



The Intellectual Structure of Research on Knowledge for SMEs’ Internationalisation

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ARTICLE INFO	ABSTRACT
<div><div>Received: 28 Mar 2025 Accepted: 15 Apr 2025 Published: 26 Apr 2025</div></div> <div><p><b>Cite this article as:</b></p><p>Suárez-Ortega, S.M., González-Loureiro, M. and García-Cabrera, A.M. (2025) “The Intellectual Structure of Research on Knowledge for SMEs’ Internationalisation”, <i>International Journal of Research in Business Studies and Management</i>, 12(1), pp. 1–17.</p><p><b>DOI:</b> <a href="https://doi.org/10.62557/2394-5931.120101">https://doi.org/10.62557/2394-5931.120101</a></p></div> <div><p><b>Copyright:</b> © 2025 The author(s). This article is licensed under a Creative Commons Attribution-Non Commercial 4.0 International License.</p><div></div></div>	<p>Knowledge is paramount to firms’ internationalisation, especially for those firms with lower size. This systematic review looks at them and analyses the intellectual structure of the scientific literature on knowledge required for the internationalisation of small and medium-sized enterprises (SMEs). We analysed the content of 224 articles found on the intersection of knowledge and SMEs’ internationalisation for the period 1984-2017. We classified the content into theoretical approaches, entry modes, target variables, methods, home and host geographical areas and industries analysed. We examined the dynamics of descriptors over time by splitting the period into two non-overlapping sub-periods based on the information technology eras: Digitalization and Age of Acceleration, which have had an impact on possibilities of SMEs’ internationalisation. We mapped the intellectual structure of research in a two-dimensional graph. Four areas of descriptors with singular distributions were found and discussed. Finally, we propose a research agenda in five research avenues.</p> <p><b>Keywords:</b> Knowledge, small-and-medium enterprises, internationalisation, literature review, correspondence analysis.</p>

INTRODUCTION

Knowledge plays a fundamental role in virtually all the approaches to internationalisation (Casillas et al., 2009), particularly in the most frequently used in scientific research: the internationalisation process model, the internationalisation of new ventures -International Entrepreneurship-, the networking approach and theory of the multinational enterprise.

Firms’ and managers’ experiential knowledge in international activities, coupled with risk control, inform why ventures choose a gradual approach to increasingly commit resources in the internationalisation process model (Cavusgil, 1980; Czinkota, 1982; Eriksson et al., 2015, Johanson and Vahlne, 1977, 2009).

In International Entrepreneurship approach, the entrepreneurial orientation is key, which is in turn dependent on the entrepreneurs’ knowledge about the industry and the international markets (McDougall et al., 1994; Oviatt and McDougall, 1994). Entrepreneurial orientation enables the firm to internationalise under high committed modes from or near inception without first gaining experiential knowledge in the most accessible domestic market. Indeed, entrepreneurial ventures may disregard the gradual approach to internationalisation (Gabrielsson et al., 2008) and conceive global markets as places where they can create new knowledge (Kuemmerle, 2002).

In the networking approach, a firm’s experiential knowledge of the foreign market is integrated with and

supplemented by the knowledge of the firm's business network in the host-market (Coviello and Munro, 1995; Chetty and Eriksson, 2002), namely vicarious learning. In fact, among small and medium-sized enterprises (SMEs), knowledge sharing at the inter-organizational level is a driver of the internationalisation precocity (Zucchella et al., 2007). Both network-based and knowledge-based factors contribute decisively to high international performance among international new ventures (INVs) and internationalising SMEs (Hughes et al., 2017).

Buckley and Casson's (1976) theory of the multinational enterprise (MNE) claims that firms will tend to internalize foreign market knowledge and productive resources to maintain control over international operations, based also on the transaction cost economics, whether owning a multinational investment will have a lower transaction cost than performing the operation with a third party abroad.

Thus, knowledge, conceptualized as *"information that changes something or somebody – either by becoming grounds for actions, or by making an individual (or an institution) capable of different or more effective action"* (Drucker, 2003, p. 200), is central in international business (IB) research (Casillas et al., 2009). It is, then, the valuable knowledge required for the firm's successful internationalization.

However, the size of the firm is pertinent to explaining some of the differences observed. Even the theories mentioned above include exceptions based on the firm's size. In the internationalisation process model, small firms at the beginning of their internationalisation are more likely to choose countries that are psychically proximal than larger firms (Andersen and Buvik, 2002; Johanson and Vahlne, 1990). New ventures started under the umbrella of already internationalised larger firms are more likely to start their international attempts under high commitment modes than small ventures lacking such support (Zahra and Garvis, 2000). Past research has found that SMEs hold idiosyncratic characteristics when compared to large MNEs and there are several features affecting the SME's ability to deal with knowledge issues when facing the internationalisation process (Fletcher and Harris, 2012). The SMEs' financial constraints are one example of the restrictions to acquiring host market-specific knowledge that these ventures face (Brouthers and Nakos, 2004). Therefore, research on the firm's internationalisation requires a distinctive place for SMEs. Despite the number of empirical research papers focused on the intersection of knowledge and the internationalisation of SMEs, there is a need to dig deeper in how new and established SMEs face their sized-related liabilities to develop the knowledge required for successfully entering foreign countries.

Several literature reviews have offered partial views on this topic. These fragmented views are owed to restrictive

criteria in the rules for inclusion, which led authors to review a limited number of papers. Such is the case of De Clercq et al. (2012), reviewing 48 articles on learning and knowledge features that underlie *early internationalisation*; Park et al. (2015), reviewing 45 articles on venture capitalist and entrepreneur knowledge of INVs; Costa et al. (2016), reviewing 38 articles on the role of knowledge on the *decision-making process* of SME's internationalisation; İpek (2019), reviewing 83 articles on organizational learning in *exporting*; or Tuomisalo and Leppäaho (2019), reviewing 50 articles on learning in INVs. While these literature reviews are useful for their particular purposes, the challenge of an integrative literature review that systematically depicts the intellectual structure of this research intersection is open.

The *intellectual* structure of a research topic is *"a set of salient attributes of the knowledge base that can provide an organized and holistic understanding of the chosen scientific domain"* (Shafique, 2013, p.63). To the best of our knowledge, the only attempt at this has been conducted by Ribau et al. (2018), who analysed 554 articles to organize the current understanding of SME internationalisation. However, they did not focus on the intersection of knowledge and SMEs' internationalisation nor did include INVs in the search, which are a relevant type of internationalised SMEs. Additionally, they did not map the intellectual structure of this research domain. These limitations cause the need for new works that offer a more complete picture of the intersection of knowledge for the SMEs' internationalisation.

Accordingly, we perform this integrative literature review that will provide the intellectual structure of this research and its dynamics over time. The decision to analyse the dynamics over time is pertinent because of the length of the period examined (1984-2017), and the continuous change that has occurred over this time in relation to information technologies (IT) of great relevance for SMEs' internationalisation (Brieger et al., 2022; Jean et al., 2020; Wittkop et al., 2018). This way, we will be able to identify changes in interests, research trends and gaps and to propose clear directions for further research. This type of integrative review *"reviews, critiques, and synthesizes representative literature on this topic in an integrated way such that new frameworks and perspectives on the topic can be generated"* (Torraco, 2005, p. 356). Considering Shafique's (2013) definition, it must include the context – *where* – and the methods – *how* –, in addition to the content – *what* –.

