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# TECHNOLOGICAL SURVEILLANCE AND GLOBAL TRENDS IN STUDIES ON INTERNATIONAL FINANCIAL INFORMATION STANDARDS - IFRS

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## ABSTRACT

*This article presents a study of technological surveillance on the state of the art of the International Financial Reporting Standards - IFRS in the world, between the years 2012 and 2020. The study was cross-sectional, supported by the deductive and descriptive method. The source used corresponded to Scopus. The research procedure considered five aspects: scientific production, outstanding authors in scientific production, countries with the highest number of publications, institutions and outstanding journals with scientific production. In the results, the United States stands out as the country with the largest related publications, while the world production of scientific literature has been increasing in the period studied. On the other hand, high production stands out in the business, management and accounting area with sub-areas such as IFRS implementation processes (IFRS), impact of IFRS on the management of companies and financial markets.*

**Key words:** International Financial Information Standards, technological surveillance, bibliometrics.

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## 1. INTRODUCTION

The Colombian government, within its policy of articulation with the world and in accordance with the demands of business and regulatory modernization, in 2009 decided to insert the country into international standardization processes regarding accounting and financial standards. . In this regard, it promulgated Law 1314 in 2009, in which it established the terms

and conditions for companies, large and small, to progressively implement the International Financial Reporting Standards (IFRS) or International Financial Reporting Standards (IFRS).

In effect, these standards seek to establish separate criteria for the security of financial and accounting information that allow accurate and timely information for decision-making. In the same way, it serves to provide information to control bodies in their work of monitoring the financial behavior of companies.

In this article, a review of the high-level publications in the world related to IFRS was carried out, for which it used technological surveillance to compile information. In this regard, there are multiple studies of this type that seek to delineate the future of world literature on an aspect of interest and establish the state of advancement of knowledge in different sectors (see for example Tribby et al., 2020).

## **2. THEORETICAL PERSPECTIVE**

### **2.1 Technological surveillance**

Technological surveillance (hereinafter, VT) can be defined as the systematic and organized process of searching, capturing and analyzing information of a technological, commercial, competitive and regulatory nature at national and international level, which allows anticipating to clarify actions through decisions, first passing through appropriation and reaching collective or organizational learning (Du Toit, 2013).

In this sense, many studies reveal that among the most relevant metrics for the study of literature are bibliometrics and patentometry, among others (Ramírez et al., 2008). Thus, in the present study, the use of the two mentioned above will be limited due to their wide recognition in research related to technological surveillance.

### **2.2 Bibliometrics**

Bibliometry has its origin in 1923 as a process related to the statistical registration of books, newspapers and documentary products. However, it is until the 1960s when it has its consolidation as the application of statistical and mathematical methods to books and other media, ready to define the development of scientific disciplines (Ramírez et al., 2008).

On the other hand, Borgman & Furner (2002) consider that there are two kinds of bibliometrics, one evaluative and the other relational. The evaluative aims to evaluate the impact of academic work, usually to compare the scientific contributions of two or more individuals or groups, while the relational aims to show the relationships within the research, such as the cognitive structure of the research fields, the emergence of new research fronts, national and international cooperation or patterns of co-authorship. For the present study, the types of bibliometrics are combined in order to have a more comprehensive report (Castellanos et al., 2011).

### **2.3 International Financial Reporting Standards - IFRS**

International financial reporting standards - IFRS issued by the International Accounting Standards Board have become generalized in recent decades, in order to increase the degree of homogeneity in the presentation of general purpose reports by companies (Ruíz, 2017). In other words, this set of parameters emerges as a consequence of economic globalization and the dynamics of international markets (Orobio et al., 2018)

The IFRS seek to satisfy the information needs of a large number of users and, the degree of utility they generate is a determining factor to evaluate their prediction capacity (Ruíz, 2017).

### 3. METHODOLOGY

The research methodology is structured in three parts. The first corresponding to the generalities of the investigation; the second, oriented towards the design of the study; and finally the third, corresponding to the instruments and information analysis.

