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The Past, Present, and Future of International Entrepreneurship and Dynamic Capabilities in Emerging Markets: A Bibliometric Approach to Performance Assessment and Scientific Mapping

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ABSTRACT

The purpose of this study is to provide a comprehensive portrayal of past trends, the current state, and future research trajectories in the field of international entrepreneurship from a dynamic capabilities perspective in emerging markets. This research was conducted using a descriptive–analytical approach and a bibliometric methodology, and it examined 908 scientific documents indexed in the Scopus citation database from 2017 to 2022. Performance analysis and scientific mapping were carried out using Excel, VOSviewer, and R software packages. The findings indicate a significant annual growth in scientific output in this domain, with a gradual shift in research focus from developed markets toward emerging markets. Moreover, the conceptual structure of the existing literature is organized into four main clusters: innovation, dynamic capabilities, international entrepreneurship, and small and medium-sized enterprises. The study further reveals that although developed countries continue to play a dominant role in knowledge production, emerging markets—particularly China—have become new research hubs, highlighting the necessity for deeper conceptual and empirical investigations in this field.

Keywords: International entrepreneurship; Dynamic capabilities; Emerging markets; Bibliometrics; Scientific mapping

Introduction

International entrepreneurship has evolved from a niche conversation at the intersection of entrepreneurship and international business into a mature research domain concerned with how entrepreneurial actors discover, enact, and scale opportunities across national borders under conditions of uncertainty and heterogeneity. Early conceptualizations emphasized the distinctiveness of entrepreneurial internationalization—particularly its opportunity-driven character, speed, and strategic experimentation—relative to incremental models of foreign expansion (1). Over time, the field has broadened to include diverse organizational forms and strategic pathways,

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from born-global and international new ventures to more traditional small and medium-sized enterprises (SMEs) seeking export growth or multi-market expansion, while retaining a central preoccupation with how cross-border opportunities are recognized and exploited (2). In parallel, scholarship has increasingly framed international entrepreneurship not merely as international market entry by small firms but as an ongoing pursuit of opportunities across borders that requires entrepreneurial judgment, resource orchestration, and strategic adaptation to institutional and competitive differences (2). This widening conceptual scope has been accompanied by efforts to systematize the domain's intellectual structure and delineate its thematic boundaries. Domain ontology and thematic analyses have shown that international entrepreneurship research has clustered around persistent themes—such as opportunity identification, entrepreneurial orientation, networks, learning, and innovation—while also undergoing periods of thematic reorientation reflecting changes in the global economy and in research tools and datasets (3).

A key driver of recent growth in this field is the increasing salience of SMEs in global value creation and the persistent managerial challenge of translating entrepreneurial ambition into international performance. Reviews of SME exporting have highlighted enduring constraints—capability gaps, market intelligence limitations, resource scarcity, and institutional frictions—while identifying "future research agendas" that include deeper attention to contextual heterogeneity and the microfoundations of capability development (4). In the context of rapid technological change and globalization, SMEs increasingly rely on entrepreneurial marketing and flexible strategic approaches to survive and grow in foreign markets, especially when originating from small and open economies where internationalization is often a strategic necessity rather than a choice (5). This SME-centric emphasis also aligns with growing evidence that organizational resilience, entrepreneur resilience, and environmental turbulence play a decisive role in whether SME exporters can withstand shocks and sustain international operations (6). Complementary findings from emerging contexts indicate that entrepreneurs' psychology and organizational resilience are not peripheral but constitutive factors shaping the performance and continuity of small firms operating amid volatile institutional and market conditions (7). These resilience-oriented perspectives reinforce the notion that international entrepreneurship is best understood as a capability-intensive process in which firms must continually recalibrate their strategies and resource configurations in response to uncertain cross-border environments.

Dynamic capabilities provide a powerful theoretical lens for such recalibration because they focus on the firm's ability to integrate, build, and reconfigure resources to address rapidly changing environments. While the international entrepreneurship literature has long recognized that cross-border opportunity pursuit requires agility, learning, and recombination, dynamic capabilities offer a coherent logic for explaining how firms systematically generate such agility and how it translates into competitive advantage and performance across heterogeneous markets. The resource-based view remains a foundational reference point for capability thinking in strategic management, emphasizing that firms differ because their resources and the ways they are deployed differ, thereby generating performance heterogeneity (8). In international entrepreneurship, these differences manifest in how firms mobilize knowledge, relationships, and entrepreneurial action to overcome liabilities of newness, foreignness, and outsidership. Notably, internationalization process perspectives have evolved to stress network embeddedness and the "liability of outsidership," suggesting that opportunity pursuit across borders depends on a firm's capacity to become an insider in relevant networks and to adapt its learning mechanisms accordingly (9). This emphasis resonates with dynamic capability logic: firms must sense and seize opportunities and reconfigure resources and relationships across markets, industries, and institutional contexts. In emerging markets, these demands are

amplified by institutional volatility, infrastructural constraints, and uneven competitive dynamics, making dynamic capabilities and resilience particularly salient mechanisms explaining differential outcomes among entrepreneurial internationalizers.

The contemporary research agenda is also shaped by the increasing coupling of entrepreneurship with innovation, especially under digital transformation and crisis-driven shifts in markets and work. Strategic management perspectives increasingly treat entrepreneurship and innovation as mutually reinforcing processes that create and capture value through experimentation, recombination, and strategic decision-making under uncertainty (10). Convergence innovation—enabled by digital technologies and accelerated in periods of disruption—has been argued to intensify the need for firms to integrate diverse knowledge domains and redesign business models, thereby raising the premium on capabilities that support rapid adaptation and opportunity exploitation (11). At the same time, entrepreneurship-based branding has been highlighted as an emerging driver of startup performance, implying that capability development may also be symbolic and market-facing, not merely operational or technological (12). Within emerging markets, social entrepreneurship has also gained visibility as an avenue for community empowerment, illustrating that entrepreneurial value creation can be simultaneously economic and social, and that the capability base may need to include stakeholder engagement and legitimacy-building within local institutional contexts (13). These themes collectively suggest that international entrepreneurship research, especially when linked to dynamic capabilities, must address a broader range of performance logics and value propositions than those captured by traditional export or growth metrics alone.

Education and skills formation constitute another foundational layer in this evolving landscape, because opportunity pursuit and capability building depend on the availability of entrepreneurial human capital and intentionality. Recent studies underscore that entrepreneurship education can shape entrepreneurial intentions, including among economically disadvantaged groups, with implications for inclusivity and the broadening of entrepreneurial participation in domestic and international markets (14). Evidence also indicates that entrepreneurship education activities can promote students' entrepreneurial intentions, suggesting that the mechanisms may include experiential learning, self-efficacy formation, and exposure to entrepreneurial role models and contexts (15). In vocational settings, models of entrepreneurship education have been proposed to institutionalize entrepreneurial competencies and pathways into employability and venture creation, particularly in developing-country contexts (16). Complementary work proposes entrepreneurship skills frameworks to foster employability among industrial technology students, reinforcing the idea that entrepreneurial competence can be structured as a teachable and assessable set of skills rather than a purely dispositional trait (17). As digitalization reshapes markets, digital entrepreneurship and entrepreneurship education have also become intertwined research streams, with literature reviews indicating that pedagogical approaches and ecosystem supports must adapt to platform economies, digital tools, and new venture scaling logics (18). In addition, theoretical foundations of innovative development in student entrepreneurship have been advanced to explain how educational institutions can cultivate innovation-oriented entrepreneurial behavior, thereby strengthening the microfoundations of capability development relevant to international entrepreneurship (19). Although education-focused studies are often treated as adjacent to international entrepreneurship, they are consequential for emerging markets where skill formation and institutional supports can determine the depth and breadth of entrepreneurial participation in global value chains.