For this aim, we performed a systematic search on the Web of Science (WoS) and on Scopus to finally review 224 articles. By using WordStat for content analysis, we extracted, classified, and discussed the content, split into several categories: (a) theoretical approaches, (b) entry modes, (c) target variables; (d) methods, (e) home markets, (f) host markets, and (g) industries analysed. We

provide the map of the intellectual structure and, based on the dynamics of descriptors over time, we identify research gaps and suggest a research agenda.

The next section describes our method and rules for inclusion. After that, we introduce our main results and findings of the intellectual structure, while discussing potential research avenues. The article ends with a summary of avenues for future research so we will have a more comprehensive perspective on the role that knowledge plays on the internationalisation of SMEs.

## METHODOLOGY

For systematic literature reviews is key to control for potential biases stemming from manually reviewing the content (Gaur and Kumar, 2018). Thus, we followed the three-stage method suggested by Tranfield et al. (2003): planning the review and data collection, building the codebook of descriptors, and analysing the descriptors that finally yielded the map of the intellectual structure of the domain. The content analysis of the articles also followed the four stages suggested by Gaur and Kumar (2018) to ensure the validity and reliability of content analysis in literature reviews: data collection, coding, analysis and interpretation of coded content.

### Planning the Review and Data Collection

*Research question:* What is the intellectual structure of research on *knowledge for SME's internationalisation* and how have evolved its descriptors over time considering information technology eras?

*Table 1. Number of articles by journal*

Journals	N	%
International Business Review	38	17.0%
International Marketing Review	22	9.8%
Journal of International Entrepreneurship	20	8.9%
Journal of International Business Studies	19	8.5%
Journal of World Business	19	8.5%
Journal of Business Research	15	6.7%
Journal of Business Venturing	12	5.4%
Journal of International Marketing	12	5.4%
Journal of Small Business Management	12	5.4%
Entrepreneurship Theory and Practice	10	4.5%
Small Business Economics	8	3.6%
International Small Business Journal	7	3.1%
Entrepreneurship and Regional Development	6	2.7%
Strategic Entrepreneurship Journal	5	2.2%
Industrial Marketing Management	4	1.8%
Journal of Management Studies	3	1.3%
British Journal of Management	2	0.9%
European Management Journal	2	0.9%
Journal of International Management	2	0.9%
Academy of Management Journal	1	0.4%
Asia Pacific Journal of Management	1	0.4%
Management Decision	1	0.4%
Research Policy	1	0.4%
Strategic Management Journal	1	0.4%
Technovation	1	0.4%
<b>TOTAL</b>	<b>224</b>	<b>100.0%</b>

*Types of scientific contributions:* We exclusively consider papers published in indexed scientific journals and exclude other types of documents – e.g., book chapters – , as the former are the scientific knowledge that pairs have evaluated (Ramos-Rodríguez and Ruiz-Navarro, 2004). The analysis of articles published in top-journals in a field is a standard practice that enhances the reliability of results – see for instance Dabic et al. (2014). Books and book chapters are subject to a wider variability in the peer review process, if any. Conference papers are works in progress that require further elaboration. Accordingly, we performed the search on WoS and Scopus databases, which index articles meeting strict criteria of quality and editorial good practices. Additionally, the most influential studies tend to be published in top-journals. Furthermore, Bradford's law on citations predicts that roughly 40% of articles dealing with a certain topic are published by 5% of journals of the area (Drott, 1981). Consequently, to avoid personal judgements on whether an article was poorly crafted, we imposed the restriction that the articles eligible should have been published in top-journals. We only considered quartile 1 journals in SSCI-JCR-WoS or SJR-Scopus as long as the journal is at least in quartile 2 in the other database in the last three available citation reports at the time of the search. Table 1 reports the number of articles by the 25 journals that met our criteria, with the first 4 having published 44.2% of the articles, which is close to the prediction of Bradford's law.



*Criteria for inclusion/exclusion of articles:* We followed a two-step process. The first implied the performance of a keyword search using the WoS and Scopus. This search allowed a preliminary identification of articles potentially relevant for our goal. We identified all the articles including the words related to *knowledge* and *internationalisation* and *SME* in the title, abstract, or keywords in the categories *Business or Management or Economics* from both databases. This yielded 526 articles. In a second step, two researchers manually and independently went through each article and read the title, the abstract or the full paper, as needed, to check whether the article dealt with knowledge for internationalisation and referred to SMEs. Later, the authors compared their decisions and in the few cases of disagreement, the problem was discussed until a final agreement was reached. This resulted in 224 papers on knowledge for SMEs' internationalisation.

*Period of study:* The search restricted to the period 1984-2017. The starting year is 1984 because that is the year of publication of the first paper focused on the target intersection (Reid, 1984), since previous works examining knowledge for internationalisation did not focus on SMEs (e.g., Johanson and Vahlne, 1977). The reason for extending the review to 2017 is to capture the research interests in the whole era of the accelerating IT development (Xiang, 2018).

### Coding of Content and Codebook Building

We followed an inductive approach, so descriptors were derived from the content analysis. The procedure included: (a) extracting key content by screening the full-length article; (b) classifying these contents to build a reduced list of the main descriptors; and (c) iteratively revising the codebook to merge similar categories to obtain a meaningful short list of descriptors.

First, we used the WordStat software for content analysis to get the list and frequency of nouns, verbs, and compound forms extracted from the articles title, abstract, and keywords. From the initial list of keywords and compound forms extracted, and following previous authors (e.g., Dabic et al., 2014), we classified them into big topics. For triangulation, two authors separately corroborated that codifications were consistent with articles' focus. We found three main categories: (a) theoretical approaches, (b) mode of entry focus, and (c) target variables analysed; and four complementary: (d) research methods, (e) home markets, (f) host markets, and (g) industries analysed. Some descriptors were merged to avoid overlapping, such as the case of *international new ventures and born global*; the same happened with *stages models* and *internationalisation process* because the distinction between them can hardly yield different results since they designate the same theory. As we needed a manageable number of descriptors to be depicted on the map, we aggregated the countries arose

during the review into seven wide geographic areas of home and host markets. These decisions yielded 55 descriptors.

Second, we performed a homogeneity analysis by alternating least squares (HOMALS) using SPSS v20, convenient to map the intellectual structure of research fields (e.g., Dabic et al., 2014, Furrer et al., 2008). Following Hoffman and Franke (1986), and Hoffman and De Leeuw (1992), we built a matrix in which rows are articles and columns are descriptors and computed 1 if any of the contents of each descriptor was found in the article (0 otherwise). The goal is to find a low dimensional representation of the original space (i.e., the matrix of  $n$  articles and  $k$  descriptors). A *loss function* is introduced to measure the goodness of fit, which is the function to be minimized.

## REVIEW FINDINGS

### Dynamics of the Intellectual Structure of Research

IT and technological innovations can notably influence SMEs' internationalisation (Brieger et al., 2022; Jean et al., 2020; Wittkop et al., 2018). Consequently, we analysed the dynamics of the intellectual structure of our research intersection considering two eras in IT development and diffusion of technological innovations in the economy and society (Xiang, 2018): Digitalization (before 2006) and Age of Acceleration (from 2007 to 2016). *Digitalization* is known as the era in which the Internet develops and mature as a commercial tool and "much of online information could be considered the digital version of its existing offline content" (Xiang, 2018: p. 148). *Age of Acceleration* characterizes by technologies such as Wi-Fi, search engines, smartphone, and the emergence of machine learning and artificial intelligence. In this period, user-generated contents and data grow exponentially. Internet transitioned from a publishing platform to a platform for participation and networking and gave rise to new business innovations such as the sharing economy that changed the rules of the game in many industries.

