



A bibliometric outlook of the most cited documents in business, management and accounting in Ibero-America

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ABSTRACT

Research on business, management and accounting (BMA) in the past century has been overwhelming. Regardless of its significance, regions such as Ibero-America have been overlooked from exhaustive studies on bibliometrics in the subject of BMA. Here, a bibliometric outlook of the subject of BMA in Ibero-America using 19 variables was conducted by analyzing the ten most cited documents in BMA in each country from 1996 to 2017 using the citation database Scopus. The main findings showed a rapid increase in intellectual production led by Spain and Portugal, which also constitute most of the citations. The majority of the most cited studies are behind paywalls. Institutional status (i.e., private or public) has a significant effect on AACSB accreditation. A negative concern that arises for the whole region, mainly Latin-America, is the discriminated use of a journal with predatory features.

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1. Introduction

Since the publication of the first volume of *Management Science* in 1954 by The Institute of Management Science at Columbia University, research on business, management, and accounting (BMA) has been exceptionally fertile. By performing a Boolean search on BMA research in English using the reference database Scopus, over one million documents indexed from 1996 to 2016 were found (Scopus, 2018). This tide of intellectual productivity over the past half-century requires bibliometric methods to comprehend the dynamics related to document production and impact by journals, authors, institutions, and countries; and the mutual influence between disciplines and the social capital of scholars from a quantitative angle (Zupic & Čater, 2015).

A review of the research on bibliometrics in BMA (Bib-BMA) outlined that the overall research has orbited around three main centers of gravity: BMA-related subjects, economic sectors, and specific journals. First, the main BMA-related subjects have been accounting (Chung, Pak, & Cox, 1992), business ethics (Ma, Liang, Yu, & Lee, 2012; Talukdar, 2011), business and management education (Arbaugh & Hwang, 2015), corporate social responsi-

bility (De Bakker, Groenewegen, & Den Hond, 2006), dynamic capabilities in strategic management (Vogel & Güttel, 2013), mergers and acquisitions (Ferreira, Santos, de Almeida, & Reis, 2014), global strategy (Peng & Zhou, 2006), supply chain management (Feng, Zhu, & Lai, 2017), and University-Industry-State collaboration (Abramo, D'Angelo, Di Costa, & Solazzi, 2009). The most studied subjects (i.e., more than three documents found) have been entrepreneurship (Merigó & Yang, 2017; Rey-Martí, Ribeiro-Soriano, & Palacios-Marqués, 2016; Wallin, 2012), marketing (Baumgartner, 2010; Fetscherin & Heinrich, 2015; Kim & McMillan, 2008) and innovation (Lazzarotti, Dalfovo, & Hoffmann, 2011; Randhawa, Wilden, & Hohberger, 2016; Yeo, Kim, Park, & Kang, 2015). Regarding economic sectors, the most studied economic sector has been the pharmaceutical industry (Koenig, 1983; McMillan & Hamilton, 2000; Narin & Rozek, 1988). Concerning Bib-BMA on specific journals, studies have analyzed the intellectual production of *Family Business Review* (Casillas & Acedo, 2007), *Journal of Product Innovation Management* (Durisin, Calabretta, & Parmeggiani, 2010), *Knowledge-Based Systems* (Cobo, Martínez, Gutiérrez-Salcedo, Fujita, & Herrera-Viedma, 2015), *Harvard Business Review* (Schulz & Nicolai, 2015) and *International Small Business Journal* (Volery & Mazzarol, 2015). The Spanish/Portuguese-language Bib-BMA literature has been focused on two main areas: BMA-related topics and specific journals. First, the main BMA-related subjects that were identified were accounting (Moya &

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Prior, 2008), corporate governance (Flórez-Parra, López-Pérez, & López-Hernández, 2014) and entrepreneurship (Arias, Restrepo, & Restrepo, 2016; Servantie, Cabrol, Guieu, & Boissin, 2016). An emergent subject that was not found in the English-language literature was women's access to management positions (Selva, Sahagún, & Pallarès, 2011).