Given these conceptual expansions, the empirical literature has also diversified, and with it the need for rigorous evidence synthesis and science mapping. Systematic review methodology in management research provides structured protocols for identifying, appraising, and synthesizing evidence, supporting more cumulative knowledge development in fast-growing fields (20). In international entrepreneurship specifically, bibliometric and systematic reviews have been used to map pathways of SME internationalization, identify leading themes, and expose research gaps, thereby guiding theory development and method selection (21). The appeal of bibliometric approaches is heightened by the accelerating growth of research outputs and the increasing availability of large citation databases. Bibliometrics itself has historical roots in efforts to quantify and understand the production and dissemination of scientific knowledge, and it has evolved into a set of analytic techniques that connect publication patterns, citation structures, and thematic dynamics (22). Contemporary bibliometric practice is closely linked to database infrastructures and to science-mapping tools that enable network analyses of authorship, co-citation, and keyword co-occurrence. Scopus, for example, has been documented as a major abstract and citation database supporting such analyses, enabling researchers to trace the evolution and structure of domains at scale (23). However, database choice is not trivial: different platforms vary in coverage, citation linking, and disciplinary breadth, and comparative studies have demonstrated meaningful differences between Scopus, Web of Science, Google Scholar, and other systems, which may influence observed patterns in science mapping (24). These issues are further complicated by the expansion of bibliometric studies beyond information science and library science, raising concerns regarding methodological rigor, interpretive overreach, and the portability of metrics across domains (25).

A critical component of bibliometric research is the use—and critique—of citation-based indicators as proxies for influence or quality. The journal impact factor has a complex history and has generated both incentives and controversies, shaping journal strategies and researcher behavior while also being criticized for misalignment with article-level quality and for vulnerability to gaming (26). Beyond journal-level indicators, citation counts and derived metrics have been widely used in science evaluation, yet conceptual reviews emphasize that citations reflect multiple underlying mechanisms—visibility, relevance, field norms, and strategic citation behavior—so the inference from citations to “quality” requires theoretical and contextual caution (27). Methodological debates also extend to normalized indicators; for instance, arguments have been made to reconsider size-independent indicators such as the mean normalized citation score (MNCS), highlighting statistical and interpretive limitations that can mislead evaluation if not carefully applied (28). At the same time, emerging work links topic growth to citation impact, suggesting that rapidly expanding topics may receive disproportionate attention and citation accumulation, which can shape the apparent prominence of themes in bibliometric maps (29). Consequently, bibliometric studies in international entrepreneurship and dynamic capabilities should interpret “impact” as a multi-dimensional construct, integrating performance analysis with thematic and relational mapping rather than relying solely on single metrics.

The operationalization of bibliometric mapping requires robust tools and transparent procedures. The development of bibliometrix as an R-based tool has enabled comprehensive science mapping analysis, including descriptive performance indicators and network analyses that support replicability and methodological transparency (30). Bibliometric keyword analysis has been used to capture the semantic evolution of a field over time, revealing shifts in research attention and the emergence of new themes, and illustrating how keyword co-occurrence can function as an empirical approximation of intellectual structure (31). Network mapping approaches have also been applied in adjacent domains to demonstrate how bibliometric network analysis can identify intellectual structures

and collaboration patterns; such work illustrates the transferability of methods for mapping the structure of specialized research areas (32). Similarly, bibliometric analysis has been used to map scientific landscapes in topics such as smart and sustainable cities, providing methodological templates for identifying leading outlets, author networks, and thematic clusters in complex interdisciplinary fields (33). Bibliometric overviews of journal evolution—such as those examining decades of publication trajectories in a management science journal—further demonstrate how performance and thematic mapping can illuminate how research agendas change across time and institutional contexts (34). Taken together, these studies justify bibliometric approaches as appropriate for synthesizing and structuring fast-growing literatures such as international entrepreneurship and dynamic capabilities in emerging markets.

Because bibliometric studies often accompany or motivate empirical model testing in management research, it is also important to recognize standards for construct validity and measurement quality that underpin credible inference. Discriminant validity, in particular, is frequently contested in management and marketing research, and methodological work has highlighted both conceptual pitfalls and practical remedies for discriminant validity testing, emphasizing the risk of inflated relationships when constructs are not adequately distinct (35). The HTMT criterion, proposed for variance-based structural equation modeling, provides a widely used approach for assessing discriminant validity and has influenced methodological standards in capability and entrepreneurship research that uses latent constructs (36). Earlier methodological discussions in marketing also warned about insufficient discriminant validity and called for more stringent evaluations to prevent misleading theoretical claims (37). The broader validity literature across psychology and behavioral measurement provides convergent guidance: factorial and discriminant validity tests have been used to establish whether scales measure what they intend to measure and whether they can be distinguished from conceptually related constructs (38). Similar validity logics have been applied to complex constructs such as sociosexuality, demonstrating how individual differences research operationalizes convergent and discriminant validity across measurement models (39). The tripartite model work on anxiety and depression symptom scales further exemplifies rigorous testing of convergent and discriminant validity, reinforcing the methodological expectation that constructs must be empirically separable to support theoretical claims (40). Even widely used psychosocial scales, such as the revised UCLA Loneliness Scale, have relied on concurrent and discriminant validity evidence to demonstrate measurement integrity, highlighting that discriminant validity is a cross-disciplinary concern with direct relevance for management constructs such as resilience, entrepreneurial intention, and dynamic capabilities (41). In the context of perceived fit, convergent and discriminant validity evidence has been used to establish construct distinctiveness in organizational research, illustrating the importance of rigorous validity testing when linking perceptions and outcomes (42). These methodological foundations matter because international entrepreneurship and dynamic capabilities research frequently employs survey-based designs and latent constructs, and bibliometric synthesis can usefully inform measurement choices and highlight recurring operationalizations that should be evaluated for distinctiveness.

The rising emphasis on emerging markets adds another layer of importance to rigorous synthesis because such contexts introduce institutional and resource constraints that may shift the causal mechanisms assumed in developed-market research. International entrepreneurship in emerging markets can be shaped by institutional voids, differing legitimacy thresholds, and resource recombination under constraints, requiring theories that explain both opportunity pursuit and survival. Resilience-oriented evidence on SME exporters and entrepreneurs in turbulent environments suggests that capability development and psychological resources interact with

environmental shocks in ways that may not generalize from stable contexts (6, 7). Moreover, as entrepreneurship education expands across contexts and populations, the pipeline of potential international entrepreneurs may change in composition and preparedness, potentially influencing patterns of opportunity pursuit and capability formation in emerging markets (14-18). Social entrepreneurship's role in empowerment also indicates that performance logics may include social value and institutional outcomes, which can intersect with internationalization strategies and innovation capability building (13). Collectively, these developments underscore why an evidence-based map of the literature—capturing publication growth, leading actors, thematic clusters, and methodological patterns—is necessary to consolidate knowledge and guide future research.