These two eras are useful to shed light on the changes in the focus of attention to any topic concerning knowledge and SMEs' internationalisation. Accordingly, and considering a reasonable time lag of one year, we defined two periods for our analysis: pre-2007 and 2008-2017. Considering the number of articles by year of publication (Figure 1), we found that 2007 is the year in which the first 24.1% of articles on knowledge for SMEs' internationalisation were published (quartile 1) and it took 24 years (1984 to 2007). The second period encompasses 10 years (2008-2017) but assists to the publication of 75.9% of articles, happening this large increase along with the emergence of new business innovations and the increasing of data in the Internet that Xiang (2018) exposed.

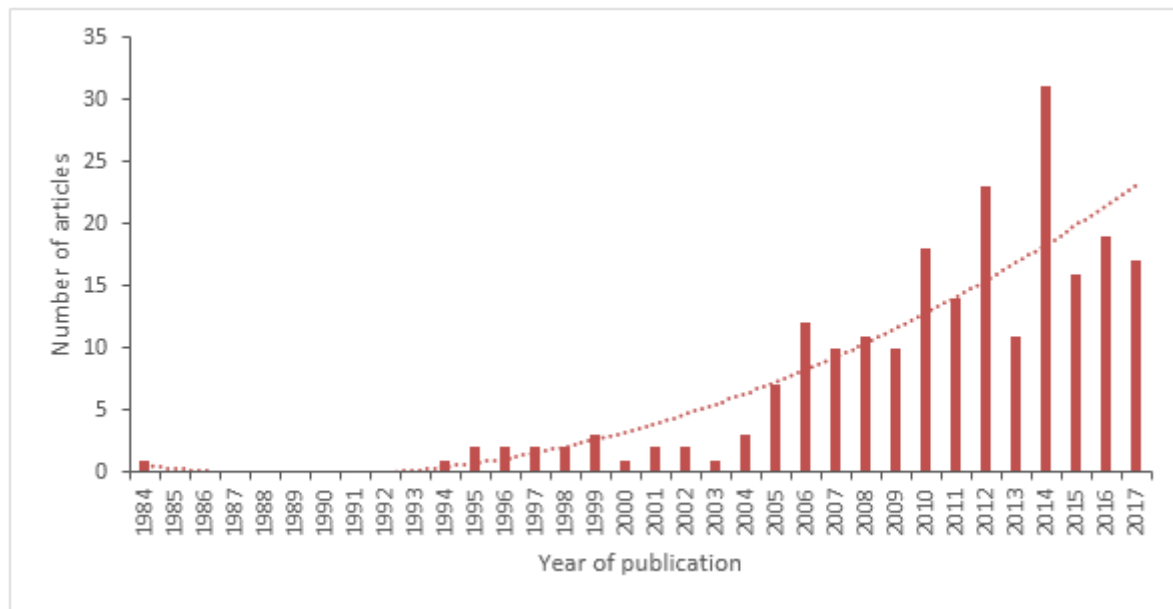


Figure 1. Number of articles by year of publication

Tables 2 and 3 summarize the descriptors' frequencies for the entire period of study (1984-2017), and for the two non-overlapping sub-periods (P1:1984-2007; P2:2008-2017).

Scholars have investigated how knowledge helps/hinders SMEs' internationalisation, essentially, from six theoretical approaches (see table 2) consistent with the main paradigms in international management research found by Acedo and Casillas (2005). International entrepreneurship (A\_IE), including INVs and born globals, is the most frequent theoretical approach (68.8% of papers) during the entire period (1984-2017), following the entrepreneurship approach of McDougall and colleagues (McDougall et al., 1994; Oviatt and McDougall, 1994). The socio-psychological (A\_SOCIO\_PS) (49.6%) and the internationalisation

process models (A\_IPM) (41.1%) are also two of the most frequent approaches. The latter is rooted in the Uppsala model of gradual internationalisation (Johanson and Vahlne 1977, 2009), in which knowledge about the foreign market plays a determinant role in explaining why some firms adopt a sequential approach to internationalisation. The former includes essentially the managerial perspective following some of the tenets of Hambrick and Mason's (1984) Upper Echelons Theory, which claims that the venture's behaviour will mirror that of the main decision-maker. This is particularly relevant among SMEs since 'owner' and 'manager' are frequently the same individual who often is responsible for the strategic decisions, so their perception is paramount for explaining SMEs' internationalisation (Eduardsen and Marinova, 2016).

Table 2. Frequencies by descriptors by periods of the main categories identified

Descriptors*	P1 1984-2007**		P2 2008-2017**		% change in share from P1 to P2***	Full period 1984-2017**	
	#	% (n=54)	#	% (n=170)		#	% (n=224)
THEORETICAL APPROACHES (A)							
A_IE	30	55.6%	124	72.9%	31.3%	154	68.8%
A_SOCIO_PS	30	55.6%	81	47.6%	-14.2%	111	49.6%
A_IPM	24	44.4%	68	40.0%	-10.0%	92	41.1%
A_NETWORK	14	25.9%	65	38.2%	47.5%	79	35.3%
A_KBV	12	22.2%	58	34.1%	53.5%	70	31.3%
A_RBV	13	24.1%	46	27.1%	12.4%	59	26.3%
A_IO	4	7.4%	10	5.9%	-20.6%	14	6.3%
A_TCE	6	11.1%	8	4.7%	-57.6%	14	6.3%
A_INSTITUTION_TH	1	1.9%	8	4.7%	154.1%	9	4.0%
MODE OF ENTRY FOCUS (B)							
B_INT_TRADE	30	55.6%	95	55.9%	0.6%	125	55.8%
B_CONTRACT_LICENS_ALLY_OUTSOURC	10	18.5%	20	11.8%	-36.5%	30	13.4%
B_FDI	6	11.1%	11	6.5%	-41.8%	17	7.6%
B_M&A	5	9.3%	8	4.7%	-49.2%	13	5.8%
B_IJV	3	5.6%	2	1.2%	-78.8%	5	2.2%

TARGET VARIABLE ANALYZED (C)							
C PERFORMANCE	13	24.1%	59	34.7%	44.2%	72	32.1%
C_K_SOURCE	16	29.6%	45	26.5%	-10.7%	61	27.2%
C_GROWTH	10	18.5%	32	18.8%	1.6%	42	18.8%
C_SPEED	15	27.8%	26	15.3%	-44.9%	41	18.3%
C_FOREIGN_MK_ENTRY	3	5.6%	21	12.4%	122.4%	24	10.7%
C_RISK_UNCERT	5	9.3%	17	10.0%	8.0%	22	9.8%
C_SCOPE	2	3.7%	13	7.6%	106.5%	15	6.7%
C_CULTURE	2	3.7%	12	7.1%	90.6%	14	6.3%
C_SURVIVAL	2	3.7%	10	5.9%	58.8%	12	5.4%
C_K_CONTENT	3	5.6%	8	4.7%	-15.3%	11	4.9%

\* See Appendix A for descriptors' full names.

\*\*While "n" is the number of articles analysed in each period, # is the number of articles that mentioned the descriptor. Because an article can mention various descriptors, the sum of # in a period can be different from the subtotal or the total "n".

\*\*\* Percentage to which the descriptor has increased/decreased its share in P2 with respect to P1.

