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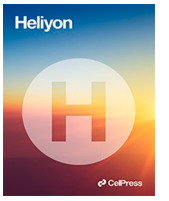

Review article

Innovation and international business: A systematic literature review

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ABSTRACT

Introduction: Innovation and international business are essential to achieve competitive advantages in currently unforeseen business environments. Today's company seeks innovation in its country of origin and abroad in order to compete globally. Thus, incorporating this concept into international companies' strategies is a main issue nowadays.

Purpose: The aim of this systematic study is to improve the current knowledge on the relationship between innovation and international business, as well as identifying innovation tendencies for corporations to acknowledge the opportunities and challenges of this area's development in the international business context.

Methodology: Despite the abundance of innovation and international business reviews, joint reviews of both of them cannot be found. This study is the first to combine the scholarly research on both topics with the systematic literature review of academic literature of 28 years, following the PRISMA guidelines and flowchart. A search was carried out in Web of Science database; 847 initial documents were obtained and, after reviewing multiple documents according to the inclusion/exclusion criteria, the results for this research work were reduced to 236 articles.

Results: The results of this research provide an overview of the knowledge structure of innovation and international business. As the main contribution, the results highlight four themes of investigation within a comprehensive and multidimensional framework: Innovative activities of multinational corporations, Global value chains, Innovation in emerging economies, and Cross-border knowledge. With an international perspective, insights from how to face innovation development in the international business context are presented.

Conclusions: There is a strong relationship between innovation and international business. These four research trends highlight the strategic importance of innovation in the international business field. Finally, the most interesting paths for future research are identified, targeting opportunities for improvement in both areas. This systematic literature review is expected to make significant contributions to both theory and practice in the field of innovation and international business.

1. Introduction

Innovation, knowledge and technology are relevant concepts in the international business field [1] and both areas are essential to achieve competitive advantages in current business environments [2]. Cantwell [3] adds that innovation and internationalization processes have been increasingly interlinked as key drivers of development since the first industrial revolution, all the way to today's

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information age.

Innovation is the cornerstone of growth and sustains organizations to counter marketplace fluctuations and prepares them for long-term growth [4]. Business model innovation, although it is very difficult to achieve [5], can itself be a pathway to competitive advantage if the model is sufficiently differentiated and hard to replicate for incumbents and new entrants alike [6]. New models of innovation have encouraged many innovative firms to change the way they search for new ideas, adopting open search strategies that involve the use of a wide range of external actors and sources to help them achieve innovation [7].

The field of international business studies came to prominence in the 1980s and early 1990s with the growth of multinational corporations [8]. In this framework, two theoretical models are extremely relevant; on the one hand, gradual internationalization or Uppsala model, according to which internationalization is seen as an incremental process that begins in foreign markets, being in closer proximity to the domestic market in terms of physical distance [9,10] and, on the other hand, born global firms, that is to say, companies that internationalise at or near their founding, on an average period of three years of founding, generating at least twenty five percent of their total sales from foreign countries [11]. There is an extensive literature about this issue [12-14].

The systematic literature review on the topic of innovation has been a frequent research method over the last ten years. Different topics have been raised and discussed: organizational innovation [15], innovation capability in SMEs [16], or digital innovation in knowledge management systems [17] among others. In the same way, systematic literature review about international business is copious, holding various topics of investigation: knowledge flows in multinational corporations [18], business systems theory [19], social network [20], or culture [21,22].

Despite the abundance of innovation and international business reviews, joint reviews of both of them cannot be found, such review being needed since the emerging phenomena that are changing international business' frontiers require a change, as well, in the threshold of international business' innovation [23]. From an economic point of view, Melitz [24] shows how high exposure to trade will induce only the most productive companies to enter the international markets; in addition, internationalization has a more positive effect on innovation in high productivity companies [25]. Likewise, the number of international relations increases the capacity to innovate [26] and exposure to foreign competition is associated with greater firm innovation [27]. Companies thus grow either through innovation or through internationalization (also through a mixed strategy), with a combination of internationalization and innovation being the most advisable option when domestic markets are limited [28].

International innovativeness is a significant dimension of international business competence [29], as a nuanced understanding of innovation and international business necessitates a multidisciplinary approach to reveal their multifaceted aspects [30]. Having this in mind, the aim of this study is to improve the current knowledge on the relationship between innovation and international business, that is to say, to identify trends for companies to know better the opportunities and challenges of innovation development in the international business context. Thus, the main innovative contribution of this systematic approach is the proposal of four themes of investigation within a comprehensive and multidimensional framework: Innovative activities of multinational corporations, Global value chains, Innovation in emerging economies, and Cross-border knowledge. This systematic review is motivated by the knowledge gap found in this issue since future research could fill that knowledge gap in the international business field through the development of new theoretical frameworks that draw on various disciplines [31]. On this wise, international business literature tends to develop a plurality of approaches that makes difficult to find single recurring or dominant forms [32].

Considering the ideas presented above and creating an intersection between both the literature of innovation and that of international business, this research provides several contributions to both areas. This is done with a methodologically systematic review of academic literature on both topics. A systematic review has been increasingly adopted in the management literature and is guided by a review question that defines the topics used for the database [33]. Following a previous theoretical study, two research questions were defined.

RQ1. What themes about innovation and international business have been studied jointly to date?

RQ2. Which themes about both areas require further research?

The rest of the paper is structured as follows: the section "Research method" presents the methodology and both the data search and selection used for the study; meanwhile, the section "Research results" presents the main results derived from that research, being categorized in those four themes of investigation posed earlier; the section "Discussion" also presents "Limitations" and "Recommendations for future research", as further studies are needed to provide greater insight about this new approach; finally, the section "Conclusions" has also been included.

2. Research method

This paper presents the results of a systematic review of innovation in international business. Knowledge production within the field of business research is accelerating while at the same time remaining fragmented and interdisciplinary. This makes difficult to assess the global evidence in a specific area of business research, being the reason why literature review as a research method is more important than ever [34]. An advantage of the systematic review methodology is the generalizability of the results by allowing the accumulated knowledge in the field to be systematically synthesized and analysed [35]. A systematic review should have a list of specific steps to assure that important studies regarding the topic are acquired without any bias. Overall, following Tranfield et al. [36], (1) Identification for the need for a review, (2) Selecting a sample of potentially relevant works and the pertinent literature, (3) Data synthesis, (4) Reporting the results and recommendations. The cited steps are all followed in this study. Specifically, the preferred reporting items for systematic reviews and meta-analysis, commonly called PRISMA [37], were followed in this study.

In this analysis, a systematic search was carried out in Web of Science of Clarivate Analytics, including documents published from

January 01, 1993 to December 31, 2020. Birkle et al. [38] claim that Web of Science is the world's oldest, most used and reliable database of research publications (around 34000 journals today). The query used in this systematic literature review is as it follows: TS = ("Innovation" AND "International Business"). Consequently, TS = Topic; and the search terms "innovation" and "international business" were combined with the Boolean Operator "AND". Therefore, literature search was based on two simultaneous topics, "innovation" and "international business" (as stated in the title of the publication, the abstract, the author keywords and/or the keywords plus). Each document has been published between 1993 and 2020, since the first contribution was published in 1993. A total of 847 related documents were found. Thus, it can be affirmed that the importance and size of the literature on innovation and international business is more relevant.

Different criteria for inclusion and exclusion are considered in this study. The process is described through the PRISMA flowchart (Fig. 1). Excluding meetings, books, review articles, editorial materials, and others, the reviewing process generated 630 articles. Only articles published in Business Economics have been considered due to its prominent research area regarding the topics of this paper; bearing this in mind, the number of the articles was reduced to 291. Each article is written in English language following Tenzer et al. [39], stating that 75% of articles in the social sciences are written in this language; therefore, the number of articles was delimited to 264. At last, each article was read in its entirety and various articles were excluded based on full-text or abstract due to their irrelevant nature to the research; thereby, the final sample has been finally reduced to 236 articles. Other criteria, as open access or funding agencies, have not been considered in this research work.

One by one, data of each article were extracted, transferred, and sorted into Microsoft Excel spreadsheet for further analysis. Therefore, a wide Excel database was created with specific information for each article: journal, title, authors' keywords, keywords plus, year of publication, and author information (number, name, affiliation, and country). Specifically, the author keywords and the keywords plus have been studied. In total, 3064 keywords (authors' keywords and keywords plus) were counted, analysed and categorized; this analysis has allowed to obtain four themes of investigation. Subsequently, in Web of Science, these research trends have been confirmed with the latest studies published from January 01, 2021 to November 03, 2022.