#### 3.1 Generalities

The study carried out was cross-sectional in that the information was collected at a specific time. On the other hand, the method used was deductive, as the postulates of technological surveillance were taken as a basis to apply it to a specific context of IFRS. The type of research was descriptive insofar as the phenomenon in question is described (Hernández et al., 2010).

#### 3.2 Design

In this research, the data record sheet applied to research articles that were used as sources to collect data on the categories of interest was used as an instrument for collecting information. In this regard, selection criteria were determined such as scientific production (Scopus) between 2012 and 2020.

#### 3.3 Instruments and information analysis

For the conduct of technological surveillance studies there are several procedures described by recognized authors, the methodology used for the development of the study is set out below (Berges-García et al., 2016; Giménez-Toledo, and Román-Román, 2001).

##### 3.3.1 On a scientific level

*Scopus:*

The largest database of citations and abstracts of peer-reviewed literature from scientific journals. It has intelligent tools to track, analyze and visualize research, offering a general relationship of the global production of research in different fields of knowledge (Andrade et al., 2017).

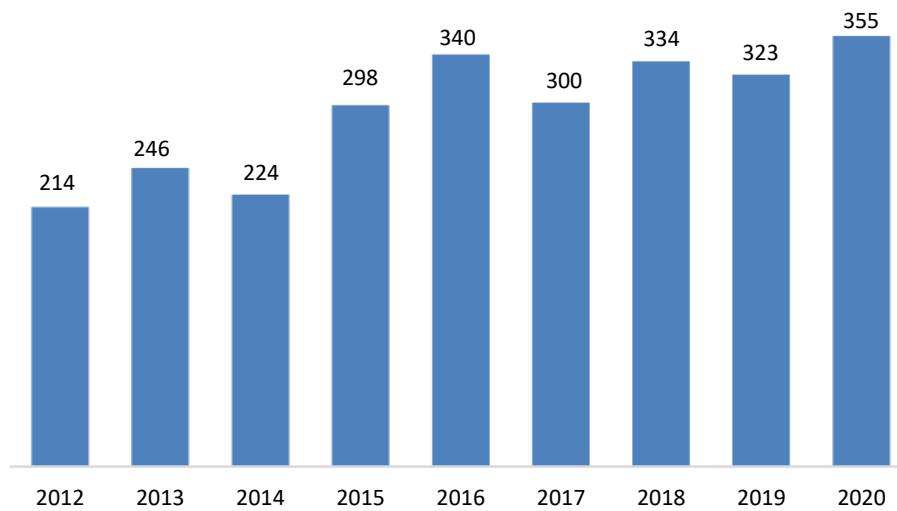
### 4. RESULTS

The Results of The Specialized Search Are Presented Below. At First, The Results Of The Bibliometrics Carried out on The Scopus Database are Presented. The search equation used was (title-abs-key ("international financial reporting standards") or title-abs-key ("ifrs")) and (limit-to (pubyear, 2020) or limit-to (pubyear, 2019 ) or limit-to (pubyear, 2018) or limit-to (pubyear, 2017) or limit-to (pubyear, 2016) or limit-to (pubyear, 2015) or limit-to (pubyear, 2014) or limit-to (pubyear, 2013) or limit-to (pubyear, 2012))