Despite their relevance, both approaches, the internationalisation process and the socio-psychological, decreased in share from P1 (1984-2007) to P2 (2008-2017): 10.0% and 14.2%, respectively. Knowledge-based view (A\_KBV) and international entrepreneurship (A\_IE) registered the opposite dynamics with increments of 53.5% and 31.3%, respectively. The networking approach (A\_NETWORK), highlighting the key role of business-to-business collaboration for successful internationalisation (Zucchella et al., 2007), was also a relevant theoretical approach during the entire period (35.3%), increasing as a theoretical approach in P2 (+47.5%). These increases could be linked to the emergence of new business models that changed the rules of the game in many industries (Xiang, 2018), particularly those stemming from the development of IT, enabling digital markets (Wittkop et al., 2018) and facilitating overseas expansion of SMEs, particularly for young ones (Brieger et al., 2022; Jean et al., 2020). In such digital markets and new business models, the networking approach shifted from physical to virtual collaboration, in which the knowledge-based view may increase in explanatory power of the international expansion of entrepreneurial SMEs.

In both sub-periods and during the full-length period, contract theories of the firm such as transaction cost economics (A\_TCE) seemed not to attract the scholars' attention to explain the knowledge for SMEs' internationalisation (6.3% for the entire period), with a decrease from P1 to P2 of 57.6% in share. Neither has institutional theory (A\_INSTITUTION\_TH) attracted the scholars' attention (4.0%, only 9 articles), despite the increase in the share from P1 to P2 (+154.1%). This approach should continue growing because SMEs are especially sensitive to institutional settings, they

increasingly internationalise to institutionally distant countries, and learning of and adaptation to a new institutional context requires time (Chetty Eriksson and Lindbergh, 2006; Hilmersson, 2014). Institutional theory could help determine the legitimacy for foreign SMEs and whether they will imitate the behaviour of local SMEs or deviate from the accepted norm in culturally distant markets. Perhaps this lens may nurture other approaches dealing with experiential knowledge in the future, as well as other sources of knowledge able to supplement SMEs' (lack of) experiential knowledge in new distant markets, such as vicarious learning –i.e., learning from network partners or from the observation of others that are geographically proximal– (De Clercq et al., 2012). These issues can also be complementary to the networking approach.

Industrial organization (A\_IO) is also marginal in frequency and share, and even decreased during P2, which is consistent with the shift of concerns from competitiveness explained by industry settings to idiosyncratic SMEs' capabilities (networking, dynamic capabilities, ambidexterity, etc.). These capabilities are critical in the Age of Acceleration, as the velocity and nature of change brought about by IT to economy and society increased, according to Xiang (2018). Yet, industrial organization (A\_IO) could supplement the networking approaches, helping understand value co-creation within the value system and across the international and global value chains specific to certain industries.

While the latter applies to all 224 analysed articles, we further explored the purely theoretical papers. Out of the 22 theoretical papers, 10 were published in P1 and 12 in P2. Figure 2 shows the share of the theoretical approach followed by the articles for the full period.

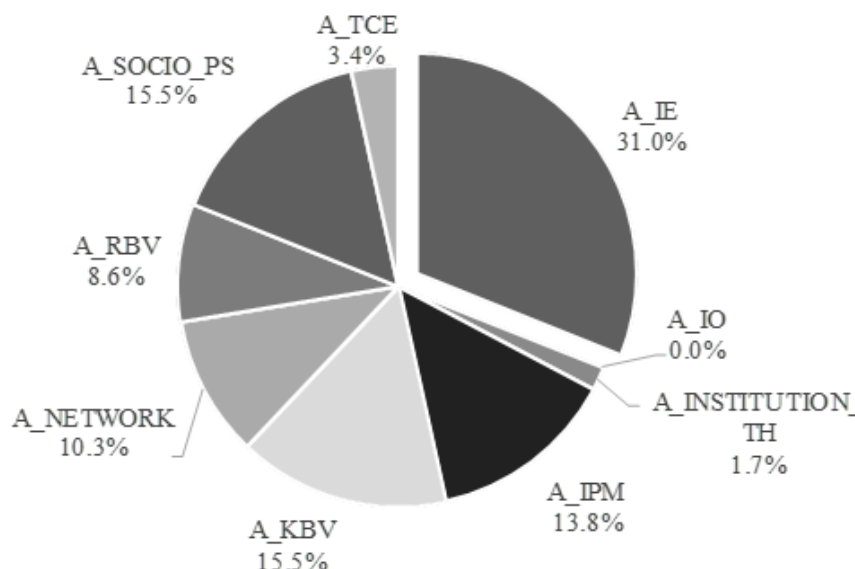


Figure 2. Share of theoretical approaches of the 22 theoretical articles analyzed\*

\* See Appendix A for descriptors' full names.

Considering only the theoretical papers, international entrepreneurship (A\_IE) is the most frequently developed theory (31.0%), while internationalisation process model (A\_IPM) was chosen by 13.8% of papers, which reinforces the result of IE as the main approach, instead of the gradualist, when knowledge for internationalisation is the focus.

Concerning mode of entry focus (descriptor B in Table 2), the studies have investigated essentially international trade forms (B\_INT\_TRADE), such as exporting (55.8% of articles for the entire period). Its level of interest remained steady in both periods of analysis. Contractual entry modes, such as licensing, outsourcing and alliances have been the second entry mode most frequently studied (B\_CONTRACT\_LICENS\_ALLY\_OUTSOURC), but showing a relevant decrease of -36.5% from P1 to P2. Very few papers investigated any form of equity entry mode, such as international joint ventures (B\_IJV), mergers and acquisitions (B\_M&A), or any other form of foreign direct investment (B\_FDI). Furthermore, the relative share decreased significantly in P2, which is consistent with both the widespread idea that SMEs have several constraints in resources and capabilities to face this type of entry mode and the digital evolution. Indeed, the consolidation of the digitalization period (culminating in 2006), characterized by the maturity of the Internet as a commercial tool, and the arrival of the Age of Acceleration (2007-2016), with search engines, Web 2.0, crowdsourcing, machine learning or artificial intelligence (Xiang, 2018), offer new opportunities for SMEs to internationalise. Actually, Brieger et al. (2022) emphasize how these technologies facilitate that new businesses can internationalise at a lower cost by making possible selling on-line, and facilitating the analysis of national and international market information, or the

reaching out of potential customers and suppliers. Consequently, IT development, may have led SMEs to adopt massively flexible entry modes that require the lowest commitment of resources and capabilities, namely exporting. This may deserve further attention in future research considering the under-researched micro-multinationals (see Dimitratos et al., 2014). Moreover, it seems consistent with the relevance of international entrepreneurship (A\_IE) as theoretical approach. Following the tenets of INVs and born global phenomena, these firms should commit low amounts of resources and capabilities in seizing from international activities since or close to inception, because they can internationalise under the less committed entry modes. Accordingly, studies researching the impact of knowledge in the internationalisation of SMEs under the international entrepreneurship approach (A\_IE) do not seem to have been able to include the high-commitment modes of entry in this new era of IT (i.e., Age of acceleration), which may deserve attention in the future if IE is to advance knowledge in this area.

