## Analyzing the Research Landscape on Digital Tax: A Bibliometric Analysis of Digital Tax Worldwide

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Abstract: The emergence of the digital economy has fundamentally changed traditional business models and tax frameworks. The digital services tax has been proposed as a strategic measure to address the taxation challenges posed by large digital businesses. This study uses a bibliometric analysis to examine the research environment related to the digital services tax. By analyzing articles published in the Scopus database between 2001 and 2023, this study investigates publication patterns, identifies prominent authors and institutions, and explores citation metrics. The study provides insight into the scientific discussion on the digital services tax, including the network on the co-occurrence of keywords, using VOSviewer. The data shows that scholars from all over the world have published 158 articles. According to the data, 107 of the 158 published documents (67.72%) come from articles as a source type. The data also shows that more than two-thirds of all articles originate from the social sciences. The article written by Mpofu from Zimbabwe ranked first in terms of dissemination and was cited a total of 17 times by academics. The keyword trends were also used to identify further research topics for this theme. This study provides valuable insights into the academic discourse on the digital services tax, including the global research focus, leading academics, and influential institutions. This comprehensive examination of the intellectual framework for the study of digital services tax provides valuable guidance for future research endeavors and ultimately contributes to a deeper understanding of the evolving landscape of digital taxation.

#### Keywords: Digital tax, Bibliometric Analysis, and Network map.

## 1. Introduction

The emergence of the digital economy in the last two decades has led to a notable change in society, the economy, and personal life. This transformation, known as digitalization, refers to the widespread adoption of information and communication technology in various aspects of life (Vuori et al., 2019). Hojeghan and Esfangareh (2011) define the digital economy as a system in which providers and customers exclusively engage in transactions through the Internet using electronic goods and services. These commodities and services are exclusively generated and exchanged over the Internet and web-based technology. As claimed by Haltiwanger and Jarmin (2000) the use of electronic devices and the Internet is changing the characteristics of products and services, the manufacturing process, and the methods used to market and sell them.

The Internet also provides taxpayers with the opportunity to generate additional money through virtual commerce. These transactions can be completed using either physical currency or digital currencies (Switzer & Switzer, 2014). Even when these transactions occur in the virtual domain of the digital economy or entail the utilization of virtual currencies, they nonetheless have tax consequences for the individuals participating in the transactions. Therefore, taxpayers need to have a thorough understanding of tax regulations to appropriately document these transactions on their tax returns. Lack of comprehension regarding this information can lead to participants in the digital economy failing to adhere to tax legislation (Cockfield, 2002). Tax authorities can utilize the taxpayers' expertise to identify the tax compliance issues of individuals involved in the digital economy. As taxes are a major source of revenue for governments worldwide, tax compliance has become a paramount concern (Kamarudin et al., 2024).

In addition, the digital economy has revolutionized traditional business models and highlighted the limits of the existing tax framework. Large digital companies often operate across borders, challenging governments to collect their fair share of taxes. Understanding the global research landscape on digital taxes is critical for Malaysia as it grapples with how to effectively tax the digital economy. As a Southeast Asian country experiencing rapid digitalization, Malaysia has seen a sharp increase in digital trade and the presence of multinational digital companies. Implementing an effective digital service tax policy requires a comprehensive understanding of current research trends, leading voices in the field, and emerging challenges related to the

taxation of digital services. Hence, the objective of this paper is to perform a bibliometric examination of digital tax. Currently, the utilization of this approach in business research remains restricted (Donthu et al., 2021).

This study provides a bibliographic analysis of academic publications on digital tax from around the world indexed in the Scopus database. The aim is to identify emerging themes in the existing body of literature. As Donthu et al. (2021) stated, bibliometric analysis is a widely used and comprehensive method for analyzing and evaluating substantial scientific data. Similarly, Ahmi and Nasir (2019) claim that bibliometric analysis is a remarkably effective method for identifying research patterns in specific subject areas. The specific aims of this study are as follows:

- To identify the source type, language, and field of research of digital tax
- To assess global patterns in the quantity of digital tax research
- To investigate research collaboration in digital tax
- To analyze the co-occurrence of keywords among authors in digital tax research

The following sections describe the research methodology used to achieve the objectives of this study, followed by an analysis of the research findings. This study concludes with a summary of the findings. The following section deals with the literature review.