3. Research results

3.1. General results

Fig. 2 shows the number of articles on innovation and international business published each year over time. 236 articles were published during the study period 1993–2020, with no consistent trend of the number of articles published, that is to say, with some ups and downs. 80% of the total articles reviewed (189) were published during the last ten years (2011–2020). The largest number of articles was published during 2020 (43 articles), followed by 2018 (31 articles), 2015 and 2019 (both with 21 articles), and finally 2017 (15 articles). There was a lack of publications during the following years: 1994, 1995, 1998, and 2001. Qualitative, quantitative and mixed methods are included in these articles (for instance, case study, literature review, bibliometric study, or regression analysis, among others).

The first article was published in the Strategic Management Journal by Hagedoorn [40]; this article presents interfirm strategic alliances in the international business area and their relationship with innovative efforts. The second article was published in the Journal of International Business Studies by Buckley and Casson [41], regarding international joint ventures in terms of the accelerating pace of technological innovation.

Number of authors per article is presented in Table 1. The number of authors ranged from 1 to 9, with a predominance of two (35.59%) and three (30.93%) authors per article, that is to say, over 65% of the articles published. Besides, the mean of authors per article is considered to be 2.44.

Following the previously mentioned line of thought, Table 2 shows the most relevant journals for research topic. The major journals included in this study are Journal of International Business Studies (48 articles; 20.34%), International Business Review (32 articles; 13.56%), International Marketing Review (14 articles; 5.93%), Management International Review (12 articles; 5.08%), Journal of International Management (8 articles; 3.39%), and Multinational Business Review (8 articles; 3.39%). These are believed to be the top six academic journals and represent more than a half (52%) of the total scientific production.

Eight journals have published at least three articles (Thunderbird International Business Review, Journal of World Business, Entrepreneurial Business and Economics Review, Organization Studies, Industry and Innovation, Competitiveness Review: An International Business Journal, Journal of Business Research, and Management and Organization Review). Eleven journals have published two articles, and finally fifty-seven journals have published only one article. Table 2 also indicates that this study is related to other topics (for instance, strategy, human resources, or entrepreneurship, among others).[1]

Fig. 3 represents the most productive universities. It is important to mention that in this study the first university of each author has been selected, rejecting other additional institutions according to the author's institutional information. Thus, the first institution is the University of Reading with a total of eight articles published, followed by the University of Manchester, University of Leeds, and Uppsala University (each one with six articles); after them, the Duke University, the Rutgers University, and the Temple University

[1] The 236 articles were written by 575 authors. Table 3 shows the most relevant authors to the research topic. Authors such as Knight, Gary A.; Buckley, Peter J.; Cantwell, John; Coviello, Nicole; Kim, Daekwan; Kolk, Ans; Lewin, Arie Y.; Luo, Yadong; Massini, Silvia; Mudambi, Ram; Peeters, Carine; and Tippmann, Esther, have each one three or more publications during the 1993–2020 period. Furthermore, thirty-nine authors contributed to at least two articles each one.

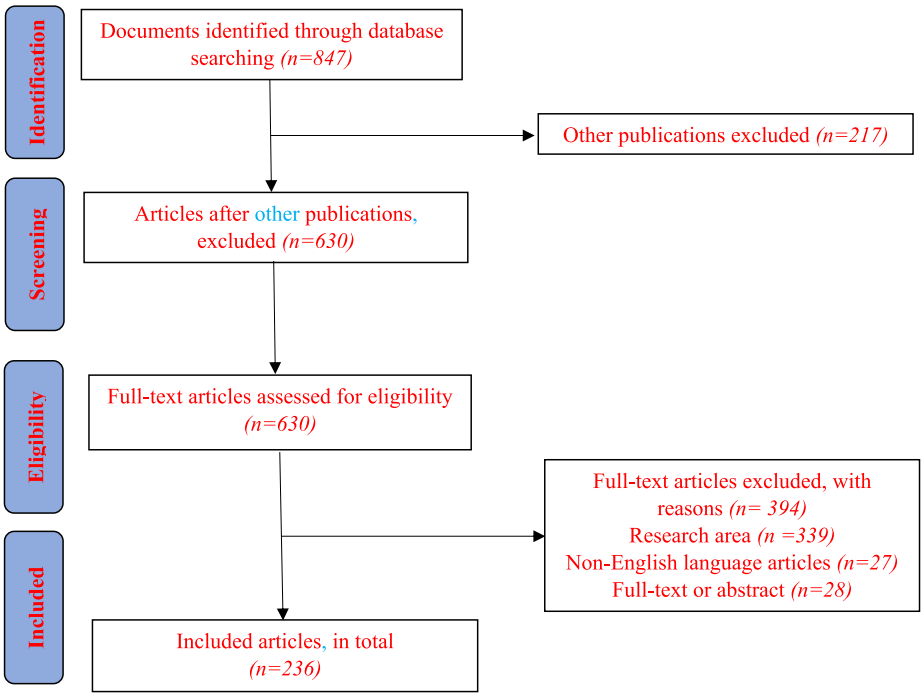

Fig. 1. PRISMA flowchart of the systematic literature review.

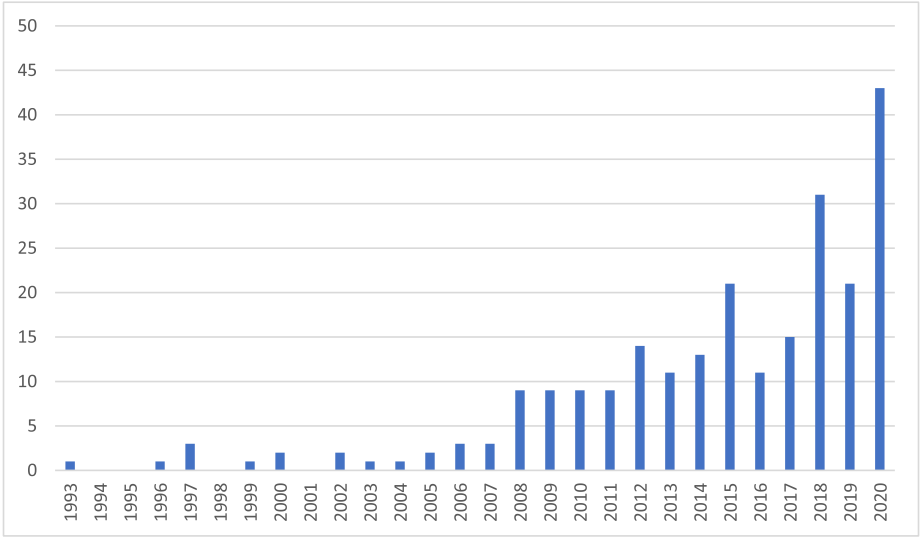

Fig. 2. Number of articles published each year.

(each one with five articles). Twenty-nine universities are included in 113 articles.

Finally, Fig. 4 shows the distribution of the research topic according to the countries of origin of the authors. Overall, the United States of America (frequency in articles = 80; 33.90%), England (52; 22.03%), China (24; 10.17%), Australia (21; 8.90%), Canada (13; 5.51%), and Italy (12; 5.08%) are the most prominent countries. Twenty-three countries were included in the sample. A country is considered part of this figure if it appears in at least three articles.

3.2. Thematic analysis

The current state of the literature is characterized by its complexity and fragmentation. As previously reported, 3064 keywords (authors' keywords and keywords plus) were counted, analysed and categorized. Some of the most prominent keywords, with

Table 1
Number of authors per article.

Number of authors	Number of articles	Weight (%)
1	49	20.76%
2	84	35.59%
3	73	30.93%
4	20	8.47%
5	6	2.54%
6	2	0.85%
7	0	0.00%
8	1	0.42%
9	1	0.42%
	236	100.00%

Table 2
Principal journals.

Journal	Number of articles	Weight (%)
Journal of International Business Studies	48	20.34%
International Business Review	32	13.56%
International Marketing Review	14	5.93%
Management International Review	12	5.08%
Journal of International Management	8	3.39%
Multinational Business Review	8	3.39%
Thunderbird International Business Review	7	2.97%
Journal of World Business	6	2.54%
Entrepreneurial Business and Economics Review	5	2.12%
Organization Studies	4	1.69%
Industry and Innovation	4	1.69%
Competitiveness Review: An International Business Journal	3	1.27%
Journal of Business Research	3	1.27%
Management and Organization Review	3	1.27%
Administrative Sciences	2	0.85%
International Journal of Management and Economics	2	0.85%
Asia Pacific Business Review	2	0.85%
Journal of East-West Business	2	0.85%
Review of International Business and Strategy	2	0.85%
International Journal of Human Resource Management	2	0.85%
Research Policy	2	0.85%
Journal of International Marketing	2	0.85%
Journal of Management Studies	2	0.85%
Strategic Management Journal	2	0.85%
Journal of Business Venturing	2	0.85%
Others Journals (with one article each)	57	23.94%
	236	100.00%

Table 3
Main authors.