To synthesize the most significant findings in Bib-BMA, the study conducted by Podsakoff, MacKenzie, Podsakoff, and Bachrach (2008) must be detailed. This study aimed to identify the universities and scholars that had the greatest impact on management from 1981 to 2004. The authors found that only a few universities and scholars accounted for most of the citations. The impact of university publications was explained by the university size, the number of PhDs awarded, research expenditure, and endowment assets. Meanwhile, the total number of publications, years in the field, graduate school reputation, and being a member of an editorial board had the highest effect on scholars' citations. It is important to note, also, that only 15 universities from outside the USA and none from Ibero-America formed part of this study.

In sum, the Bib-BMA studies reviewed had contributed substantially in, first, the production of knowledge, mainly focusing on the global north. Second, several common features such as the diagnosis and identifying determinants for high productivity and impact of studies, journals, business schools, and institutions (mostly universities). Third, mapping the social capital of authors and institutions through co-authorship analysis and the intellectual structure of the field through co-citations or bibliographic coupling. And fourth, identifying established or nascent research topics.

These contributions have raised additional research questions: What are the current bibliometric features of the research on BMA in the Spanish-speaking and neighboring countries (i.e., Brazil and Portugal)? What are the features of the most cited research on BMA in Ibero-America? What is the relation between business schools' status (i.e., private or public) and international accreditation (i.e., the Association to Advance Collegiate Schools of Business [AACSB]), impact (measured as Field-Weighted Citation Impact), authors' h-index, documents published, journals' h-index, Open Access (OA), and leading authors in Ibero-America? Considering the aforementioned research questions, the aim of this study is to comprehend the bibliometric features of the subjects of BMA in Ibero-America by analyzing the ten most cited documents in BMA in each country from 1996 to 2017 using the citation database Scopus. A comprehensive framework of 19 variables was developed to conduct this bibliometric overview. In the next section, the bibliometric outlook is presented and analyzed in the following order: sample, publications, citations and h-index, title text-mining analysis, authors, and status and accreditation. In the seventh section, ANOVAs and logistic regression were conducted to identify significant differences and effects among two groups of institutional status (i.e., private or public) in the Field-Weighted Citation Impact, authors' h-index, documents published, journals' h-index, leading authors, and open access. Afterward, the results are discussed. Finally, the conclusions are presented.

2. Methodology

2.1. Sample countries

The intention of studying a defined set of countries instead of either the most cited documents or authors/journals with the highest h-index in Ibero-America is to amplify the inclusion criteria of researchers and institutions from the region excluded by previous assessments. Considering the significant correlation between journal productivity and citations (Tsay & Ma, 2003) a study focused on analyzing the aforementioned variables in Ibero-America would be

biased towards documents published by researchers from Spain, Brazil, and Portugal, since these countries are the most productive. Meanwhile, researchers from Panama, Nicaragua, or Venezuela would be out of the sample. This broad inclusion would allow a refined understanding of each country instead of focusing on a select group. The sample of 22 countries and their respective two-letter code was: Argentina-AR, Bolivia-BO, Brazil-BR, Chile-CL, Colombia-CO, Costa Rica-CR, Cuba-CU, Dominican Republic-DO, Ecuador-EC, El Salvador-SV, Guatemala-GT, Honduras-HN, Mexico-MX, Nicaragua-NI, Panama-PA, Paraguay-PY, Peru-PE, Portugal-PT, Puerto Rico-PR, Spain-ES, Uruguay-UY and Venezuela-VE. The subject areas and categories of BMA according to SCImago (n.d.) are accounting; business and international management; business, management and accounting; industrial relations; management information systems; management of technology and innovation; marketing; organizational behavior and human resource management; strategy and management; and tourism, leisure and hospitality management.