## 2. Literature Review

**Bibliometric Analysis:** Bibliometric analysis is a quantitative approach to assessing various elements of the scientific literature, focussing on publication, citation, and collaboration patterns within a particular subject area or across numerous disciplines. This is a systematic analysis of bibliographic data from scientific publications such as journals, conference proceedings, books, and patents. The word bibliometrics was defined for the first time by Alan Pritchard in 1969 as an application of statistics and mathematical approaches to articles, books, and other mediums of communication.

Since its introduction, bibliometric analysis has become a crucial tool in research for evaluating scholarly impact and understanding research trends gives insight to the next researcher and concerned party for the future research direction (Wigantini & Nainggolan, 2022; Teiuşan & Deaconu, 2021; Ogrean & Herciu, 2021; Rosyidiana et al., 2019). Initially, bibliometric analysis focused on assessing citation patterns and journal impact, nowadays bibliometrics has evolved to encompass a wide range of applications. Researchers use bibliometric analysis to identify influential authors, institutions, and publications, track the dissemination of knowledge within and across disciplines, and uncover emerging research areas.

Additionally, bibliometric analysis plays a vital role in assessing the societal impact of research and guiding policy development (Nobanee & Ullah, 2023). By analyzing citation patterns, collaboration networks, and knowledge dissemination pathways, the bibliometric analysis offers insights into how research findings are being utilized, applied, and disseminated within academic circles and beyond. This information is invaluable for policymakers seeking to understand the real-world implications of research findings and design evidence-based policies that address pressing societal challenges. Thus, bibliometric analysis serves as a bridge between academic research and policy implementation, facilitating the translation of research insights into meaningful actions and outcomes for society.

## **Past Studies**

Digital tax refers to the imposition of charges on the income derived from digital services offered by global technology corporations. This tax policy aims to tackle the issue of taxing digital companies that operate internationally but may not have a substantial physical presence in the countries where they generate income (Latif, 2020). When comparing previous research that utilized scientometric or bibliometric methods to study taxation with more recent findings, it is evident that only a small number of studies employ bibliometric analyses to explore different facets of taxation (Ya'u & Saad, 2021). Most of the bibliometric research on taxation focuses mostly on tax evasion, tax compliance, tax administration, tax avoidance, and green taxes (Nevzorova et al., 2016; Wigantini & Nainggolan, 2022; Nobanee & Ullah, 2023).

Boateng et al. (2022) conducted a thorough investigation into the interrelation between tax risk assessment, financial restrictions, and tax compliance using a bibliometric approach. The paper emphasizes that there is limited empirical evidence about the effects of tax risk on tax compliance, indicating that research in this area is still in its preliminary stages. Although there is a solid theoretical basis, there is a lack of practical research investigating this connection. This presents difficulties for tax authorities, particularly in the context of globalization and complex financial markets. Ya'u and Saad (2021) performed a bibliometric analysis to examine the patterns and frequencies of published literature on taxation in Malaysia using the Scopus database. Their research indicates a rise in the rate of expansion of literature on taxation studies in the Malaysian setting from 1977 to 2020. In addition, Nevzorova et al. (2016) have conducted bibliometric analyses to investigate the degree to which scholarly articles on tax evasion correspond with the practical issues encountered by stakeholders. This research contributes to the integration of theoretical ideas and practical applications, providing valuable information for policy discussions and enforcement methods.