Number of Articles Published	Authors
5	Knight, Gary A.
4	Buckley, Peter J.; Cantwell, John
3	Coviello, Nicole; Kim, Daekwan; Kolk, Ans; Lewin, Arie Y.; Luo, Yadong; Massini, Silvia; Mudambi, Ram; Peeters, Carine; Tippmann, Esther
2	Aggarwal, Vijita; Barnard, Helena; Birkinshaw, Julian M.; Casson, Mark C.; Cavusgil, S. Tamer; Ciabuschi, Francesco; Forsgren, Mats; Geppert, Mike; Giblin, Majella; Gotz, Marta; Jean, Ruey-Jer Bryan; Jin, Zhongqi; Kapoor, Madhavi; Kedia, Ben L.; Khan, Zaheer; Lee, Jeoung Yul; Lorenz, Melanie P.; Lundan, Sarianna M.; Monaghan, Sinead.; Musteen, Martina; Ning, Lutao; Parente, Ronaldo Couto; Park, Taekyung; Peng, Mike W.; Perez-Nordtvedt, Liliana; Ramsey, Jase R.; Rhee, Jaehoon; Rose, Elizabeth L.; Rosinska-Bukowska, Magdalena; Ryan, Paul; Seyoum, Belay; Sutherland, Dylan; Teece, David J.; Tsao, Shou-Min; Wang, Yuandi; Weerawardena, Jay; Welch, Catherine; Zahra, Shaker A.; Zander, Ivo

minimum occurrences of ten, are showed in Table 4; the semantic difference between singular and plural forms is not considered. Obviously, “innovation” and “international business” are the most relevant concepts among the ones displayed. These two keywords together, along with the other five keywords, influence four categories. Subsequently, “multinational corporation” and “knowledge” are the most common keywords in this research work.

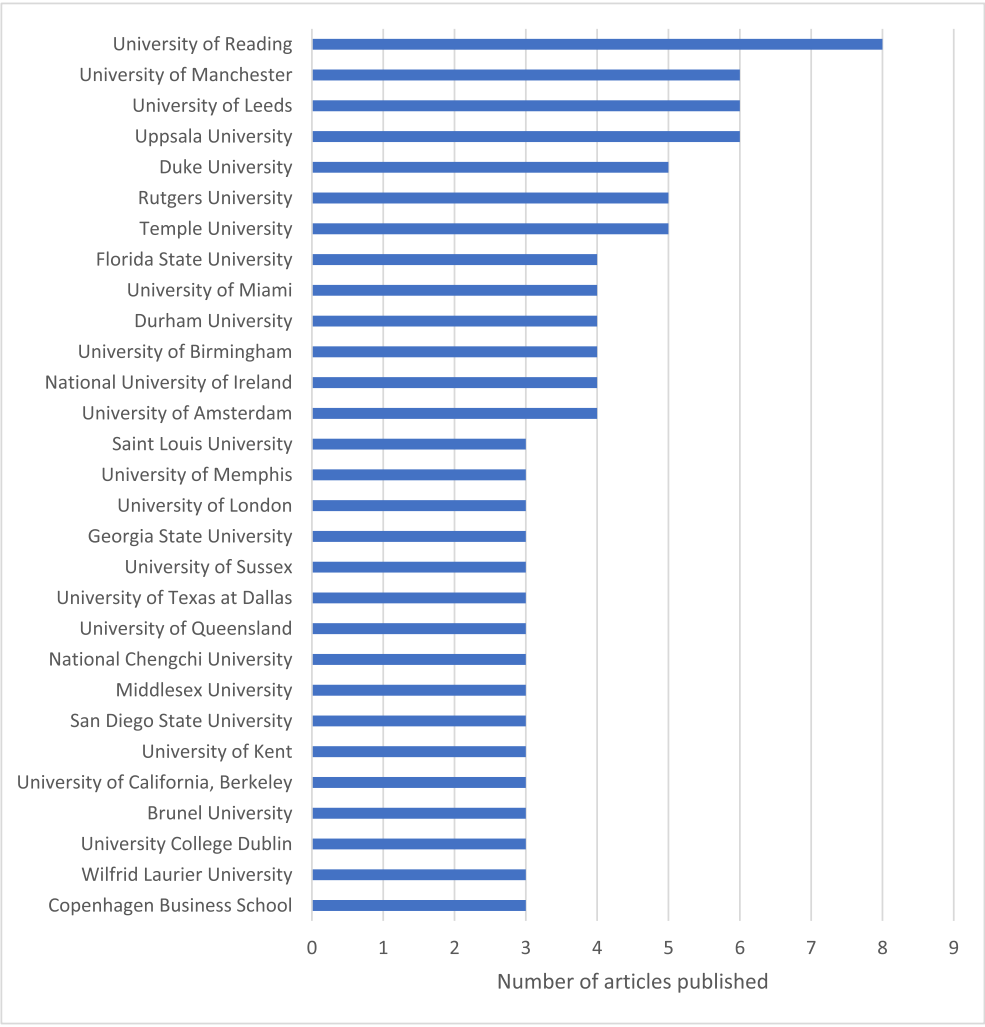

Fig. 3. Most productive universities.

Thus, this section synthesizes the results of this study. Four themes of investigation about the relationship between innovation and international business are suggested: Innovative activities of multinational corporations, Global value chains, Innovation in emerging economies, and Cross-border knowledge. This thematic analysis allows to answer the RQ1 posed earlier, that is to say: "What themes about innovation and international business have been studied jointly to date?" Consequently, it provides the occasion to have a more complete understanding of the research topic within a comprehensive and multidimensional framework.

3.2.1. Innovative activities of multinational corporations

A classic topic in international business research is the multinational corporation. The widest theme of investigation studies the relationship between innovation and the multinational corporation because, as Venaik et al. [42] assert, the international business literature has placed ever-greater emphasis on the role that learning and innovation play in determining multinational corporation performance.

It is common to conceive multinational corporations as a set of geographically disseminated subsidiaries that are combinations of heterogeneous technology competencies and product market responsibilities [43] or, in previous years, as firms that control and manage production establishments located in at least two countries [44]. Competitive success hinges on a multinational corporation's ability to use effectively available knowledge, and to combine it with knowledge from other locations [45]. Therefore, by interacting with locations multinational corporations have the possibility to organize their activities for balancing the exploitation of their current knowledge base and that of the new knowledge bases [46].

Knowledge that is complex to measure [47] has been recognized as critical for subsidiaries' power [48] and its transfer is driven by subunits' motivation: subunits whose activities are mostly complementary have a natural motivation to collaborate and to ensure that the transferred knowledge is adopted, while subunits with surrogate activity relationships are less motivated [49]; consequently Miller et al. [50] assert that the use of distant knowledge contributes to innovation.

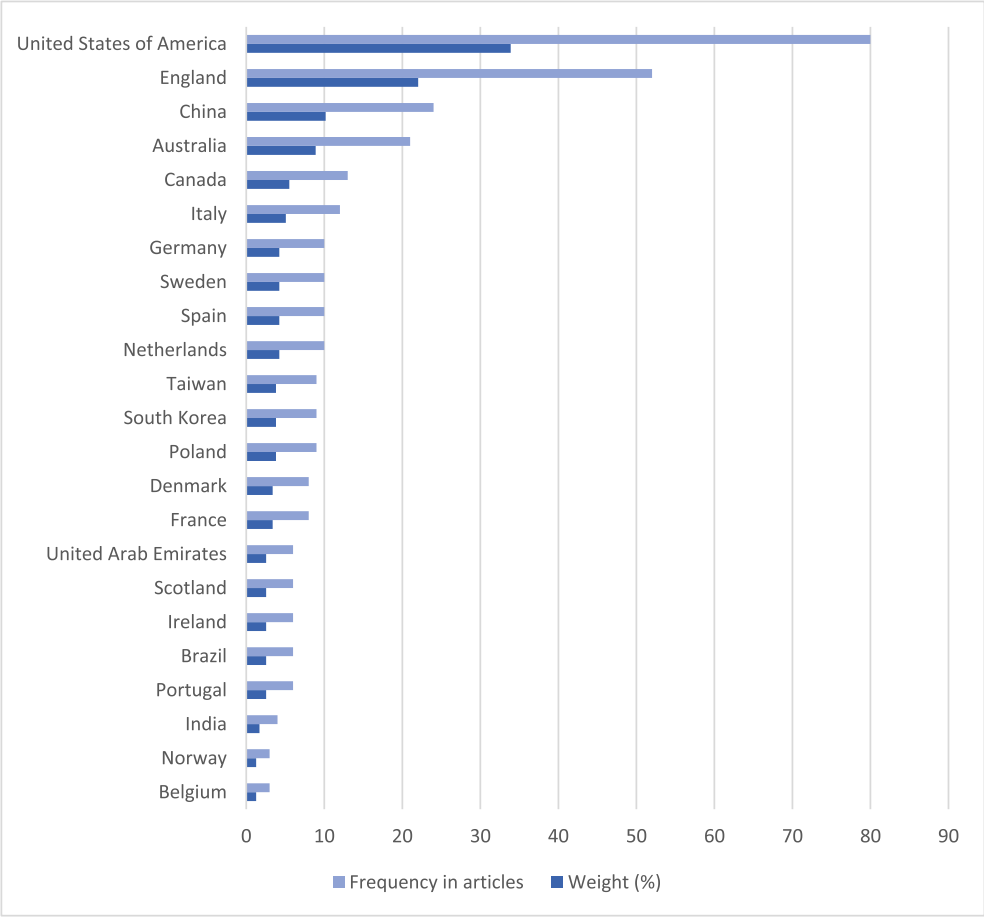

Fig. 4. Most prominent countries.