2.2. Data sources

Two of the most popular data sources for scientometrics studies are Clarivate Analytics' Web of Science (WoS) and Elsevier's Scopus. Scopus was selected for the following reasons: institutional access; greater journal coverage (Scopus: 20,346 journals vs. WoS: 13,605 [149% more journals]); greater social sciences coverage (Scopus: ≈25% vs. WoS: ≈15% as a proportion of Ulrich's periodicals directory); greater coverage of both articles and journals published by countries in Ibero-America (e.g., Spain and Brazil); overlapping coverage (≈84% of active titles in WoS were also indexed in Scopus); and the recent implementation of the Field-Weighted Citation Impact (FWCI) (Gavel & Iselid, 2008; Mongeon & Paul-Hus, 2016). The starting point for the analysis was fixed as 1996 because Scopus has only been adding references since then (Scopus, 2015). Information about authors and institutional status (private, public, private-public or multilateral) was searched on the institutional websites or Wikipedia. The AACSB website provided information on accredited business schools. The dataset used in this study can be accessed in the following permanent link: <http://bit.ly/2Y92BdQ>.

2.3. Variables

Table 1 presents the 19 variables used to conduct the bibliometric outlook.

3. Results

3.1. Regional and countries overview 1996–2017

The increase of documents published by researchers from Ibero-America in BMA has been remarkable, with 51,082 documents published from 1996 to 2017. The total number of publications per year has increased, rising from 235 documents in 1996 to 6,564 in 2017. There were two outliers: Spain and Brazil. Both countries published 33,471 documents during 1996–2017 (65% of the total). A Pareto distribution emerged since Spain, Brazil, Portugal, and Mexico (20% of the countries) published 43,233 documents (84% of the total) (Fig. 1). Table 1 presents the top ten most cited studies of the sample. Six out of ten articles were published by at least one author from Spain. The main topics were related to innovation and strategy, innovation regional systems, social entrepreneurship, and entrepreneurial universities. Two journals published more than two studies: *Research Policy* and *Journal of Management Information Systems*.

Table 1
Variables used in the study.

Variable	Definition
1 Country affiliation	Author's country of affiliation. Source: Scopus
2 Type of document	An article, a book, a book chapter, or a conference paper. Source: Scopus
3 Open access	Whether the document is available via open access. Source: Scopus
4 Citations	The number of citations of a given document. Source: Scopus
5 Field-Weighted Citation Impact (FWCI)	The number of citations received by a document compared with the average number of citations received by all other similar publications. The FWCI for a set of N publications is defined as: $FWCI = \frac{1}{N} \sum_{i=1}^N \frac{c_i}{e_i}, (1)$ Where c_i represents citations received by publication i and e_i represent the number of citations expected to be received by all similar publications in the publication year and the following 3 years. $FWCI > 1.00$ indicates that the publication has been cited more than would be expected (e.g. 2.20 means that it has been cited 120% more than the global average). Source: Scopus
6 Authors	The number of authors of a given document. Source: Scopus
7 Year	Year in which a document was published. Source: Scopus
8 Name	Name of the first author (in order of appearance) with at least one affiliation to any organization from Ibero-America. Source: documents
9 Gender	Gender (male or female) of at least one author with at least one affiliation to any organization from Ibero-America. Source: Scopus and authors' websites (institutional or Google Scholar)
10 Lead author	Whether the author with at least one affiliation to any organization from Ibero-America figured as the lead author. Source: Scopus
11 Documents	The number of documents published in Scopus by the author with at least one affiliation to any organization from Ibero-America. Source: Scopus
12 Author h-index	H-index of the author with at least one affiliation to any organization from Ibero-America. An entity, whether an author or a journal, has an index of h if h of the author's or journal's papers have at least h citations each and the remaining papers have $\leq h$ citations each (Hirsch, 2005). For instance, Hirsch has an h-index of 55 (Scopus, 2018), which means that his 55 most cited papers have each received at least 55 citations. Source: Scopus
13 Journal h-index	H-index of the journal in which the article was published. Source: SCImago
14 Affiliation	Name of the organization. Source: Scopus
15 Status	Private or public. Source: institutional websites
16 Title	Title of the document. Source: Scopus
17 Keywords	Document's keywords. Source: Scopus
18 Source name	Name of the source (e.g. journal, proceedings, or book). Source: Scopus
19 AACSB accreditation	Whether the business school with which the author was affiliated is currently accredited by the AACSB. Since its foundation, the AACSB has been virtually unchallenged in its accreditation activities and its standards are acknowledged as some of the most rigorous and selective in business education (Durand & McGuire, 2005). Both research output and impact are included in the AACSB's standards (Standard 2: Intellectual contribution, impact, and alignment with the mission statement) (AACSB, 2017, p. 18). Source: AACSB (2018) website.

