

# **PUBLIC GOVERNANCE FOCUSED ON INTELLECTUAL PROPERTY: A BIBLIOMETRIC ANALYSIS OF NATIONAL AND INTERNATIONAL SCIENTIFIC PUBLICATIONS**

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## **Abstract**

*This study aims to investigate the main national and international theoretical contributions on Public Governance, with a focus on Intellectual Property. The methodology used involved exploratory analysis, based on bibliometric research. The data were collected through the Capes Periodical Portal, namely in the Scopus databases, consisting of a database of citations and neutral abstracts curated by independent sources of specialists in the subject. The obtained result indicated that the combination of the searched terms, "Public Governance" and "Intellectual Property", as a filter in all fields. As a result, it is observed that there are 15 countries more prominent in research on Public Governance and Intellectual Property, led by the USA, standing out with 22.5% of publications. Of the 13 (thirteen) largest areas of knowledge, it can be seen that the three largest areas represent 78% of the publications in the Scopus database. In relation to the largest universities found among the 15 (fifteen), potentially 3 (three) stand out with greater individual percentage representativeness in the publications on the theme of this research. Finally, it was identified that this research contributes to researchers and the scientific community in general, while allowing the reproduction of future research, using other bases, and thus increasing knowledge.*

**Keywords:** Public Governance; Intellectual property; Bibliometrics.

## **1. Introduction**

Unauthorized public action has high costs for its implementation, therefore, this situation compromises the confidence of the citizen in the public institution, as well as fosters bureaucracy and non-conformity, to avoid situations like these interfering, there is the practice of Governance (GUIA DA POLÍTICA OF PUBLIC GOVERNANCE, 2018).

Decree No. 9,203 of November 22, 2017, establishes that Public Governance involves the mechanisms of leadership, strategy and control adopted by the Public Administration to assess, direct and monitor how public policies and the provision of services of interest to the company are being conducted. society (BRAZIL, 2017).

Governance is considered a dynamic process through which public development takes place, through civil society, state and government, in which they organize and manage public life (PEREIRA, 2001, p.08).

With the proper Governance strategy, citizens' interests and needs will be more adequate and the expected results will have a more positive impact on society (BANCO MUNDIAL, 2017). Due to the variety of strategies associated with Public Governance, it can be deduced that many of them are aimed at improving efficiency in the management of public resources and towards greater economy and sustainability in the use of public resources (RIBEIRO et al., 2020).

Public managers need to seek to boost institutions, so that they can meet the demands for efficiency and effectiveness of services available to the population. Therefore, new measures must be taken in order to modernize management, in this sense, computerization takes on a prominent role as it makes the service more agile (SILVA, 2015).

In this sense, innovation involves the integration of administrative instruments and mechanisms aimed at providing better performance in economic and social relations, privileging the strengthening of government actions through the continuous improvement of the levels of effectiveness, efficiency and effectiveness of public policies, guaranteeing transparency of processes (RIBEIRO; OSCAR, 2017).

The incentive to stimulate innovation and to organize the innovation system, intellectual property emerges in the form of ideas and inventions, being the creative expression that institutions use to encourage technological advancement and the existing legal apparatus (CAMPOS; DENIG, 2011). And intellectual property assets considered as creations of the mind and fruits of knowledge, emerge as goods, which are necessary to ensure economic appropriation, based on an innovation effort, to guarantee and stimulate creativity, thus encouraging studies and scientific research in institutions (TEH; KAYO; KIMURA, 2008). Given the above, the objective of this study was to analyze articles published on Public Governance and Intellectual Property in national and international journals.

## **2. Theoretical Foundation**

### **2.1 Public Governance**

Governance is of paramount importance to society, as it provides support to promote the economic development and well-being of the population. Therefore, with the use of good governance, it is possible to identify improvements in organizational performance, where conflicts are reduced and government action strategies are directed and aligned (BERLE; MEENS, 1932).

The system that determines the balance of power is Public Governance, since those involved are citizens, elected representatives, senior management, managers and employees, since they allow the common good to prevail over the interests of people or groups (MATIAS-PEREIRA, 2010).