The location choice for R&D subsidiaries has been a topic of interest for researchers [51] since national subsidiaries carry out different tasks in the distinct processes of creation and innovation in multinational corporations [52,53]. Moreover, according to Frost et al. [54], the formation of centres of excellence in foreign subsidiaries of multinational corporations is shaped by the conditions of the subsidiary's local environment, the fundamental role played by parent firm investment as well as the role of internal and external organizations in the development of subsidiary capabilities. As Castellani et al. [55] argue, multinational corporations have organizational and technical competencies that enable them to transfer knowledge within their internal networks at a relatively low cost, so that geographic distance has a relatively low impact on international R&D investments. Nevertheless, the within-country cultural distance between subsidiaries influences headquarters to transfer projects between those same subsidiaries [56].

Therefore, the degree to which the business model links to local idiosyncrasies, local knowledge, or local innovation, impacts on the business model-related specific advantages [57]. In this context, Cantwell [58] claims that changes in the environment for international business activities have facilitated more open networked formations. Such cooperation will often take place within the field of the multinational corporation orchestrated innovation network which may include open innovation activity [59]. Prashantham and Birkinshaw [60] add that multinational corporations can cooperate with small and medium sized-enterprises as a specific type of host country business stakeholder, although the extent to that cooperation being relatively weak or not is a result of the compatibility between the intents of these disparate sets of firms.

3.2.2. Global value chains

In recent years, firms have been increasingly implementing strategies to take advantage of the comparative advantages of locations. This results in a wider geographic dispersion of firms' activities, with direct implications for creative industries' global value [61]. Buckley [62] proposes the concept of global factory as a structure through which multinational corporations integrate their global strategies through a combination of innovation, distribution and production of goods and services. The increasing international fragmentation of economic activity gives rise to the global value chain research stream, a conceptual approach that deals with managing disaggregated and geographically dispersed value chains of multinational corporations (see, for instance, Refs. [63-66]).

The global value chain concept recognizes that such value-creating chains were not restricted solely to commodities but could also be extended across manufacturing and indeed to services [67]. Large multinational corporations operate in global innovation systems

Table 4
Themes of investigation identified.

Categories	Authors' keywords and Keywords plus	Frequency in articles
All	Innovation	157
	International Business	90
	Strategy	58
	Internationalization	41
	Dynamic capabilities	26
	Competitive advantage	16
	Location	10
Innovative activities of multinational corporations	Multinational corporation/company/enterprise/firm	76
	Foreign direct investment	40
	Research and development	32
	SMEs	25
	Firm performance	17
	Subsidiaries	14
	Born global	12
	National culture	11
Global value chains	Technology	21
	Globalization	17
	Global value chain	17
	Clusters	12
Innovation in emerging economies	Emerging markets/economies/countries	28
	Growth	12
	Competition	11
Cross-border knowledge	Knowledge	63
	Network	44
	Absorptive capacity	32
	Knowledge transfer	14

that are highly complex and so interdependent that the sources of new knowledge creation are hard to pinpoint [68].

Traditionally, the cluster approach emphasizes horizontal links between firms and local organizations [69] and from a network perspective, the cluster is a mechanism for the share of knowledge and learning [70] and also to innovate [71]. Nevertheless, the global value chain is strongly related with the analysis of clusters in the globalization era [72-75] because the need to integrate the global industry and local cluster levels is a basic one [64]. As Carloni [76] develops, clusters are supporters and accelerators of internationalization processes. Moreover, the existence of strong local innovation systems tends to be a prerequisite to guarantee sustained learning through global value chain participation [77].

Overall, participation in the global value chain is positively related to the innovation result of a country, which suggests that the international fragmentation of production may be a channel that allows international technology transfer from developed to developing countries [78]. Integration in the global value chain is perceived as a fundamental way for companies in developing countries to access knowledge to innovate [79] and to access larger markets and new technologies too [80].

3.2.3. Innovation in emerging economies

Emerging economies are low-income, rapid-growth countries using economic liberalization as their primary engine of growth [81]. Since the end of the 20th century, emerging economies, or what is the same, emerging markets, constitute the major growth opportunity in the world economic order and their potential has created a shift in multinational corporations [82] seeking to do business in emerging economies with manifold stakeholders benefited [83], although characteristics of internationalization of emerging market multinational enterprises investment simultaneously have positive and negative development consequences in their home countries [84]. In any case, multinational corporation subsidiaries and local institutions can help emerging market stakeholders, as suppliers [85].

Innovation is an important driver of economic growth in emerging economies [86]. In this context, for instance, innovation has helped develop solutions for consumers at the bottom of the pyramid [87] and middle-class consumers [88]. Emerging economies have certain characteristics, such as immature capital markets, lack of resources for innovation, and poor legal framework to protect property rights [89], that make the innovation process different from developed countries, despite having recently begun to innovate at a rapid rate, regarding the challenges they face [90]. Moreover, developing country difficulties can foster innovation capabilities and international competition [91] since in emerging markets a company gains advantage by learning to improvise with scarce resources and, in the process, to become more innovative than its competition [92]. Summing up, as Anand et al. [93] claim, innovation to and from emerging economies is a systemic outcome of an entire innovation milieu and both firms and countries are heterogeneous, following each one an idiosyncratic path in its evolution.

3.2.4. Cross-border knowledge

International business and cross-border flows of trade and investment significantly impact on the economic growth, employment and innovation potential of countries [64]. In addition, the rapid reshaping of the global economic order requires fundamental changes in international business; as a result, innovation networks will require novel reconfigurations [94,95]. Thus, Cantwell [3] remembers

that there has been an increasing awareness of the importance of absorptive capacity on the part of firms [96]. In this same line, Contreras et al. [97] show that companies should have an organizational climate that allows them to acquire and transform knowledge in order to increase their innovativeness and be more competitive in a globalized world. Having this in mind, firms and locations co-evolve with one another, and it is possible to appreciate the rise of knowledge connectivity in innovation systems, that is a new underlying reality of the international business field [98]. The dynamics of place, space and organization continually generate new domains within which knowledge is leveraged in unique ways [99]. Knowledge circulates through two types of networks; on the one hand, organization-based linkages, or in other words, pipelines [100] and, on the other, personal relationships [73]. Accordingly, digital platforms and ecosystems are a major venue for innovation and have considerable implications for international business [101, 102].

Multinational enterprises and subnational governments have increased their level of cooperative activity and create the basis for sustainable economic growth [103]. Discontinuities between nation-states and spatial heterogeneity within national boundaries are a relevant part of international business with different reasons, such as the historical role of national borders, the magnitude of national governments in international trade, the importance of national institutions in the formulation of business strategy and the decision making and the availability of data [104]. Hence, it is necessary to refer to the concept of global cities, or in other words, the centres of political power, corporate decision-making, knowledge generation and the exchange and movements of human capital and ideas [105]. Goerzen et al. [106] argue that distinctive characteristics of global cities (global interconnectedness, cosmopolitanism, and abundance of advanced production services) help multinational corporations to overcome the costs of doing business abroad. Nevertheless, global cities are not always necessarily the key locations for future multinational investments since knowledge and technology as well as the connection with the capabilities and company goals are crucial [107]. In any case, as Van Burg et al. [108] remember, organizational actors' decisions about interorganizational knowledge transfer might change over time because unforeseen events can prompt actors to quite radically reframe future developments as opportunities or threats.