At the same time, undertaking a bibliometric study in this domain requires careful attention to the politics and limitations of metrics and databases. Debates surrounding impact indicators highlight how evaluative systems can shape research agendas and journal behavior, complicating interpretation of productivity and influence in bibliometric outputs (26-28). Differences in database coverage can change the apparent centrality of journals, authors, or topics, which is particularly important for emerging market scholarship that may be unevenly indexed across systems (23, 24). Furthermore, the expanding use of bibliometrics outside its originating fields suggests the need for disciplined protocols and transparent reporting to avoid overclaiming and to ensure that science mapping results are interpreted as structured descriptions of a literature rather than as definitive judgments of scholarly quality (20, 25). Tools like bibliometrix make it feasible to implement such transparency and replicability, while keyword analyses and network mapping can reveal the intellectual architecture that narrative reviews might overlook, especially in fast-growing domains (30, 31). Moreover, research on topic growth and citation impact cautions that "hot" topics may appear more influential simply because they are expanding, reinforcing the need to combine performance metrics with substantive thematic interpretation (29).

Despite the maturity of international entrepreneurship as a field, there remains a practical need to integrate its evolving themes—innovation, resilience, education, and digital transformation—within a coherent capability-based framework, especially for emerging markets where context differences can alter mechanisms and outcomes. Pathway-focused reviews of SME internationalization have highlighted the complexity of trajectories and the need for integrative syntheses that connect theory, method, and context (21). The broad domain analyses covering earlier decades demonstrate that thematic evolution is continuous and that new emphases require updated mapping and agenda setting (3). Conceptual definitions and modeling approaches that foreground the speed of internationalization and opportunity pursuit still provide a baseline, but today's landscape demands that dynamic capabilities and resilience be treated as central explanatory constructs rather than peripheral moderators (1, 6). In addition, innovation and convergence dynamics suggest that international entrepreneurship increasingly entails recombination across technological and market domains, with branding and market-facing capabilities contributing to performance (10-12). Therefore, a bibliometric performance and science-mapping assessment of international entrepreneurship and dynamic capabilities in emerging markets can both consolidate dispersed insights and identify underexplored intersections among these themes, while also clarifying where methodological rigor—particularly in measurement validity—should be strengthened (35, 36).

Accordingly, the aim of this study is to conduct a bibliometric performance analysis and scientific mapping of research on international entrepreneurship and dynamic capabilities in emerging markets, in order to synthesize the field's intellectual structure, influential contributors, and evolving thematic trajectories.

Methods and Materials

The methodology of a review study, like other scientific investigations, follows a step-by-step and systematic process in order to address the research problem objectively. As the volume of academic publications is rapidly increasing, keeping updated and being informed about any specific scientific domain has become increasingly difficult. The present study is a descriptive–analytical investigation conducted using a bibliometric approach. The methodological steps of the study are outlined below.

Step 1: Selection of the Research Problem and Field of Study

In the present study, leading scientific documents were retrieved using the Publish or Perish software, and the theoretical framework of the field was delineated accordingly. Considering the dispersion and multiplicity within the literature on internationalization and international entrepreneurship, as well as the similarities and differences between these domains, the authors identified topic selection and the execution of a bibliometric study as a central research problem. Ultimately, the growth of publications in this area and the need to synthesize the outputs of these studies motivated the authors to focus on research published over the past five years.

Step 2: Determination of Research Objectives

In accordance with the framework proposed by Snyder (2019), the authors defined the objectives of the present study in two main categories: performance analysis objectives and scientific mapping objectives.

Step 3: Definition of the Search Strategy

According to Wang et al. (2020), the rapid expansion of citation databases in recent years and the corresponding growth in the number of published scientific articles—which doubles approximately every 9 to 15 years—necessitate a structured search strategy for managing large volumes of bibliographic information. In this study, the search strategy consisted of four main stages.

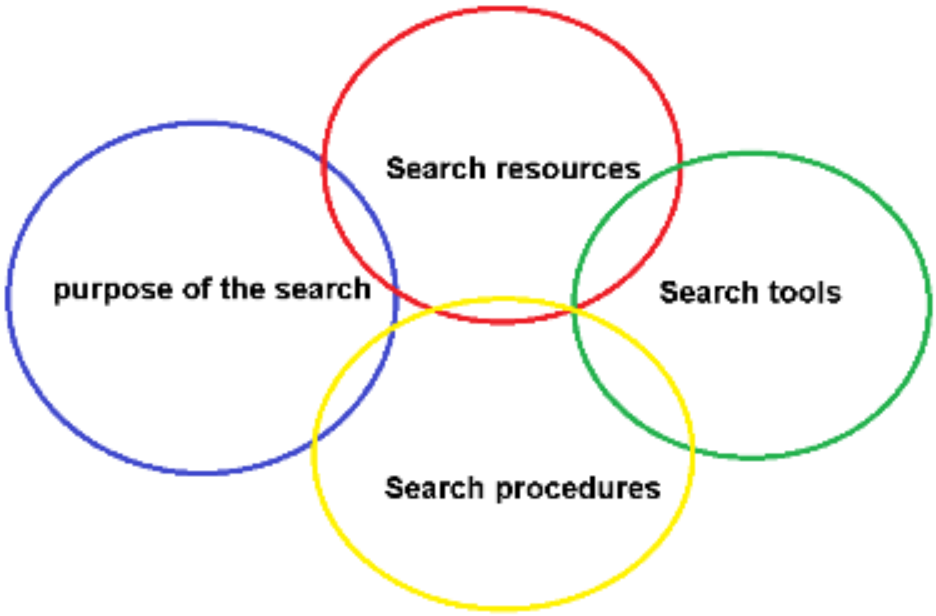

Figure 1. Components of the Citation Data Search Strategy

The authors applied the required filters to refine the search within the Scopus database. The search results and associated criteria are presented in Table 1.

Table 1. Procedures and Criteria for Searching Citation Sources

Items	Description
Citation Database	Scopus
Keywords	("international entrepreneurship") AND ("dynamic capabilities") AND ("emerging markets")
Search Fields	Title, Abstract, Keywords
Search Query	(("international entrepreneurship") AND ("dynamic capabilities") AND ("emerging markets") AND (LIMIT-TO (SRCTYPE, "j")) AND (LIMIT-TO (PUBSTAGE, "final")) AND (LIMIT-TO (DOCTYPE, "ar") OR LIMIT-TO (DOCTYPE, "re")) AND (LIMIT-TO (SUBJAREA, "BUSI")) AND (LIMIT-TO (PUBYEAR, 2022) OR LIMIT-TO (PUBYEAR, 2021) OR LIMIT-TO (PUBYEAR, 2020) OR LIMIT-TO (PUBYEAR, 2019) OR LIMIT-TO (PUBYEAR, 2018) OR LIMIT-TO (PUBYEAR, 2017)) AND (LIMIT-TO (LANGUAGE, "English") OR LIMIT-TO (LANGUAGE, "Spanish") OR LIMIT-TO (LANGUAGE, "Portuguese") OR LIMIT-TO (LANGUAGE, "Bosnian") OR LIMIT-TO (LANGUAGE, "Chinese") OR LIMIT-TO (LANGUAGE, "French") OR LIMIT-TO (LANGUAGE, "Polish")))
Document Types	Journal articles and review papers
Time Span	2017–2022
Language	All languages (with English bibliographic records)

It should be noted that the time period 2017–2022 was selected due to the sharply increasing growth rate of studies on the research topic beginning in 2017.

Step 4: Selection of Software for Bibliometric Analysis

The software packages employed in this study included:

Publish or Perish for identifying the research domain, leading authors, and the theoretical literature;

Zotero for managing and organizing references;

VOSviewer for constructing co-word networks and performing network and cluster analyses;

R for extracting performance indicators and conducting network analysis.

Step 5: Data Collection and Extraction

Based on the criteria specified in Table 1, a search was conducted in the Scopus database, and on 31 January 2023, a total of 908 documents were retrieved using the selected keywords and operators.

