Learning from History:

Past, current trends and future priorities in IB research ─ A bibliographic-coupling and social network analysis, 2016-2019*

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Abstract

Recently, author and document citation and co-citation analyses have been often applied to map the 'intellectual structure' or knowledge base of different fields or scientific domains. Also in the field of *management*. Even to the literature on *international business*. Nevertheless, the technique of *bibliographic coupling* between documents which seeks to identify the various active research fronts in a scientific field or discipline by means of a study about the most recent literature (Kessler, 1963) –particularly suitable for detecting current trends and future research priorities–, it has been a less commonly used analysis technique in these fields. Precisely, our paper has as its main purpose to apply this technique to papers on *international business* recently published in a wide variety of journals, thus trying to identify and visualize –through social network analysis (SNA)– the aforementioned research fronts shedding light on the current *state-of-the art* and the possible directions that the research in the field of *international business* could take in the future.

Keywords: international business (IB); research fronts; bibliometrics; bibliographic coupling analysis (BCA); social network analysis (SNA).

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INTRODUCTION

The field of *international business* has advanced substantially in both theory and empirical research over the past decades (van Tulder et al., 2018; Kano & Verbeke, 2019; amongst others). As the field of *international business* (IB) has matured –a wide and diverse range of topics, theories, frameworks, and applied research methods characterize this maturity–, many new perspectives and streams of research have emerged; others, need or have required to be revisited (Coviello et al., 2017; Marchand, 2018; Yamin & Kurt, 2018; Kano & Verbeke, 2019). For instance, in their recent article: *'Theories of the multinational firm: a microfoundational perspective,'* published at the special issue of *Global Strategy Journal:* Microfoundations of Global Strategy: Role of Leadership and Manager Characteristics, Kano & Verbeke (2019, p. 118) point out that for IB strategy frameworks to claim managerial relevance –theories of the MNE, especially core theories such as internalization (Buckley & Casson, 1976) and the Uppsala model (Johanson & Vahlne, 1977, 2009), are essentially theories of managerial choice (Buckley et al., 2016, p. 139)–, they must build upon plausible microfoundational assumptions.

In any case, the research in the field advances in an unstoppable way and it suits to keep taking its pulse… and, what do we really know about current research developed in the IB domain? Does it have an interdisciplinary nature? Which contributions have received the highest number of citations in the period analysed (2016-2019*) and can consequently be considered as the most influential in the future consolidation and evolution of the field under study? Is it possible to reveal the existence of different active research fronts or some sort of *gap* in the literature? Which are the future directions towards which the field might move?

Our paper precisely has as its aim to develop – in the form of a literature review– an analysis of the scientific production in the field of *international business* for the purpose of identifying the main active "fronts" which characterize most recent research essentially through the use of bibliometric methods together with social network analysis (SNA).

Particularly, we agree with authors as Ethiraj et al. (2017, p. 3) that reviews of prior literature serve an important purpose of integrating often disparate research conversations. But effective reviews go further –they add to the literature by providing fresh perspectives and identifying potentially fruitful avenues for future research; not only synthesize existing research, but also seek to stimulate new research– and, in our opinion, the research methods above mentioned and described below are adequate to achieve that purpose.

Co-citation analysis vs. bibliographic coupling between documents

In the field of bibliometrics, a great variety of methods and techniques exist that can be used when it comes to defining and visualizing a scientific field with the aim of detecting subfields, areas or lines of research. Some studies utilize author co-citation (ACA), documents (DCA), or co-words analysis (White & Griffith, 1981; van Raan & Tijssen, 1993; White & McCain, 1998; Small & Upham, 2009; Chen et al., 2010; Leydesdorff & Welbers, 2011; Zhao & Strotmann, 2011; amongst others). Others resort to the bibliographic coupling proposed by Kessler in 1963 (Boyack & Klavans, 2010; Chen et al., 2011; Glänzel & Thijs, 2011). There is yet another group of scholars who combine several of the aforementioned analysis techniques, e.g. ACA and co-words analysis (Zitt & Bassecoulard, 1996; Zitt et al., 2011). In any case, two types of analysis clearly prevail: co-citation analysis; and the bibliographic coupling technique.

Co-citation analysis, introduced by Small (1973), starts from the assumption that a certain thematic similarity, as well as a certain intellectual connection within the field under analysis, would exist –at least from the perspective of the citing author (McCain, 1990, p. 443)– between two co-cited documents, in such a way that the higher the co-citation frequency, the greater the affinity existing between them (Cawkell, 1976; Garfield et al., 1978). The intensity of this relationship will be determined by the number of citing documents or source documents which contain the same pair of documents amongst their references. Assuming that highly-cited documents represent the key concepts, methods or experiments developed within a scientific field or discipline, such co-citation patterns could then be used to identify and visualize the connections between those key ideas, allowing us to identify the reference documents which have served as the foundation for the development of knowledge in that field, as well as the intellectual influences and the seminal character that such documents and the authors responsible for them have when it comes to research (Small, 1973). Nevertheless, this type of analysis offers a "retrospective" vision or one more oriented towards the past (Grégoire et al., 2006; Vogel & Güttel, 2013), insofar as it allows us to identify the documents which have influenced the subsequent literature to a greater extent; in other words, the intellectual structure or cognitive base of the domain examined. A certain length of time must have elapsed, though, for those documents to be consulted and cited in later studies.

As for the bibliographic coupling technique, it is supported on the identification and quantification of the common bibliographic references cited by the documents analyzed, since the fact that two documents share at least one common bibliographic reference cited by them both serves to understand that such documents are thematically related and the higher the number of bibliographic references shared by them, the greater their thematic proximity will be (Kessler, 1963). In short, the analytical interest of studies based on bibliographic couplings between documents lies in the fact that it permits to identify the active knowledge areas or nuclei existing inside a discipline. Unlike co-citation analysis, it is additionally a "prospective" methodology, in the sense that, from the very moment when a document is published or made known, through its online version for example, the possibility exists to attach or group that document together with others which collect the same cited bibliographic references and consequently have a thematic affinity, it being unnecessary to wait for that document to accumulate a certain influence within the scientific community. This methodology additionally makes it possible to know the stage of evolution or development of a research theme[1] (Jarneving, 2007a, 2007b; Boyack & Klavans, 2010; amongst others).

Figure 1 illustrates the two aforementioned procedures for the analysis of the bibliographic references contained in scientific publications.

Figure 1. Insert about here

Since our aim is precisely no other than identifying and characterizing the main research strands or "fronts" in the field of international business, we will resort to the last of the previously described analyses in the research developed below. Social network analysis (SNA) was equally utilized to construct, visualize, and analyze the bibliographic coupling network derived from the analysis performed.

Our paper is structured as follows. The next section –Section 2– deals with the collection of data to be analyzed from the data source or base regarded as most appropriate and with the methodology applied. The outcome of the bibliographic coupling analysis developed, the graphic representation or visualization of the 'intellectual structure' of the bibliographic coupling networks of the study field examined, as well as the results of social network analysis (SNA), and of multivariate analysis, are shown in Section 3. Finally, the last section summarizes the main conclusions, the limitations faced, and the future lines of research.

METHODOLOGY

Data source and sample of documents

In relation to the data, the 'source-documents' utilized to carry out the present research work were retrieved from the Web of Science™ (WoS) Core Collection (CC). The WoS CC is composed of six indices maintained by Clarivate Analytics: the Science Citation Index Expanded (1970–present), the Social Sciences Citation Index (1970–present), the Arts & Humanities Citation Index (1975–present), the Conference Proceedings Citation Index-Science (1990–present), the Conference Proceedings Citation Index-Social Science & Humanities (1990–present), and the Emerging Sources Citation Index (2015–present).

In our specific case, and using the aforesaid database –in particular, one of its indexes: the *Social Sciences Citation Index* (SSCI)–, a total of 543 research papers published in different journals in the areas of *management* and *business* between 2016 and 2019* (until the database consultation date) –*the search equation utilized consisted in using the topic: "international business" as search term in the field of TOPIC* (database consultation date: 22-Juny 2019)– were retrieved.

