

Resources and Capabilities From Their Very Outset: A Bibliometric Comparison Between Scopus and the Web of Science

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Abstract

The bibliometric method has proven to be a powerful tool for the analysis of scientific publications, in such a way that allows rating the quality of the knowledge generating process, as well as its impact on firm's environment. This article presents a comparison between two powerful bibliographic databases in terms of their coverage and the usefulness of their content. The comparison starts with a subject associated to the relationship between resources and capabilities. The outcomes show that the search results differ between both databases. The Web Of Science (WOS), has a greater coverage than SCOPUS has. It also has a greater impact in terms of most cited authors and publications. The search results in the WOS yield articles from 2001, while Scopus yields articles from 1976, however, some of the latter are inconsistent with the topic being searched. The analysis points to a lack of studies regarding resources as foundations of firm's capabilities; as a result, new research on this field is suggested.

Keywords: bibliometric analysis, capabilities, resources, resource based view of the firm, Scopus, Web of Science

1. Introduction

Scientific research expressed in written documents is the driving force of science (Van Raan, 2003), also, the continuous growth of scientific production, as well as its collection in databases, has boosted the use of bibliometric analysis (Filippo & Fernández, 2002; Solano López, Castellanos Quintero, López Rodríguez del Rey, & Hernández Fernández, 2009). This method of quantitative character provides information on the growth, evolution, structure, and visibility of the literature, as well as the tendencies of a specific topic using diverse indicators (Albort-Morant and Ribeiro-Soriano 2016; Van Raan 2003). The most used ones are known as basic metrics (Albort-Morant, Leal-Rodríguez, Fernández-Rodríguez, & Ariza-Montes, 2017; Haustein & Larivière, 2015). They measure the productivity of academics, countries and indexed journals and also analyze the databases information retrieval capacity (Falagas, Pitsouni, Malietzis, & Pappas, 2008) and the impact of papers and journals, measured through the number of citations received and the H index (De Bakker, Groenewegen, & Den Hond, 2005).

In spite of the benefits described below, bibliometric analysis seems to differ when the work is performed using different databases, which may lead to odd results, and consequently, may indeed, vary the course of a research, depending on the selection made. These facts turn the choice of the database into an even more relevant decision. Considering the above, this document presents a bibliometric comparison between WOS and Scopus: two powerful world-wide known databases. The study tries to demonstrate that coverage, impact and specific results of a certain topic-search, may vary from database to database. To do so, the same search equation was used on documents associated to the relationship between resources and capabilities of firms, according to the Research Based View Theory of Firms (RBV). The comparison allows to identify differences between both databases, while offers a general overview of the subject, reveals the progress of the research over time and the areas that require more theoretical and empirical research. It also serves as an introductory reference and preliminary focus for new researchers who wish to delve into the subject.

The document begins with the bibliometric analysis; then describe the methodology used to analyze the information obtained from the databases; followed by the discussion of the results, and ends with the conclusions of the study.

1.1 Bibliometrics and Its Importance

Bibliometrics is understood as the quantification of the production and consumption of bibliographic information (Rueda-Klaussen Gómez, Villa-Roel Gutérrez, & Rueda-Klaussen Pinzón, 2005). It dates back to the beginning of the 20th century (Bordons & Zulueta, 1999; Haustein & Larivière, 2015; Osareh, 1996), when it was used as a tool for the development of journal collections (Haustein and Larivière 2015). However, from the last two decades, this discipline has experienced an increased importance due to technological advances (Bordons & Zulueta, 1999), and also due to the use of mathematical models and refined statistics, which have allowed to examine the scientific activity and productivity on an easier way (Albort-Morant et al., 2017; Albort-Morant & Ribeiro-Soriano, 2016; Daim et al., 2006). By using a bibliometrics set of tools, evaluations on the research quality can be performed, and concrete measures of productivity by journals, countries, and authors are feasible (Abramo and D'Angelo 2011).