Source: Author.

This table presents the 19 variables used in this study and their respective definition/description and sources.

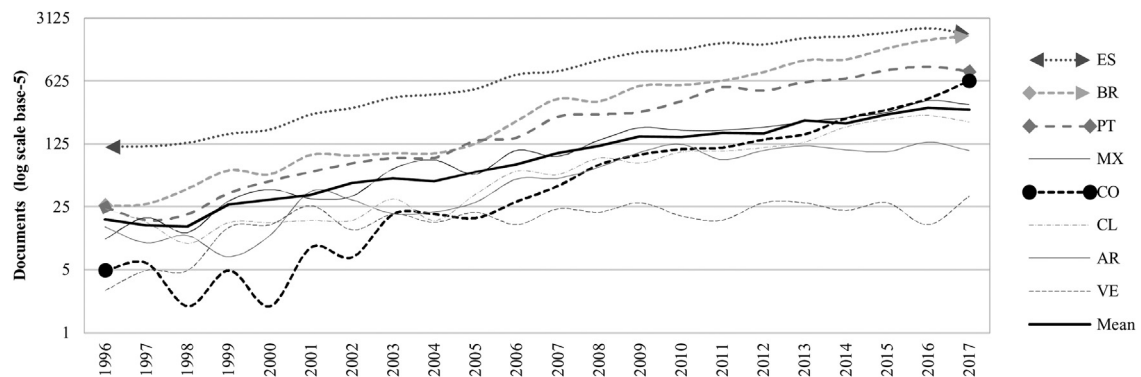


Fig. 1. Top eight countries using a log-5 scale 1996–2017. Source: Scopus (2018).

3.2. Publication overview

It was planned to analyze the ten-most cited documents from each of the 22 countries of Ibero-America ($n = 220$) but the sample was reduced to 208 since documents from Honduras, Paraguay, and El Salvador did not have at least one citation. The most cited documents were pay-walled (94%) English-language (78%) articles (75%). Other types of publications were book chapters (15%), conference proceedings (9%), and books (1%). Table 2 presents the top ten most cited articles of the sample. The second and third

most common languages were Spanish (17%) and Portuguese (5%), which was a paradox in a Spanish-Portuguese dominated region. Only 6% of the documents were OA. The journal *Espacios* was the *most desired* journal in the region since researchers from 13 out of 22 countries had published at least one article. This is critical in countries such as Brazil 2,896 articles, Colombia 464 and Venezuela 101. The data also showed that this journal has published 4,500+ documents since 2007, whereas the *Academy of Management Journal*, a top-tier journal, has published only 1,636 documents since 1975.

Table 2
Top-10 most cited articles from Ibero-America.