Another focal point of taxation research is the examination of tax policies aimed at addressing environmental concerns, such as carbon taxes and green taxes. Wigantini and Nainggolan (2022) utilized bibliometric analysis to map the landscape of carbon tax research and assess its implications for the economy and businesses. This approach facilitates a comprehensive understanding of the scholarly discourse surrounding environmental taxation, shedding light on the emerging trends and areas for further investigation. Furthermore, the effectiveness of taxation in promoting sustainable practices and mitigating environmental degradation has garnered significant attention in recent years. Nobanee and Ullah (2023) explored the efficacy of green taxes in reducing pollution, stimulating economic growth, and fostering sustainable development. Through bibliometric analysis, researchers can track the evolution of green tax literature and assess the impact of policy interventions on environmental outcomes.

Moreover, scholars have increasingly turned their attention to the intersection of taxation and globalization, particularly in the context of international tax competitiveness. Mazurenko and Tiutiuyk (2021) undertook a bibliometric analysis to systematize research on international tax competitiveness and its relationship with other economic factors. By identifying gaps and promising avenues for future research, this line of inquiry contributes to the development of effective tax policies in an increasingly interconnected world. Recently, a study by Nasir et al. (2023) examined a bibliometric analysis of tax research by examining trends, patterns and contributions to the field. However, this study only focused on corporate tax in the last two decades from 2003 to 2022.

In addition to these areas, the emergence of digital taxation as a pressing issue in the modern economy has sparked renewed interest among scholars. Since the primary focus of most bibliometric studies lies in areas such as tax evasion, tax compliance, tax administration, tax avoidance, and green taxes. Hence, this research assumes a pioneering role by undertaking an analysis of digital taxation spanning from 2001 to the present. The primary objective of this research is to provide guidance to researchers and facilitate a broader comprehension and mastery of the digital tax subject. This study can be used as an introduction reference and initial approach for new scholars who want to become acquainted with the literature on digital taxation by documenting the progression of this subject over 23 years (2001–2023). The bibliometric analysis allows us to identify the most influential authors, the most prolific journals, the countries with the highest productivity rates, the annual number of studies on dynamic capabilities, the studies that cite dynamic capabilities, and the recent advancements in this field.

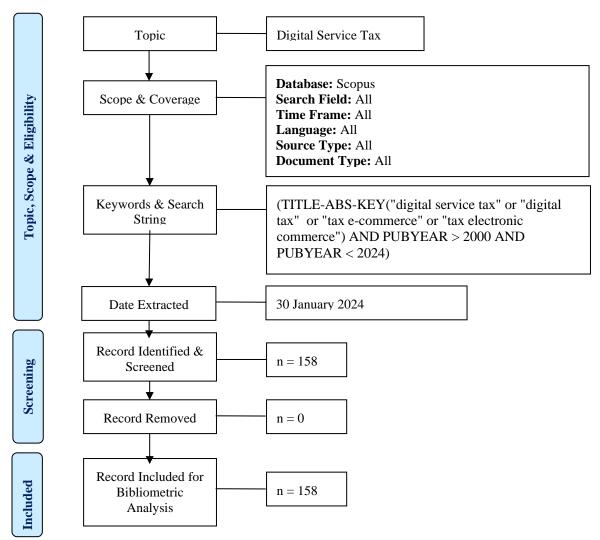
## 3. Method

The study aims to conduct a comprehensive analysis of digital tax research. The analysis includes examining trends in research volume, distribution by country and author, identifying subject areas, document types, and sources, and analyzing co-authorship between authors and countries and the co-occurrence of keywords. To achieve the objectives of this study, digital tax research data from the Scopus database (as of 30 January 2024) was used. The Scopus database was selected due to its reputation as the most comprehensive abstract and index database. The metadata available in the Scopus database enables researchers to efficiently collect

information on a large amount of published research and save time and resources compared to manual literature reviews.