Findings and Results

Within the sixth methodological phase, the authors conducted performance (descriptive) analysis and network analysis. Prior to examining each analytical component, an overall assessment of the documents remaining in the analytical dataset was performed.

Table 2. Overview of the Main Bibliometric Information

Description	Results	Document Contents
Timespan	2017–2022	Keywords Plus (ID)
Sources (Journals, Books, etc.)	256	Author Keywords (DE)
Documents	908	Authors
Annual Growth Rate (%)	26.68	Authors of Single-Authored Documents
Document Average Age	7.82	
Average Citations per Document	13.16	
References	84,490	
Single-Authored Documents	68	Article
Co-authors per Document	3.09	Review
International Co-authorships (%)	42.4	

The table indicates that during the period 2017–2022, a total of 908 documents were included in the analytical dataset, published across 256 sources, with an annual scientific production growth rate of 26.68%, reflecting a

strong upward trend. The average number of citations per document was 13.16, which is considered substantial in this research domain. The results also show that while a small number of articles received a high volume of citations, a larger number of publications accumulated relatively low citation counts. Journal impact, number of references, and number of authors clearly demonstrate that journals addressing rapidly developing topics tend to enjoy citation advantages. An additional overview of the dataset reveals that authors employed 2,506 distinct keywords to classify their studies. Furthermore, the dataset included 68 single-authored publications on international entrepreneurship, whereas the remaining 840 documents were produced collaboratively, with an average collaboration rate of 3.09 authors per document. International collaboration accounted for 42.4%, indicating that only about 8% of the articles were single-authored, while more than 92% were written through collaborative efforts.

Performance Analysis of Documents and Authors

One of the most important components of any bibliometric study is the identification of the documents and authors that have exerted the greatest influence within a scientific field.

Table 3. Top 10 Most Influential Studies in the Field of International Entrepreneurship

AU	TI	PY	SO	TC
Paul, J.; Parthasarathy, S.; Gupta, P.	Exporting challenges of SMEs: A review and future research agenda	2017	*Journal of World Business*	373
Luo, Y.; Tung, R. L.	A general theory of springboard MNEs	2018	*Journal of International Business Studies*	266
Azar, G.; Ciabuschi, F.	Organizational innovation, technological innovation, and export performance: The effects of innovation radicalness and extensiveness	2017	*International Business Review*	226
Sutter, C.; Bruton, G. D.; Chen, J.	Entrepreneurship as a solution to extreme poverty: A review and future research directions	2019	*Journal of Business Venturing*	206
Yunis, M.; Tarhini, A.; Kassar, A.	The role of ICT and innovation in enhancing organizational performance: The catalyzing effect of corporate entrepreneurship	2018	*Journal of Business Research*	174
Ferreira, J.; Coelho, A.; Moutinho, L.	Dynamic capabilities, creativity and innovation capability and their impact on competitive advantage and firm performance: The moderating role of entrepreneurial orientation	2020	*Technovation*	156
Olanrewaju, A.-S. T.; Hossain, M. A.; Whiteside, N.; Mercieca, P.	Social media and entrepreneurship research: A literature review	2020	*International Journal of Information Management*	151
Kano, L.	Global value chain governance: A relational perspective	2018	*Journal of International Business Studies*	145
Zameer, H.; Wang, Y.; Yasmeen, H.	Reinforcing green competitive advantage through green production, creativity and green brand image: Implications for cleaner production in China	2020	*Journal of Cleaner Production*	141
Anwar, M.	Business model innovation and SMEs performance: Does competitive advantage mediate?	2018	*International Journal of Innovation Management*	134

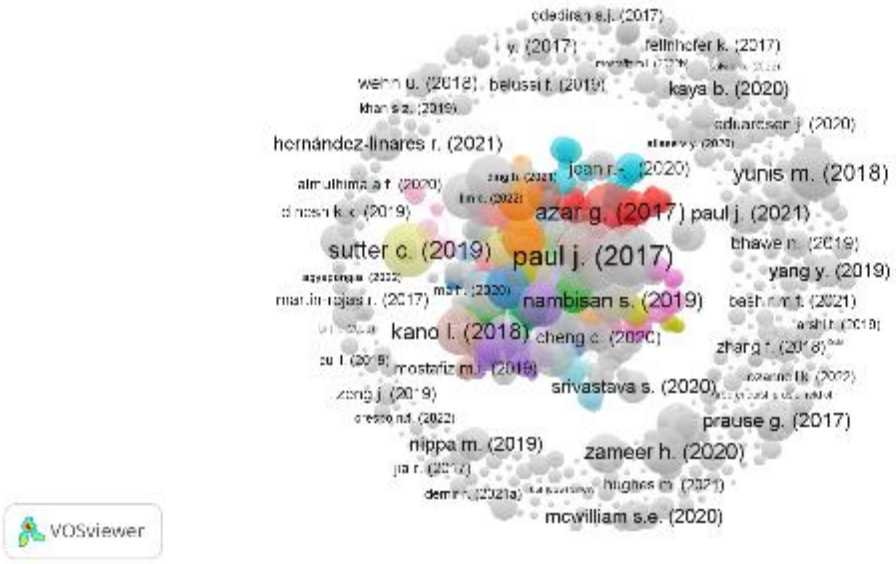

Figure 2. Importance of the Documents in the Analytical Dataset Based on Total Citations

Figure 2 illustrates the relative importance of these documents according to the authors' names. Consistent with Table 3, each document that has received a higher number of citations is represented by a larger node, indicating greater scholarly weight.

Table 4. Top 10 Most Prolific Authors in the Field of International Entrepreneurship

Author	h-index	g-index	m-index	TC	NP	PY_start
Khan, Z.	8	10	1.333	250	10	2018
Paul, J.	7	8	1.000	728	8	2017
Bresciani, S.	6	6	2.000	147	6	2021
Falahat, M.	6	7	0.857	159	7	2017
Knight, G.	6	6	1.000	267	6	2018
Dimitratos, P.	5	5	0.714	238	5	2017
Johanson, M.	5	6	0.714	108	6	2017
Adomako, S.	4	6	1.000	72	6	2020
Anwar, M.	4	5	0.667	181	5	2018
Arslan, A.	4	4	0.571	78	4	2017

As shown in Table 4, Khan, Z. has produced a total of 10 studies with 250 citations and an h-index of 8; Paul, J. has published 8 studies with 728 citations and an h-index of 7; Bresciani, S. has authored 6 articles with 147 citations and an h-index of 6; and Falahat, M. has produced 7 studies with 159 citations and an h-index of 6. Prominent scholars such as Cavusgil, S. T., Knight, G., Zahra, S. A., and Jones, M. V., despite having highly influential publications in this field, do not appear among the top 10 authors based on citation counts—even when considering the cumulative citations of their works. This finding reaffirms that higher scientific output does not necessarily equate to higher citation impact, which is sometimes regarded as a qualitative indicator in bibliometric research despite extensive criticism, given that research quality is a multidimensional construct.

Performance Analysis of Journals and Institutions

As previously noted, 256 journals have published the 908 studies included in the dataset. Among these, the 10 journals with the greatest impact in terms of scientific production in this field are presented in Table 5. It should be acknowledged, however, that numerous critiques have been raised regarding journal impact factor enhancement strategies, some of which are ethically questionable and intended to artificially improve journal rankings.

