. (2019). What is the difference between PubMed, Web of Science, and Google Scholar?. Retrieved from https://libguides.lib.msu.edu/ld.php?content_id=51429818
- Moed, H. F., De Bruin, R. E., & Van Leeuwen, T. N. (1995). New bibliometric tools for the assessment of national research performance: Database description, overview of indicators and first applications. *Scientometrics*, 33(3), 381-422. doi:10.1007/bf02017338
- Noyons, E. C. M., Moed, H. F., & Luwel, M. (1999). Combining mapping and citation analysis for evaluative bibliometric purposes: A bibliometric study. *Journal of the American Society for Information Science*, 50(2), 115-131.
- OECD. (n.d.). Service Trade. Retrieved 03 20, 2020, from OECD (Organisation for Economic Co-operation and Development): <http://www.oecd.org/trade/topics/services-trade/>

- OECD. (January 2020). OECD Services Trade, Restrictiveness Index: Policy trends up to 2020. OECD (Organisation for Economic Co-operation and Development). Retrieved from <https://issuu.com/oecd.publishing/stacks/6347ed3ca3004c5f85b5ff5f5507da4a7>
- OECDiLibrary (n.d.). Trade in Services. Retrieved 03 20, 2020, from: <https://doi.org/10.1787/3796b5f0-en>
- Özsağır, A., & Akın, A. (2012). Hizmetler Sektörü İçinde Hizmet Ticaretinin Yeri Ve Karşılaştırmalı Bir Analizi. *Elektronik Sosyal Bilimler Dergisi*, 11(41), 311-331.
- Pritchard, A. (1969). Statistical bibliography or bibliometrics. *Journal of documentation*, 25(4), 348-349.
- Şakar, G.D., & Cerit, A.G. (2013). Uluslararası Alan İndekslerinde Türkiye Pazarlama Yazını: Bibliyometrik Analizler ve Nitel Bir Araştırma. *Atatürk Üniversitesi İ.İ.B.F. Dergisi*, 27(4), 37-62.
- Tang, M., Liao, H., & Su, S.-F. (2018). A Bibliometric Overview and Visualization of the International Journal of Fuzzy Systems Between 2007 and 2017. *International Journal of Fuzzy Systems*, 20(5), 1403–1422. doi:10.1007/s40815-018-0484-5
- TUİK. (2020, 03 20). İşgücü İstatistikleri, 2019. Retrieved 03 20, 2020, from Türkiye İstatistik Kurulu-TUİK: <http://www.tuik.gov.tr/PreHaberBultenleri.do?id=33784>
- ULAKBİM. (n.d.). Retrieved March 1, 2020, from <https://cabim.ulakbim.gov.tr/bibliyometrik-analiz/bibliyometrik-analiz-sikca-sorulan-sorular/>
- Van Eck, N. J., & Waltman, L. (2009). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, 84(2), 523–538. doi:10.1007/s11192-009-0146-3
- Web of Science. Citation report. Retrieved 04 04, 2020, from Web of Science: www.webofknowledge.com
- World Bank. (n.d.). Service exports (BoP, current US\$). Retrieved 03 20, 2020, from World Bank: <https://data.worldbank.org/indicator/BX.GSR.NFSV.CD?end=2018&start=1960&type=shaded&view=chart>
- Xu, Z., & Yu, D. (2019). A Bibliometrics analysis on big data research (2009–2018). *Journal of Data, Information and Management*, 1(1-2), 3-15.