The bibliometric approach has become a valuable tool for researchers to understand the intellectual structure and development of a particular field. To evaluate the published research, the bibliometric method has been used to collect information about the publications (Wigantini & Nainggolan, 2022). In ensuring the analysis includes only related materials, each document is chosen solely based on its title. A search was conducted in the Scopus database: TITLE ("digital service tax" or "digital tax" or "tax e-commerce" or "tax electronic commerce"). A total of 158 documents were retrieved by this query for further analysis after the data had been cleaned by reviewing the abstract. The flow of the search strategy is shown in Figure 1. VOS Viewer software was used to map co-authorship networks to uncover patterns of collaboration between researchers and countries. In Harzing Publish or Perish, Excel was used to analyze citation patterns and identify influential articles, authors, and journals.

# Figure 1: Flow diagram of the search strategy.



Source: Zakaria et al. (2020), Moher et al. (2009)

# 4. Results and Discussion

Documents Profiles: Table 1 shows the categories of sources published by various scholars. The source types published by various scholars are provided in Table 1. Based on the findings, most of the publications are produced in articles (67.72%), book series (15.82%), and reviews (6.69%). The remaining percentages are allocated to conference papers (5.06%), editorials (1.90%), books (1.27%), and notes (1.27%).

# Table 1: Document Type

Document Type	Total Publications (TP)	Percentage (%)
Article	107	67.72%
Book Chapter	25	15.82%
Review	11	6.96%
Conference Paper	8	5.06%
Editorial	3	1.90%
Book	2	1.27%
Note	2	1.27%
Total	158	100.00

Table 2 illustrates the number of digital tax publications categorized by language. According to data gathered from Scopus, English is the most frequently used language, with 149 documents followed by Russian and Spanish as the second most utilized languages, each appearing in three articles. These findings are aligned with expectations, as English-language journals are the most abundant and are crucial for researchers to master in the contemporary global academic community. Additionally, several digital tax publications are available in languages beyond English, including German, Italian, and Portuguese.

## Table 2: Languages

Language	Total Publications (TP)*	Percentage (%)
English	149	93.71%
Russian	3	1.89%
Spanish	3	1.89%
German	2	1.26%
Italian	1	0.63%
Portuguese	1	0.63%
Total	159	100.00

\*One document has been prepared in dual languages

Table 3 presents the number of documents published according to the field of research in the Scopus category. The search yielded 113 papers in the field of Social Sciences, 81 articles in the domains of Economics, Econometrics, and Finance, and 66 articles in the fields of Business, Management, and Accounting. There were also some documents in other fields, but their numbers were insignificant. This numerical value quantifies and discerns numerous disparities between the quantities of documents in the field of social sciences and those in other study disciplines. These findings also suggest that the subject of digital tax is highly pertinent in the realm of social sciences.

#### Table 3: Subject Area

Subject Area	Total Publications (TP)	Percentage (%)
Social Sciences	113	71.52%
Economics, Econometrics and Finance	81	51.27%
Business, Management and Accounting	66	41.77%
Computer Science	15	9.49%
Engineering	7	4.43%
Decision Sciences	6	3.80%
Medicine	3	1.90%
Environmental Science	2	1.27%

Psychology	2	1.27%
Arts and Humanities	1	0.63%
Energy	1	0.63%
Materials Science	1	0.63%
Mathematics	1	0.63%
Multidisciplinary	1	0.63%
Nursing	1	0.63%
Pharmacology, Toxicology and Pharmaceutics	1	0.63%

**Publication Trends:** Table 4 shows that interest in this field of knowledge has increased over the last 23 years. The data presented in the table indicates a significant increase in publications between 2018 and 2023. 2021 was the most productive year with 35 publications and 63 citations. In 2019, 26 articles received a total of 76 citations, resulting in an average of 2.92 citations per publication. The continued rise in this trend demonstrates the ongoing importance of digital taxation and emphasizes that several areas of research need to be explored further in the future. According to Mashabela and Kekwaletswe (2020) and Soulange et al. (2017), e-filing rates in industrialized countries are still relatively low despite the rising trend. Participants in digital transactions must have the necessary tax expertise to recognize the specific instances and timing in which tax implications arise. A lack of expertise in this area could result in individuals in the digital economy not complying with tax requirements.