Notwithstanding that numerous academics point at scientific databases as the main source for powerful bibliometric analysis (Granda-Orive et al., 2013), bibliometrics extensively depends on the database chosen. Few years ago, the WOS was the only practical tool used to measure the impact of articles, journals, and researchers. Nevertheless, since 2004, other databases like Scopus and Google Scholar have also been used for this purpose (Abramo & D'Angelo, 2011; Kulkarni et al., 2009). This fact has facilitated the searching for a specific topic and the analysis of the content's importance (Falagas et al., 2008). Bibliometrics has then become an important tool for researchers; therefore, in the literature we can find bibliometric studies that focus on counting citations of a particular topic (Bauer & Bakkalbasi, 2005; Falagas et al., 2008; Jacsó 2005; Kulkarni et al., 2009; Meho & Rogers, 2008; Noruzi, 2005), or the number of articles and types of journals in a specific area of knowledge within certain period of time. These studies share a common objective, which is to identify the importance of the manuscripts, and, to measure the increase in knowledge in a particular area and its tendencies. As important as these measurements, is to grade the consistency and differences in search results among different databases. For this particular research, the WOS and Scopus were selected given their strong coverage on peer-reviewed journals (Kulkarni et al., 2009). The base for the comparison was "the relationship between resources and capabilities"; a topic that happens to be relevant in the field of strategic management, considering the importance of the resources and capabilities as sources of competitive advantages (Lache, León, Bravo, Becerra, & Forero, 2016; Teece, Pisano, & Shuen, 1997; Torres-Barreto & Antolinez, 2017; Torres-Barreto, Martínez, Meza-Ariza, & Molina, 2016). Related to this research topic, there are numerous references in the literature that highlight resources as founders of capabilities (Helfat & Peteraf, 2003; Schriber & Löwstedt, 2015), and some others that remark a relationship between R&C and firm's productivity, or financial results (Cruz, López, & Martín, 2009; Escandón, Rodríguez, & Hernández, 2013; Ray, Barney, & Muhanna, 2004; Rivera & Figueroa, 2013). Another group of studies point out a relationship between R&C and the creation of competitive advantages (Barney, 1991, 2001, 2007; Dierickx & Cool, 1989; King, 2007; Ma, 1999a, 1999b; Morgan, Kaleka, & Katsikeas, 2004; Phusavat & Kanchana, 2007; Priem & Butler, 2001b, 2001a; Santhapparaj, Sreenivasan, & Loong, 2006; Sirmon, Hitt, & Ireland, 2007; Torres-Barreto, 2017; Torres-Barreto, Mendez-Duron, & Hernandez-Perlines, 2016; Wernerfelt, 1984; Wiklund & Shepherd, 2003). Based on these previous findings, the intention of this paper is to compare the performance of two powerful databases with respect to a specific search equation and by this way, to deal out with the problem of differences among search results that may lead a researcher to alter the course of their investigation.

2. Method

In this study we conducted an analysis of productivity, publications and author indicators. We intended to compare the results obtained by using the same search equation in both databases. WOS and Scopus coincide in providing scientific information of articles as well as other academic publications, however, the first source of difference identified was related to the grouping by areas of knowledge. While in WOS we had: economics, administration, and business, in Scopus we had: business, administration-accounting, economics, econometrics, and finance. This fact was considered as a preliminary cause of differences among databases search results.

The next step was to compare the productivity (through the number of publications); and the impact of publications (through the number of citations) (Albort-Morant et al., 2017; Albort-Morant & Ribeiro-Soriano, 2016; Cadavid-Higueta, Awad, & Franco-Cardona, 2012). By measuring these two items, we also intended to determine how the academic interest on the relationship between resources and capabilities has grown over time.