Public Governance comprises the mechanisms of evaluation, direction and monitoring, and the interactions between structures, processes and traditions, which determine as citizens, according to the capacity that political and administrative systems have to act in order to bring solutions, thus resolving problems of a public nature (GRAHN; AMOS; PLUMPTRE, 2003).

In short, Public Governance is focused on a set of good practices that Public Administration entities must adopt, so that their objectives must ultimately be pursued, as in the end a quality service will be provided

to society, whose objective is it is based on delivering excellent public services to the population (BRASIL, 2014).

## **2.2 Public Governance focused on Intellectual Property**

Public Governance is gaining more and more prominence on the world stage, considering that its good practices are essential for efficient administration, in this sense public governance is an essential and indispensable aspect for intellectual property to be better managed. In this context, the insertion of Intellectual Property as an important protection mechanism for intellectual creations, operating as an instrument for the dissemination of scientific knowledge (RIBEIRO, 2019).

National intellectual property policies are fundamental to the exercise of a unified government policy, as this has a greater chance of considering the needs of all sectors of society and deciding what is best for the country, and not only for a specific sector ( PORTO; BARBOSA, 2009).

Intellectual Property plays a role in regulating the relationship between moral and patrimonial rights, thus treating the resource of the contemporary economy, knowledge, which has become balanced, as it considers society and public and private organizations (CARVALHO; VERAS, 2008).

For society, the benefits related to the use of Intellectual Property are the increase in employment and income in the public and private spheres, and for the nation, the results are the generation of its own technologies, providing independence in relation to other countries, in addition to development economic (RIBEIRO, 2019).

## **3. Methodology**

This study will be carried out through exploratory, quantitative analysis using the bibliometric technique. Exploratory research has the mission of accessing greater familiarity with the problem, pointing to greater clarity and improvement of opinions or intuitive findings (GIL, 2017). In turn, quantitative research is differentiated by the use of quantification in the collection of information and treatment of data through statistical techniques (RICHARDSON, 2008).

Bibliometrics is known as a quantitative and statistical technique for measuring scientific production and dissemination rates, as well as following the increase in different scientific areas and the models of authorship, publication and use resulting from research. (LOPES et al., 2012).

The data were collected through the Capes Periodical Portal, namely in the Scopus databases, consisting of a database of citations and neutral abstracts curated by independent sources of experts on the subject, providing powerful analysis tools in the hands of the researchers, provides more than 25,100 titles, from an average of 5,000 international publishers, offering a broad overview of world research in the areas of science, technology, medicine, social, science and arts and humanities (SCOPUS, 2020).

The search was carried out through the combination of the terms: “public governance” and “intellectual property”, covering a time period between the years 2004 to 2020, divided into three search stages, as shown in Chart 1.

Chart 1. Scopus Base Searches

| Filter                      | Scopus   | Publications found |
|-----------------------------|--|--------------------|
| Title                       | (TITLE ("public governance" AND TITLE ("intellectual property")))                    | 0                  |
| Title, summary and keywords | (TITLE-ABS-KEY ("public governance" ) AND TITLE-ABS-KEY ("intellectual property" ) ) | 5                  |
| All fields                  | ( ALL ( "public governance" ) AND ALL ( "intellectual property" ) )                  | 166                |

Source: Prepared by the authors (2021).

The data were measured using the Excel Software, the variables were inserted in a database, allowing the construction of the graphs and the quantitative analysis of the results.

#### 4. Analysis and discussion of results

In the combination of the searched terms, "Public Governance", "Intellectual Property", using as a filter (title, abstract and keywords), resulted in the quantity of 05 (five) documents published in scientific journals, indexed in the Scopus databases. Listed in Box 2, highlighting the need for more research focused on this joint theme.