Year	ТР	NCP	ТС	C/P	C/CP
2001	1	0	0	0.00	0.00
2003	1	1	13	13.00	13.00
2015	1	0	0	0.00	0.00
2016	1	1	13	13.00	13.00
2017	1	0	0	0.00	0.00
2018	6	6	39	6.50	6.50
2019	26	18	76	2.92	4.22
2020	34	15	49	1.44	3.27
2021	35	21	63	1.80	3.00
2022	26	15	67	2.58	4.47
2023	26	4	8	0.31	2.00
Total	158				

# Table 4: Year of Publication

Notes: TP=total number of publications; NCP=number of cited publications; TC=total citations; C/P=average citations per publication; C/CP=average citations per cited publication

**Publications by Authors:** Table 5 shows the ranking of the top 10 authors according to the number of articles published in the field of digital taxes. Accordingly, Mpofu, F.Y. from Zimbabwe has achieved the highest rank as the most productive author with six published articles. However, the number of cited publications is only four, as is the case for Kofler, G. from Austria. Sinnig, J. has the most citations with 31, although the number of cited publications is only three. Figure 2 also shows the co-authorship among the authors and how they are networked with other authors. This network map visually represents the connections between authors in the field of digital taxes as determined by their publication links. The color tone of the map indicates the collaborating clusters, while the line connecting the authors symbolizes their co-authorship.

Author's Name	Affiliation	Country	ТР	NCP	ТС	C/P	C/CP
		<b>y</b>			-	-/-	
Mpofu, F.Y.	National University of	Zimbabwe	6	4	17	2.83	4.25
	Science and Technology						
	Bulawayo						
Kofler, G.	WU Vienna University of	Austria	4	4	28	7.00	7.00
	Economics and Business						

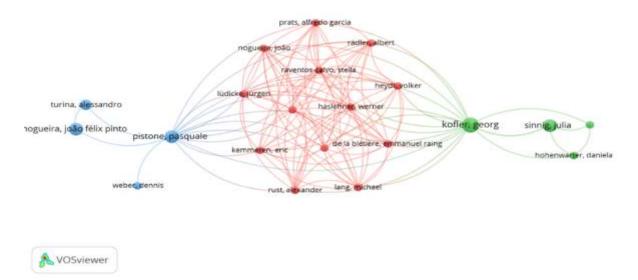
#### **Table 5: Publications by Authors**

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Sinnig, J.	Universität Bremen	Germany	3	3	31	10.3	10.33
0, 7		5				3	
Nogueira, J.F.P.	Universidade Católica	Portugal	3	3	4	1.33	1.33
-	Portuguesa	_					
Pistone, P.	"Università degli Studi di	Italy	3	3	4	1.33	1.33
	Salerno						
Ponomareva,	Financial Research Institute	Russian	3	1	1	0.33	1.00
K.A.	of the Ministry of Finance of	Federation					
	the Russian Federation						
Geringer, S.	University of Economics and	Austria	2	1	12	6.00	12.00
-	Business						
Dimitropoulou,	WU Vienna	Austria	2	2	7	3.50	3.50
C.							
Avi-Yonah, R.	University of Michigan	United	2	1	4	2.00	4.00
	- 0	States					
Bevacqua, J.	Monash University	Australia	2	1	2	1.00	2.00

Notes: TP=total number of publications; NCP=number of cited publications; TC=total citations; C/P=average citations per publication; C/CP=average citations per cited publication





**Publications by Institutions:** Table 6 presents the leading ten institutions that have made contributions in the form of papers regarding digital tax adoption, ranked by the number of publications. Based on the findings, WU Vienna University of Economics and Business, under the Government of the Austria Federation, leads with the highest contribution of eight papers, followed by the University of Johannesburg with seven papers. As noted by Rosyidiana et al. (2019), differences in expenditure and research support among universities or institutions may account for variations in the number of paper publications. Furthermore, Man et al. (2004) suggest that different universities or institutions may have distinct reward systems for assessing publication outcomes. Hence, institutions offering reward systems for human resources are likely to support research publications in high-impact journals. Generally, universities with a greater number of research publications indicate their proficiency in securing research grants, financial support, or effective systems to encourage more publications.