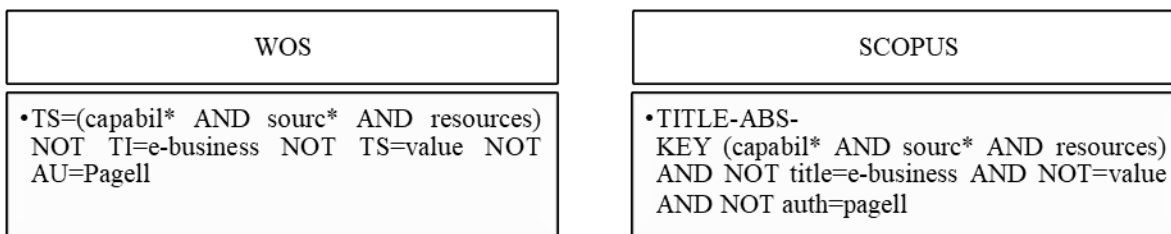


Figure 1. Search equations

Regarding the search equation used (See Figure 1), after being built-up it was validated through consultation of various experts. Boolean operators were used to include, group and exclude terms of interest. The search commands lightly differ from one equation to the other due to small differences in the configuration language between both databases. In this case, “source” was the word that better define the relationship between resources and capabilities in different articles. Furthermore, the terms “e-business” and “value”, were excluded since the many manuscripts that contained them, didn’t relate to the subject of study. It also happened with the author: Pagell. We also selected the areas of knowledge according to the importance of the subject in the field of strategic management and, the interval of the study was 2001 to 2016.

3. Results

By executing the search equation in both databases we obtained 258 documents in the WOS, (237 were articles). And 189 in Scopus, (106 articles). Since this study exclusively considers the research articles; the remaining documents were excluded. Within this search results we analyzed:

- The number of research articles that explore the relationship between resources and capabilities (2001 to 2006).
- The countries with higher productivity.
- The more productive authors.
- The journals with a higher number of publications.
- The most cited articles.

The next finding was related to the coverage of databases, having found 39 articles that coincide in both of them. From those that do not coincide, 198 belong to the WOS and 67 to Scopus, pointing out a higher coverage by the WOS database. Regarding the databases effectiveness, we found that the percentage of articles that indeed study the relationship between resources and capabilities were 20% in the WOS Vs. 19% in Scopus, which indicates a marginal relevance of the WOS. It was also found that 19 articles have no citations in the WOS, while in Scopus there are 24 articles without any citations, which leads to the conclusion that the WOS articles are more visible and consequently more cited.

3.1 Comparison Regarding Year of Publication

The study of the relationship between R&C became relevant in the WOS since 2001, meanwhile in Scopus it began relevant in 1976; however, most of the Scopus publications are not specifically related to the study of the relationship among Resources and Capabilities, some of them analyse a particular resource, or review the relationship between strategy and competitive advantage, and, in some other cases the content of the article doesn’t precisely match the topic of study. Considering the previous facts, we may say that this topic became relevant in 2001 (see Figure 2).

Another item of study comprises the quantity of manuscripts published per year within the field of study. Both databases register at least 6 publications per year from 2001, and this number has been increasing over the next 15 years, keeping a growing tendency in Scopus, while registering some inflection points towards increase and decline in the WOS. The highest number of published researches was registered in 2010 for both databases (27 articles in WOS Vs. 12 in Scopus). Between 2014 and 2015 the number of publications was stable in the WOS, and this number decreased in 2016. Scopus exhibit a decreasing tendency from 2013 to 2016.