Concerning the target variable, as expected, performance was the most frequently studied (32.1%), along with growth and speed of internationalisation (roughly 18% each). This is consistent with the main theoretical approach followed, international entrepreneurship (A\_IE), which is particularly interested in how INVs can speed up the achievement of foreign sales and the number of international target markets. In the second period, performance increased 44.2% its appearance in papers, which can be paired with the 58.8% increase in the study of survival. Some other dynamics relate with the increase in the study of the scope of internationalisation (+106.5%) and foreign market entry (+122.4%). Surprisingly, risk and uncertainty only were studied in



9.8% of papers and its frequency did not increase significantly in the second period (8.0%). Following Pezderka and Sinkovics (2011), we can say that although many risks faced by firms operating in the physical domain may be less relevant to those operating mostly online, such risks must be carefully examined, as well as additional risks that are only relevant in the online context. Therefore, new research is imperative in exploring the risks and contingent uncertainties stemming from the global virtual market.

In terms of the variables targeted that are strikingly concerned with knowledge, *knowledge sources* is the most frequently studied descriptor (C\_K\_SOURCE) and the second most studied target variable (27.2%), while *knowledge content* (C\_K\_CONTENT) is only marginal in share (4.9%). This is consistent with the main theoretical approaches: scholars, and very likely SMEs, have been more interested in the detection of the source of knowledge, a relevant issue in the internationalisation process (A\_IPM), international entrepreneurship (A\_IE) and networking (A\_NETWORK) approaches. The focus is on *where* the knowledge comes from – e.g., experiential knowledge –, instead of the mental representation of it, i.e., *what* is known and *how* it is known – i.e., managerial and organizational perception-cognition. If we look at periods P1 and P2, we find that while the use of knowledge-based view has increased (53.5%), the focus on the target variables knowledge sources (C\_K\_SOURCE) and knowledge content (C\_K\_CONTENT) have both declined – although the number of articles that mentioned the descriptors has increased, their relative proportion has fallen –. It seems that knowledge-based view (A\_KBV) has not penetrated sufficiently into the research on knowledge for SMEs' internationalisation.

Thus, as research advances, we might expect scholars to mirror the research already done in the general field of management. Knowledge content is vital, for instance, to have an in-depth understanding of networking, which

includes networking in both home and host countries, and with partners that are compatriots and/or foreigners. The networking opportunities and conditions needed to facilitate the acquisition of relevant knowledge (e.g., international opportunity recognition knowledge, local tacit knowledge of certain cognitive and normative institutions) required for SMEs to succeed in their internationalisation are also of interest. Since similar knowledge could be available to most SMEs, how these ventures interpret that knowledge is what can make a difference in strategic terms. This provides future research avenues on firm-specific cognition. We can also expect that decision-makers in SMEs, i.e., managers, may attract scholars' attention for investigation into the managerial and shared cognition in management teams, and its combination with the content of knowledge, which can also moderate some of the relationships already studied. For instance, it could be studied the moderating effect of the availability of tacit knowledge about foreign markets in the relationship between managers' abilities in resourcing from partners in the host country and SMEs' success in that country.

Table 3 provides the summary of frequencies for complementary categories. Referring to research methods, quantitative empirical papers were the majority (52.2%). In the second period, there was a relevant increase in mixed methods (+201.8%), while purely qualitative papers remained relatively steady (-4.7%). The weight of purely theoretical articles decreased during the second sub-period (-61.9%), which may entail that this sub-period has been, essentially, for testing theories quantitatively rather than for exploring the development of theories. The easier access to online data, and the development of new technologies to manage and analyse data may be behind the higher focus on quantitative methods. We also find a vast majority of mixed method studies performed during the second period (90%). This may be due to the recent development of mixed methods and the growing acceptance of these studies in leading IB journals.

Table 3. Frequencies of descriptors by periods of the complementary categories identified

Descriptors*	P1 1984-2007**		P2 2008-2017**		% change in share from P1 to P2***	Full period 1984-2017**	
	#	% (n=54)	#	% (n=170)		#	% (n=224)
<b>RESEARCH METHODS (D)</b>							
D METHODS QUANT	26	48.1%	91	53.3%	11.2%	117	52.2%
D METHODS QUALIT	16	29.6%	48	28.2%	-4.7%	64	28.6%
D METHODS THEORY	10	18.5%	12	7.1%	-61.9%	22	9.8%
D METHODS MIXED	2	3.7%	19	11.2%	201.8%	21	9.4%
<b>HOME MARKETS (E)</b>							
E EUROPE Home	23	42.6%	92	54.1%	27.1%	115	51.3%
E ASIA PACIFIC Home	13	24.1%	24	14.1%	-41.4%	37	16.5%
E SOUTH EAST ASIA Home	5	9.3%	27	15.9%	71.5%	32	14.3%
E NORTH AM Home	7	13.0%	15	8.8%	-31.9%	22	9.8%
E LATIN AM Home	1	1.9%	5	2.9%	58.8%	6	2.7%
E MIDDLE EAST ASIA Home	1	1.9%	5	2.9%	58.8%	6	2.7%



E_AFRICA_Home	0	0.0%	1	0.6%	n.a.	1	0.4%
<b>HOST MARKETS (F)</b>							
F_EUROPE_Host	13	24.1%	61	35.9%	49.0%	74	33.0%
F_NORTH_AM_Host	15	27.8%	40	23.5%	-15.3%	55	24.6%
F_ASIA_PACIFIC_Host	8	14.8%	34	20.0%	35.0%	42	18.8%
F_SOUTH_EAST_ASIA_Host	5	9.3%	30	17.6%	90.6%	35	15.6%
F_MIDDLE_EAST_ASIA_Host	4	7.4%	22	12.9%	74.7%	26	11.6%
F_AFRICA_Host	7	13.0%	19	11.2%	-13.8%	26	11.6%
F_LATIN_AM_Host	8	14.8%	19	11.2%	-24.6%	27	12.1%
<b>INDUSTRY ANALYZED (G)</b>							
G_MANUFACT_OTHER	24	44.4%	61	35.9%	-19.3%	85	37.9%
G_ICT	12	22.2%	44	25.9%	16.5%	56	25.0%
G_SERVICES	12	22.2%	31	18.2%	-17.9%	43	19.2%
G_TRAD_MANUF	0	0.0%	15	8.8%	n.a.	15	6.7%
G_BIOTECHN	1	1.9%	14	8.2%	344.7%	15	6.7%
G_COM	6	11.1%	14	8.2%	-25.9%	20	8.9%
G_MACH_EQU	6	11.1%	14	8.2%	-25.9%	20	8.9%
G_FOOD	4	7.4%	13	7.6%	3.2%	17	7.6%
G_CHEM	0	0.0%	9	5.3%	n.a.	9	4.0%
G_ENERGY	1	1.9%	6	3.5%	90.6%	7	3.1%
G_HEALTH	0	0.0%	6	3.5%	n.a.	6	2.7%
G_BUILDING	5	9.3%	4	2.4%	-74.6%	9	4.0%
G_TRANSPOR	4	7.4%	3	1.8%	-76.2%	7	3.1%

\* See Appendix A for descriptors' full names.

\*\* While "n" is the number of articles analysed in each period, # is the number of articles that mentioned the descriptor. Because an article can mention various descriptors, the sum of # in a period can be different from the subtotal or the total "n".

\*\*\*Percentage to which the descriptor has increased/decreased its share in P2 with respect to P1.

Concerning home and host markets analysed, 85% of papers included information regarding the home country of the sample: 90% studied a single home country and, roughly, 9% studied two or three home areas. Only 41% of papers included information of the host countries that the firms analysed were entering: 30% analysed one area as host country, 31% analysed two or three host areas, and 30% did it in four to six host areas, although only 6.6% included samples internationalising towards the seven areas. The number of multi-country studies warrants a significant robustness in terms of host countries, but it is not so for home countries, which complicates potential comparisons and deserves further attention by shifting the focus from a certain market to studying dyadic relationships between home and host markets.