Table 5. Top 10 Journals with the Highest Scientific Output in the Field

Journal	Articles
International Business Review	52
Journal of Business Research	46
International Marketing Review	24
Technological Forecasting and Social Change	23
Journal of International Entrepreneurship	22
International Entrepreneurship and Management Journal	20
Journal of International Management	20
Journal of World Business	20
Journal of International Business Studies	19
Management International Review	17

The journal *International Business Review* ranks first, having published 52 high-quality scientific studies under the Elsevier publishing group, with an impact factor of 8.045 and a CiteScore of 9.9, covering the subject areas of *Business, Management and Accounting: Business and International Management*. The second-ranked journal is the highly prestigious *Journal of Business Research*, with an impact factor of 11.969 and a CiteScore of 11.2, and whose primary scope includes *Business, Management and Accounting: Marketing*, encompassing business decision-making, processes, and organizational activities across related business domains. This journal occupies second place with 46 publications. The next two journals are *International Marketing Review*, ranked third with 24 publications and published by Emerald, and *Technological Forecasting and Social Change*, ranked fourth and published by Elsevier.

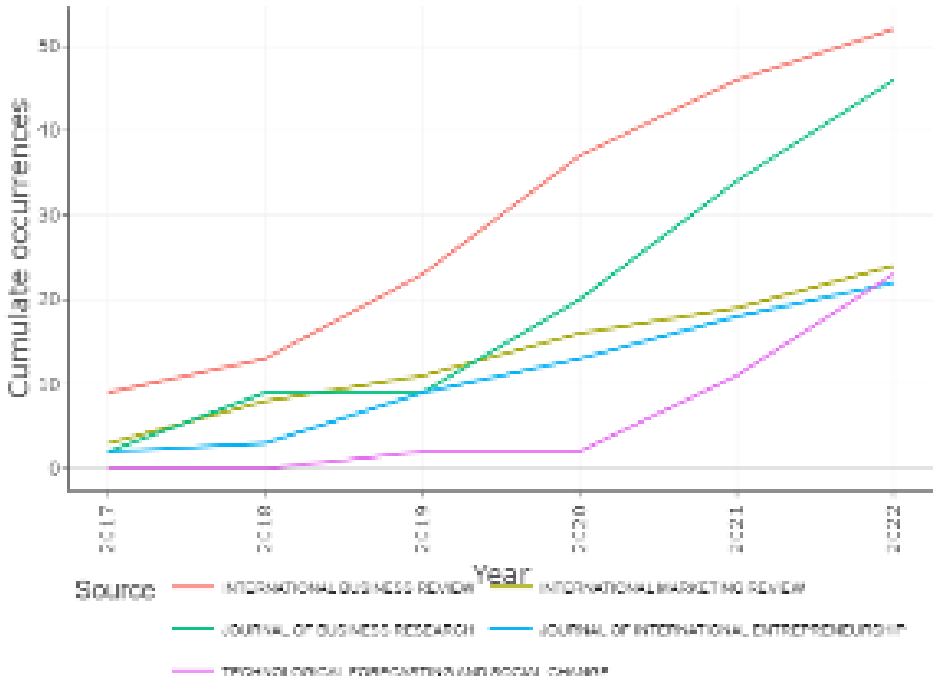

Figure 3. Growth of Scientific Production in International Entrepreneurship Journals

In the following, the critique and analysis of Figure 3 once again demonstrate the growth of the top five journals among the top eight journals in the business field up to the end of 2022. A comparative assessment shows that *Technological Forecasting and Social Change* and the *Journal of Business Research*, respectively, have experienced a much steeper upward trend in the field of international entrepreneurship compared to other journals

in this domain. Although *International Business Review* recorded the highest growth in scientific production up to 2020, a decline in the growth rate of published articles in the areas of international entrepreneurship and the internationalization of small and medium-sized enterprises is observed during the subsequent two years. Moreover, the overall journal results indicate that 216 journals at the lower end of the distribution each contributed only one article to the field under study. Among the 256 journals publishing the 908 documents in the analytical dataset, more than 40% of the high-quality studies were published in just over 7% of these journals, indicating a highly concentrated publication structure.

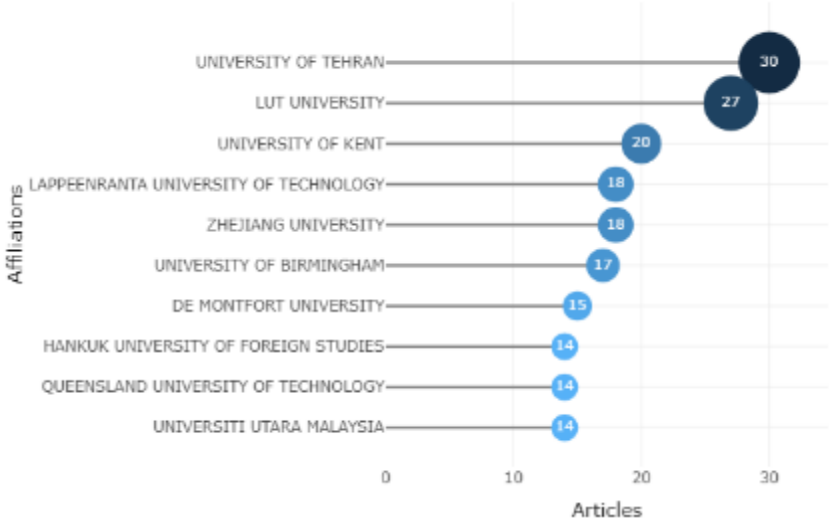

Figure 4. Top 10 Organizations with the Highest Scientific Output in the Field

According to the above table and Figure 4, the University of Tehran emerges as the leading institution in the research domain of the present study. Despite being less than 100 years old, this university has surpassed many well-established global institutions in terms of performance in the investigated field. With the highest scientific output in international entrepreneurship and dynamic capabilities in international markets, the University of Tehran is recognized as the top institution in terms of publication volume and growth within the Scopus database. According to the Scimago Institutions Rankings (2023), the University of Tehran is classified as a Q1 institution, holding a global rank of 402 and the first national rank in Iran. LUT University in Finland, despite its relatively young age of approximately 62 years, has secured the second position through its specialized focus on business topics, particularly international entrepreneurship and the internationalization of small and medium-sized enterprises. The University of Kent ranks third among organizations in terms of scientific output in the relevant field, with a global rank of 491. According to the same ranking source, both of the top two universities have improved their global research rankings over the past two years, and in the studied field they clearly dominate the landscape with 30 and 27 publications, respectively, placing them well ahead of other institutions among the top ten research organizations. Furthermore, the linear trend analysis of institutional scientific production indicates that the University of Tehran and LUT University continue to exhibit the highest growth rates in international entrepreneurship research.