Only "journal papers," that is, research papers –rather than books, doctoral dissertations or papers containing reviews and proceedings– were taken into consideration in our research, since they are the only ones which can be regarded as certified knowledge (Merton, 1973), a term used to describe the knowledge subject to the critical review of other researchers in order to achieve their approval and which has resisted their objections. The use of citations coming from research papers additionally constitutes a standard practice adopted for the implementation of such studies which has as its aim to increase the reliability of the results obtained.

Bibexcel® and the treatment of bibliographic records

The documents retrieved were downloaded directly in plain text format (.txt) to be treated after their conversion through Bibexcel®, a public-domain software –designed to assist a user in analyzing bibliographic data, or any data of a textual nature formatted in a similar manner– which can be downloaded for free on the Internet and which was specifically developed by Professor Olle Persson in the *Institute of Information Sciences* at the Swedish University of Umeå to handle and treat bibliographic records.

Bibexcel® offers, amongst many other features, the possibility to combine the information extracted from different fields within a bibliographic record, including the field of cited references, carrying out counts by frequency, analyzing co-occurrence between various elements (authors, documents, journals, keywords, etc.) as well as the implementation of *bibliographic coupling* techniques.

In our case, the aforementioned software was utilized to extract not only the references contained in each one of the source documents examined but also, once the information had been processed and homogenized, and after establishing the *minimum coupling threshold* –value fixed for the purpose of eliminating the most trivial relationships and focusing the analysis on the significant relationships existing between the documents. The application of this threshold permits to reduce the initial number of documents to a subset or nucleus of documents which stand out for their higher coupling frequency, thus allowing for the analysis and reticular representation of information (Small, 2009)– for to quantify, for each pair of documents examined, their bibliographic coupling frequency; or expressed differently, the number of bibliographic references cited in both documents. This will make it possible to construct a co-occurrence matrix with the absolute values of the references shared by each pair of documents considered. The reticular or network structure of the information under analysis from the vision provided by social network analysis (SNA), that is, of the bibliographic coupling network, was approached using the matrices previously generated with the software Bibexcel® to be treated with Pajek®, proceeding to their visualization or reticular representation by means of the software UCINET 6 *for Windows*. As for the different multivariate analyses carried out, they were developed using the statistical package SPSS® v.25, as well as the software mentioned above.

It is worth highlighting once again at this point that scientific map analysis cannot be directly applied to the gross data collected from bibliographic databases such as Web of Science (WoS) or Scopus; a pre-processing of those data is required, since these data usually contain plenty of errors and inconsistencies in what mainly regards their coding. On some occasions, elements extant which represent the same object or concept, for instance. Such is the case in the name of an author or the title of a journal, which may appear written or coded in a wide variety of ways (e.g. Buckley, P. J. or Buckley, Peter J.; J Int Bus Stud or Journal of International Business Studies) or the different editions of a book. Hence why the data contained in the field of cited references underwent a careful normalization process in order to ensure their accuracy.

Document selection and calculation of co-occurrence and proximity matrices

With regard once again to the research developed and to the choice of those documents that were ultimately going to form part of the analysis, the impossibility to work with them all in our particular case, added to the fact that such an analysis –as explained above– requires the establishment of a cut-off point or *minimum coupling threshold* made us take into account all those documents with a coupling frequency of at least 20 references in common with a minimum of one of the remaining documents considered, this being the information supplied by Bibexcel® –this criterion will be subsequently modified to a minimum of two documents in social network analysis (SNA)– thus obtaining a *co-occurrence* matrix, **C,** with dimensions 73x73, that showed the number of cited references shared by each pair of papers considered. This matrix has two main characteristics: firstly, it is a symmetrical matrix; and secondly, all the values in the main diagonal are zero.

The next step in this type of analysis once the aforesaid *co-occurrence* matrix in absolute values **C** has been obtained –after establishing or deciding the treatment that will be given to the main diagonal values in the matrix[2]– consists in achieving a proximity or similarity matrix **S** on which there is a possibility to apply –for example, through the statistical packs SPSS© o STATA©– various multivariate analysis techniques meant to reduce the dimensionality of the data examined, Pearson's r correlation coefficient being –despite the criticism received (Ahlgren et al., 2003, 2004; van Eck & Waltman, 2008, to quote but a few)– one of the similarity measures between pairs most often used amongst a wide range of normalization strategies suggested in the area of bibliometrics (see, for example, van Eck & Waltman, 2009).

The transformation of the absolute values contained in matrix **C** into a matrix of similarities **S** has the advantage that each value now takes into consideration all the documents analyzed and not only the absolute values corresponding to each one of the pairs of documents considered separately; normalized values are obtained likewise, thus clarifying the potential differences in the measuring scale between documents which share a high number of common citations and those other documents which can lie thematically close as well, even though with a lower number of shared references; or between documents that have a much more extensive bibliography than others with a smaller proportion of cited references.

As a rule, factor analysis (FA) and/or cluster analysis are usually applied then on that matrix **S** seeking to classify the various elements analyzed into a smaller number of factors and/or clusters, thus reducing data dimensionality.

Factor analysis and construction of the bibliographic coupling network

In our specific case, rather than using either of the two previous techniques, we preferred to adopt social network analysis (SNA) as our first and main analysis technique, in combination with factor analysis. The suitability of combining the preceding type of analysis and some other classification or *clustering* method, such as factor analysis, so that results can be contrasted and provide them with more robustness, has been highlighted in their research, amongst others, by authors such as Vogel & Güttel (2013, p. 430), as well as a variety of authors belonging to the fields of *bibliometrics* and *scientometrics*.

More precisely and making use of UCINET 6 *for Windows* and the *spring embedder algorithm* provided by that software[3] –similarly to multidimensional scaling (MDS) approaches, this graph layout algorithm optimizes the distances between every pair of nodes. The distances between any two nodes are approximated by the path length, i.e. the number of edges between them. The shorter the mean path length between a given node and other nodes, the higher its centrality in the network– an effort was made to plot or construct a network through which the different research "fronts" or nuclei in the field under analysis can be identified and visualized. The nodes in the network represent the citing or source documents (i.e. the documents which contain the citations). The *edges* represent the *bibliographic couplings*; in other words, the number of references which are shared by each pair of documents.

In particular, and being somehow consistent with the criteria utilized to obtain the co-occurrence matrix **C** on which the analysis developed is mainly supported, a decision was made to establish the same minimum number of *couplings* (i.e. the same *minimum coupling threshold)* between each document and, in our case, a minimum number of at least two other documents –this is due to the fact that only those research "fronts" or nuclei made up of at least 3 source documents will be considered here– in order to consider exclusively those documents at or above these thresholds. In any case, it deserves to be highlighted that the variation or modification of that threshold and the aforesaid number of documents caused changes in the size of the network, even though its structure did not change to a significant extent, remaining practically invariable. Hence our final decision to use the previously mentioned ones (tie strength ≥ 20; node degree ≥ 2) as parameters. The number of documents would thus be reduced from the 543 initial documents and the 73 whose bibliographic coupling values shape matrix **C** to only 36 documents.

As for FA results, this analysis –applied this time on matrix **S** of Pearson's r-correlation coefficients, i.e. on the matrix of similarities between documents– served to extract a total of 29 factors with an eigenvalue ≥ 1 through the implementation of the principal components method and VARIMAX rotation. From all of these, only those factors comprising at least three of the different nodes, i.e. documents considered in social network analysis (SNA) with factor loadings that have an absolute value ≥ 0.6 were selected –in the event that more than one factor should have to be loaded, the one with the highest factor loading was selected. The reason for this choice was that it additionally implied eliminating all those other documents which did not significantly load in any of the extracted factors and, once again applying the parameters defined in the preceding analysis, the number of nodes represented in the network was fixed in 35 documents. Finally, with respect to the factors considered, 10 in all, they would permit to account for 46.4% of the total explained variance, drawing a correspondence with the different research "fronts" or nuclei –represented in the bibliographic coupling network through various symbols and by the label assigned to each one of the documents– which can be identified in the field or domain under study: that of *international business*.