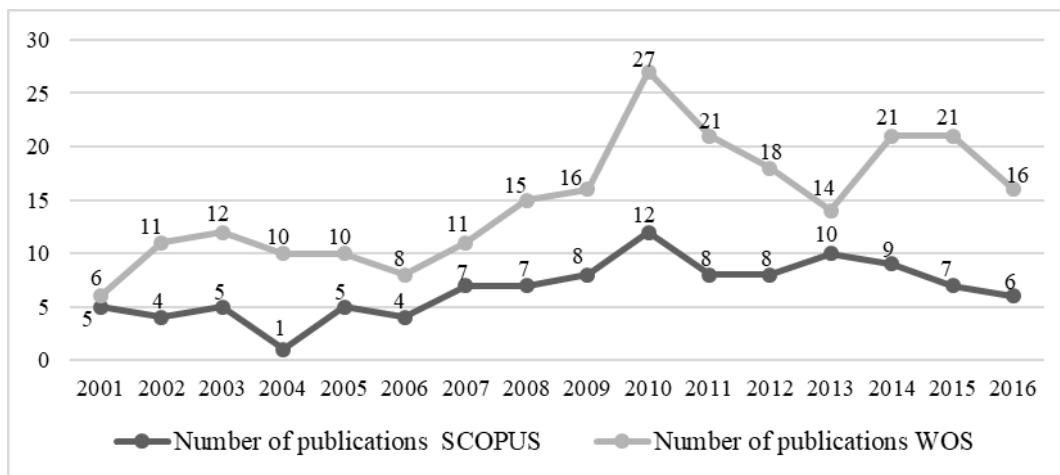


Figure 2. Evolution of the number of publications regarding the relationship between R&C.

Source: WOS and Scopus.

3.2 Comparison Regarding Productivity by Countries

Tables 1 and 2 show the top 20 countries by productivity. Productivity by country is measured through the total number of papers published per year (TP), the total number of citations (TC), the average number of citations per published paper (C/P) and the H-index. The analysis of both databases yields that the United States of America is positioned as the top country in terms of number of publications (WOS 100 Vs. Scopus 32 documents), it also exhibit the highest number of citations (WOS 5.122 Vs. Scopus 2.762) and the highest H-index (WOS 33 Vs. Scopus 18). These results could be attributed to the amount of money devoted to research in the United States, and also to the degree of access to databases by the side of researchers in that country.

For the rest of the countries the results vary from one database to the other: countries that have a leading productivity position in the WOS, do not maintain this position in Scopus, however, regardless of their position in the list of the top 20, the countries in both databases are mostly the same ones, except Singapore, Turkey, Belgium, Portugal and Hong Kong.

Further observation identifies that the highest productivity of a country does not suggest the highest number of citations. Such is the case of Belgium (3 articles and 287 citations in total) and Brazil (5 articles and 22 citations) See Table 1. Something similar occurs in Germany (2 articles and 121 citations. See Table 2). There are also some countries with a small number of citations, this could be due to the novelty character of this papers, or alternatively, that their works can be considered of less academic value.

For Belgium’s case, the paper with the highest number of citations refers to the relationship between the firms capability to relate to others within the same sector; and the resources generated by strategic alliances and acquisitions (Vanhaverbeke, Duysters, & Noorderhaven, 2002).

Table 1. Top 20 of productivity by country in the WOS

Rank	Country	TP	TC	C/P	H-index
1	United States	100	5.122	51,22	33
2	England	24	596	24,83	11
3	Spain	18	273	15,17	7
4	Australia	15	217	14,47	7
5	China	14	248	17,71	7
6	Taiwan	14	310	22,14	9
7	Germany	13	700	53,85	10
8	South Korea	11	110	10,00	7

9	France	10	514	51,40	9
10	Netherlands	9	693	77,00	9
11	Italy	8	202	25,25	3
12	Sweden	8	305	38,12	6
13	Canada	6	83	13,83	4
14	Denmark	6	304	50,67	3
15	Brazil	5	22	4,40	2
16	Singapore	4	192	48,00	3
17	Turkey	4	23	5,75	4
18	Belgium	3	287	95,67	3
19	Malaysia	3	2	0,67	1
20	Portugal	3	8	2,67	2