#### 4.1 Scientific production

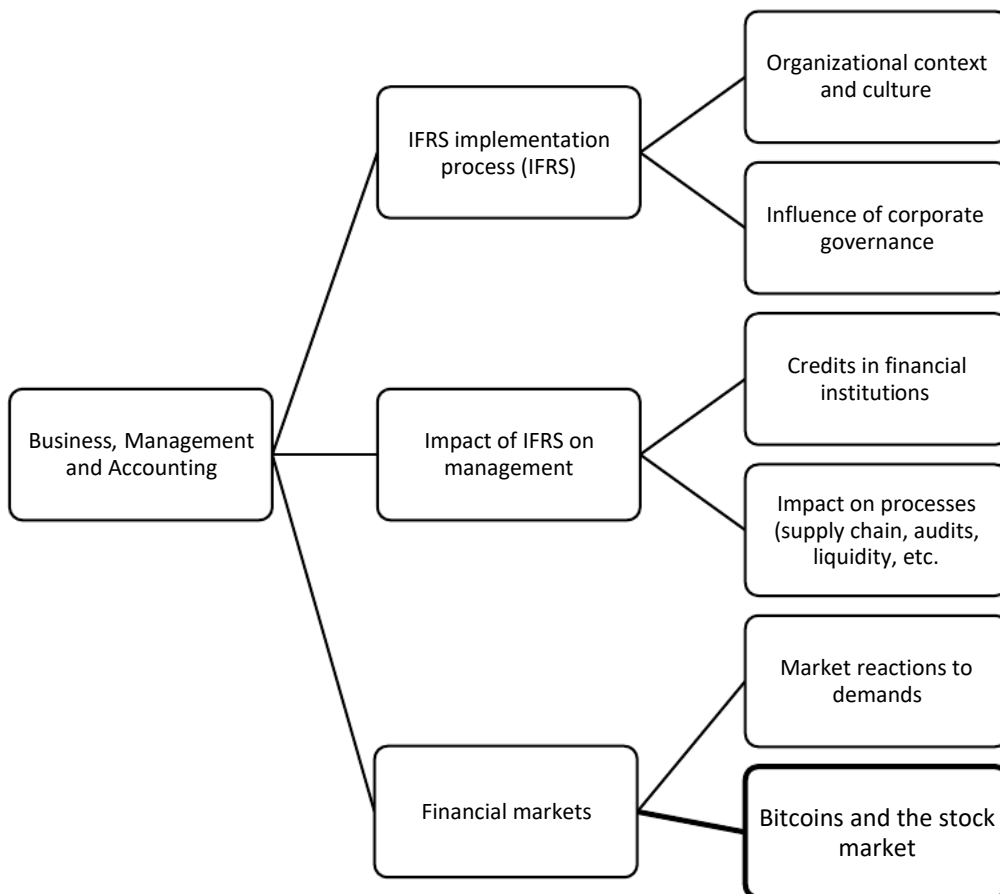
The results obtained through the search equation developed show a total of 2,434 research articles for the period 2012-2020. Thus, a growing trend can be inferred in the number of scientific publications since 2012, with a maximum in 2020 of 345 publications (see figure 1).

The related areas of knowledge include Business, Management and Accounting with 1,980 products and Economics, Econometrics and Finance with 1,423 publications. The area of Social Sciences follows by far with 430 publications



**Figure 1** Scientific production (2012-2020)

Source Own elaboration based on Scopus

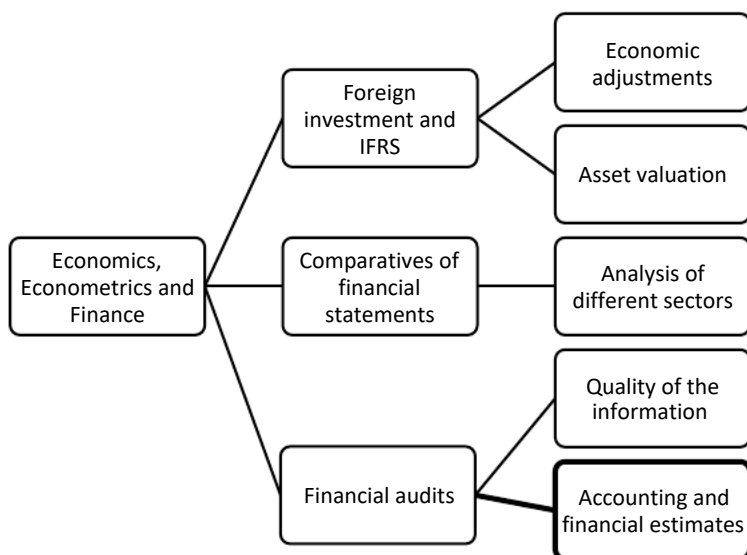


**Figure 2** Research Trends for Business, Management and Accounting

Source Own elaboration based on Scopus

Within the Business, Management and Accounting area, the sub-areas of IFRS implementation processes (IFRS) stand out, the impact of IFRS on the management of companies and financial markets. Faced with the sub-area of IFRS implementation processes

(IFRS), aspects such as the influence of the context and organizational culture and the influence of corporate governance on the implementation of IFRS stand out. On the other hand, in the sub-area of impacts of IFRS on management are aspects such as the impact on loans in financial institutions and the effects on processes such as the supply chain, audits and liquidity, among others. Finally, in the financial markets subarea, issues related to market reactions to the requirements of IFRS and bitcoins emerge (see figure 2).