Affiliation	Country	ТР	NCP	ТС	C/P	C/CP
WU Vienna University of Economics and	Austria	8	7	21	2.63	3.00
Business						
University of Johannesburg	South Africa	7	4	17	2.43	4.25
Financial University under the Government	Russian	5	4	8	1.60	2.00
of the Russian Federation	Federation					
Universität Wien	Austria	4	3	22	5.50	7.33
University of London	United Kingdom	4	2	7	1.75	3.50
University of Luxembourg	Luxembourg	4	2	7	1.75	3.50
IBFD	Netherlands	4	3	5	1.25	1.67
Russian Presidential Academy of National	Russian	4	3	5	1.25	1.67
Economy and Public Administration	Federation					
University of Cape Town	South Africa	3	2	3	1.00	1.50
Financial Research Institute of the Ministry	Russian	3	0	0	0.00	0.00
of Finance of the Russian Federation	Federation					

#### **Table 6: Most productive institutions**

Notes: TP=total number of publications; NCP=number of cited publications; TC=total citations; C/P=average citations per publication; C/CP=average citations per cited publication.

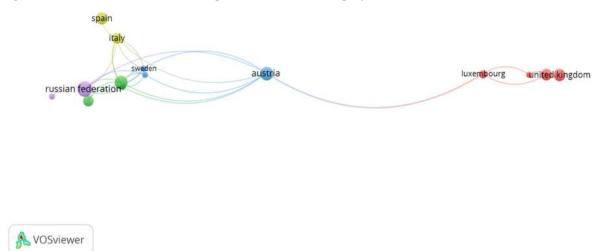
**Publications by Countries:** Furthermore, the bibliographic analysis encompasses the quantification of publications supplied by each country to ascertain the most productive countries. The results for the top ten contributors are displayed in Table 7. The number of publications since 2001 in the Russian Federation was 17 documents. Austria and South Africa tied for second place with 13 publications. Both the UK and Spain own ten documents each. The remaining 5 countries have less than 10 publications. According to this table, the Russian Federation had a greater impact on research publications concerning digital tax concerns. This is supported by Rahman and Fukui (2003), who states that the number of publications for each country is affected by research funding. Hence, this result was the answer to the domination of the Russian Federation as a developed country. The reason for this is that developed countries provide robust financial support for research, increasing the number of research projects created by these nations.

Furthermore, a visual examination of the network map, as illustrated in Figure 3, reveals the presence of five distinct colored clusters. The clusters indicate the countries that are co-authors which shows a high degree of collaboration in research between these countries. The size of the nodes could indicate that they have co-authored more publications than other countries in the network. It also discloses the nations that dominate each cluster, as defined by the magnitude of the circle. Based on the findings, the Russian Federation has been identified as the most solid connection in this field.

Country	ТР	NCP	ТС	C/P	C/CP
<b>Russian Federation</b>	17	11	36	2.12	3.27
Austria	13	10	54	4.15	5.40
South Africa	13	7	24	1.85	3.43
United Kingdom	10	6	27	2.70	4.50
Spain	10	2	6	0.60	3.00
Belgium	9	6	20	2.22	3.33
United States	9	5	24	2.67	4.80
Netherlands	8	3	5	0.63	1.67
Italy	8	3	3	0.38	1.00
China	6	2	7	1.17	3.50

#### Table 7: Top 10 Countries contributed to the publications.

Notes: TP=total number of publications; NCP=number of cited publications; TC=total citations; C/P=average citations per publication; C/CP=average citations per cited publication.



#### Figure 3: Network visualization map of the co-authorship by countries

**Publications by Source Titles:** Table 8 shows the results of the top ten sources of articles, as indicated by the number of article publications. The most popular source of articles is from Intertax which contributed 15 papers. Eleven papers were published in the European Taxation, while seven were published in the Taxing the Digital Economy: The EU Proposals and Other Insights. Additionally, Table 8 demonstrated that the correlation between the number of publications and citations was not direct, as several journals have a substantial number of publications but a relatively low number of citations.