The results of the different analyses performed –bibliometric analysis, factor analysis and social network analysis (SNA)– can be found in the next section.

RESULTS AND DISCUSSION

The results obtained after completing the different stages included in the analysis developed are shown below.

Particularly, a total of 543 documents, which contained 48,631 cited references in all –30,441 unique references–, were analyzed in our research. The average number of references per paper was situated at 89.56. In particular, 79.2% (n = 24,114) of the 30,441 aforementioned unique references were cited only once, and 20.8% (n = 6,327) on two or more occasions (≥.10

times, 1.09%; n = 334). Table 1 shows the list with the top-ten of the most cited research works by the 543 articles on IB retrieved in our study.

Table 1. Insert about here

For its part, Table 2 provides the frequency distribution of those articles by the journal where they were published.

Table 2. Insert about here

With regard to the *document bibliographic coupling analysis* performed, it served to identify a total of 48,160 unique pairs between documents. 49.48% (n = 23,829) of those pairs shared a single bibliographic reference in common; 49.05% (n = 23,622) between 2 and 9; and finally, 1.47% (n = 709) over ten common bibliographic references. In our research, as previously explained in the methodological section, the co-occurrence matrix **C** was constructed with the bibliographic couplings between 73 documents, a number which eventually went down to 35 in social network analysis and principal components factor analysis. These documents would be included in some of the various research "fronts" that will be subsequently analyzed.

Figure 2 allows us to visualize the network of bibliographic couplings between the 35 documents finally subject to analysis. Each one of the nodes is differently represented in that reticular representation, according to whether it belonged to one or another of the 10 factors considered, from a total of 29, in factor analysis.

Figure 2. Insert about here

The total variance percentage explained by each one of the aforementioned factors appears in Table 3.

Table 3. Insert about here

In order to finish the review of the analyses carried out and before proceeding to discuss the different research "fronts" identified in our study, Table 4 shows the value of the different network indicators calculated for some of the nodes shaping it –particularly the 15 nodes with higher indices in each case– once again resorting to the software UCINET® 6 *for Windows* for that purpose. These indices or indicators –*centrality degree, closeness and betweenness*– will allow us to complete the analysis developed from the perspective supplied by SNA.

Table 4. Insert about here

In the research developed, the higher degree of intermediation or betweenness –if we consider all the nodes in the social network and not only the 35 nodes finally under analysis in our study– comes to correspond, for instance, with the paper written by Eng, Ozdemir & Michelson (2016) entitled: *'Brand origin and country of production congruity: Evidence from the UK and China'* published in *Journal of Business Research*. The role of intermediaries that certain nodes may exert very often has to do either with the fact that such nodes represent documents which deal with transversal issues common to several research fields or these are documentary typologies such as literature reviews or documents written for a general purpose. These documents have a particular value because they favour connectivity and cohesion in the research undertaken within a discipline in question (Meyer et al., 2014).

<u>Characterization of active research "fronts"</u>

The different research "fronts" situated at the forefront of knowledge (see Table 5) which permit to reveal the current, and even the future trends or priorities in research with regard to the field of *international business* are described below:

Table 5. Insert about here

The first of the nuclei identified in our analysis, one of the fronts of research that brings together the largest number of works, comprises, amongst others, the papers written by such researchers as Frynas et al. (2017) ─the study by Frynas, Child & Tarba (2017) entitled: *'Non-market social and political strategies - New integrative approaches and interdisciplinary borrowings'* introduces for instance a special issue of the *British Journal of Management* on social and political strategies in the non-market environment. On the one hand, it reviews the extant research on the possible forms of interaction between Corporate Social Responsibility (CSR) strategies and Corporate Political Activity (CPA): CSR-CPA complementarity, CSR-CPA substitution and mutual exclusion between CPA and CSR. On the other hand, the paper provides an overview of the recent contributions of non-business disciplines –psychology, sociology, economics, politics and history– to nonmarket scholarship and, above all, the potential future scholarly contributions of these disciplines─ or Voinea & van Kranenburg (2018) on non-market institutional pressures and firm non-market strategies. More precisely, the aforesaid nucleus includes the following research works mainly related to research on non-market strategies: Frynas et al. (2017), Gao et al. (2018), Voinea & van Kranenburg (2018), Banerjee & Venaik (2018) and Elsahn et al. (2018). The authors of this last manuscript entitled: *'Political schemas and corporate political activities during foreign market entry: a micro-process perspective'* analyses for example how multinational enterprises (MNEs) manage their interactions with host governments during the market entry process. A qualitative multiple case study collected data through in-depth interviews with multiple participants in six New Zealand MNEs. The analysis identifies two distinct political schemas which represent MNE managers' assumptions and heuristics regarding how to approach interactions with foreign governments, systematic and episodic, which lead to the enactment of distinct patterns of political activities, each supported by certain political resources and capabilities. Their authors then identify several sources of the variations in these two political schemas at the managerial, firm, industry, and country levels of analysis.

As for the second research “front” or nucleus considered, the papers by Zolner (2019) ─that explores identification processes amongst subsidiary employees who function as intermediaries between the subsidiary and headquarters thanks to their competencies in the common corporate language─, Gaibrois (2018), Golesorkhi et al. (2019), Tenzer & Pudelko (2016) and Aichhorn & Puck (2017) on language in international business –a fast growing number of studies demonstrates that language diversity influences almost all management decisions in modern multinational corporations (Tenzer et al., 2017, p. 815)– would belong to this same research “front.” Based on qualitative data Aichhorn & Puck (2017) identify for example two main language strategies through which employees cope with the emotional and cognitive challenges stemming from language diversity and the use of a common corporate language. In their analysis the authors show how these strategies can be connected to the development of ‘company-speak’. They further unpack its specific functions and suggest that company-speak is crucial for successfully bridging the language gap in the MNC.

For its part, the articles by Coviello et al. (2017) – adopting a microfoundational perspective the authors focus for instance their attention on two critical dimensions absent from Vahlne & Johanson’s (2017) arguments in their general model of the evolution of the multinational business enterprise (MBE): the impact of the digital context as a defining macro-level feature of our modern world, and the role of the individual as a core microfoundation of the internationalization process and argue that a robust theory of the evolution of the modern firm must necessarily account for these dimensions–, Kano (2018), Matysiak et al. (2018) and Kano & Verbeke (2019) on the role of the individuals as a core microfoundation of the internationalization process made up another of the nuclei identified in the present analysis. In the last of the papers aforementioned, Kano & Verbeke (2019) analyze the six core international business (IB) strategy frameworks highlighted by Forsgren (2013) to identify the explicit or implicit microfoundations embedded therein. They start from two, broad microfoundations, namely bounded rationality and bounded reliability, covering a total of ten microfoundational facets, recently put forward as supposedly essential to any predictive and managerially relevant theory of the firm (Kano & Verbeke, 2015) and show how these various facets, embedded in the conceptual foundations underlying the various theoretical approaches, can be made actionable by articulating them explicitly and by connecting them to firm-level IB strategy outcomes. They also describe how reflecting on these microfoundational facets and on the likely actionable implications thereof for managerial decision making, allows enhancing these theories' conceptual power, predictive capacity, and managerial relevance.

In tun, the papers written by Trapczynski (2018), Trapczynski & Gorynia (2017) and Trapczynski & Banalieva (2016) at the Poznań University of Economics and Business on new/infant MNEs from Poland as a mid-range emerging economy are also part of a research front amongst those identified. By drawing from the internalisation and institutional theories, as well as the organisational capability perspective, the paper by Trapczynski & Gorynia (2017) entitled: *'A double-edged sword? The moderating effects of control on firm capabilities and institutional distance in explaining foreign affiliate performance'* analyses the moderating effects of parent control over foreign affiliates in relation to firm capabilities and institutional distance and their performance effects. These relationships are explored in the context of new MNEs from Poland for which ownership choices constitute critical decisions given their early stage of internationalisation.