The results in terms of home and host markets show a relevant difference with literature reviews conducted on MNEs (see Dabic et al., 2014). While the U.S. was among the top home countries in the case of MNEs, its share is low in the case of SMEs. Two potential explanations can justify this. First, firms are on average larger in the U.S.

If dyadic relationships between home and host geographical areas are analysed (see Table 4), we found that Europe as home and host market has been the most frequently pair investigated (44). In fact, the row of Europe-Home contains the highest numbers in virtually

than in many other countries<sup>1</sup>. Second, researchers are more interested in MNEs than in SMEs in the case of North America, while this seems to be the opposite in Europe and other locations. Europe is the home market of SMEs more frequently investigated (51.3% of papers) and is the focus of 33.0% of host markets, with an increase of the frequency from P1 to P2 (+49.0%). In terms of the country of origin, although South-East Asia, Middle East Asia, and Latin America and the Caribbean have not received much attention as home areas, they have increased their frequency in the second period (71.5%, 58.8% and 58.8%, respectively). Conversely, Asia Pacific dropped in share in the second period, suggesting that it is decreasing in attractiveness as a home market for scholars, or that studies performed on SMEs from that area are not reaching top journals, which can be partially explained by budgetary restrictions for scientific research in those countries. In both home and host markets, Africa is the least frequently investigated area. Nevertheless, it seems to be more interesting as a host rather than as a home market. SMEs from this area deserve urgent attention.

all the pairs, with a relevant number in the pair Europe-Home and North America-Host. The inverse relationship is not usually investigated, which may be related to the fact that few studies focus on SMEs from North America. There are also few papers studying SMEs from the

<sup>1</sup> According to official data from the U.S. Census, the Canadian Census and Eurostat, for the year 2020 the share of

firms with less than 10 employees was 76.6% in the U.S., 92.5% in Canada, and 94.6% in the EU-27.

Middle East to any of the other parts of the world, and from Africa. From Asia-Pacific as home, the most frequently investigated host area is Europe (18), while it

is more evenly distributed for South-East Asia as home: the main host areas are North America (12), Europe (11) and Asia Pacific (10).

**Table 4. Pairwise analysis of home and host countries\***

		HOST COUNTRIES (F)						
HOME COUNTRIES (E)		Africa	Asia_Pac	Europe	Latin_Am	Middle_East	North_Am	South_East
	Africa	0	0	1	0	0	0	0
	Asia_Pac	8	15	18	6	7	13	12
	Europe	17	19	44	19	14	28	17
	Latin_Am	0	1	2	3	1	4	0
	Middle_East	1	2	4	1	4	3	1
	North_Am	1	7	7	3	5	6	4
	South_East	2	10	11	2	4	12	6

*\*Number of articles pairwise. Totals per row and column may not sum the total number of articles for each geographical area since one article may deal with more than one pair of areas.*

Finally, the industries frequently analysed have been unspecified manufacturing industries (37.9%), ICT and other high-tech industries (25.0%), and services (19.2%). Biotechnology and Energy are among the most salient industries in terms of increasing interest from P1 to P2 (+344.7% and +90.6%, respectively).

## Map of the Field

We performed the correspondence analysis by means of HOMALS to obtain a proximity map, where descriptors of articles are depicted in a low-dimensional space of two axes. We carried out the analysis for the full period (1984-2017) to gain a whole picture of the intellectual structure of the research intersection (Figure 3). The dimensional

interpretation is that the pairs of keywords jointly appearing in a large portion of articles are located closer on the map and vice-versa. The total variance explained is reported as a goodness-of-fit measure. The dimensions obtained by this analysis are listed in an order directly related to the amount of variance explained (i.e., the first dimension explains more than the second one, and so forth). The low-dimensional map formed by the first two dimensions shows that dimension one reports about the 27.2% of total variance, while the second one explains 21.7%, which preserves the optimal fit when the goal is to detect global patterns instead of explaining the maximum variance (Gabriel, 2002), which is our case.

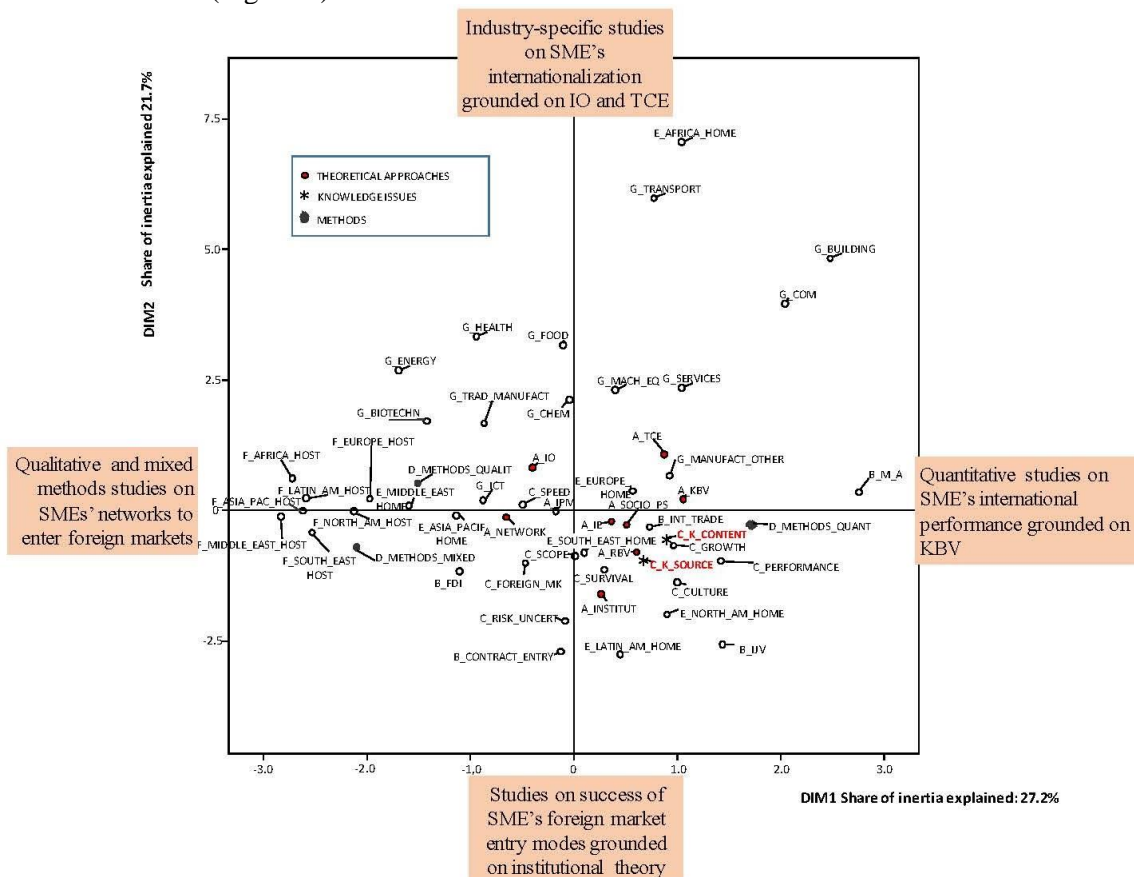


Figure 3. Intellectual structure of research on knowledge for SMEs internationalisation\*

\* See Appendix A for descriptors' full names.