Source Title	ТР	NCP	ТС	Publisher
Intertax	15	11	66	Kluwer Law International
European Taxation	11	4	6	International Bureau of Fiscal
				Documentation (IBFD)
Taxing The Digital Economy The EU Proposals	7	3	5	International Bureau of Fiscal
and Other Insights				Documentation (IBFD)
National Tax Journal	5	5	31	University of Chicago Press
International Transfer Pricing Journal	5	0	0	International Bureau of Fiscal
				Documentation (IBFD)
EC Tax Review	4	3	9	Kluwer Law International
International Tax Studies	4	3	8	International Bureau of Fiscal
				Documentation (IBFD)
Advances In African Economic Social and	4	1	1	Springer Nature
Political Development				
British Tax Review	3	1	2	Thomson Reuters
E-Journal of Tax Research	3	1	2	Thomson Reuters

#### Table 8: Most Active Source Titles

Notes: TP=total number of publications; NCP=number of cited publications; TC=total citations.

**Citation Metrics:** The results of the citation metrics are shown in Table 9. Citation metrics are fundamental in bibliometric research and serve as quantitative measures of the impact and influence of scientific publications. These indicators can be used to assess the general recognition and dissemination of research results within a particular discipline. For this study, a total of 158 publications with 326 citations dealing with digital tax over 23 years were analyzed.

Table 5. Citations Methes	
Metrics	Data
Papers	158
Number of Citations	326
Years	23
Citations per Year	14.17
Citations per Paper	2.06
Citations per Author	228.27
Papers per Author	113.85
Authors per Paper	1.85
h-index	10
g-index	12

## **Table 9: Citations Metrics**

**Highly Cited Documents:** When performing bibliometric analysis, it is also crucial to consider highly cited articles as they provide valuable insights into which papers are referenced by scholars worldwide in particular academic disciplines. Table 10 presents the ten most cited papers. The article authored by G. Kofler and J. Sinnig, entitled "Equalization taxes and the EU's 'digital services tax," has garnered a notable 18 citations in total and an annual average of 3.6 citations.

Any tax imposed by the government, according to Kofler and Sinnig, (2019) ought to adhere to international obligations, possess an administratively straightforward structure, and have a scope that does not exceed reasonable boundaries.

No.	Authors	Title	Cites	Cites per Year
1	G. Kofler, J. Sinnig	Equalization taxes and the EU's 'digital services tax'	18	3.6
2	A. Turina	Which 'Source Taxation' for the digital economy?	15	2.5
3	W. Cui	The superiority of the digital services tax over significant digital presence proposals	13	2.6
4	C.E. McLure Jr.	The value-added tax on electronic commerce in the European Union	13	0.62
5	G. Verne, T. Bratteteig	Do-it-yourself services and work-like chores: on civic duties and digital public services	13	1.63
6	W. Lips	The EU Commission's digital tax proposals and its cross-platform impact in the EU and the OECD	12	3
7	E. Bassey, E. Mulligan, A. Ojo	A conceptual framework for digital tax administration - A systematic review	12	6
8	S. Geringer	National digital taxes–Lessons from Europe	12	4
9	M.R. Hoffman	Can Blockchains and Linked Data Advance Taxation	12	2
10	C. Noonan, V. Plekhanova	Taxation of digital services under trade agreements	11	2.75

#### Table 10: Top 10 Highly Cited Articles

**Top Keywords:** Another astonishing discovery resulting from the bibliographical research is the identification of the keywords most frequently used by the authors. These findings are important for identifying potential research areas in the subject area. Besides, primary findings indicate that digital taxation is the most frequently mentioned keyword in 28 publications, as evidenced by the data presented in Table 11. The second most frequently used keyword was "digital economy," which appeared in 27 publications and contributed around 17.09% of the total publications. In addition, digital services tax represents 14.56% and Taxation represents 12.66%. The remaining keywords account for less than 10% of the overall publications. Upon analysis, it can