4. Discussion

This paper performs a systematic literature review of the relationship between innovation and international business. Particularly, using a qualitative/interpretative methodology, evolutionary trends have been recognized and are described in detail. 236 articles were published during the depicted study period 1993–2020. The largest number of articles was published during 2020, highlighting the topicality of the subject. Moreover, to enrich this section, the most recent works are included. The results of this research provide an overview of the knowledge structure of innovation and international business. The results highlight four themes of investigation within a comprehensive and multidimensional framework: Innovative activities of multinational corporations, Global value chains, Innovation in emerging economies, and Cross-border knowledge.

About the first theme, this systematic literature review shows that the multinational corporation is the most important kind of firm for innovation development in the international scenery. Thus, the location choice for its subsidiaries and its local environment is basic for the innovations' development [51,52] and also for the geographies of innovation [109]. This agrees with a very current line of research, which shows that the growing tendency of local technological innovation of multinational corporations, together with the increasing relevance of subsidiaries, are promoting subsidiaries' engagement in conducting innovation activities [110]. In the same way, managers' characteristics, such as prior multinational corporations work experience and industry experience, affect subsidiary innovation [111].

As previously reported, in the field of international business two models are basic; however, although the Uppsala model keeps capturing the interest of scholars and is still one of the most cited frameworks in this area [112], it is confirmed that the born global firms' phenomenon is very present in current literature. As Hennart et al. [113] remember, born global firms make large foreign sales at birth or shortly afterwards since they own valuable resources (for instance, advanced technologies and a high international orientation), and specific internationalization strategies (such as networks). Given the nature of this study, it should be specified that innovation plays a relevant role in the creation of born global firms [114,115]; moreover, born global firms contend with environmental dynamism in global markets, compelling these companies to enhance their innovation capabilities [116].

The second theme reveals a new conceptual approach, the global value chains as referred in the relationship between multinational corporations and global innovation systems [64] in view of the fact that nowadays international lead firms integrate their geographically dispersed partners, specialized suppliers, and customers in these global value chains or global production networks [117]. This new conceptual approach is confirmed due to the necessity of the adoption of a more holistic view of global value chains since this action will provide a clearer picture of how the organization and outcomes of innovative activities have evolved in this specific context [118].

About the third theme, this study supports the forecasts that indicate that emerging economies will have more economic power in the upcoming years. Therefore, this stated theme emphasizes, in the context of innovation, the opportunities for multinational corporations, local institutions, and stakeholders [85]. In any case, legal systems in emerging countries must be strengthened by harder competition laws that encourage the kind of competition that is based on innovation [119]; moreover, emerging market multinational enterprises have consolidated their global presence recently, challenging international business' theories [120]; consequently, strengths and weaknesses are more pronounced when firms face competitors from emerging markets [121].

Finally, the fourth theme is Cross-border knowledge, which, in the internationalization context, impacts on the potential innovation of the countries [64], requiring relevant changes in their innovation networks [95]. In this sense, interaction and communication among their different intra-organizational networks facilitate multinational corporation knowledge transfer [122], whereas born global firms exploit different types of knowledge and networks to develop international opportunities [123]. Consequently,

Freixanet and Churakova [124] point out to a reduction in the transaction costs as companies gain internationalization knowledge. Hence, internationalized companies devote substantial efforts to deploying and maintaining digital platforms, which plays an increasingly important role in today's digitally connected world [125].

4.1. Limitations

This study is supported by official data from 236 articles located in the Web of Science database and it has followed a rigorous research methodology. However, the scope of this kind of study always tends to involve some limitations. Firstly, other databases (Scopus or Google Scholar, for instance) have been excluded from the search. Secondly, while keywords (as innovation and international business) have been selected to cover the chosen areas as completely as possible, it could still be possible that important contributions were missed. Furthermore, certain sources of information have been not targeted (meetings, review articles, books, and editorial materials, among others). It must also be taken into consideration that the only considered area of research has been the Business Economics area (other ones, such as Computer Science or Engineering were not considered relevant enough due to the topic of the current study). In order to finish, only English language publications have been included in this analysis (thus, other languages like Spanish, Korean, or Russian were eliminated). Overall, as Greenhalgh et al. [126] defend, the literature is complex and the approach is somewhat unconventional, leading to other researchers to inevitably identify a different set of primary sources; being this an inherent characteristic of any systematic review.

4.2. Recommendations for future research

This study has strong implications for researchers. Bearing in mind the results of this investigation, it is recommended to expand the scope of this specific study to related innovation and international business topics targeting opportunities for improvement in both areas. There are multiple themes that require further research. Thus, future studies should deepen into the relationship between those specific topics, although this subject could not be an easy one. As previously stated, to enrich this section, the most recent works have been included. The implications of this study allow to answer the RQ2 question posed earlier, that is to say: "Which themes about both areas require further research?"

For instance, the global value chain requires to be fully studied in order to address the participation of multinational corporations in an understandable way holding a comparative environment between countries [127] since, as Buciuni and Pisano [128] confirm, there are a plurality of global value chain structures and a variety of innovation models within the global value chain. Similarly, the international business literature has given little attention to the comparison between the performance of advanced economy multinational corporations and the emerging market multinational corporations acting in international markets [129]. In the same way, in recent years open innovation has become a basic paradigm regarding the specific literature about innovation. However, throughout this research only one article [130] discusses the relationship between this topic and multinational corporations. In addition, a lack of specificity has been observed in the current literature regarding the role of social innovation in multinational corporation since only one recent article of this study [131] suggests to ask why and how this companies engage in social innovations. Likewise, although corporate social responsibility is a relevant factor in multinational corporation's competitiveness, only one depicted article [132] studies the development of corporate social responsibility in international business.

Furthermore, the impact of the Covid-19 pandemic on international business has barely been discussed; leading to only one article in this study addressing this question [133]. The Covid-19 pandemic is an external shock that has disrupted the foundations of our everyday life [134], not only by changing the structure of the world economy, but also by leading to lasting impacts on the international business strategies of multinational corporations [135]. This pandemic encourages multinational firms to diversify their supply chains in order to retain innovation opportunities [136] due to the uncertainty of some innovations during that time [137]. Hence, it is necessary to shed light on the long-term impacts of the Covid-19 pandemic on international business, although the true effects on multinational corporations and global value chains can only be judged over time [138]. In any case, analysing the impact of this virus in the new context of the internationalized companies becomes a necessity.

Future studies could offer more evidence about different topics in the internationalization area (for instance, innovation network adaptation, economic performance, social media, stakeholders, and corruption). Also, the importance of human resource management in the international business context should be reviewed in the near future [139]. In the same way, the majority of the studies have examined outward firm internationalization; however the phenomenon of inbound internationalization is limited and, as Bianchi and Stoian [140] add, innovation drives that inbound internationalization.

On this basis, international business scholars may contribute to addressing these knowledge gaps through research and lecturing. Therefore, this study identifies a set of analysis challenges that can be used as a research agenda for the international business research community. To conclude the present section, final remarks for practitioners are advised since the results of this work could also be useful to CEOs and managers of multinational corporations, and overall, international entrepreneurs; particularly those working in the innovation field (management, processes, or networks, among others). From a managerial viewpoint, these practitioners have encountered difficulties to align their different strategies many times. Thus, these results provide guidance to practitioners that adjust their innovation strategies along with their international business strategies in a complex competitive environment. Likewise, this paper allows a better comprehension of the dynamic reality and identifies challenges that can be used and employed by decision-makers when dealing with the unforeseen internationalization process.

5. Conclusions

Nowadays, companies seek innovation in their countries of origin and abroad in order to compete globally. Therefore, innovation is a key factor for entering into international markets. This systematic literature review shows that there is indeed a strong relationship between innovation and international business; four themes of investigation within a comprehensive and multidimensional framework are found: Innovative activities of multinational corporations, Global value chains, Innovation in emerging economies, and Cross-border knowledge. These four research trends highlight the strategic importance of innovation in international business. Nevertheless, even when the number of articles addressing such topics is growing, this research work underlines that there is still a great opportunity for studying the relationship between those concepts. Thus, incorporating innovation into internationalized companies' strategies is a main issue in current times, even more considering the changing and challenging world that we live in.

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Declaration of interest's statement

The authors declare no competing interests.