Table 2. Top 20 of productivity by country in Scopus

Rank	Country	TP	TC	C/P	H-index
1	United States	32	2.762	86,31	18
2	Australia	8	158	19,75	5
3	China	8	85	10,63	3
4	France	7	271	38,71	4
5	United Kingdom	7	61	8,71	4
6	Malaysia	5	6	1,20	1
7	Brazil	4	9	2,25	1
8	Russian Federation	4	49	12,25	2
9	Spain	4	43	10,75	2
10	Taiwan	4	28	7,00	2
11	Canada	3	105	35,00	2
12	Denmark	3	35	11,67	3
13	Sweden	3	24	8,00	2
14	Czech Republic	2	2	1,00	1
15	Germany	2	121	60,50	2
16	Hong Kong	2	144	72,00	2
17	India	2	1	0,50	1
18	Israel	2	20	10,00	2
19	Italia	2	205	102,50	1
20	Netherlands	2	38	19,00	2

Tables 3 and 4 show the number of papers published in the 10 most productive countries. The United States is in the top of the list for both databases, however, the reduced number of total papers published up to these days make evident that the connection between the set of resources that the company poses and the capabilities it develops still haven't been addressed significantly, leaving gaps open to being studied.

Table 3. Top 10 of countries by productivity. WOS. 2001-2016

Year	United States	England	Spain	Australia	China	Taiwan	Germany	South Korea	France	Netherlands
2001	3	0	0	2	1	0	0	0	0	0
2002	8	0	0	1	0	0	0	0	0	2
2003	6	0	0	0	0	1	0	0	2	1
2004	5	1	0	0	0	1	0	1	0	0
2005	8	1	0	0	0	1	0	0	0	0
2006	1	1	0	0	0	0	1	0	1	3
2007	2	2	0	0	0	2	0	0	1	0
2008	8	1	2	2	0	1	0	0	1	1
2009	10	1	1	2	1	0	1	1	2	0
2010	8	4	2	0	0	4	5	1	0	1
2011	7	2	3	0	1	0	2	2	1	0
2012	6	2	1	1	3	2	1	1	0	0
2013	8	1	1	1	2	1	0	2	1	1
2014	10	2	5	3	0	1	0	2	1	0
2015	9	1	1	0	2	0	3	0	0	0
2016	1	5	2	3	4	0	0	1	0	0

Table 4. Top 10 of countries by productivity - Scopus. 2001-2016

Year	United States	Australia	China	France	United Kingdom	Malaysia	Brazil	Russian Federation	Spain	Taiwan
2001	1	3	0	0	1	0	0	0	0	0
2002	3	1	0	0	0	0	0	0	1	0
2003	4	0	0	0	0	0	0	0	0	0
2004	1	0	0	0	0	0	0	0	0	0
2005	2	0	1	0	1	0	1	0	1	0
2006	1	0	2	0	0	0	0	0	0	0
2007	3	0	0	0	0	0	0	0	0	0
2008	3	1	1	0	0	0	0	0	0	0
2009	3	0	1	3	0	1	0	1	1	1
2010	2	1	1	0	0	1	0	1	0	1
2011	1	0	0	0	1	0	1	0	0	0
2012	2	0	0	0	0	1	1	0	0	0
2013	1	0	0	1	1	1	1	0	0	1
2014	3	0	1	0	2	0	0	0	0	1
2015	1	1	0	1	1	0	0	2	1	0
2016	1	1	1	2	0	1	0	0	0	0

The United States register 10 WOS articles published in 2009 and 10 in 2014, while in Scopus the most productive year was 2003 with 4 publications. The particular topics studied in this papers, are the different sources of capabilities, including some resources as generators of firms capabilities (Chadwick & Dabu, 2009; Colakoglu, Yamao, & Lepak, 2014; Helfat & Peteraf, 2003; McKelvie & Davidsson, 2009; Morris, Hammond, & Snell, 2014), also some capabilities

that enhance capabilities and influences the generation of resources (Hervas-Oliver, Sempere-Ripoll, & Boronat-Moll, 2014; Kleinbaum & Stuart, 2014; Weeks, 2009), as well as the study of some type of resource or capability and its influence in the company's performance and competitive advantage.