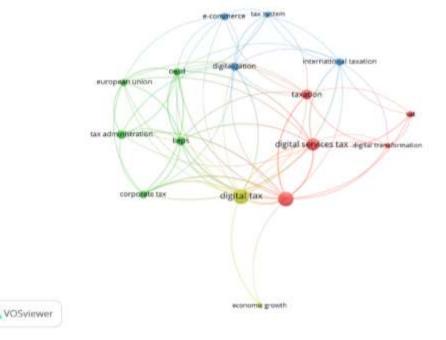
be inferred that the study trend in this area has encompassed a wide range of disciplines and diverse literature. This also demonstrates that there are still certain aspects of digital tax studies that require further investigation.

Figure 4 shows the network visualization map, which depicts a co-occurrence network of author keywords related to the digital services tax. The nodes with the highest degree of centrality, shown by the size of the circles, correspond to the terms "digital tax" and "digital service tax". Around the central keywords, other terms form clusters that likely represent related topics within the broader field of digital services taxation. For example, "e-commerce tax system" and "international taxation" could form a thematic cluster around the challenges of taxing cross-border digital trade.

Author Keywords	Total Publications (TP)	Percentage (%)
Digital Tax	28	17.72%
Digital Economy	27	17.09%
Digital Services Tax	23	14.56%
Taxation	20	12.66%
BEPS	13	8.23%
Tax Administration	10	6.33%
Digitalization	9	5.70%
Corporate Taxation	8	5.06%
E-Commerce	8	5.06%
International Taxation	7	4.43%

## Table 11: Top 10 Author's Keywords

# Figure 4: Network Visualization Map of The Co-Occurrence by Author's Keywords



## **5.** Conclusion

The study analyses the development of research publications on digital tax. Bibliometric analysis is used to assess several papers that are correlated with digital service tax. The results provide an analysis of the language and the field of study under the Scopus category, including trends in the annual publication. In addition, the findings reveal the institutions and countries that possess the highest volume of relevant research publications,

as well as the preferred journals and publishers for authors to publish their papers on digital tax. In addition, this study also investigates the commonly used keywords by authors who have researched this topic. This analysis is valuable for authors interested in digital tax, as it provides guidance on recommended journals to consult and highlights the most prolific researchers in the field.

This study offers several significant contributions to this topic. According to the findings, digital tax emerges as the dominant topic in this subject area, with potential areas for exploration including digital economy, digital services tax, and taxation. Moreover, by mapping the citation and co-authorship network, this study successfully identifies the most significant studies on digital tax and the authors with the highest number of publications. Besides, through co-occurrence and co-citation analysis in this study, the academic network of this field is delineated, potentially unveiling new research areas. Thus, this study augments prior literature on digital tax by employing bibliometric analysis, thus furnishing valuable insights into past trends in the literature. To summarise, this study contributes to the existing body of knowledge by providing valuable insights into the evolving research landscape of digital taxes.

As the digital economy continues to reshape traditional business models, research on digital taxation is likely to gain even more momentum. Future studies can delve deeper into the issues identified in this analysis, explore the effectiveness of proposed digital tax solutions, and examine the legal and economic implications of different policy approaches. By providing insight into the global research landscape, this study should provide valuable insights for Malaysia as it grapples with the complex issues surrounding the taxation of the digital economy. The dynamic nature of the digital economy requires continuous research and adaptation in the digital field. By understanding the global research landscape on digital services taxation, this study serves as a springboard for further research where additional research is needed to explore implementation strategies and potential challenges other countries face. It can also help policymakers capitalize on the successes of digital services taxation internationally. By utilizing the insights gained, the study can contribute to the advancement of knowledge and help to understand the complexities of taxing the digital economy in the 21st century. The findings can help policymakers develop sound digital tax policies that promote a fair and efficient tax system in the digital age.

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