References

[1] U. Andersson, A. Dasí, R. Mudambi, T. Pedersen, Technology, innovation and knowledge: the importance of ideas and international connectivity, J. World Bus. 51 (1) (2016) 153–162.
[2] I. Aldeanueva, J.A. Jiménez, Dirección Estratégica Internacional, third ed., Ediciones Pirámide, 2021.
[3] J. Cantwell, Innovation and international business, Ind. Innovat. 24 (1) (2017) 41–60.
[4] V. Kumar, Understanding cultural differences in innovation: a conceptual framework and future research directions, J. Int. Market. 22 (3) (2014) 1–29.
[5] H. Chesbrough, Business model innovation: opportunities and barriers, Long. Range Plan. 43 (2–3) (2010) 354–363.
[6] D.J. Teece, Business models, business strategy and innovation, Long. Range Plan. 43 (2) (2010) 172–194.
[7] K. Laursen, A. Salter, Open for innovation: the role of openness in explaining innovation performance among U.K. manufacturing firms, Strat. Manag. J. 27 (2) (2006) 131–150.
[8] J. Paul, A. Rosado, Gradual internationalization vs born-global/international new venture models: a review and research agenda, Int. Market. Rev. 36 (6) (2019) 830–858.
[9] J. Johanson, J.E. Vahlne, The internationalization process of the firm: a model of knowledge development and increasing foreign market commitments, J. Int. Bus. Stud. 8 (1) (1977) 23–32.
[10] J. Johanson, F. Wiedersheim-Paul, The internationalization of the firm: four Swedish cases, J. Manag. Stud. 12 (3) (1975) 305–322.
[11] G.A. Knight, T.K. Madsen, P. Servais, An inquiry into born-global firms in Europe and the USA, Int. Market. Rev. 21 (6) (2004) 645–665.
[12] S.T. Cavusgil, G.A. Knight, The born global firm: an entrepreneurial and capabilities perspective on early and rapid internationalization, J. Int. Bus. Stud. 46 (1) (2015) 3–16.
[13] S. Monaghan, E. Tippmann, N. Coviello, Born digitals: thoughts on their internationalization and a research agenda, J. Int. Bus. Stud. 51 (1) (2020) 11–22.
[14] T. Zalan, Born global on blockchain, Rev. Int. Bus. Strategy 28 (1) (2018) 19–34.
[15] M.M. Crossan, M. Apaydin, A multi-dimensional framework of organizational innovation: a systematic review of the literature, J. Manag. Stud. 47 (6) (2010) 1154–1191.
[16] M. Saunila, Innovation capability in SMEs: a systematic review of the literature, J. Innov. Knowledge 5 (4) (2020) 260–265.
[17] A. Di Vaio, R. Palladino, A. Pezzi, D.E. Kalisz, The role of digital innovation in knowledge management systems: a systematic literature review, J. Bus. Res. 123 (2021) 220–231.
[18] S. Michailova, Z. Mustaffa, Subsidiary knowledge flows in multinational corporations: research accomplishments, gaps, and opportunities, J. World Bus. 47 (3) (2012) 383–396.
[19] M.B. Rana, G. Morgan, Twenty-five years of business systems research and lessons for international business studies, Int. Bus. Rev. 28 (3) (2019) 513–532.
[20] Y. Kurt, M. Kurt, Social network analysis in international business research: an assessment of the current state of play and future research directions, Int. Bus. Rev. 29 (2) (2020) 1–42.
[21] C. López-Duarte, M.M. Vidal, B. González, International business and national culture: a literature review and research agenda, Int. J. Manag. Rev. 18 (4) (2016) 397–416.
[22] S. Srivastava, S. Singh, S. Dhir, Culture and international business research: a review and research agenda, Int. Bus. Rev. 29 (4) (2020) 1–15.
[23] D.P. Sullivan, J.D. Daniels, Innovation in international business research: a call for multiple paradigms, J. Int. Bus. Stud. 39 (6) (2008) 1081–1090.
[24] M.J. Melitz, The impact of trade on intra-industry reallocations and aggregate industry productivity, Econometrica 71 (6) (2003) 1695–1725.
[25] P. Aghion, A. Bergeaud, M. Lequien, M.J. Melitz, The Impact of Exports on Innovation: Theory and Evidence, 2018. NBER Working Paper 24600.
[26] M. Gjelsvik, Capabilities for innovation in a globalizing world: from nearby or at a distance? Entrep. Bus. Econ. Rev. 2 (2) (2014) 7–19.
[27] M. Ayyagari, A. Demirgüc-Kunt, V. Maksimovic, Firm innovation in emerging markets: the role of finance, governance, and competition, J. Financ. Quant. Anal. 46 (6) (2011) 1545–1580.
[28] K. Kyläheiko, A. Jantunen, K. Puumalainen, S. Saarenketo, A. Tuppura, Innovation and internationalization as growth strategies: the role of technological capabilities and appropriability, Int. Bus. Rev. 20 (5) (2011) 508–520.