	Country	Name of author from Iberoamerica	Affiliation	Year	Title of the document	Journal name	Journal h-index	Cites	FWCI	# Authors	Status (Priv = 1; Pub = 0)	Open Access (1 = Y; 0 = N)
1	ES	Garriga, Elisabet	IESE	2004	Corporate social responsibility theories: Mapping the territory	Journal of Business Ethics	120	1000	8,07	2	1	0
2	MX	Leidner, Dorothy E.	ITESM	1998	Is anybody out there? Antecedents of trust in global virtual teams	Journal of Management Information Systems	119	988	12,85	3	1	0
3	CL	Loayza, Norman V.	Central Bank of Chile	2000	Finance and the sources of growth	Journal of Financial Economics	194	927	18,73	3	0	0
4	ES	Sierra, Carles	CSIC	2001	Automated Negotiation: Prospects, Methods and Challenges	Group Decision and Negotiation	47	912	48,43	6	0	0
5	ES	Veugelers, Reinhilde	IESE	2006	In search of complementarity in innovation strategy: Internal R & D and external knowledge acquisition	Management Science	198	861	19,84	2	1	0
6	ES	Uranga, Mikel Gómez	University of the Basque Country	1997	Regional innovation systems: Institutional and organisational dimensions	Research Policy	178	827	8,56	3	0	0
7	BR	Terra, Branca Regina Cantisano	Universidade do Estado do Rio de Janeiro	2000	The future of the university and the university of the future: Evolution of ivory tower to entrepreneurial paradigm	Research Policy	178	810	0	4	0	0
8	ES	Mair, Johanna	IESE	2006	Social entrepreneurship research: A source of explanation, prediction, and delight	Journal of World Business	80	775	8,57	2	1	0
9	ES	Bobadilla, Jesús	Universidad Politécnica de Madrid	2013	Recommender systems survey	Knowledge-Based Systems	74	657	53,07	4	0	0
10	PT	Markus, Mary Lynne	Universidade Tecnica de Lisboa	2001	Toward a theory of knowledge reuse: Types of knowledge reuse situations and factors in reuse success	Journal of Management Information Systems	119	647	14,35	1	0	0

Source: [Scopus, 2018](#); institutional websites; Wikipedia; and AACSB, 2018.

3.3. Citations and h-index overview

The results of the descriptive analysis were: average citations (137.2), average FWCI (5.3), average year (2007.6), and average journal h-index (88.44). The top five countries in terms of document citations were Spain (745), Portugal (437), Brazil (315.7), Mexico (286.4), and Chile (242.4). The top five in terms of FWCI were Spain (20.8), Colombia (20.4), Mexico (16.1), Portugal (11.7), and Brazil (7.6). Regarding the top five countries in terms of their journal h-index, Chile (133.6), Uruguay (131.6), Bolivia (125.5), El Salvador (124.2), and Portugal (123.1), showed a higher quantity of documents published in journals with a superior h-index. It was found that the methodological strategies of the 50 most cited documents were quantitative (44%), theoretical (35%), qualitative (13%) or mixed (8%). Fig. 2-Left shows a skewed citation distribution since 1% of the documents ($n=2$) had between 951 and 1,000 + citations, whereas 48% ($n=94$) had between 1 and 50 citations. The citation distribution is being skewed daily. During a two-week period (end of January and beginning of February 2018), 17 of the 20 most cited documents received 2.2 citations on average. The outlier article was: "A new criterion for assessing discriminant validity in variance-based structural equation modeling", which received five citations (+1.3%).

3.4. Author overview

The average number of authors per paper is 4.34. In 48% of the papers, authors with an affiliation in the region figured as the lead author. A document worth mentioning in terms of the number of authors is *Culture-specific and cross-culturally generalizable implicit leadership theories: Are attributes of charismatic/transformational leadership universally endorsed?* This document has over twenty authors from several countries around the world. In terms of gender, only 26% female authors figured as leading author. On average, female researchers (176) were cited more often than male researchers (137). Males, on the other hand, had a higher FWCI (females: 4.0, males: 6.1) and h-index (females: 4.8, males: 8.0) on average. The top five countries by the average number of authors were Chile (8), Bolivia (7.2), Brazil (6.9), Guatemala (6.2), and Paraguay (6.2). Spain, Paraguay, Colombia, and Cuba were ranked first in terms of lead authors (70%) followed by Nicaragua (60%).