Particularly, another of the research nuclei or "fronts" identified, where articles deal, for its part, with the concept distance and how home and host country context (e.g. linguistic and religious diversity) might matter more than (cultural) distance brings together the works of Dow et al. (2016), Puck et al. (2016) and Harzing & Pudelko (2016).

The contributions made by McGaughey et al. (2016), Aguilera & Grogaard (2019) and Fortwengel (2017) on the role of institutions –not only as taken-for-granted constraints that need to be accommodated, but also the outcomes of agency; purposive action by individuals, firms, coalitions and other actors– in international business form another of the identified research "fronts". Drawing on facets of the comparative capitalisms literature, the paper by Fortwengel (2017) for example maps out how institutional distance involves four key dimensions: coordination, strength, thickness, and resources. The paper argues that the particular combination of these dimensions forming configurations of institutional distance will influence when MNCs are able to overcome distance, conceptualized as behaving in deviant ways. Further a research agenda is developed, paying special attention to how complex causal effects can be studied using qualitative comparative analysis and multiple case studies.

Amongst the most active research areas also stands out the one including the papers written by Manning et al. (2018), Musteen et al. (2017) and Mihalache & Mihalache (2016) on the adoption of particular global sourcing practices as *offshoring* mirroring the growing trend for firms to support their operations by locating activities abroad. By way of example, the article by Stephan Manning et al. (2018): *'The changing rationale for governance choices: early vs. late adopters of global services sourcing'* studies how the logic of firm governance choices varies as a function of the time of adoption of particular sourcing practices. Using data on the diffusion of global business services sourcing as a management practice from early experiments in the 1980s through 2011, the authors show that the extent to which governance choices are affected by process commoditization, availability of external service capabilities, and past governance choices depends on whether firms are early or late adopters: firms that began with global services sourcing early, invested mainly in their internal sourcing capacity, while outsourcing only simple tasks to external providers, whereas firms that started later invested more in their capability to outsource various services to increasingly sophisticated suppliers. Findings inform research on governance choice dynamics specifically in highly diverse and evolving firm populations.

Likewise, the papers by Beugelsdijk et al. (2017), Peterson & Barreto (2018) and Kirkman et al. (2017) on Hofstede-inspired country-level culture research in international business integrate another of the research "fronts" identified in the bibliographic coupling analysis. In the last of the aforementioned papers, Kirkman et al. (2017) provide: (a) a summary of the progress that has been made from the publication of their 2006 *Journal of International Business Studies* article, *'A quarter century of Culture's Consequences: a review of the empirical research incorporating Hofstede's cultural values framework,'* and most importantly, (b) a new set of recommendations for the next years to guide those wishing to study the role of national culture in organizations.

On the other hand, the 2016 *Journal of Management* article by Mellahi et al. (2018), *'A review of the nonmarket strategy literature: toward a multi-theoretical integration,'* and the papers by van Kranenburg & Voinea (2017) on nonmarket strategies predictors for foreign firms and Liedong & Frynas (2018) on how investment climate constraints affect the political ties of foreign firms in contexts other than US, Europe and Asia make up the ninth and penultimate of the active research areas identified in our study. Drawing on institutional theory, Lidong & Frynas

(2018) propose for example that firms' exposure to administrative and control constraints as well as the presence of public affairs (PA) functions will lead to political tie intensification. They test their propositions using data from foreign firms operating in Ghana, and find that whereas control constraints strengthen political ties, administrative constraints weaken these ties. The findings also suggest that PA functions and political ties can be substitutes, not complements, depending on the institutional contingencies.

Finally, the contributions of Tung & Stahl (2018) on the evolution of the role of culture in international business research and Peterson et al. (2018) entitled: *'Traversing cultural boundaries in IB: the complex relationships between explicit country and implicit cultural group boundaries at multiple levels'* on the relationship between country and cultural group boundaries shape the last front identified in our research. Also the paper written by Huang et al. (2017): *'When is traditionalism an asset and when is it a liability for team innovation? A two-study empirical examination.'* In this last paper, Huang et al. (2017) examine for example how team activities are affected by the extent to which members value traditionalism – that is, placing importance on preserving old ways of doing things over breaking precedent and forging new approaches. They found that whether traditionalism is an asset or liability for team innovation depends on whether (1) the average level (versus diversity) of team traditionalism is examined; and (2) idea generating versus idea implementing is of primary importance. Specifically, idea generating benefits from higher diversity on team traditionalism, whereas idea implementing benefits from higher average levels of team traditionalism.

CONCLUSIONS, LIMITATIONS AND FUTURE LINES OF RESEARCH

The research developed here is placed amongst the works that have as their main aim to identify, visualize and/or characterize, within a specific time period, the most outstanding research strands or “fronts” in relation to a specific scientific discipline, subdiscipline or field, for which they resort, as opposed to the possibility of using other systematization proposals, to the utilization of bibliometric methods. In our case, the technique of *bibliographic coupling* between documents from their thematic affinity or similarity, determined based on the number of bibliographic citations or references that they share, and social network analysis (SNA).

Particularly, the analysis technique mentioned above, together with principal components factor analysis, would have allowed us –adopting or following a quantitative method of a deductive nature for that purpose– to identify the most active research areas or “fronts” in the international research on IB through an analysis of the articles published in the areas of *management* and *business* during the period comprised between the years 2016 and 2019* (until the database consultation date: 22 Juny 2019).

In our case, the groups resulting from the previous analyses have been defined at a bibliometric level as research contexts, strands or nuclei, i.e. “fronts” which shape the vanguard of knowledge and allow us to know the most important current and future research trends and priorities in the field of IB. A total of 10 different research nuclei or “fronts” were identified and characterized in the study developed. In order to approach the network structure of the information studied, from the vision provided by social network analysis (SNA), i.e. the bibliographic coupling network, a decision was made to utilize the matrices previously generated by means of Bibexcel®., proceeding to their visualization or reticular representation with the software UCINET 6 *for Windows*. This allowed us to use that software to construct the coupling network graphically represented in our study, as well as to carry out the calculation of certain network indicators.

Specifically, amongst the most current research topics, some of them could be mentioned as examples, although the results and discussion section offers a synoptic view (see Table 5) and a much more detailed description of each and every one of the different research areas or "fronts" identified in our study. In this respect, works dealing with the role of the individuals as a core microfoundation of IB strategy and the *so-called* as *microfoundational perspective,* the concept distance and how home and host country context (e.g. linguistic and religious diversity) might matter more than (cultural) distance or the adoption of particular global sourcing practices such as *offshoring* might serve as examples. Anyway, even though it can be stated that the various research "fronts" identified reflect and collect a significant part of the research on the topic analyzed developed during the period under study, there are other research strands which could not be identified in the analysis. Amongst the reasons explaining this circumstance stand out the conditions established for the identification of such "fronts" or nuclei already commented upon in previous sections.

Limitations

This study faces several limitations, some of which result from the actual research design, while others are a direct consequence of using the bibliometric technique implemented in the bibliographic coupling analysis. In relation to this last type of limitation, in general we agree with authors such as Batistič & van der Laken (2019) that the interpretation of the results could be limited to our human capabilities in terms of text and information processing. Future studies could extend our current analysis with a more data-driven approach. For instance, text mining algorithms such as latent Dirichlet allocation (Blei et al., 2003), a generative statistical model that allows sets of observations to be explained by unobserved groups that explain why some parts of the data are similar, could be used to identify the state-of-the-art topics in IB research. Additionally, as Batistič et al. (2017, p. 100-101) point out, meta-analytical review approaches could be adequate and useful to help future research to have a clearer vision and achieve a better understanding of the results of our study. As for the remaining limitations, the most important one related to the research design derives basically of the application of certain thresholds in order to process the data. Logically, we acknowledge that these thresholds may have introduced bias in the otherwise relatively objective bibliometric methods.