3.3 Comparison Regarding Productivity by Authors

There is just one common author between WOS and Scopus in the top 20 list of productive authors. Nevertheless, if we observe the total list of authors, there are 86 in common, including Lengnick-Hall, Helfat, Peteraf, Habbershon, Williams, MacMillan, Verona, Ravasi, Foerstl, Reuter, Hartmann, Chadwick, and Dabu. By other hand, WOS exhibit higher H-indices per author (H=3 and H=2), compared to Scopus (H=0 or H=1), which points out a greater impact of the WOS.

Regarding number of citations per article, the papers that stand out, study the importance of capabilities, their origins and the influence in the performance of the company (Ethiraj, Kale, Krishnan, & Singh, 2005), and firms preferences for external sources in order to develop innovative capabilities (Hagedoorn and Duysters 2002; Vanhaverbeke, Duysters, and Noorderhaven 2002). Regarding the analysis by authors, there are highly relevant differences between both databases, being the WOS the one with the greatest number of citations per author (Scopus=119 cites per author, while WOS=172).

Table 5. WOS: Influential authors regarding the relationship between R&C

Authors	TP	TC	C/P	H-index
Bowman C	3	42	14,00	3
Hartmann E	3	245	81,67	3
Kaufmann L	3	75	25,00	3
Duysters G	3	408	136,00	3
Lengnick-Hall CA	3	113	37,67	2
Lengnick-Hall ML	3	122	40,67	3
Ambrosini V	2	25	12,50	2
Blome C	2	221	110,50	2
Collier N	2	24	12,00	2
Foerstl K	2	221	110,50	2
Grimpe C	2	164	82,00	2
Hervas-Oliver JL	2	53	26,50	2
Hyland P	2	34	17,00	2
Kale P	2	344	172,00	2
Lau A	2	80	40,00	2
Lee Ruby P	2	15	7,50	1
Lin BW	2	89	44,50	2
Manning S	2	21	10,50	2
Reuter C	2	221	110,50	2
Sofka W	2	164	82,00	2

Table 6. SCOPUS: Influential authors regarding the relationship between R&C.

Authors	TP	TC	C/P	H-index
Capron, L.	2	114	57	1
Abrahamsson, M.	1	21	21	1
Afshar, A.	1	64	64	1
Aggarwal, A.K.	1	1	1	1
Ahn, M.J.	1	36	36	1
Al-Athari, A.	1	34	34	1
Anderson, E.	1	1	1	1
Bañón, A.R.	1	10	10	1
Beckmann, S.	1	2	2	1
Beltrán, J.	1	0	0	0
Bertrand, O.	1	47	47	1
Best, M.H.	1	10	10	1
Beyhan, B.	1	5	5	1
Blome, C.	1	119	119	1
Bonvillian, W.B.	1	5	5	1
Boright, J.P.	1	1	1	1
Boylan, R.L.	1	55	55	1
Bravo-Ibarra, E.R.	1	2	2	1
Brettel, M.	1	2	2	1
Brush, T.H.	1	50	50	1

3.4 Comparison Regarding Productivity by Journals

The study found 102 journals in the WOS Vs. 86 in Scopus exploring the relationship between resources and capabilities. Tables 7 and 8 display the top 20 journals and its impact factor. WOS top journals are: Strategic Management Journal and Technovation, (12 papers each). Scopus top Journals are: Asian Journal of Technology Innovation, the International Business Management and Technological Forecasting and Social Change (3 publications each). We may say that the impact factor per journal differs in both databases, and, that it is probably due to the different number of publications identified by each database search engine, being the WOS the one that has the greatest coverage and impact.

Lastly, an individual analysis by journal reveals that the journal with the highest impact factor is not always the most productive one. As an example: The Academy of Management Journal has only 1 publication registered in Scopus and has an H-index=10,34, compared to the most productive journal in WOS: The Strategic Management Journal, with 12 publications and a H=4.461. We can deduce that top productive journals of WOS are more cited than top productive journals of Scopus, for this particular area of study.