The most productive authors in terms of the average number of documents published in Scopus were from Panama (81.3), Spain (54.9), Chile (51.7), Mexico (49.8), and Portugal (36.6). This landscape changed abruptly in relation to the average h-index of authors, where the top five countries were Nicaragua (19.9), Paraguay (17.8), Panama (15.8), Chile (14.6) and Uruguay (11.3). Regarding participation by gender, female authors affiliated with organizations from Venezuela and Panama accounted for 50% of their country's documents, while those from Paraguay, Dominican Republic, and Spain accounted for 40%. Fig. 2-Right shows a skewed distribution in relation to documents and authors, as 1% ($n=2$) of the authors had published between 340 and 380 documents, while 55% ($n=114$) had published between one and ten documents. Regarding status and accreditation, 53% of the organizations were private, while 47% were public. Only 32% of business schools are currently accredited by the AACSB. Private organizations dominated BMA publishing in Peru (100%), Paraguay (90%), Mexico (90%), Costa Rica (80%), and Bolivia (80%). Conversely, the public sector dominated in Venezuela (100%), Panama (100%), Dominican Republic (78%), Portugal (82%), and Uruguay (70%). The top-ranked countries to have at least one author affiliated with an AACSB-accredited business school were Mexico (80%), Chile (70%), Portugal (70%), Guatemala (60%), and Spain (50%).

Table 3

Logistic regression results for institution status as an independent variable, and lead author, AACSB accreditation and documents in OA as dependent variables.

	Dependent variables		
	Leading Author Coef. – Std. Err.	AACSB Coef. – Std. Err.	Open Access Coef. – Std. Err.
Constant	-.22 – (.28)	.94 – (.31)	-1.15 – (.69)
N	204	204	204
LR chi2	.61	9.27	3.15
Pseudo R ²	.0022	.04	.036
Prob > chi2	.44	.00*	.07

Source: Scopus (2018). * $p < .05$.

This table presents the logistic regression for institution status as an independent variable, and lead author, AACSB accreditation and documents in OA as dependent variables.

3.5. Significant differences between groups of universities' status in FWCI, authors' h-index, documents published, journals' h-index, leading authors, and open access; and the effect of institutional status on leading authors, AACSB accreditation, and documents in OA

Four ANOVAs (one-way analysis of variance) were conducted in *Stata 14* to identify significant differences between two groups of universities (group 1: private and group 2: public) in FWCI, authors' h-index, documents published by authors, and journals' h-index. There were no significant differences between groups at the $p < .05$ level in either the FWCI [$F(1, 202) = .00, p = .96$], authors' h-index scores [$F(1, 202) = .03, p = .86$], number of documents published by authors [$F(1, 202) = .66, p = .42$], nor journal h-index score [$F(1, 202) = .66, p = .42$]. Logistic regression applied to explore the effect of institutional status on leading authors, AACSB accreditation, and documents in OA, showed that institutional status significantly predicted whether the institution was accredited by the AACSB [$\chi^2(1, N = 204) = 3.15, p = .00$] (Table 3).

4. Discussion

The intellectual output in BMA in Ibero-America has been growing. Spain has been a powerhouse in terms of both productivity and influence. Spain is also the top country in terms of the average number of citations (745) and FWCI (20.8). Business schools in Spain have made a name for themselves, with five being AACSB-accredited. There were also countries in Latin America such as Uruguay (131.6), Bolivia (125.5), and El Salvador (124.2) that had articles published in journals with the highest h-index and without AACSB-accredited business school. However, the region as a whole is barely cited in BMA globally. For instance, Garriga's (the most cited author in the sample) number of citations was just 5% of the number of citations of the global-scholar Kathleen Eisenhardt affiliated with Stanford University.