Future lines of research

Finally, regarding possible research lines in the coming years, the present study constitutes the starting point for future analyses that should help better understand the scientific domain or field analyzed: the field of *international business*. The various analyses performed would have also allowed us to make out –in the form of potential opportunities for future research– the existence of research "niches" or areas yet to be covered at all and that should be a priority for researchers on IB strategy. For instance, if as Kano & Verbeke (2019, p. 118) point out "for IB strategy frameworks to claim managerial relevance they must build upon plausible microfoundational assumptions" the development and use of multi-level theories and methodologies in IB research trying to "understand the whole keep an eye on the parts" (Kozlowski & Klein, 2000, p. 53) should be undoubtedly one of those priorities.

Ednotes:

[1] Bibliographic coupling examines the extent to which documents cite the same secondary documents. This implies that the primary, citing document rather than the cited, secondary documents is the focus of analysis (Vogel & Güttel, 2013; Batistič & van der Laken, 2019; amongst others). The general assumption is that the more the bibliographies of two documents overlap, the stronger their connection is. Bibliographic coupling is different from

other bibliometric methods as it does not derive the importance of papers within a scholarly community from their citation count or relations (Verbeek et al., 2002). This prevents an (over)emphasis on mainstream documents that may be popular but insignificant to a fields' intellectual development. Moreover, because it relies on the references within documents, the results of bibliographic coupling are more stable over time because reference lists do not change over time (in contrast to citation counts and relations). All this makes coupling particularly suitable for detecting current trends and future priorities, as these are commonly covered in the more recent publications, which inherently are not the most cited.

[2] There are two main ways of treating such values. The first one (White & Griffith, 1981) consists in taking the sum of the three highest values or absolute frequencies in the corresponding row or column –note that this is a symmetrical matrix– and dividing that sum by two. This provides a value which, in the opinion of the aforesaid authors, could turn out to be indicative of the importance corresponding to a given paper about the field studied; the other option (McCain, 1990) simply starts from the consideration of such data as missing data or values and applies the criterion of omitting both cases (*pairwise deletion*) during the calculations to be developed; in other words, from ignoring the values in the main diagonal when, for example, the values of the correlation coefficients between each pair of documents are calculated. In our specific case, we chose the second option for reasons of simplicity and due to the fact that the results hardly varying when one or the other alternative is used.

[3] In contrast to our study, many papers apply multi dimensional scaling (MDS) for science mapping. We prefer, the same as Vogel & Güttel (2013), network analysis because MDS can transform metric similarities into spatial distances only for a limited number of documents within the tolerance range of stress values, while network analysis can display an unlimited number of documents as network nodes.

References

Aguilera RV, Grogaard B (2019). The dubious role of institutions in international business: a road forward. Journal of International Business Studies 50(1): 20-35.
Ahlgren P, Jarneving B, Rousseau R (2003). Requirements for a cocitation similarity measure, with special reference to Pearson's correlation coefficient. Journal of the American Society for Information Science and Technology 54(6): 550-560.
Ahlgren P, Jarneving B, Rousseau R (2004). Author cocitation analysis and Pearson's r. Journal of the American Society for Information Science and Technology 55(9): 843 (letter to the editor).
Aichhorn N, Puck J (2017). Bridging the language gap in multinational companies: language strategies and the notion of company-speak. Journal of World Business 52(3): 386-403.
Banerjee S, Venaik S (2018). The effect of corporate political activity on MNC subsidiary legitimacy: an institutional perspective. Management International Review 58(5): 813-844.
Barney JB (1991). Firm resources and sustained competitive advantage. Journal of Management 17(1): 99-120.
Batistič S, Černe M, Vogel B (2017). Just how multi-level is leadership research? A document co-citation analysis 1980-2013 on leadership constructs and outcomes. The Leadership Quarterly 28: 86-103.
Batistič S, van der Laken P (2019). History, evolution and future of big data and analytics: a bibliometric analysis of its relationship to performance in organizations. British Journal of Management 30(2): 229-251.
Beugelsdijk S, Kostova T, Roth K (2017). An overview of Hofstede-inspired country-level culture research in international business since 2006. Journal of International Business Studies 48(1): 30-47.
Blei DM, Ng AY, Jordan MI (2003). Latent Dirichlet allocation. Journal of Machine Learning Research 3: 993-1022.
Boyack KW, Klavans R (2010). Co-citation analysis, bibliographic coupling, and direct citation: which citation approach represents the research front most accurately? Journal of the Association for Information Science and Technology 61(12): 2389-2404.
Buckley PJ, Casson M (1976). The Future of the Multinational Enterprise. London: Macmillan.
Buckley PJ, Chen L, Clegg LJ, Voss H (2016). Experience and FDI risk-taking: a microfoundational reconceptualization. Journal of International Management 22(2): 131-146.
Cawkell AE (1976). Understanding science by analysing its literature. Essays of an Information Scientist 2: 543-549.
Chen C, Ibekwe-SanJuan F, Hou J (2010). The structure and dynamics of cocitation clusters: a multiple-perspective cocitation analysis. Journal of the American Society for Information Science and Technology 61(7): 1386-1409.
Chen DZ, Huang MH, Hsieh HC, Lin CP (2011). Identifying hidden relevant patent citation links by using bibliographical coupling in LED illuminating technology. Journal of Informetrics 5(3): 400–412.
Coviello N, Kano L, Liesch PW (2017). Adapting the Uppsala model to a modern world: macro -context and microfoundations. Journal of International Business Studies 48(9): 1151-1164.
Dow D, Cuypers IRP, Ertug EG (2016). The effects of within-country linguistic and religious diversity on foreign acquisitions. Journal of International Business Studies 47(3): 319-346.
Elsahn ZF, Benson-Rea M (2018). Political schemas and corporate political activities during foreign market entry: a micro-process perspective. Management International Review 58(5): 771-811.
Eng TY, Ozdemir S, Michelson G (2016). Brand origin and country of production congruity: evidence from the UK and China. Journal of Business Research 69(12): 5703-5711.

Ethiraj SK, Gambardella A, Helfat CE (2017). Reviews of strategic management research. Strategic Management Journal 38(1): 3.
Forsgren, M (2013). Theories of the Multinational Firm: A Multidimensional Creature in the Global Economy. Cheltenham, UK: Edward Elgar.
Fortwengel J (2017). Understanding when MNCs can overcome institutional distance: a research agenda. Management International Review 57(6): 793-814.
Frynas JG, Child J, Tarba SY (2017). Non-market social and political strategies-New integrative approaches and interdisciplinary borrowings. British Journal of Management 28(4): 559-574.
Gaibrois C (2018). 'It crosses all the boundaries': hybrid language use as empowering resource. European Journal of International Management 12(1-2): 82-110.
Gao Y, Yang ZE, Huang KF, Gao SX, Yang W (2018). Addressing the cross-boundary missing link between corporate political activities and firm competencies: the mediating role of institutional capital. International Business Review 27(1): 259-268.
Garfield E, Malin MV, Small H (1978). Citation data as science indicators. In: Elkana Y, Lederberg J, Merton RK, Thackray A, Zuckerman, H (eds.), Toward a Metric of Science: The Advent of Science Indicators (pp. 179-208). New York: John Wiley & Sons.
Glänzel W, Thijs B (2011). Using 'core documents' for the representation of clusters and topics. Scientometrics 88(1): 297-309.
Golesorkhi S, Mersland R, Piekkari R, Pishchulov G, Randoy T (2019). The effect of language use on the financial performance of microfinance banks: evidence from cross-border activities in 74 countries. Journal of World Business 54(3): 213-229.
Grégoire DA, Nöel MX, Déry R, Béchard JP (2006). Is there conceptual convergence in entrepreneurship research? A co-citation analysis of Frontiers of Entrepreneurship Research, 1981–2004. Entrepreneurship Theory and Practice 3(3): 333-373.
Harzing AW, Pudelko M (2016). Do we need to distance ourselves from the distance concept? Why home and host country context might matter more than (cultural) distance. Management International Review 56(1): 1-34.
Hofstede G (1980). Culture's Consequences: International Differences in Work-Related Values. Beverly Hills, CA: Sage Publications.
Huang L, Gibson CB, Kirkman BL, Shapiro DL (2017). When is traditionalism an asset and when is it a liability for team innovation? A two-study empirical examination. Journal of International Business Studies 48(6): 693-715.
Jarneving B (2007a). Bibliographic coupling and its application to research-front and other core documents. Journal of Informetrics 1(4): 287-307.
Jarneving B (2007b). Complete graphs and bibliographic coupling: a test of the applicability of bibliographic coupling for the identification of cognitive cores on the field level. Journal of Informetrics 1(4): 338-356.
Johanson J, Vahlne JE (1977). The internationalization process of the firm—A model of knowledge development and increasing foreign market commitments. Journal of International Business Studies 8(1): 23-32.
Johanson J, Vahlne JE (2009). The Uppsala internationalization process model revisited: from liability of foreignness to liability of outsidership. Journal of International Business Studies 40(9): 1411-1431.
Kano L (2018). Global value chain governance: a relational perspective. Journal of International Business Studies 49(6): 684-705.
Kano L, Verbeke A (2015). The three faces of bounded reliability: Alfred Chandler and the micro-foundations of management theory. California Management Review 58(1): 97-122.
Kano L, Verbeke A (2019). Theories of the multinational firm: a microfoundational perspective. Global Strategy Journal 9(1): 117-147.