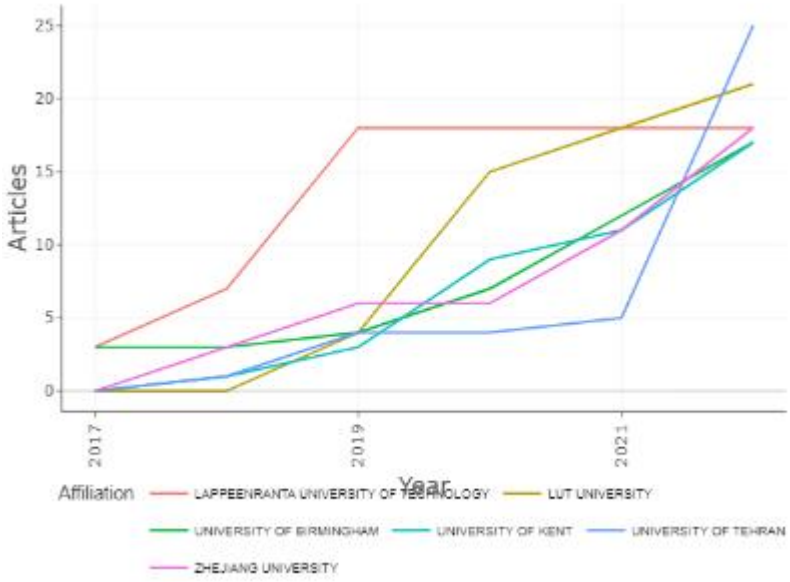

Figure 5. Linear Trend of Scientific Output Growth in International Entrepreneurship with a Dynamic Capabilities Perspective across Organizations and Universities

Based on the data presented in the following table, the countries of China, the United Kingdom, the United States, Spain, and Italy exhibit the highest levels of scientific production. However, the volume of publications in the two leading countries is markedly higher than in other top-ranked nations. Specifically, Figure 7 shows that China has produced 337 documents, the United Kingdom 321 documents, and the United States 202 documents. Consequently, in terms of publication frequency and repetition, China ranks above the other nine leading countries in research on international entrepreneurship, dynamic capabilities, and emerging markets.

Table 6. Top 10 Countries with the Highest Scientific Output in the Field

Region	Frequency	Region	Frequency
China	337	Australia	111
United Kingdom	321	Malaysia	103
United States	202	Brazil	87
Italy	169	Finland	86
Spain	168	India	80

Figure 6 further illustrates that China and the United Kingdom have experienced the most rapid growth in article production. Additionally, the influence of leading countries should not be examined solely through publication counts; international collaboration plays a critical role. The participation of researchers from multiple countries within a single study is an indicator of high research quality and facilitates future international research opportunities. Both single-country studies and multi-country international studies among the top twenty countries are depicted in Figure78.

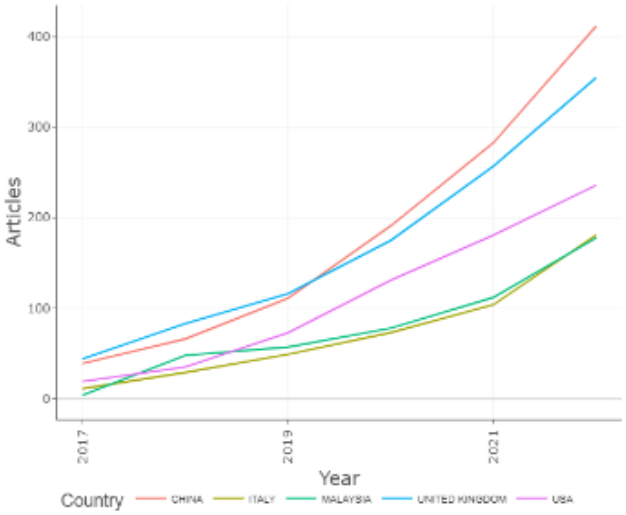

Figure 6. Linear Growth Trend of Scientific Production in International Entrepreneurship across Countries

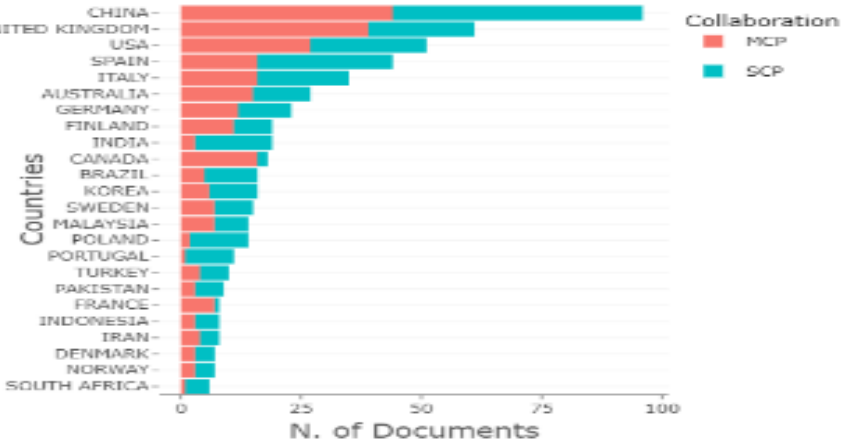

Figure 7. Collaboration of Authors from Different Countries

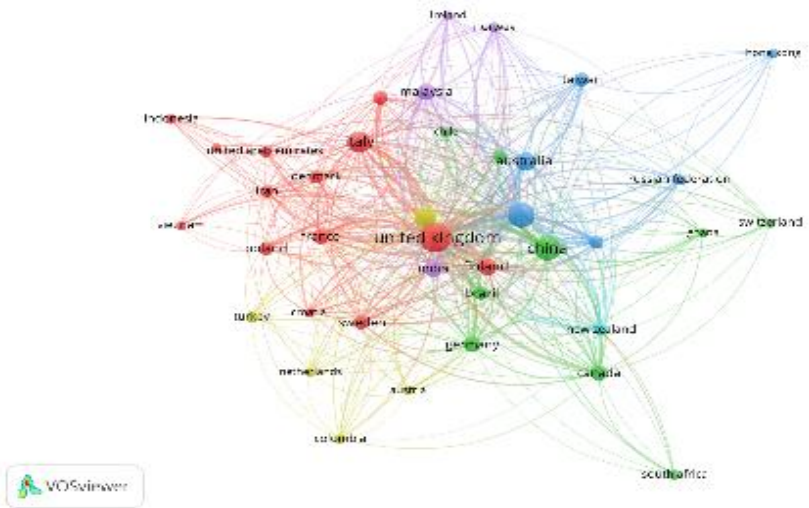

Figure 8. Collaboration among Countries

Figure 8 shows that the United Kingdom, with 38 international collaborations involving countries such as the United States, Finland, Spain, Italy, Malaysia, and Canada, ranks first in international research cooperation within the field of international entrepreneurship. Despite having lower overall publication volumes, many developing countries seek to ensure publication in prestigious journals and increase citation impact by engaging in international collaborative studies. Another motivating factor for such collaborations is the availability of English-speaking partners and the opportunity to secure future research fellowships and academic exchanges.

Keyword Analysis

Keywords are distinctive elements of an academic article because they are selected by authors to represent the most important concepts of their work. When analyzed collectively, they reveal which research topics are dominant and which are underexplored within a field.

Figure 9. Keyword Analysis

Each cell represents a unique keyword, and its size reflects its importance and weight across the 908 studies. Innovation accounts for the largest share (12%), supporting the widely accepted notion that the contemporary era is fundamentally an era of innovation. This finding explains the pervasive growth of innovation across all business-related disciplines, as organizations are increasingly compelled to pursue innovation across all dimensions of their operations. Figure 10 indicates that small and medium-sized enterprises, with a 9% share, represent the second most prominent keyword. Performance evaluation (6%), globalization (6%), and business development (5%) also constitute major thematic concentrations in this research domain.