The predominant type publication is the article, although most are behind paywalls. Researchers, institutions, students, practitioners, and policymakers without the resources required to have access to the *oligopoly of academic publishers in the digital era* (Larivière, Haustein, & Mongeon, 2015) are being excluded from knowledge. Forty-eight percent of the journals in which researchers from the region have published are OA, *Espacios*, the most desired journal for BMA publishing, among them. The quality of *Espacios* is another story although. Ten out of the 32 articles published in vol. 39, No. 2 in *Espacios* were analyzed. The time frame from submission to publication was one month (six days in two cases). Such practices are typical of predatory editorials. The discussion should not be restricted to the prevalence of OA journals, but which journals have reached high quality/ethical standards.

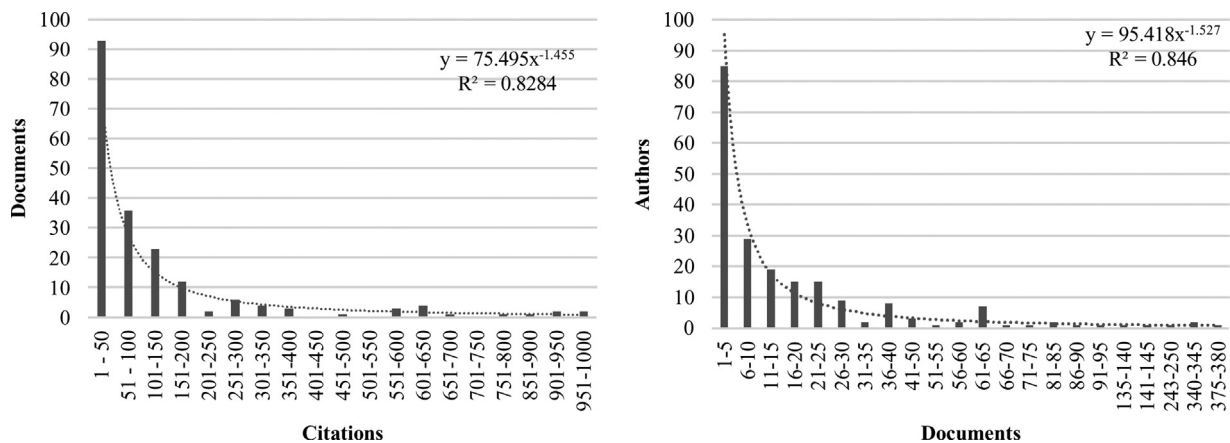


Fig. 2. Left: Numbers of citations and documents. Right: Numbers of documents and authors. Source: Scopus (2018).

Alternatives proposed by experts (e.g. Isidro Aguillo-Webometrics Ranking Web editor) include the creation of an OA mega-journal (e.g. *Science* or *Nature*) crowdfunded by regional science and technology institutions.

The lower percentage of OA articles among the most cited is a straightforward suggestion for business schools to design and implement strategies to adopt the strengths of the OA agenda. It was estimated that at least 28% of the scholarly literature is OA (and growing). Also, OA articles received 18% more citations (Piwowar et al., 2018). The Berlin Declaration (Max Planck Institute, 2003) outlined several recommendations for institutions in this line, such as “encouraging our researchers/grant recipients to publish their work according to the principles of the open access paradigm. . . [or] advocating that open access publication be recognized in promotion and tenure evaluation”. Regarding language, “global business speaks English” (Neeley, 2012). Spanish and Portuguese, however, are not far behind as hub languages (Ronen et al., 2014).