Kessler MM (1963). Bibliographic coupling between scientific papers. Journal of the Association for Information Science and Technology 14(1): 10-25.
Kirkman BL, Lowe KB, Gibson CB (2017). A retrospective on Culture's Consequences: the 35-year journey. Journal of International Business Studies 48(1): 12-29.
Kogut B, Singh H (1988). The effect of national culture on the choice of entry model. Journal of International Business Studies 19(3): 411-432.
Kostova T (1999). Transnational transfer of strategic organizational practices: a contextual perspective. Academy of Management Review 24(2): 308-324.
Kozlowski SWJ, Klein KJ (2000). A multilevel approach to theory and research in organizations: contextual, temporal, and emergent processes. In: Klein SWJ, Kozlowski KJ (eds.), Multilevel Theory, Research, and Methods in Organizations: Foundations, Extensions, and New Directions (pp. 3-90). San Francisco, CA: Jossey-Bass.
Leydesdorff L, Welbers K (2011). The semantic mapping of words and co-words in contexts. Journal of Informetrics 5(3): 469-475.
Liedong TA, Frynas JG (2018). Investment climate constraints as determinants of political tie intensity in emerging countries: evidence from foreign firms in Ghana. Management International Review 58(5): 675-703.
Manning S, Massini S, Peeters C, Lewin AY (2018). The changing rationale for governance choices: early vs. late adopters of global services sourcing. Strategic Management Journal 39(8): 2303-2334.
Marchand M (2018). New models in old frameworks? Contributions to the extension of international management theories through the analysis of emerging multinationals. International Journal of Emerging Markets 13(3): 499-517.
Matysiak L, Rugman AM, Bausch A (2018). Dynamic capabilities of multinational enterprises: the dominant logics behind sensing, seizing, and transforming matter! Management International Review 58(2): 225-250.
McCain KW (1990). Mapping authors in intellectual space: a technical overview. Journal of the American Society for Information Science 41(6): 433-443.
McGaughey SL, Kumaraswamy A, Liesch PW (2016). Institutions, entrepreneurship and co-evolution in international business. Journal of World Business 51(6): 871-881.
Mellahi K, Frynas JG, Sun P, Siegel D (2018). A review of the nonmarket strategy literature: toward a multi-theoretical integration. Journal of Management 42(1): 143-173.
Merton RK (1973). The Sociology of Science: Theoretical and Empirical Investigations. Chicago, IL: The University of Chicago Press.
Meyer M, Libaers D, Thijs B, Grant K, Glänzel W, Debackere K (2014). Origin and emergence of entrepreneurship as a research field. Scientometrics 98(1): 473-485.
Mihalache M, Mihalache OR (2016). A decisional framework of offshoring: integrating insights from 25 years of research to provide direction for future. Decision Sciences 47(6): 1103-1149.
North DC (1990). Institutions, Institutional Change and Economic Performance. Cambridge, MA: Cambridge University Press.
Peng MW, Wang DYL, Jiang Y (2008). An institution-based view of international business strategy: a focus on emerging economies. Journal of International Business Studies 39(5): 920-936.
Peterson MF, Barreto TS (2018). Interpreting societal culture value dimensions. Journal of International Business Studies 49(9): 1190-1207.
Peterson MF, Sondergaard M, Kara A (2018). Traversing cultural boundaries in IB: the complex relationships between explicit country and implicit cultural group boundaries at multiple levels. Journal of International Business Studies 49(8): 1081-1099.

Podsakoff PM, MacKenzie SB, Lee JY, Podsakoff NP (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. Journal of Applied Psychology 88(5):879-903.
Puck J, Hodl MK, Filatotchev I, Wolff HG, Bader B (2016). Ownership mode, cultural distance, and the extent of parent firms' strategic control over subsidiaries in the PRC. Asia Pacific Journal of Management 33(4): 1075-1105.
Small H (1973). Co-citation in the scientific literature: a new measure of the relation between two documents. Journal of the American Society for Information Science 24(4): 265-269.
Small H (2009). Critical thresholds for co-citation clusters and emergence of the giant component. Journal of Informetrics 3(4): 332-340.
Small H, Upham SP (2009). Citation structure of an emerging research area on the verge of application. Scientometrics 79(2): 365-375.
Tenzer H, Pudelko M (2016). Media choice in multilingual virtual teams. Journal of International Business Studies 47(4): 427-452.
Tenzer H, Terjesen S, Harzing, AW (2017). Language in international business: a review and agenda for future research. Management International Review 57(6): 815-854.
Trapczynski P (2018). Dissecting the sources of competitive advantage of infant MNEs: performance antecedents of foreign affiliates of Polish firms. European Journal of International Management 12(4): 374-401.
Trapczynski P, Gorynia M (2017). A double-edged sword? The moderating effects of control on firm capabilities and institutional distance in explaining foreign affiliate performance. International Business Review 26(4): 697-709.
Trapczynski Piotr, Banalieva, Elitsa R (2016). Institutional difference, organizational experience, and foreign affiliate performance: evidence from Polish firms. Journal of World Business 51(5): 826-842.
Tung RL, Stahl GK (2018). The tortuous evolution of the role of culture in IB research: what we know, what we don't know, and where we are headed. Journal of International Business Studies 49(9): 1167-1189.
Vahlne JE, Johanson J (2017). From internationalization to evolution: the Uppsala model at 40 years. Journal of International Business Studies 48(9): 1087-1102.
van Eck NJ, Waltman L (2008). Appropriate similarity measures for author co-citation analysis. Journal of the American Society for Information Science and Technology 59(10): 1653-1661.
van Eck NJ, Waltman L (2009). How to normalize cooccurrence data? An analysis of some well-known similarity measures. Journal of the American Society for Information Science and Technology 60(8): 1635-1651.
van Kranenburg H, Voinea CL (2017). Nonmarket strategies predictors for foreign firms. Scandinavian Journal of Management 33(2): 82-92.
van Raan AFJ, Tijssen RJW (1993). The neural net of neural network research. An exercise in bibliometric mapping. Scientometrics 26(1): 169-192.
van Tulder R, Verbeke A, Piscitello L (2018). Introduction: International Business in the Information and Digital Age–An Overview of Themes and Challenges. In van Tulder R, Verbeke A, Piscitello L (eds.), International Business in the Information and Digital Age (Progress in International Business Research, Volume 13) (pp. 1-13). Bingley, UK: Emerald Publishing Ltd.
Vendrell-Herrero F, Gomes E, Mellahi K, Child J (2017). Building international business bridges in geographically isolated areas: the role of foreign market focus and outward looking competences in Latin American SMEs. Journal of World Business 52(4): 489-502.
Verbeek A, Debackere K, Luwel M, Zimmermann E (2002). Measuring progress and evolution in science and technology– I: the multiple uses of bibliometric indicators. International Journal of Management Reviews 4(2): 179-211.