Chart 2. Synthesis of the 5 (five) articles found in the Scopus database

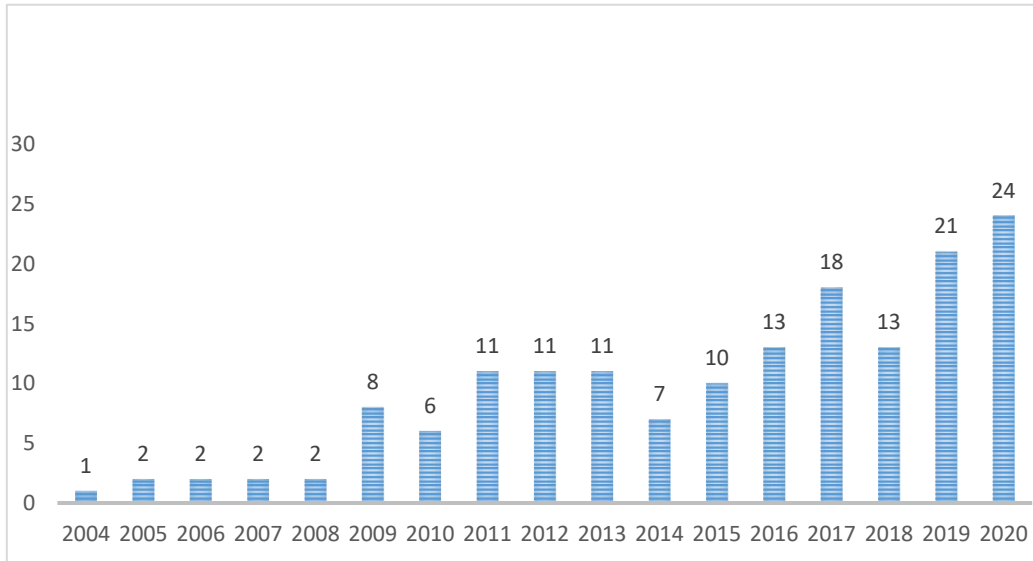
|   | Authors / Year  | Title  | Objective  | Affiliation                                | Parents |
|---|---|--|--|--|---------|
| 1 | RIBEIRO,P.G;IS<br>HIKAWA,G.;<br>LIMA; I.A.;<br>RASOTO, V.I.<br>(2020) | Application of public governance practices in public universities technological innovation centers | Analyze how Public Governance practices are adopted to manage Intellectual Property  | Federal Technological University of Paraná | Brazil  |
| 2 | MULLIGAN,<br>D.K.,<br>BAMBERGER,<br>K.A. (2018)                       | Saving governance-by-design Mulligan   | Detail a framework to save governance by design. Through four case studies, the article examines a series of recent battles over the values embodied in technology design and makes us enter an era of "design war" policymaking | University of California                   | EUA     |

|   |                       |  |  |                                     |        |
|---|-----------------------|--|--|-------------------------------------|--------|
| 3 | MONTES, J.<br>(2018)  | Risks and regulation of emerging technologies in chaotic and uncertain times the case of 3D printing.                                | Explain how the scope, scale and speed of emerging technologies (ETs) affect the Public Risk Governance (approaches, structure and tools). It also discusses the main implications of regulating the uncertainty of 3DP, also known as additive manufacturing (AM).  | Université du Québec à Montréal     | Canada |
| 4 | VIDAL, N.H.<br>(2018) | Territorializando STS: an analysis of current discussions about agro-biotechnology governance in Latin America, Europe, and the USA. | Examine current discussions on the governance of agro biotechnology in Latin America, Europe and the USA, based on a comparative reading of critical scholarships on the topic   | Loyola University of Chicago        | EUA    |
| 5 | ZAHRA, S.A.<br>(2014) | Public and Corporate Governance and Young Global Entrepreneurial Firms   | Analyze two key layers of governance (public and corporate) and how they interact to influence young global entrepreneurial companies, especially those "born global" companies that enter foreign markets from the beginning (for example, internet companies) or shortly after their establishment, also known as first internationalizers | University of Minnesota Twin Cities | EUA    |

Source: Prepared by the authors (2021).

The combination of the terms searched, "Public Governance", "Intellectual Property", as a filter in all fields, showed a total of 166 documents published in scientific journals, indexed in the Scopus databases. The data represented in the Figures below illustrate the panorama of this research, through the analysis of the variables: year of publication, countries, area of knowledge and universities.