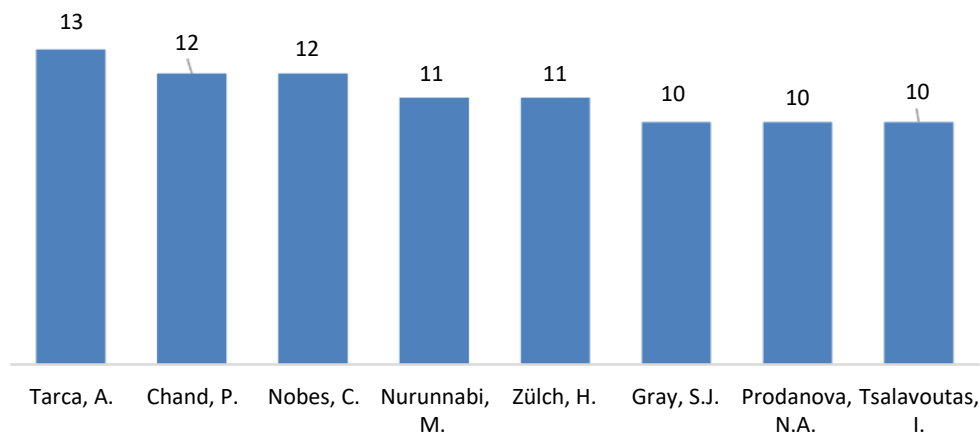


**Figure 3** Research Trends for Economics, Econometrics and Finance

Source Own elaboration based on Scopus

For the area of Economics, Econometrics and Finance, sub-areas of foreign investment and IFRS, financial comparative studies and financial audits were found. In the foreign investment and IFRS subarea, aspects such as economic adjustments and asset valuation stand out. Likewise, the financial comparative studies subarea is oriented towards analyzes in different economic sectors around the world. Finally, the financial audits subarea focuses on aspects such as the quality of information and accounting and financial estimates (see figure 3).

#### 4.2 Outstanding authors in scientific production



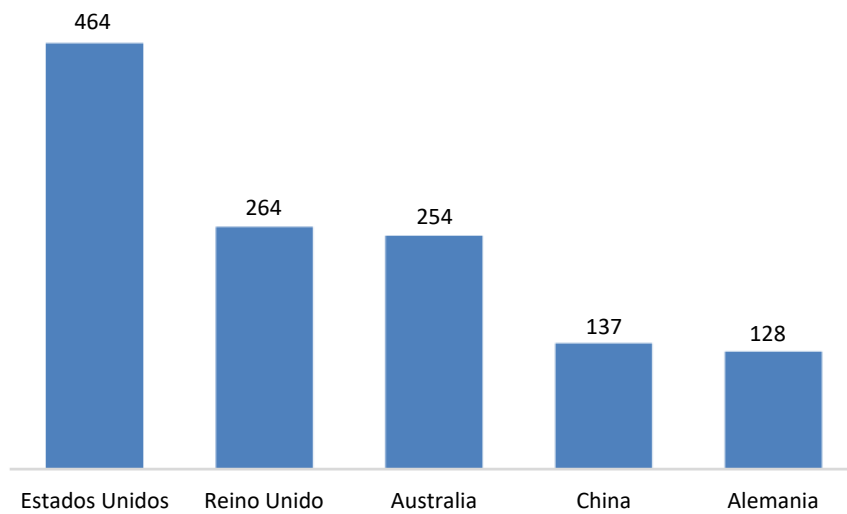
**Figure 4** Autores destacados

Fuente. Elaboración propia con base en Scopus. The related scientific production is led by Ann Tarca (University of Western Australia) with 13 research articles. They are followed by Parmod Chand (Macquarie University) and Christopher Nobes (University of London) with 12 products each. Later there are Mohammad Nurunnabi (Harvard University) and Henning Zülch (Universität Wien) with 11 publications each (see figure 4).