Vogel R, Güttel WH (2013). The dynamic capability view in strategic management: a bibliometric review. International Journal of Management Reviews 15(4): 426-446.
Voinea CL, van Kranenburg H (2018). Feeling the squeeze: nonmarket institutional pressures and firm nonmarket strategies. Management International Review 58(5): 705-741.
White HD, Griffith BC (1981). Author cocitation: a literature measure of intellectual structure. Journal of the American Society for Information Science 32(3): 163-171.
White HD, McCain KW (1998). Visualizing a discipline: an author co-citation analysis of information science, 1972-1995. Journal of the American Society for Information Science 49(4): 327-355.
Yamin M, Kurt Y (2018). Revisiting the Uppsala internationalization model: social network theory and overcoming the liability of outsidership. International Marketing Review 35(1): 2-17.
Zaheer S. (1995). Overcoming the liability of foreignness. The Academy of Management Journal 38(2): 341-363.
Zhao D, Strotmann A (2011). Intellectual structure of stem cell research: a comprehensive author co-citation analysis of a highly collaborative and multidisciplinary field. Scientometrics 87(1): 115-131.
Zitt M, Bassecoulard E (1996). Reassessment of co-citation methods for science indicators: effect of methods improving recall rates. Scientometrics 37(2): 223–244.
Zitt M, Lelu A, Bassecoulard E (2011). Hybrid citation-word representations in science mapping: portolan charts or research fields? Journal of the American Society for Information Science and Technology 62(1): 19-39.
Zolner M (2019). Local intermediaries and their organisational identification in a French subsidiary. European Journal of International Management 13(1): 88-110.

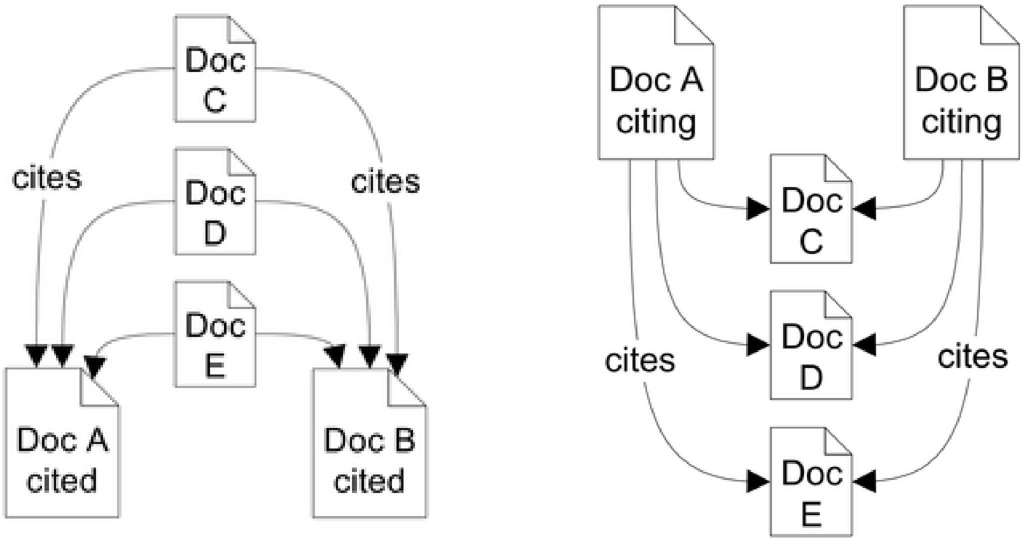

Figure 1. *Co-citation analysis vs. bibliographic coupling between documents*

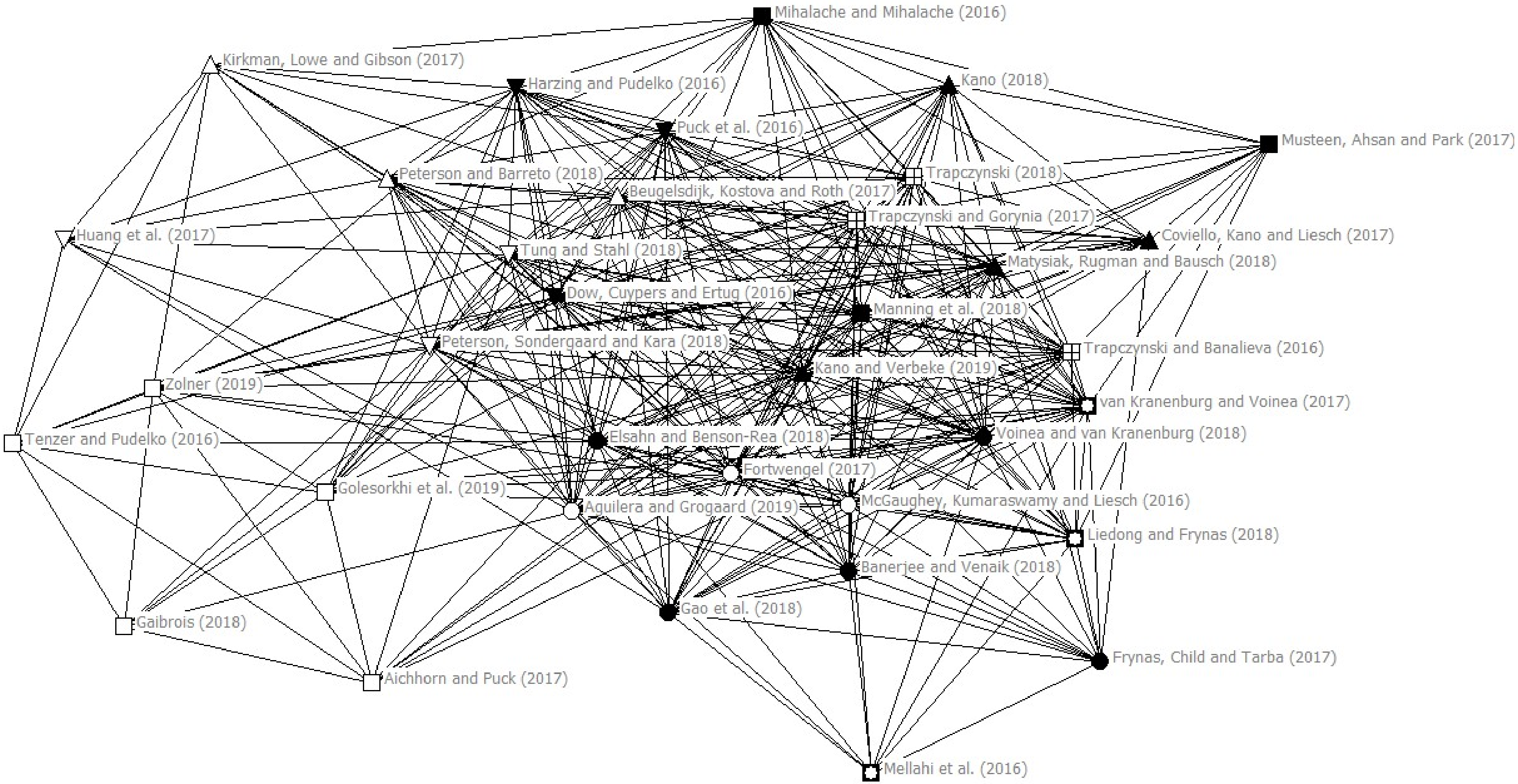

Figure 2. *Bibliographic coupling network of recent research on international business in the areas of management and business, 2016–2019 **

Table 1. *List with the top ten of the most cited research works by the 543 articles published on IB in the areas of management and business in the period 2016-2019**