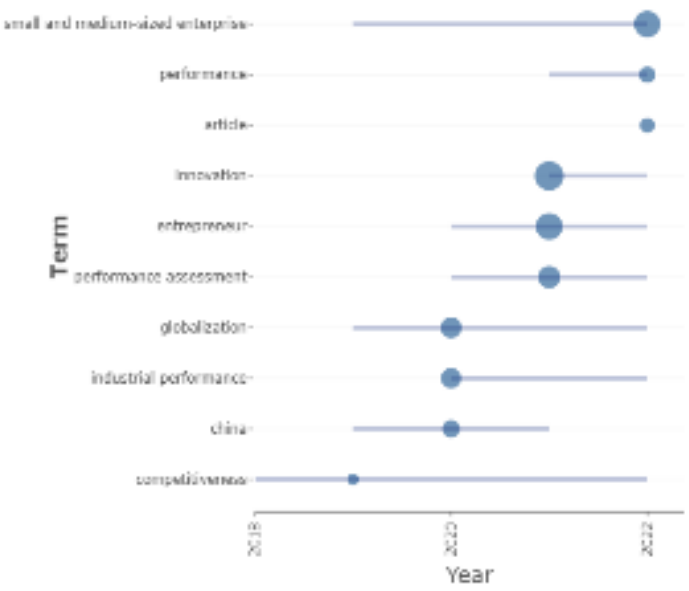

Figure 10. Temporal Evolution of Keywords Based on Topic Weighting

Network Analysis and Scientific Mapping in Bibliometrics

Scientific mapping refers to the development and application of computational techniques for visualizing, analyzing, and modeling a wide range of scientific and technological activities.

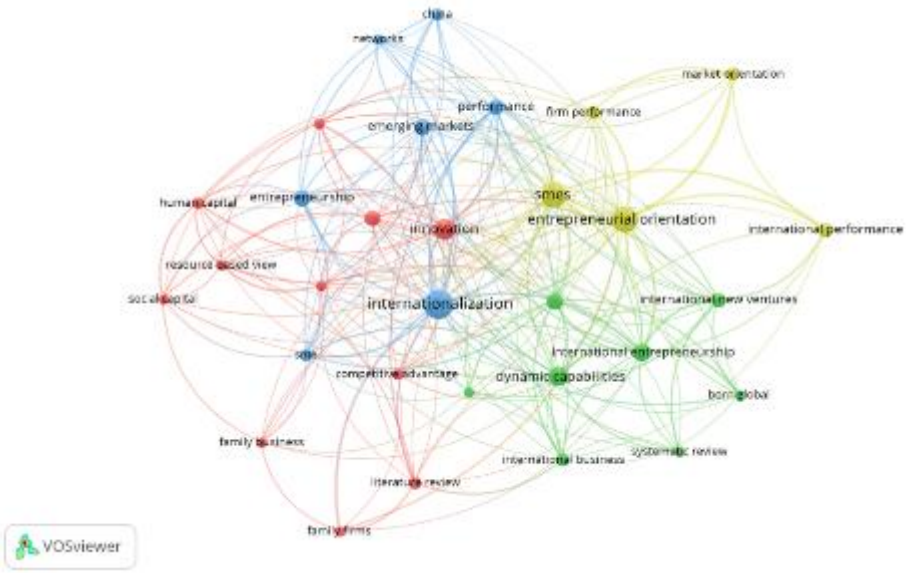

Figure 11. Co-occurrence of the Most Frequent Keywords

In the keyword co-occurrence network of the 908 documents, the authors selected documents containing at least 15 overlapping and concurrent keywords. These keywords represent the 28 most frequent terms, and the size of each node indicates its weight based on frequency of occurrence. The co-occurrence of these keywords is classified into four clusters. In the red cluster, with innovation as the central node, the network includes export performance, competitive advantage, emerging economies, human capital, family firms, the resource-based view, social capital, literature review, family business, and institutional theory, forming a total of 24 links, with some of the thickest connections appearing in this cluster. The second cluster, colored yellow, is centered on small and medium-sized

enterprises, with entrepreneurial orientation positioned very close to SMEs, followed by firm performance, market orientation, and international performance. The strongest links in this cluster are associated with internationalization, international entrepreneurship, and dynamic capabilities. The third cluster, shown in green, is centered on dynamic capabilities, followed by international entrepreneurship, and incorporates concepts such as international new ventures, born globals, systematic literature review, and internationalization. In this cluster, international entrepreneurship exhibits the strongest link thickness with small and medium-sized enterprises, internationalization, entrepreneurial orientation, and venture creation. The fourth cluster, displayed in blue, is centered on internationalization and includes performance, entrepreneurship, emerging markets, small and medium-sized enterprises, networks, and China, showing the highest frequencies of co-occurrence with small and medium-sized enterprises, innovation, entrepreneurial orientation, and international entrepreneurship.

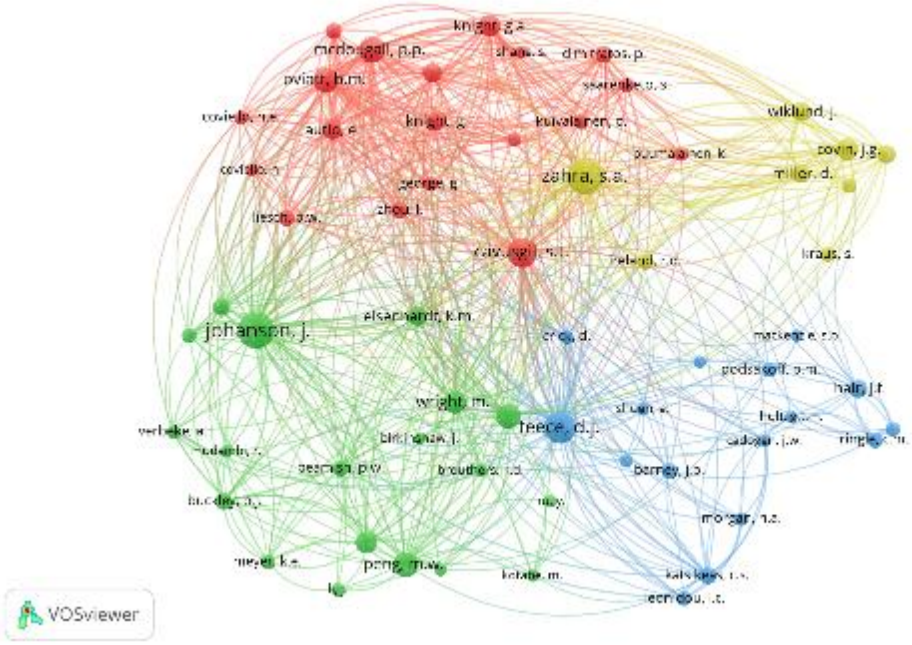

Figure 12. Co-authorship Network of Authors in the Field of International Entrepreneurship and Dynamic Capabilities

The co-authorship network shown in Figure 12 indicates that Zahra, S. A. is located at the center of the yellow cluster, with the highest number of links, reflecting his influential contributions to entrepreneurship research. In the green cluster, Johanson, J. occupies the central position with the highest number of links, representing his pioneering role in internationalization theory. In the red cluster, Cavusgil, S. T., along with Oviatt, B. M. and McDougall, P. P., appears at the core, reflecting their substantial contributions to born global firms and international entrepreneurship research. In the blue cluster, David J. Teece is positioned at the center, representing research related to dynamic capabilities and closely associated theoretical constructs.