**Table 1** Recent scientific production

<b>Artículo</b>	<b>Año</b>	<b>Revista</b>
The IASB and Comparability of International Financial Reporting: Research Evidence and Implications	2020	Australian Accounting Review
Confirmation bias in accounting judgments: the case for International Financial Reporting Standards for small and medium-sized enterprises	2019	Accounting and Finance
Reviewing IFRS Goodwill Accounting Research: Implementation Effects and Cross-Country Differences	2018	International Journal of Accounting
The Pathway of Transition to International Financial Reporting Standards (IFRS) in Developing Countries: Evidence from Indonesia	2018	Journal of International Accounting, Auditing and Taxation

### 4.3 Countries with The Highest Number of Publications

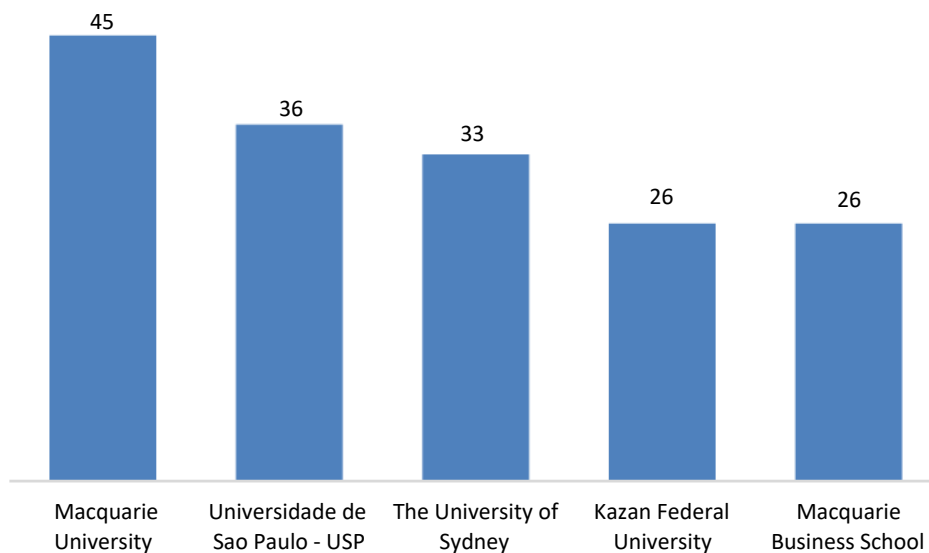


**Figure 5** Countries with scientific production (2012 - 2020)

**Source** Own elaboration based on Scopus

The country with the highest number of related publications is the United States with 434 documents, followed by far by the United Kingdom with 264 and Australia with 254. Later, there are China with 137 and Germany with 128 (see figure 5).

### 4.4 Outstanding Institutions With Scientific Production



**Figure 6** Institutions with scientific production

**Source** Own elaboration based on Scopus

Among the main institutions related to scientific production are Macquarie University with 45 publications. It is followed by the Universidade de Sao Paulo - USP with 36 and the University of Sydney with 33. Then there are Kazan Federal University and Macquarie Business School with 26 products each (see figure 6).

#### 4.5 Outstanding Journals with Scientific Production



**Figure 7** Outstanding journals with scientific production

Source Own elaboration based on Scopus

Among the journals with the highest number of related publications are the British journals Accounting In Europe with 85 publications, Australian Accounting Review with 64 products and International Journal Of Accounting with 57 research articles (see figure 7).

#### 5. CONCLUSIONS

From the results found, it can be concluded that the United States is the dominant country in the IFRS literature with a generous production in this regard, followed by countries such as the United Kingdom and Australia. On the other hand, UK journals contain the largest number of publications on the subject, while researchers from these three countries appear as the most prominent scholars on the subject.

On the other hand, the area of knowledge of Business, Management and Accounting stands out with the highest concentration of studies and within this, the sub-areas of IFRS implementation processes (IFRS), impact of IFRS on company management stand out and financial markets. Likewise, it is followed by the area of Economics, Econometrics and Finance, in which sub-areas of foreign investment and IFRS, financial comparative studies and financial audits were found.

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