Ranking	
1	Johanson J, Vahlne JE (1977). The internationalization process of the firm—A model of knowledge development and increasing foreign market commitments. Journal of International Business Studies 8(1): 23-32.
2	Zaheer S. (1995). Overcoming the liability of foreignness. Academy of Management Journal 38(2): 341-363.
3	Peng MW, Wang DYL, Jiang Y (2008). An institution-based view of international business strategy: a focus on emerging economies. Journal of International Business Studies 39(5): 920-936.
4	North DC (1990). Institutions, Institutional Change and Economic Performance. Cambridge, MA: Cambridge University Press.
5	Johanson J, Vahlne JE (2009). The Uppsala internationalization process model revisited: from liability of foreignness to liability of outsidership. Journal of International Business Studies 40(9): 1411-1431.
6	Barney JB (1991). Firm resources and sustained competitive advantage. Journal of Management 17(1): 99-120.
7	Podsakoff PM, MacKenzie SB, Lee JY, Podsakoff NP (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. Journal of Applied Psychology 88(5):879-903.
8	Hofstede G (1980). Culture's Consequences: International Differences in Work-Related Values. Beverly Hills, CA: Sage Publications.
9	Kogut B, Singh H (1988). The effect of national culture on the choice of entry model. Journal of International Business Studies 19(3): 411-432.
10	Kostova T (1999). Transnational transfer of strategic organizational practices: a contextual perspective. Academy of Management Review 24(2): 308-324.

Table 2. *List of journals where the 543 research works analyzed have been published*

Title of Journal	Frequency	Percentage	Total percentage
Journal of International Business Studies	65	11.97%	11.97%
International Business Review	..64	11.79%	23.76%
Journal of World Business	..51	9.39%	33.15%
Management International Review	29	5.34%	38.49%
Cross Cultural & Strategic Management	22	4.05%	42.54%
Journal of Business Research	18	3.31%	45.86%
Global Strategy Journal	16	2.95%	48.80%
International Marketing Review	15	2.76%	51.57%
Journal of International Management	15	2.76%	54.33%
Others (143 different outlets)	248	45.67%	100%
TOTAL	**543**	**100%**	

Table 3. *Factor analysis: results summary and symbols in the network*

No.	Symbol	No. of docs	Eigenvalue	Variance explained (%)	Cum. %
Factor 1	●	5	5,32509	7,3	7,3
Factor 2	□	5	4,83859	6,6	13,9
Factor 3	▲	4	3,95752	5,4	19,3
Factor 4	⌖	3	3,13771	4,3	23,6
Factor 5	▼	3	3,05994	4,2	27,8
Factor 6	○	3	3,05992	4,2	32,0
Factor 7	■	3	2,99003	4,1	36,1
Factor 8	△	3	2,72026	3,7	39,8
Factor 9	▣	3	2,51855	3,4	43,2
Factor 10	▽	3	2,35355	3,2	46,4

Table 4. *Indicators –centrality degree, closeness and betweenness– calculated for some of the nodes of the network*

	Centrality (nDegree)	Document	Closeness (Freeman)	Document	Betweenness (nBetweenness)
Tung and Stahl (2018)	0,85294116	Tung and Stahl (2018)	0,87179488	Tung and Stahl (2018)	3,86824250
Dow, Cuypers and Ertug (2016)	0,82352942	Dow, Cuypers and Ertug (2016)	0,85000002	Dow, Cuypers and Ertug (2016)	3,74963760
Elsahn and Benson-Rea (2018)	0,79411763	Elsahn and Benson-Rea (2018)	0,82926828	Elsahn and Benson-Rea (2018)	3,64511790
Trapczynski and Gorynia (2017)	0,76470589	Trapczynski and Gorynia (2017)	0,80952382	Aguilera and Grogaard (2019)	3,14444351
Kano and Verbeke (2019)	0,76470589	Kano and Verbeke (2019)	0,80952382	Peterson, Sondergaard and Kara (2018)	2,87272215
Fortwengel (2017)	0,76470589	Fortwengel (2017)	0,80952382	Kano and Verbeke (2019)	2,26356816
Peterson, Sondergaard and Kara (2018)	0,76470589	Peterson, Sondergaard and Kara (2018)	0,80952382	van Kranenburg and Voinea (2017)	1,69557571
Aguilera and Grogaard (2019)	0,76470589	Aguilera and Grogaard (2019)	0,80952382	Fortwengel (2017)	1,46382725
Trapczynski (2018)	0,73529410	Trapczynski (2018)	0,79069769	Beugelsdijk, Kostova and Roth (2017)	1,45756089
Voinea and van Kranenburg (2018)	0,73529410	Voinea and van Kranenburg (2018)	0,79069769	Matysiak, Rugman and Bausch (2018)	1,44997633
van Kranenburg and Voinea (2017)	0,73529410	van Kranenburg and Voinea (2017)	0,79069769	Voinea and van Kranenburg (2018)	1,37857342
Matysiak, Rugman and Bausch (2018)	0,73529410	Matysiak, Rugman and Bausch (2018)	0,79069769	Manning et al. (2018)	1,37502396
Manning et al. (2018)	0,73529410	Manning et al. (2018)	0,79069769	Harzing and Pudelko (2016)	1,32802498
McGaughey, Kumaraswamy and Liesch (2016)	0,70588237	McGaughey, Kumaraswamy and Liesch (2016)	0,77272725	Liedong and Frynas (2018)	1,25576246
Beugelsdijk, Kostova and Roth (2017)	0,70588237	Beugelsdijk, Kostova and Roth (2017)	0,77272725	Golesorkhi et al. (2019)	1,21815777

Table 5. *"Research fronts" identified after the application of the factor analysis upon Matrix* ***S***

1	Frynas, Child and Tarba (2017), Gao et al. (2018), Voinea and van Kranenburg (2018), Banerjee and Venaik (2018) and Elsahn and Benson-Rea (2018).	*Non-market social and political strategies; non-market institutional pressures and firm non-market strategies.*
2	Zolner (2019), Gaibrois (2018), Golesorkhi et al. (2019), Tenzer and Pudelko (2016) and Aichhorn and Puck (2017).	*Language in international business research.*
3	Coviello, Kano and Liesch (2017), Kano (2018), Matysiak, Rugman and Bausch (2018) and Kano and Verbeke (2019).	*Microfoundations in IB strategy research; role of the individuals as a core microfoundation of the internationalization process.*
4	Trapczynski (2018), Trapczynski and Gorynia (2017) and Trapczynski and Banalieva (2016).	*New/infant MNEs from Poland as a mid-range emerging economy.*
5	Dow, Cuypers and Ertug (2016), Puck et al. (2016) and Harzing and Pudelko (2016).	*Papers dealing with the concept distance and how home and host country context (e.g. linguistic and/or religious diversity) might matter more than (cultural) distance*
6	McGaughey, Kumaraswamy and Liesch (2016), Aguilera and Grogaard (2019) and Fortwengel (2017).	*Research on the role of institutions –not only as taken-for-granted constraints that need to be accommodated, but also the outcomes of agency; purposive action by individuals, firms, coalitions and other actors– in IB.*
	Manning et al. (2018), Musteen, Ahsan and Park (2017) and Mihalache and Mihalache (2016).	*Key factors influencing the adoption of particular global sourcing practices as offshoring mirroring the growing trend for firms to support their operations by locating activities abroad.*
	Beugelsdijk, Kostova and Roth (2017), Peterson and Barreto (2018) and Kirkman, Lowe and Gibson (2017).	*Hofstede-inspired country-level culture research in international business.*
	Mellahi et al. (2016), van Kranenburg and Voinea (2017) and Liedong and Frynas (2018).	*Research on nonmarket strategies predictors for foreign firms and how investment climate constraints affect the political ties of foreign firms in contexts other than US, Europe and Asia.*
	Tung and Stahl (2018), Peterson, Sondergaard and Kara (2018) and Huang et al. (2017).	*Evolution of the role of culture in international business research; relationship between country and cultural group boundaries*