Table 7. WOS most productive journals

Rank	Number of publications	Journals	Impact factor 2016
1	12	Strategic Management Journal	4.461
2	12	Technovation	3.265
3	7	Journal of International Business Studies	5.869
4	7	R & D Management	2.444
5	7	Technological Forecasting and Social Change	2.625
6	6	IEEE Transactions on Engineering Management	1.188
7	6	International Journal of Technology Management.	1.036

8	5	Industrial and Corporate Change	1.777
9	5	Journal of International Marketing	3.725
10	5	Journal of Supply Chain Management	5.789
11	5	Journal of World Business	3.758
12	5	Organization Science	2.691
13	5	Research Policy	4.495
14	4	Asian Journal of Technology Innovation	0.698
15	4	British Journal of Management	2.982
16	4	Industrial Marketing Management	3.166
17	4	Innovation Management Policy & Practice	0.950
18	4	International Journal of Human Resource Management	1.650
19	4	Journal of Management Studies	3.962
20	4	Asian Business & Management	1.133

Table 8. Scopus most productive journals

Rank	Number of publications	Journals	Impact factor 2016
1	3	Asian Journal of Technology Innovation	0.429
2	3	International Journal of Technology Management	0.450
3	3	Technological Forecasting and Social Change	1.247
4	2	Advances In Applied Business Strategy	0.149
5	2	Economy of Region	0.260
6	2	Espacios	0.170
7	2	Industrial and Corporate Change	1.835
8	2	International Business Management	0.194
9	2	International Journal of Emerging Markets	0.260
10	2	International Journal of Project Management	1.396
11	2	Journal of Business Venturing	5.771
12	2	Journal of Strategic Marketing	0.328
13	2	Journal of The Knowledge Economy	0.534
14	2	Mediterranean Journal of Social Sciences	0.139
15	2	Organization Science	5.870
16	2	Research Policy	3.625
17	2	Strategic Management Journal	7.651
18	1	Academy of Management Executive	4.599
19	1	Academy of Management Journal	10.346
20	1	Accounting and Business Research	0.945

3.5 Comparison Regarding Citations by Papers

The most cited paper (The dynamic resource-based view: capability lifecycles), was published in 2003 by Helfat and Peteraf. (993 citations in WOS Vs. 1.234 in Scopus). It addresses the concept of the evolutionary lifecycle of capabilities. The study considers that capabilities are originated in a group of individuals with distinctive characteristics and a common objective that implies to generate an ability. They later move into a development stage, where highly depend on what the individuals can achieve with the available resources. Lastly, they enter a stage of maturity, incorporating themselves in the memory of the organization.

The analysis of the highly relevant papers in both databases shows that most of them study the relationship between resources and capabilities, or the influence of resources on capabilities. See Tables 9 and 10.

Table 9. WOS: Most cited papers about the relationship between R&C

Rank	TC	Authors	Title
1	993	Helfat & Peteraf (2003)	The dynamic resource-based view: Capability lifecycles.
2	380	Vorhies & Morgan (2005)	Benchmarking marketing capabilities for sustainable competitive advantage.
3	332	Habbershon, Williams, & MacMillan (2003)	A unified systems perspective of family firm performance.
4	320	Ethiraj, Kale, Krishnan, & Singh (2005)	Where do capabilities come from and how do they matter? A study in the software services industry.
5	247	Zahra & Nielsen (2002)	Sources of capabilities, integration and technology commercialization.
6	239	Hagedoorn & Duysters (2002)	External sources of innovative capabilities: The preference for strategic alliances or mergers and acquisitions.
7	223	Florin, Lubatkin, & Schulze (2003)	A social capital model of high-growth ventures.
8	178	Hoffmann (2007)	Strategies for managing a portfolio of alliances.
9	167	Verona & Ravasi (2003)	Unbundling dynamic capabilities: an exploratory study of continuous product innovation
10	163	Gold, Seuring, & Beske (2010)	Sustainable Supply Chain Management and Inter-Organizational Resources: A Literature Review