We left the descriptor *d\_methods\_theory* (i.e. theoretical papers) out of the map, since it was depicted on the left and very distant from the other cloud of descriptors. Its inclusion would distort the visualization of the other descriptors. This is because most of the purely theoretical papers (9.8% of the total) did not include any reference to host-home markets, nor industries.

Labelling the poles is the first step for the right interpretation of the map (Hoffman and De Leeuw, 1992). The label should be based on the most-extreme-located descriptors in each of the four poles, and on the fact that the most frequent descriptors in each pole exert a pull on closer descriptors.

On the rightmost of the map, the most frequent descriptors located close to the pole were *d-methods-quantitative*, *c-performance*, and *a-KBV*. Therefore, we labelled this pole "Quantitative studies on SME's international performance grounded on KBV". In fact, the descriptor *c-Knowledge-content* scored high on this pole. They are essentially quantitative studies. Examples of papers falling close to this pole are the studies of Dasí et al. (2015), or Camisón and Villar-López (2010).

On the leftmost, we found all the geographical areas as host markets, studies under qualitative and mixed methods, and ICT, biotech, health and energy are among the most studied industries. The main theoretical approach was networking. We labelled this pole "Qualitative and mixed methods studies on SMEs' networks to enter foreign markets". Examples of this pole are the studies of Coviello (2006) and that of Francioni et al. (2017).

On the uppermost, virtually all the descriptors relate to any of the industries analysed. Industrial organization (*A\_IO*) and contract theories of the firm and of internationalisation (*A\_TCE*) are the main theoretical approaches. Thus, it agglutinates "Industry-specific studies on SME's internationalisation grounded on IO and TCE". Since they deal with certain industries, it seems logical that the approach most frequently used was industrial organization (*A\_IO*), based on the industry structure-behaviour-performance paradigm. Examples of articles in this pole are Pinho and Martins (2010) or Jansson and Sandberg (2008).

On the lowermost, we found some entry modes such as *b-IJV*, *b-contract-alliances-licenses-outsourcing*, and *b-FDI*. Some target variables scored high in this pole, such as *c-risk-uncertainty*, *c-culture*, *c-survival*, *c-foreign-market*. Therefore, we labelled this pole "Studies on success of SME's foreign market entry modes grounded on Institutional theory". Latin-America, North-America and South-East-Asia were the home markets that scored high here. The descriptor *c-Knowledge-source* also scored high in this pole. It, therefore, seems that these articles are especially concerned with the performance of

the mentioned entry modes. They also focus on the sources of knowledge for acquiring the required knowledge about foreign markets, to decrease the levels of uncertainty and risk and deal with cultural issues, to finally get a successful foreign market entry. Accordingly, it is understandable that the low number of papers grounded on institutional theory locate in this area of the map. This theory is about firms within a given country conforming and reacting to the institutional system of rules, values and cognitions in that country to perform efficient transactions with lower costs and risks (Meyer et al., 2009). Notably, there is a combination of equity and non-equity entry modes scoring high in this pole, although, most frequently, studies included only forms of international trade. The number of articles comparing more than one entry mode beyond only international trade were just a few, while equity modes were the least numerous. Examples of articles falling close to this pole are Lu and Beamish (2006) or Hilmerston and Jansson (2012).

Finally, we underline that international entrepreneurship, the most frequently developed theory, locates very close to the origin (the intersection of the axes). This indicates that almost any article with any research objective within the literature on knowledge for SMEs' internationalisation was grounded on the international entrepreneurship theoretical approach or, at least, was indirectly grounded on it by means of the network of co-occurrences.

## RESEARCH AGENDA

This article aimed at reviewing scientific papers on knowledge for SMEs' internationalisation. We have content-analysed the 224 articles found in the WoS and Scopus databases dealing with the subject, and have yielded the results of the dynamics over time of this domain in terms of the 55 main descriptors. We have also reported the intellectual structure of the domain using homogeneity analysis by alternating least squares performed in the matrix of articles and descriptors.

Based on the dynamics over time and on the singular distribution of descriptors in the map, we have found several research gaps that warrant future exploration, that we have grouped into five categories: theoretical approaches, methods, target variables, combination of geographical areas, and under-investigated topics.

## Theoretical Approaches

From the main approaches followed by the 224 articles, we found that industrial organization, institutional theory and contract theories of the firm and of internationalisation were among the least frequently included. We propose that further empirical and theoretical developments of the internationalisation of SMEs under these approaches are needed because they can be fruitful for the development on the intersection

under study. For example, industrial organization has been used to explain the firms' performance based on the industry structure and the firms' behaviour. This can be particularly relevant for SMEs since, considering their constraints in resources and capabilities when compared with larger corporations, the strategic alternatives available are restricted. Knowledge asymmetries, principal-agent relationships between SMEs in home and host countries, are just a few examples of issues still under-investigated. For instance, decisions made by SMEs following game theory are absent in this intersection. This can be fruitfully added to extant networking, international entrepreneurship and internationalisation process model approaches to explain how SMEs can use their limited knowledge to cope with the uncertainty and risks associated with internationalisation. This is particularly relevant under the networking approach since trust-building is crucial for the success of the relationship and the parties involved may perceive contractual safeguards to avoid information asymmetries as problematic for that building. Since the literature review of Acedo and Casillas (2005), it seems that no theoretical paradigms have been developed that were essentially new. It seems that the question in the air is that already posited by Buckley (2002) years ago: IB needs a new, big research question. The internationalisation of SMEs mirrors that general stream of research.

### **Methods**

Linked to the mentioned above research gap, we also found that only 22 out of 224 were purely theoretical papers. It seems that scholars have been adopting the main theories and adapting them to the special features of SMEs when compared with larger counterparts. Considering the extant development, it seems that the time has come to conceptualize what is specific for these firms beyond the extant theories of international entrepreneurship. Competition based on the industry (industrial organization approach), or how SMEs deploy their strategic responses to internationalisation challenges based on their resources and capabilities are some examples of future development. Institutional theory provides a theoretical lens that can assist in the understanding of how and why the institution named SME tends to replicate itself when going international. It seems also that a relevant number of SMEs do not advance to more committed modes after their initial foreign market entries, which could be fruitfully explained from institutional theory in combination with some other approaches (e.g., socio-psychological approaches related to being able to maintain the behaviour under control).

Methodologically, it seems that time has come to build new knowledge by means of meta-analyses and, in particular, checking in which conditions the size of the

firm moderates certain relationships. Knowledge-based view can also be combined with networking theory to explain how valuable knowledge is transferred or acquired between members of the network, be they large or small-and-medium enterprises. On conducting meta-analyses in IB suggestions of Kirca and Yaprak (2010) should be followed.

Since SME's international performance may depend on how well SMEs' knowledge resources or those that they can be easily acquired from partners allow them to successfully enter the chosen host market, research in this area should benefit from the use of more comprehensive methods such as the configuration approach (Meyer et al., 1993). In addition, big data analytics, as well as artificial intelligence, can be incorporated as methods to examine and deeply understand the knowledge for SMEs' internationalisation. For example, sources of knowledge and knowledge about competitors, suitable local partners, and customers in the host countries can be re-examined in the light of new criteria, data and procedures. These new methods can be especially useful to study the dynamics of IB networks with respect to the transfer of knowledge. In addition, these methods offer the possibility of using larger samples, and of accessing new information using big data from user-generated content on websites; to study, for instance, what conditions the customers' opinions of competitors in a given host country or to compare between countries in order to choose the right foreign market for a product or service. How big data may be leveraged to create knowledge that facilitates the recognition and exploitation of IB opportunities by SMEs should be a matter of interest in future research. Overall, it seems that a combination of approaches can explain and predict further SMEs' behaviours.