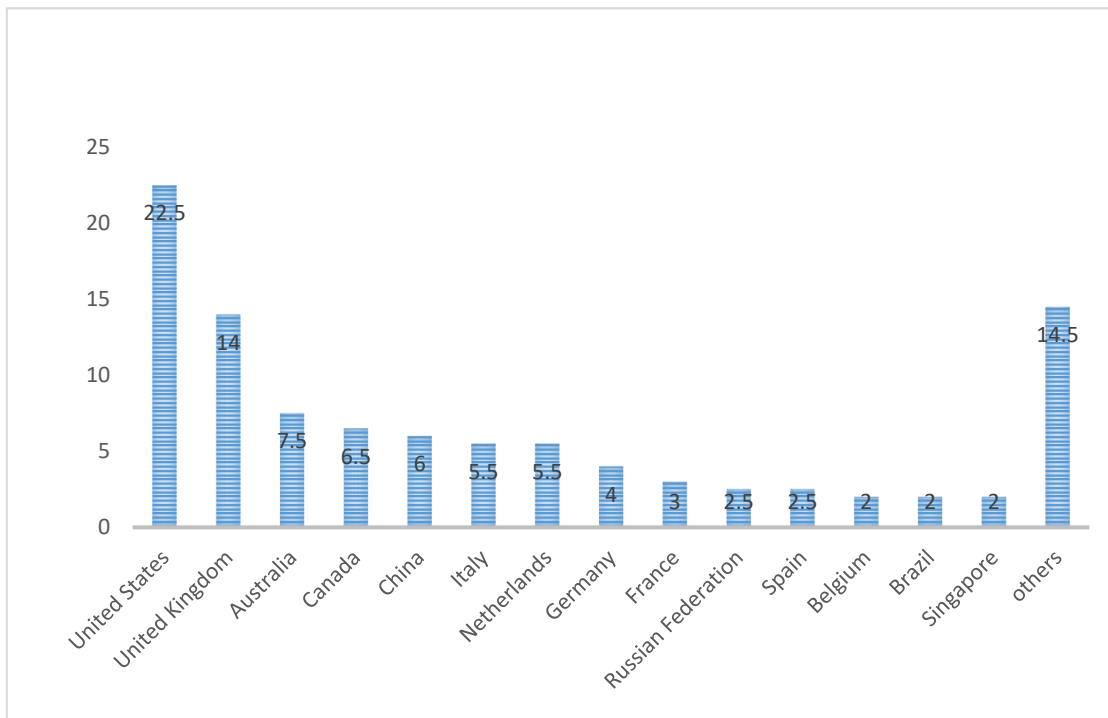
Figure 1. Distribution of publications by year in the Scopus database



Source: Adapted by the authors of the database of the Scopus database (2021).

In the evolution of publications by year, Figure 1 shows the period between 2004 and 2020, with 166 documents found in the SCOPUS database. It is interesting to note that the beginning of research on this theme coincides with the year 2004, when the COSO (Committee of Sponsoring Organizations of the Treadway Commission) published the Corporate Risk Management - Integrated Framework (document) today it is considered a reference in the theme of Governance (TCU, 2014).

Figure 2. Percentage distribution of publications by countries in the Scopus database