As Podsakoff et al. (2008) argued, a highly skewed distribution of documents and citations also was found, whereby a small percentage of documents (1% were responsible for most of the citations 951–1,000). This distribution is becoming increasingly skewed each week. This is another evidence of the “Matthew effect” in science proposed by Merton (1968). The advance in knowledge now relies more on *packs* than *lone wolves*. The average number of authors per document has gradually increased from 2.7 in 2000 to 4.2 in 2015, an average annual growth rate of 10%. The regional average is over 2.8 which is the average in management (Acedo, Barroso, Casanueva, & Galán, 2006). This reflects a trend toward global scientific collaboration (Wuchty, Jones, & Uzzi, 2007). Female authors were underrepresented. Less than 30% of the leading authors in the sample were female, a similar number found by Podsakoff et al. (2008). This number is also similar to the global scenario since 28.8% of researchers worldwide are female (UNESCO, 2017). The percentage of female researchers in the top three countries in Latin America were very similar: Venezuela (56.3%), Panama (48.2%), and Paraguay (51.7%) (UNESCO, 2017).

Institutional status showed no significant differences in the FWCI, authors' h-index, authors' documents output, or journals' h-index. Logistic regression, however, showed a significant effect of institutional status on AACSB accreditation. This finding supports Podsakoff et al. (2008) claim on the effects of research expenditures and endowment assets on universities' publications impact. Public universities and business schools regularly suffer budget cuts that constraint their capacity to maintain research excellence and reputation (Quacquarelli Symonds (QS) (2013)), a crucial factor for achieving international accreditations. The impact factor is not free of controversy neither from its author nor the publishing

elite (Callaway, 2016) yet the paradigm persists among management scholars. A report published by the Academy of Management (Haley, Page, Pitsis, Yu, & Rivas, 2017) found that the two most important indicators of scholarly impact are scholarly articles published in top-tier journals, and citations. The report also stated that the least important audience for scholars was students which seems linked with the low positioning of teaching materials (e.g., case-studies) among the sample.

5. Conclusions

The BMA research in Ibero-America is passing through a complex period. It has achieved its highest level of output over the years but a closer examination reveals a few powerhouses in terms of production and influence (i.e., Spain, Brazil, Portugal, and Mexico). A detailed examination of those countries' research policies, incentives, research centers, allies, and business research support programs may help to identify best practices for other countries in a region that exhibit some social and historical similarities. AACSB accreditation standards provide a good benchmark. These practices should encourage researchers from the region to strengthen their competencies and intrinsic motivation to enter in the global discussions without discarding their local relevance (i.e., *glocalizing* research). A noteworthy discussion is the creation of an OA mega-journal funded by regional science and technology institutions to compete with the top-tier journals. The clear advantage of private over public institutions in terms of infrastructure, recruitment of researchers, and research funding to pursue international accreditations and visibility, increase the gap. Public institutions have an opportunity in the underexploited (high-quality) OA scenario. Besides the traditional measures for monitoring impact, studies on altmetrics seem to consider a broader set of contexts in which BMA researchers also could debate and disseminate their research results.

This study provided a comparative analysis between countries which allows more inclusive criteria for those with low production or impact in BMA. The OA database enables researchers and practitioners to replicate or triangulate the data in further bibliometric studies; to locate influential researchers or organizations within countries; to identify future research allies; to study whether research activities have been focused on the private sector; and to identify the most influential BMA journals in the region. National science and technology institutions will be able to measure how close, or far, their countries are to other countries in terms of output and impact.

This study has two main limitations. Whilst Scopus is more inclusive than WoS in several BMA-related aspects, open platforms

such as Google Scholar, Microsoft Academic, and Dimensions, as the latter is gaining maturity, have been showing overlapping and broad reach compared to Scopus or WoS. Further studies could compare the regional differences in terms of BMA subjects between Scopus and WoS and other databases such as Google Scholar and Dimensions. In addition, methodological appraisals such as co-authorship or co-citation analysis and altmetrics would amplify the understanding of the researchers' social capital and impact. Comparative analyses considering additional groups of countries such as Eastern Europe or Asia would help to identify the framework in which the intellectual production from Ibero-America has been finding its place in the global dialogue of the BMA research.

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