Table 10. Scopus: Most cited papers about the relationship between R&C

Rank	TC	Authors	Title
1	1234	Helfat & Peteraf(2003)	The dynamic resource-based view: Capability lifecycles
2	464	Habbershon, Williams, & MacMillan(2003)	A unified systems perspective of family firm performance
3	205	Verona & Ravasi(2003)	Unbundling dynamic capabilities: An exploratory study of continuous product innovation
4	152	Deng(2007)	Investing for strategic resources and its rationale: The case of outward FDI from Chinese companies
5	147	Jones, Lanctot, & Teegeen (2001)	Determinants and performance impacts of external technology acquisition
6	119	Foerstl, Reuter, Hartmann, & Blome (2010)	Managing supplier sustainability risks in a dynamically changing environment-Sustainable supplier management in the chemical industry
7	113	Capron & Mitchell (2009)	Selection capability: How capability gaps and internal social frictions affect internal and external strategic renewal
8	106	Yam et al. (2011)	Analysis of sources of innovation, technological innovation capabilities, and performance: An empirical study of Hong

			Kong manufacturing industries
9	86	Chadwick & Dabu (2009)	Human resources, human resource management, and the competitive advantage of firms: Toward a more comprehensive model of causal linkages
10	64	Afshar & Haghani (2012)	Modelling integrated supply chain logistics in real-time large-scale disaster relief operations

4. Conclusion

This bibliometric research was performed to compare two academic databases: WOS and Scopus, in terms of coverage and impact reached by each one. The comparison was performed using the same search equation in both databases and the specific subject chosen was: “the relationship between resources and capabilities”. The analysis of these two databases allows the identification of differences between the search methods, the operators to formulate the equation, the number of articles contained in each database, the importance of authors, the productivity of the journals and countries and the variability in the areas of knowledge for each database.

Regarding coverage, both databases offer powerful search engines and guarantee the inclusion of a comprehensive range of knowledge, nevertheless, the WOS proves to have a higher coverage.

With regards to productivity, both databases started with a similar number of papers published per year, and follow certain growing tendency, being 2010 the most productive year (27 papers in the WOS Vs. 13 in Scopus). Although they both started registering the same number of papers in 2001, WOS has been increasing the number of published papers in this area of knowledge, and, for 2016 the gap between both databases was considerable in terms of number of papers published (WOS=16, Scopus=6), being the WOS the most productive one.

The analysis by country reveals that the United States has the highest number of papers and the greatest number of citations. Europe and Asia by their side, are the two predominant continents in publishing in this field of knowledge. Even though the list of the top 20 countries regarding productivity do not exactly match for both databases, there is a common factor: the gap between USA and the other countries in terms of total productivity and total citations is really considerable. This fact has proven to be a pattern not only for this particular area of knowledge, but for the global productivity by countries.

As regards of authors, each one of the top 20 authors has published between 1 and 3 papers per year, regardless of the database used. In terms of the H-index, authors in the top 20 list by productivity have an H-index lower than 4, which is an indicative either of the authors novelty character, or, the novelty of this particular subject of study, or either the low interest that academics have placed on the subject until today. In any case, this leaves a well-defined space for new research in this field.

There are big differences concerning to productivity and impact per journal. The WOS exhibit journals with a higher impact factor and productivity compared to Scopus (for the studied subject). There is a group of at least 7 journals (see Table 7) that concentrate the 50% of the top 20 publications by journal. Also “The Academy of Management Journal”, has the highest impact factor among all the other journals, subsequently, it would be recommendable for a researcher interested on this topic, to take a close look at it.

Derived from all the analysis performed, the conclusion points at a shortage of studies of resources as foundations of firm’s capabilities, therefore, the suggestion is to open new lines of research that allow enlightening the relationships among different resources and a variety of firm’s capabilities. This becomes relevant as there is an already proven relationship between resources-capabilities and productivity of firms, therefore affecting the economy of regions and nations.

Lastly, it is important to highlight the advantages of bibliometrics, as it makes possible to evaluate the complete set of indexed publications in selected databases, for a certain period of time (Abramo & D’Angelo, 2011).

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