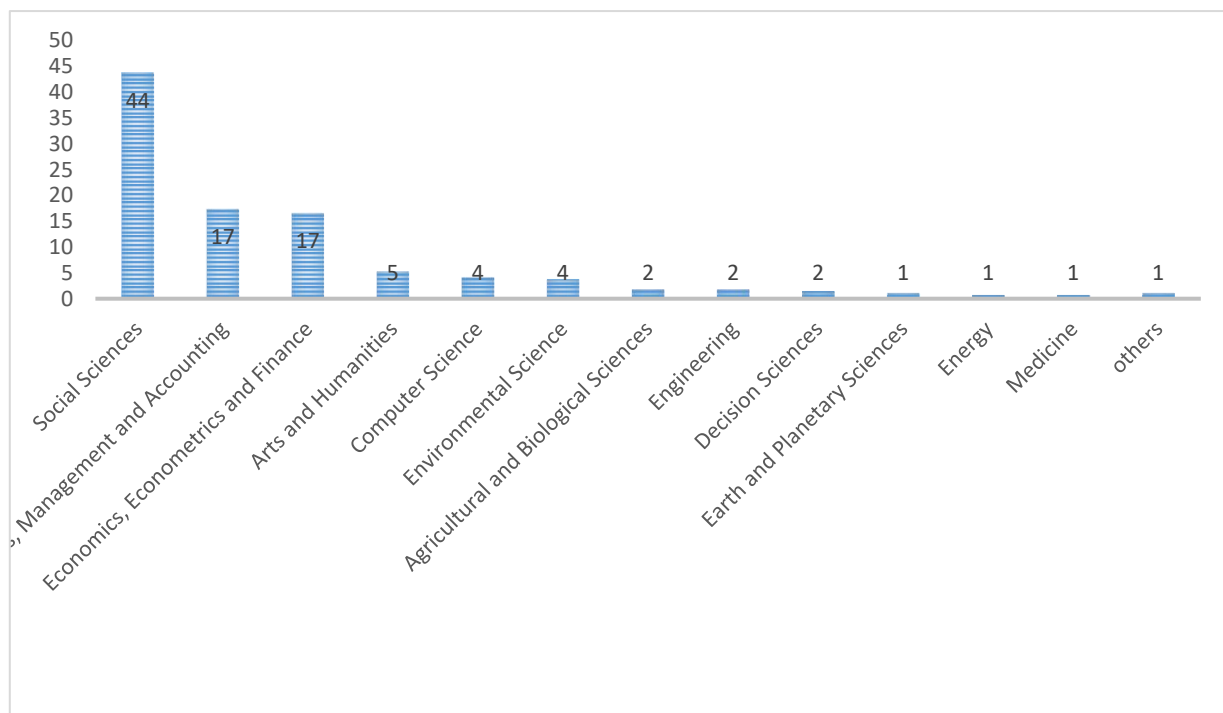


Source: Adapted from the database of the Scopus database (2021).

With regard to the distribution of publications by countries, Figure 2 presents the 15 most prominent countries in research on Public Governance and Intellectual Property. The USA, preliminarily stands out with 22.5% of the publications in relation to the other countries. In sequence with 45% of the other publications, there is the joint block of countries from: United Kingdom, Australia, Canada, China, Italy and the Netherlands. Finally, with a share of 32.5%, Germany, France, Russia, Spain, Belgium, Brazil, Singapore and others are included. The Brazilian presence among the 15 most relevant countries, highlights the efforts of national researchers as promoters of the national and international scientific base in the area of Public Governance and Intellectual Property.

It is interesting to point out that the beginning of research on this theme, previously merges with the foundation of the European Corporate Governance Institute - ECGI in 2002, aiming to support independent research, leading to improved governance, after scandals in the USA, in the mid 2000s. , involving fraud in the financial statements (TCU, 2014).

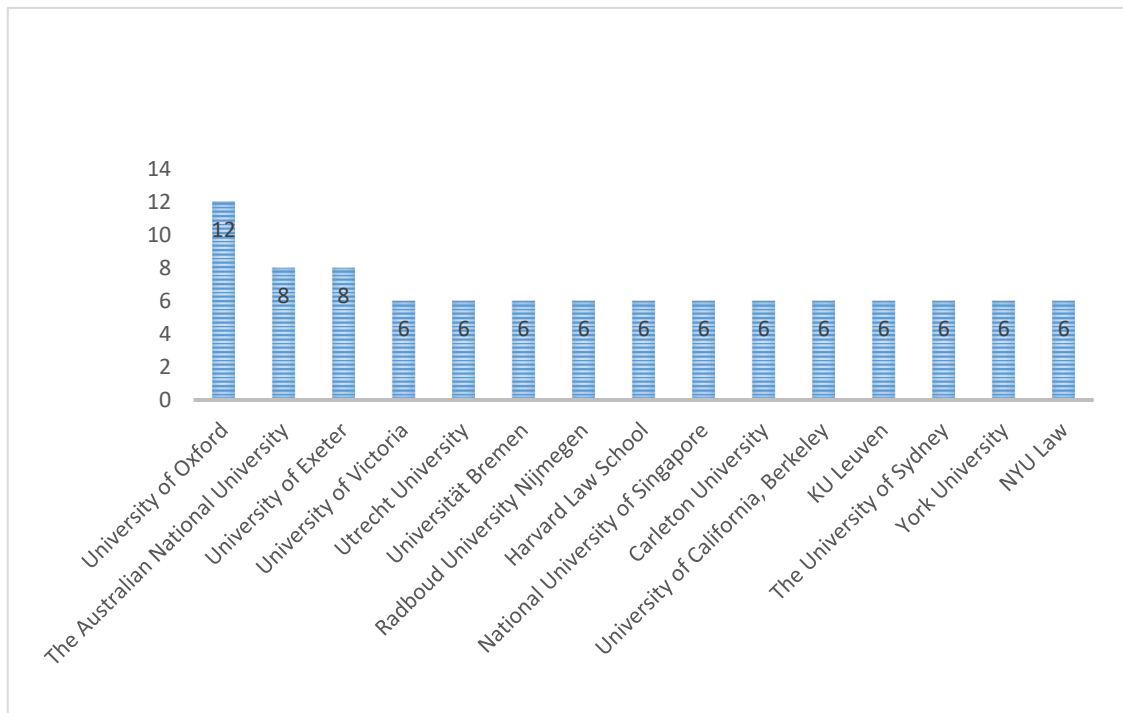
Figure 3. Percentage distribution of publications by area of knowledge in the Scopus database