[29] G.A. Knight, D. Kim, International business competence and the contemporary firm, J. Int. Bus. Stud. 40 (2) (2009) 255–273.
[30] Y. Liu, S. Collinson, C. Cooper, D. Baglieri, International business, innovation and ambidexterity: a micro-foundational perspective, Int. Bus. Rev. 31 (3) (2022), 101852.
[31] M. Christofi, V. Pereira, D. Vrontis, S. Tarba, A. Thrassou, Agility and flexibility in international business research: a comprehensive review and future research directions, J. World Bus. 56 (3) (2021), 101194.
[32] S. Guercini, M. Milanesi, Heuristics in international business: a systematic literature review and directions for future research, J. Int. Manag. 26 (4) (2020), 100782.
[33] L.M. De Menezes, C. Kelliher, Flexible working and performance: a systematic review of the evidence for a business case, Int. J. Manag. Rev. 13 (4) (2011) 452–474.
[34] H. Snyder, Literature review as a research methodology: an overview and guidelines, J. Bus. Res. 104 (2019) 333–339.
[35] C.L. Wang, H. Chugh, Entrepreneurial learning: past research and future challenges, Int. J. Manag. Rev. 16 (1) (2014) 24–61.
[36] D. Tranfield, D. Denyer, P. Smart, Towards a methodology for developing evidence-informed management knowledge by means of systematic review, Br. J. Manag. 14 (3) (2003) 207–222.
[37] A. Liberati, D.G. Altman, J. Tetzlaft, C. Mulrow, P.C. Gotzsche, J.P.A. Ioannidis, M. Clarke, P.J. Devereaux, J. Kleijnen, D. Moher, The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate health care interventions: explanation and elaboration, J. Clin. Epidemiol. 62 (2009) e31–e34.
[38] C. Birkle, D.A. Pendlebury, J. Schnell, J. Adams, Web of Science as a data source for research on scientific and scholarly activity, Quant. Sci. Stud. 1 (1) (2020) 363–376.
[39] H. Tenzer, S. Terjesen, A.W. Harzing, Language in international business: a review and agenda for future research, Manag. Int. Rev. 57 (2) (2017) 815–854.
[40] J. Hagedoorn, Understanding the rationale of strategic technology partnering: interorganizational modes of cooperation and sectoral differences, Strat. Manag. J. 14 (5) (1993) 371–385.
[41] P.J. Buckley, M. Casson, An economic model of international joint venture strategy, J. Int. Bus. Stud. 27 (5) (1996) 849–876.
[42] S. Venaik, D.F. Midgley, T.M. Devinney, Dual paths to performance: the impact of global pressures on MNC subsidiary conduct and performance, J. Int. Bus. Stud. 36 (6) (2005) 655–675.
[43] M.T. Hansen, B. Lovas, How do multinational companies leverage technological competencies? Moving from single to interdependent explanations, Strat. Manag. J. 25 (8/9) (2004) 801–822.
[44] D.J. Teece, Multinational enterprise, internal governance, and industrial organization, Am. Econ. Rev. 75 (2) (1985) 233–238.
[45] S. Tallman, A.S. Chacar, Knowledge accumulation and dissemination in MNEs: a practice based-framework, J. Manag. Stud. 48 (2) (2011) 278–304.
[46] J. Cantwell, R. Mudambi, Physical attraction and the geography of knowledge sourcing in multinational enterprises, Global Strat. J. 1 (3–4) (2011) 206–232.
[47] S. Sandberg, Emerging market entry node pattern and experiential knowledge of small and medium-sized enterprises, Int. Market. Rev. 30 (2) (2013) 106–129.
[48] R. Mudambi, P. Navarra, Is knowledge power? Knowledge flows, subsidiary power and rent-seeking within MNCs, J. Int. Bus. Stud. 35 (5) (2004) 385–406.
[49] U. Andersson, A. Gaur, R. Mudambi, M. Persson, Unpacking interunit knowledge transfer in multinational enterprises, Global Strat. J. 5 (3) (2015) 241–255.
[50] D.J. Miller, M.J. Fern, L.B. Cardinal, The use of knowledge for technological innovation within diversified firms, Acad. Manag. J. 50 (2) (2007) 308–326.
[51] C. Falaster, M.P. Ferreira, Institutional factors and subnational location choice for multinationals' R&D subsidiaries, Innov. Manag. Rev. 17 (4) (2020) 351–367.
[52] B.J. Cowden, H.S. Alhorr, Disruptive innovation in multinational enterprises, Multinatl. Bus. Rev. 21 (4) (2013) 358–371.
[53] S. Ghoshal, C.A. Bartlett, Creation, adoption, and diffusion of innovations by subsidiaries of multinational corporations, J. Int. Bus. Stud. 19 (3) (1988) 365–388.
[54] T.S. Frost, J.M. Birkinshaw, P.C. Ensign, Centers of excellence in multinational corporations, Strat. Manag. J. 23 (11) (2002) 997–1018.
[55] D. Castellani, A. Jimenez, A. Zanfei, How remote are R&D labs? Distance factors and international innovative activities, J. Int. Bus. Stud. 44 (7) (2013) 649–675.
[56] Y. Miao, Y. Zeng, J.Y. Lee, Headquarters resource allocation for inter-subsidiary innovation transfer: the effect of within-country and cross-country cultural differences, Manag. Int. Rev. 56 (5) (2016) 665–698.
[57] R. Bohnsack, F. Ciulli, A. Kolk, The role of business models in firm internationalization: an exploration of European electricity firms in the context of the energy transition, J. Int. Bus. Stud. 52 (5) (2021) 824–852.
[58] J. Cantwell, Blurred boundaries between firms, and new boundaries within (large multinational) firms: the impact of decentralized networks for innovation, Seoul J. Econ. 26 (1) (2013) 1–32.
[59] C. Dhanaraj, A. Parkhe, Orchestrating innovation networks, Acad. Manag. Rev. 31 (3) (2006) 659–669.
[60] S. Prashantham, J. Birkinshaw, MNE-SME cooperation: an integrative framework, J. Int. Bus. Stud. 51 (7) (2020) 1161–1175.
[61] R. Mudambi, Location, control and innovation in knowledge-intensive industries, J. Econ. Geogr. 8 (5) (2008) 699–725.
[62] P.J. Buckley, The impact of the global factory on economic development, J. World Bus. 44 (2) (2009) 131–143.
[63] C. Findlay, B. Hoekman, Value chain approaches to reducing policy spillovers on international business, J. Int. Bus. Policy 4 (3) (2021) 390–409.
[64] G. Gereffi, Global value chains and international development policy: bringing firms, networks and policy-engaged scholarship back in, J. Int. Bus. Policy 2 (3) (2019) 195–210.
[65] L. Kano, Global value chain governance: a relational perspective, J. Int. Bus. Stud. 49 (6) (2018) 684–705.
[66] A.O. Laplume, B. Petersen, J.M. Pearce, Global value chains from a 3D printing perspective, J. Int. Bus. Stud. 47 (5) (2016) 595–609.
[67] M.D. Parrilli, K. Nadvi, H.W.C. Yeung, Local and regional development in global value chains, production networks and innovation networks: a comparative review and the challenges for future research, Eur. Plann. Stud. 21 (7) (2013) 967–988.
[68] N.J. Foss, R. Mudambi, S. Murtinu, Taxing the multinational enterprise: on the forced redesign of global value chains and other inefficiencies, J. Int. Bus. Stud. 50 (9) (2019) 1644–1655.
[69] J. Humphrey, H. Schmitz, How does insertion in global value chains affect upgrading in industrial clusters? Reg. Stud. 36 (9) (2002) 1017–1027.
[70] M. Franco, L. Esteves, Inter-clustering as a network of knowledge and learning: multiple case studies, J. Innov. Knowled. 5 (1) (2020) 39–49.
[71] J.S. Engel, Global clusters of innovation: lessons from Silicon Valley, Calif. Manag. Rev. 57 (2) (2015) 36–65.
[72] G. Gereffi, J. Lee, Economic and social upgrading in global value chains and industrial clusters: why governance matters, J. Bus. Ethics 133 (1) (2016) 25–38.
[73] M. Lorenzen, R. Mudambi, Clusters, connectivity and catch-up: bollywood and Bangalore in the global economy, J. Econ. Geogr. 13 (3) (2013) 501–534.
[74] K. Nadvi, Global standards, global governance and the organization of global value chains, J. Econ. Geogr. 8 (3) (2008) 323–343.
[75] E. Turkina, A. Van Assche, Global connectedness and local innovation in industrial clusters, J. Int. Bus. Stud. 49 (6) (2018) 706–728.
[76] E. Carloni, Formal clusters supporting small firms' internationalization: a case of public-private interaction, J. Bus. Ind. Market. 37 (13) (2022) 77–93.
[77] C. Pietrobelli, C. Staritz, Upgrading, interactive learning, and innovation systems in value chain interventions, Eur. J. Dev. Res. 30 (3) (2018) 557–574.
[78] L. Tajoli, G. Felice, Global value chains participation and knowledge spillovers in developed and developing countries: an empirical investigation, Eur. J. Dev. Res. 30 (3) (2018) 505–532.
[79] C. Keijser, M. Iizuka, Looking beyond global value chains in capacity development: the case of the IT-enabled services (ITES) sector in South Africa, Eur. J. Dev. Res. 30 (3) (2018) 442–461.
[80] C. Pietrobelli, Global value chains in the least developed countries of the world: threats and opportunities for local producers, Int. J. Technol Learn. Innovat. Dev. 1 (4) (2008) 459–481.
[81] R.E. Hoskisson, L. Eden, C.M. Lau, M. Wright, Strategy in emerging economies, Acad. Manag. J. 43 (3) (2000) 249–267.
[82] D.J. Arnold, J.A. Quelch, New strategies in emerging markets, Sloan Manag. Rev. 40 (1) (1998) 7–20.
[83] V. Kumar, R. Srivastava, New perspectives on business model innovations in emerging markets, J. Acad. Market. Sci. 48 (5) (2020) 815–825.