### **Target Variables**

Most of research has been conducted in investigations about exporting and contractual entry modes, while equity entre modes seem not to be attractive to scholars on the internationalisation of SMEs. Even the study of micro-multinationals is still in its infancy. Further empirical research on these issues is warranted for the future. Another main issue is the behavioural approach to explaining these decisions in SMEs. While there have been recent developments for MNEs (e.g., Kalinic and Forza, 2012; Maitland and Sammartino, 2015), this has not been the case in SMEs research. This is particularly relevant in terms of risk and uncertainty: since most small businesses are governed by a single owner-manager, managerial cognition should be introduced in the academic discussions considering the extension of Hambrick and Mason's (1984) Upper Echelons Theory. This will help explain how SMEs cope with risk and uncertainty and could even explain why some of these firms decide to remain domestic despite possibly being a



riskier choice than going international (see Puig et al., 2018). Transitions from lower to higher commitment modes also deserve further attention. Survival and scope of internationalisation are also among the least frequently investigated target variables, while it seems that speed (including earliness) and growth may have reached their peak and are ready for summarizing what we know by means of meta-analyses. Other variables not detected in the content analysis will also benefit the understanding of why, how much and how knowledge is crucial for SMEs' internationalisation and what are the efficient forms of acquiring such knowledge in every context. Examples of these new variables include the home-host country distance, the owner-manager's personal characteristics, such as being immigrant-entrepreneurs or self-initiated expatriates, or individual qualities such as cultural intelligence, multicultural competencies, emotional intelligence, and resilience, among others.

### Combination of Geographical Areas

While industries are evenly represented in the 224 papers analysed, the geographical areas are not. Africa is virtually absent from the research intersection of knowledge and SMEs' internationalisation. If we are to build universally valid theories, we should provide further empirical evidence of whether these theories are valid for SMEs going to/coming from Africa, as has already been highlighted by Kolk and Rivera-Santos (2018). Latin America and the Caribbean is another geographical area that is under-researched in the sample we analysed, both as home and host markets. Pairwise analysed, there are other combinations of areas requiring further empirical research. This is the case of Asia Pacific with all areas but Europe; the case of the Middle East and

Asia, and the case of Southeast Asia as host market paired with Latin America and the Caribbean, the Middle East and Asia, North America and Southeast Asia as home markets. Another notorious gap is the case of North American SMEs, since research in this area seems to be much less attractive than MNEs for scholars. Our suggestion is also to perform multi-country studies beyond the same geographical area in the quest for farther cultural or physis distances and their differential impact on how knowledge may affect the SMEs' internationalisation. Besides, as the knowledge content and the sources of it that are involved in the process of knowledge acquisition could be contingent upon the specific pair of countries analysed (Suárez-Ortega et al., 2016), investigating various cases involving different home–host country combinations are needed before models that are more general in nature can be proposed to explain this phenomenon.

### Under-Investigated Topics

We also noticed the virtual absence of some relevant topics. Such is the case of the internalization theory that

justifies the existence of MNEs. The evolution from SME to MNE is still under-investigated and further attention should be devoted to the demonstration of which mechanism may explain why some SMEs choose to evolve while others do not. Perhaps one of the biggest issues we noticed is the low frequency of papers following the international entrepreneurship perspective and studying the high commitment modes. This is particularly challenging in the case of SMEs if we consider their constraints. However, the main tenet of this theory seems to be difficult to prove among this type of venture, beyond those SMEs that are part of a holding or new ventures originating within and with the support of a large corporation. Another relevant topic for the future is de-internationalisation; after a period of internationalisation by necessity if the SME wanted to survive, we can expect some type of retrenchment and abandonment in those cases in which the venture has been unable to reach adequate international performance. Otherwise, the survival of the SME may be compromised. Longitudinal studies will shed light on the issues related to dynamics.

In summary, knowledge is paramount for explaining internationalisation, particularly in SMEs considering their constrained resources. While some combinations of topics have been studied extensively, some others are still under-investigated, and warrant additional scientific inquiry over the next decades.

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## APPENDIX A. DESCRIPTORS

SHORT NAME	FULL NAME
<b>Theoretical approaches (A)</b>	
A_IE	International entrepreneurship
A_IO	Industrial organization
A_INSTITUTION_TH	Institutional theory
A_IPM	Internationalization process model
A_KBV	Knowledge-based view approach
A_NETWORK	Networking approach
A_RBV	Resource-based view
A_SOCIO_PS	Socio-psychological approaches
A_TCE	Contract theories of the firm and of internationalization (transaction cost economics-TCE, agency theory; OLI)
<b>Mode of entry focus (B)</b>	
B_CONTRACT_LICENS_ALLY_OUTSOURC	Alliances & non-equity agreements: Licenses, Franchises and outsourcing
B_FDI	Foreign Direct Investment (excluded IJV and M&A)
B_IJV	International Joint Venture
B_INT_TRADE	International trading entry modes
B_M&A	Mergers & Acquisitions
<b>Target variables analysed (C)</b>	
C_CULTURE	Cultural issues
C_FOREIGN MK_ENTRY	Foreign market entry
C_GROWTH	Growth and international expansion
C_K_CONTENT	Content of knowledge
C_K_SOURCE	Source of knowledge
C_PERFORMA	General Performance
C_RISK_UNC	Risk and uncertainty
C_SCOPE	Scope of internationalization
C_SPEED	Speed to and of internationalization
SURVIVAL	Survival
<b>Methods (D)</b>	



SHORT NAME	FULL NAME
D_METHODS_QUALIT	Qualitative methods
D_METHODS_QUANT	Quantitative methods
D_METHODS_MIXED	Mixed methods
D_METHODS_THEORY	Theoretical paper
<b>Geographical areas for home countries (E) and host countries (F)*</b>	
E_AFRICA_HOME/ F_AFRICA_HOST	Africa
E_ASIA_PAC_HOME/ F_ASIA_PAC_HOST	Asia Pacific
E_EUROPE_HOME/ F_EUROPE_HOST	Europe
E_LATIN_AM_HOME/ F_LATIN_AM_HOST	Latin America and The Caribbean
E_MIDDLE_EAST_HOME/ F_MIDDLE_EAST_HOST	Middle East_ West Asia
E_NORTH_AM_HOME/ F_NORTH_AM_HOST	North America
E_SOUTH_EAST_HOME/ F_SOUTH_EAST_HOST	South East Asia
<b>Industries/sectors analysed (G)</b>	
G_BIOTECHN	Bio industries
G_BUILDING	Building
G_CHEM	Chemical
G_COM	Commerce and retailing
G_ENERGY	Energy
G_FOOD	Food industry
G_HEALTH	Health services
G_SERVICES	Services: banking, services to firm; education; media; tourism, hospitality
G_ICT	ICT and other high-tech industries
G_MACH_EQUIP	Machinery and equipment
G_TRAD_MANUF	Traditional manufacturing industries
G_MANUFACT_OTHER	Other manufacturing industries or manufacturing industries not specified
G_TRANSPORT_DISTRIB	Transportation and logistics

(\*) In the short names, the letters E and F were used to denote home and host markets, respectively.