Source: Adapted from the database of the Scopus database (2021).

Regarding the percentage classification of publications in the 13 largest areas of knowledge, Figure 3 highlights the preliminary highlight for the three largest areas that represent 78% of the publications in the Scopus database: social sciences; business, management and accounting; Economics, Econometrics and Finance.

Figure 4. Percentage distribution of publications by Universities in the Scopus database



Source: Adapted from the database of the Scopus database (2021).

In Figure 4, in the Scopus base, among the 15 (fifteen) universities found, potentially 3 (three) stand out with greater individual percentage representation in the publications of the theme of this research, found in the Scopus base, namely: Oxford University with 12 %; Australian National University and the University of Exeter both with an individual percentage of 8%.

### 5. Conclusion

The importance of Public Governance and Intellectual Property is the theme that guides all this work of bibliometric survey. It appears that this research relied on the use of a structured process for mapping relevant articles on the topic of interest to the researcher, in the case of the present study of public governance with a focus on intellectual property, it was possible to identify the main characteristics of the bibliographic portfolio .

This study, using the search instrument, was collected through the Capes Journal Portal, namely in the Scopus databases, consisting of a database of citations and neutral abstracts curated by independent sources of specialists in the subject, made possible the verification of: (a) the combination of the searched terms, "Public Governance", "Intellectual Property", as a filter in all fields, showed a total of 166 documents published in scientific journals, indexed in the Scopus databases; (b) the selection of a representative bibliographic portfolio on public governance and intellectual property; (c) a bibliometric analysis of the selected articles and their references in order to identify the year of publication, countries, areas of knowledge and universities.



With this knowledge built throughout the research, it becomes possible to identify that: Regarding the publications by year, it can be observed that in the period between 2004 and 2020, a total of 166 documents found in the SCOPUS database.

Regarding the distribution of publications by countries, it is observed that there are 15 countries more prominent in research on Public Governance and Intellectual Property. The USA stands out with 22.5% of the publications, followed by 45% of the other publications, there is the joint bloc of the countries of the United Kingdom, Australia, Canada, China, Italy and the Netherlands. And finally, with 32.5%, there are Germany, France, Russia, Spain, Belgium, Brazil, Singapore and others.

Regarding the percentage classification of publications in the 13 largest areas of knowledge, it is observed that the three largest areas that represent 78% of the publications in the Scopus database: social sciences; business, management and accounting; Economics, Econometrics and Finance

Finally, in relation to the largest universities found among the 15 (fifteen), potentially 3 (three) stand out with greater individual percentage representation in the publications on the theme of this research, found in the Scopus database, namely: Oxford University with 12%; Australian National University and the University of Exeter both with an individual percentage of 8%.

This study proved to be relevant, despite knowing that all research has limitations, as it presents the mapping of articles available only in the databases of the Capes Journal Portal, even so, it is believed that the knowledge produced during the investigation, by presenting a structured bibliometric process to search for representative scientific articles, it contributes to researchers and the scientific community in general, while allowing the reproduction of future research, using other bases, and thus increasing knowledge.

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