[84] G. Hendriks, How outward investment from emerging markets affects economic development at home: using the eclectic paradigm to synthesize two IB literatures, Multinatl. Bus. Rev. 28 (4) (2020) 463–482.
[85] R.A. Corredoira, G.A. McDermott, Adaptation, bridging and firm upgrading how non-market institutions and MNCs facilitate knowledge recombination in emerging markets, J. Int. Bus. Stud. 45 (6) (2014) 699–722.
[86] S. Radas, L. Božić, The antecedents of SME innovativeness in an emerging transition economy, Technovation 29 (6–7) (2009) 438–450.
[87] C.K. Prahalad, Bottom of the pyramid as a source of breakthrough innovations, J. Prod. Innovat. Manag. 29 (1) (2012) 6–12.
[88] S.T. Cavusgil, S. Deligonul, I. Kardes, E. Cavusgil, Middle-class consumers in emerging markets: conceptualization, propositions, and implications for international marketers, J. Int. Market. 26 (3) (2018) 94–108.
[89] I.P. Mahmood, W. Mitchell, Two faces: effects of business groups on innovation in emerging economies, Manag. Sci. 50 (10) (2004) 1348–1365.
[90] X. Xiao, C.B. Califf, S. Sarker, S. Sarker, ICT innovation in emerging economies: a review of the existing literature and a framework for future research, J. Inf. Technol. 28 (4) (2013) 264–278.
[91] A. Cavallo, A. Ghezzi, B.V. Ruales, Driving internationalization through business model innovation: evidences from an AgTech company, Multinatl. Bus. Rev. 28 (2) (2020) 201–220.
[92] J.N. Sheth, Impact of emerging markets on marketing: rethinking existing perspectives and practices, J. Market. 75 (4) (2011) 166–182.
[93] J. Anand, G. McDermott, R. Mudambi, J. Narula, Innovation in and from emerging economies: new insights and lessons for international business research, J. Int. Bus. Stud. 52 (4) (2021) 545–559.
[94] Y. Ding, J. Wu, Overcoming openness paradox in open networks: a configurational approach, J. Bus. Res. 150 (2022) 528–537.
[95] O. Petricevic, D.J. Teece, The structural reshaping of globalization: implications for strategic sectors, profiting from innovation, and the multinational enterprise, J. Int. Bus. Stud. 50 (9) (2019) 1487–1512.
[96] W.M. Cohen, D.A. Levinthal, Absorptive capacity: a new perspective on learning and innovation, Adm. Sci. Q. 35 (1) (1990) 128–152.
[97] F. Contreras, I. Aldeanueva, J.C. Espinosa, G. Abid, Potential and realized absorptive capacity in Colombian firms: the mediating role of the organizational climate for innovation, Sage Open 11 (4) (2021) 1–11.
[98] M. Cano-Kollmann, J. Cantwell, T.J. Hannigan, R. Mudambi, J. Song, Knowledge connectivity: an agenda for innovation research in international business, J. Int. Bus. Stud. 47 (3) (2016) 255–262.
[99] S. Beugelsdijk, P. McCann, R. Mudambi, Introduction: place, space and organization–economic geography and the multinational enterprise, J. Econ. Geogr. 10 (4) (2010) 485–493.
[100] H. Bathelt, A. Malmberg, P. Maskell, Clusters and knowledge: local buzz, global pipelines and the process of knowledge creation, Prog. Hum. Geogr. 28 (1) (2004) 31–56.
[101] S. Nambisan, S.A. Zahra, Y. Luo, Global platforms and ecosystems: implications for international business theories, J. Int. Bus. Stud. 50 (9) (2019) 1464–1486.
[102] K. Rong, Z. Kang, P.J. Williamson, Liability of ecosystem integration and internationalisation of digital firms, J. Int. Manag. 28 (4) (2022), 100939.
[103] S. Lundan, J. Cantwell, The local co-evolution of firms and governments in the Information Age, J. Int. Bus. Stud. 51 (9) (2020) 1516–1528.
[104] S. Beugelsdijk, R. Mudambi, MNEs as border-crossing multi-location enterprises: the role of discontinuities in geographic space, J. Int. Bus. Stud. 44 (5) (2013) 413–426.
[105] P. McCann, Z.J. Acs, Globalization: countries, cities and multinationals, Reg. Stud. 45 (1) (2011) 17–32.
[106] A. Goerzen, C.G. Asmussen, B.B. Nielsen, Global cities and multinational enterprise location strategy, J. Int. Bus. Stud. 44 (5) (2013) 427–450.
[107] S. Iammarino, P. McCann, R. Ortega-Argilés, International business, cities and competitiveness: recent trends and future challenges, Compet. Rev. 28 (3) (2018) 236–251.
[108] E. Van Burg, H. Berends, E.M. Van Raaij, Framing and interorganizational knowledge transfer: a process study of collaborative innovation in the aircraft industry, J. Manag. Stud. 51 (3) (2014) 349–378.
[109] H. Bathelt, P. Li, The interplay between location and strategy in a turbulent age, Global Strat. J. 12 (3) (2022) 451–471.
[110] T. Liu, X. Li, How do MNCs conduct local technological innovation in a host country? An examination from subsidiaries' perspective, J. Int. Manag. 28 (3) (2022), 100951.
[111] N. Nuruzzaman, A.S. Gaur, R.B. Sambharya, A microfoundations approach to studying innovation in multinational subsidiaries, Global Strat. J. 9 (1) (2019) 92–116.
[112] B.F. Abrantes, Are neoclassic internationalization models enduring? A case-review of the Uppsala paradigm, Sage Open 10 (2) (2020) 1–16.
[113] J.F. Hennart, A. Majocchi, B. Hagen, What's so special about born globals, their entrepreneurs or their business model? J. Int. Bus. Stud. 52 (9) (2021) 1665–1694.
[114] A.M. García-Cabrera, M.G. García, S.M. Suárez, Macro-level spillovers and micro-level capabilities as antecedents of young SMEs' propensity to export and to become a born global, Int. Enterpren. Manag. J. 13 (4) (2017) 1199–1220.
[115] C.J. Prieto-Sánchez, F. Merino, Prevalence of the born-global phenomenon in different countries: an integrated perspective, Multinatl. Bus. Rev. 30 (4) (2022) 471–498.
[116] D. Buccieri, R.G. Javalgi, E. Cavusgil, International new venture performance: role of international entrepreneurial culture, ambidextrous innovation, and dynamic marketing capabilities, Int. Bus. Rev. 29 (2) (2020), 101639.
[117] L. Kano, E.W.K. Tsang, H.W.C. Yeung, Global value chains: a review of the multi-disciplinary literature, J. Int. Bus. Stud. 51 (4) (2020) 577–622.
[118] B. Ambos, K. Brandl, A. Perri, V.G. Scalera, A. Van Assche, The nature of innovation in global value chains, J. World Bus. 56 (4) (2021), 101221.
[119] M. Kafouros, S.P. Chandrashekar, M. Aliyev, A.K.M. Au, How do formal and informal institutions influence firm profitability in emerging countries? J. Int. Manag. 28 (1) (2022), 100890.
[120] Y. Liang, A. Giroud, A. Rygh, Emerging multinationals' strategic asset-seeking M&As: a systematic review, Int. J. Emerg. Mark. 16 (7) (2021) 1348–1372.
[121] K. Friesenbichler, A. Reinstaller, Do firms facing competitors from emerging markets behave differently? Evidence from Austrian manufacturing firms, Eur. Bus. Rev. 34 (2) (2022) 153–170.
[122] P. López-Sáez, J. Cruz, J.E. Navas, M.M. Perona, Organizational integration mechanisms and knowledge transfer effectiveness in MNCs: the moderating role of cross-national distance, J. Int. Manag. 27 (4) (2021), 100872.
[123] R. Romanello, M. Karami, S. Gerschewski, N. Evers, C.X. He, International opportunity development of born global firms: the role of institutions, Crit. Perspect. Int. Bus. 18 (3) (2022) 303–337.
[124] J. Freixanet, I. Churakova, Exploring the relationship between internationalization stage, innovation, and performance: the case of Spanish companies, Int. J. Bus. 23 (2) (2018) 131–150.
[125] J. Li, Y. Pan, Y. Yang, C.H. Tse, Digital platform attention and international sales: an attention-based view, J. Int. Bus. Stud. 53 (8) (2022) 1817–1835.
[126] T. Greenhalgh, G. Robert, F. MacFarlane, P. Bate, O. Kyriakidou, Diffusion of innovations in service organizations: systematic review and recommendations, Milbank Q. 82 (4) (2004) 581–629.
[127] F. Fortanier, G. Miao, A. Kolk, N. Pisani, Accounting for firm heterogeneity in global value chains, J. Int. Bus. Stud. 51 (3) (2020) 432–453.
[128] G. Buciuni, G. Pisano, Variety of innovation in global value chains, J. World Bus. 56 (2) (2021), 101167.
[129] K.S.L. Ozkan, H. Khan, S. Deligonul, S. Yeniyurt, Q.C. Gu, E. Cavusgil, S. Xu, Race for market share gains: how emerging market and advanced economy MNEs perform in each other's turf, J. Bus. Res. 150 (2022) 208–222.
[130] M.M. Naqshbandi, S.M. Jasimuddin, Knowledge-oriented leadership and open innovation: role of knowledge management capability in France-based multinationals, Int. Bus. Rev. 27 (3) (2018) 701–713.
[131] C.H. Lind, O. Kang, A. Ljung, M. Forsgren, MNC involvement in social innovations: the issue of knowledge, networks and power, Crit. Perspect. Int. Bus. 16 (1) (2020) 79–99.
[132] H. Zhao, F. Zhang, J. Kwon, Corporate social responsibility research in international business journals: an author co-citation analysis, Int. Bus. Rev. 27 (2) (2018) 389–400.

[133] E. Santos, M. Oliveira, V. Ratten, F. Oliveira, V. Capela, A reflection on explanatory factors for COVID-19: a comparative study between countries, Thunderbird Int. Bus. Rev. 63 (3) (2021) 285–301.
[134] N. Nummela, E. Paavilainen, R. Harikkala, J. Raitis, When all doors close: implications of COVID-19 for cosmopolitan entrepreneurs, Int. Small Bus. J.: Res. Entrep. 38 (8) (2020) 711–717.
[135] A. Verbeke, W. Yuan, A few implications of the COVID-19 pandemic for international business strategy research, J. Manag. Stud. 58 (2) (2021) 597–601.
[136] G. Gereffi, What does the COVID-19 pandemic teach us about global value chains? The case of medical supplies, Journal of International Business Policy 3 (3) (2020) 287–301.
[137] V. Ratten, Coronavirus and international business: an entrepreneurial ecosystem perspective, Thunderbird Int. Bus. Rev. 62 (5) (2020) 629–634.
[138] L. Curran, J. Eckhardt, J. Lee, The trade policy response to COVID-19 and its implications for international business, Crit. Perspect. Int. Bus. 17 (2) (2021) 252–320.
[139] J.D. Sebestova, C.R.G. Popescu, Factors influencing investments into human resources to support company performance, J. Risk Financ. Manag. 15 (1) (2022) 19.
[140] C. Bianchi, M.C. Stoian, Exploring the role of managerial and organizational capabilities for the inbound internationalization of small and medium-sized enterprises, J. Small Bus. Manag. (2022) 1–39.