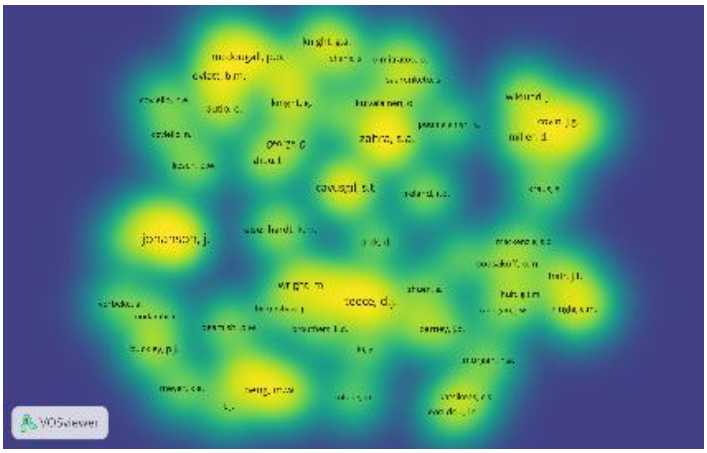

Figure 13. Density of Co-authorship among Authors in the Field of International Entrepreneurship and Dynamic Capabilities

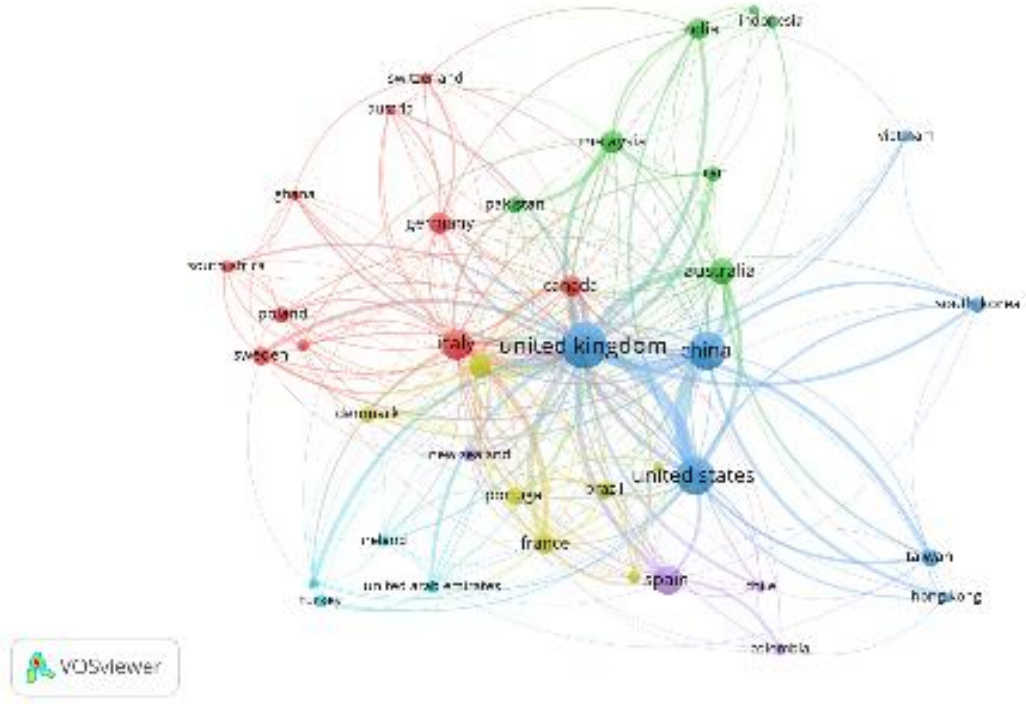

Figure 14. Network of International Collaboration among Countries

Figure 14 illustrates the collaboration networks of countries producing research on international entrepreneurship, dynamic capabilities, and emerging markets. Only countries with at least 10 documents are shown on the map. A strong and well-established collaboration network is observed between the United Kingdom and China, the United States, Spain, Italy, Canada, Finland, Malaysia, Sweden, India, Australia, and Iran, as indicated by the thick connecting lines. The United States also maintains strong collaborative ties with France and Italy. Although weaker, additional collaborative links among other countries are also visible, particularly involving the United Kingdom, the United States, Italy, and Spain.

The criteria and methodological approach adopted in the present study may involve certain potential limitations.

First, due to the large volume of selected documents, the bibliometric search did not permit in-depth reading and content analysis of individual articles.

Second, the protocol's focus on specific criteria prevented many studies from entering the analytical dataset while also excluding a substantial body of potentially relevant research.

Third, only a single database was used, which may have resulted in the omission of some relevant information.

Fourth, reliance on English-language titles, abstracts, and keywords may have led to the loss of additional non-English scholarly content.

Discussion and Conclusion

The findings of the present bibliometric investigation demonstrate that research on international entrepreneurship and dynamic capabilities in emerging markets has entered a phase of accelerated intellectual consolidation and thematic diversification. The steady annual growth of publications, combined with the concentration of highly cited works and the emergence of distinct conceptual clusters, confirms that this field has moved beyond its formative stage toward a mature research domain. This pattern is consistent with the evolution observed in other fast-growing management domains where topic growth strongly correlates with citation impact and scientific attention (29, 34). The high growth rate observed in the present dataset reflects both the increasing relevance of emerging markets in global entrepreneurship dynamics and the heightened scholarly focus on capability-based explanations of competitive performance (2, 43).

A central result of this study is the structural organization of the literature around four dominant thematic clusters: innovation, international entrepreneurship, dynamic capabilities, and SMEs. The prominence of innovation within the intellectual structure confirms contemporary arguments that entrepreneurship and innovation are inseparable processes in modern strategic management, particularly under conditions of technological convergence and market disruption (10, 11). The observed integration of innovation with dynamic capabilities supports the view that competitive advantage in international entrepreneurial firms is not derived from static resources but from continuous reconfiguration of capabilities in response to environmental change (8, 9). These results reinforce prior theoretical work suggesting that opportunity pursuit across borders depends on firms' abilities to sense, seize, and transform resources over time (1, 2).

The dominance of SMEs within the conceptual structure further highlights their central role in international entrepreneurship research. The performance cluster surrounding SMEs and export activity mirrors empirical findings that small firms face distinctive challenges in internationalization, including capability constraints, resource limitations, and heightened vulnerability to environmental turbulence (4). The growing integration of resilience and psychological constructs into this cluster provides additional explanatory depth, aligning with evidence that organizational resilience and entrepreneur resilience critically influence survival and performance in volatile emerging markets (6, 7). These findings suggest that future theorizing on international entrepreneurship must integrate microfoundations of resilience with dynamic capability development rather than treating resilience as a contextual control variable.

The geographical distribution of scientific output uncovered in this study also yields important theoretical implications. The leadership of China, the United Kingdom, and the United States in publication volume reflects both the expansion of entrepreneurship research in emerging economies and the sustained dominance of advanced research systems. However, the exceptionally rapid growth of Chinese research output confirms the strategic

prioritization of innovation and entrepreneurship within national development agendas and supports claims that emerging markets are becoming central laboratories for entrepreneurship theory building (13, 16). This shift underscores the importance of context-sensitive theorizing, as institutional structures and resource conditions in emerging markets significantly shape entrepreneurial processes (9, 43). The extensive international collaboration networks revealed in the study further support the argument that high-impact research increasingly emerges from cross-national knowledge integration rather than isolated national research efforts (23, 24).

The co-authorship and institutional collaboration patterns also provide insights into the social organization of knowledge production in this domain. The central positions of influential scholars within co-authorship networks confirm that intellectual leadership remains highly concentrated, consistent with prior bibliometric findings in entrepreneurship and management research (3, 21). At the same time, the expansion of collaborative ties between emerging and developed economies illustrates the increasing globalization of entrepreneurship scholarship and supports arguments that international research cooperation enhances both visibility and scientific quality (27, 28). These patterns also reflect the evolving role of citation databases and bibliometric infrastructures in shaping research agendas and evaluation processes (22, 26).

The keyword evolution results further illuminate how theoretical priorities in international entrepreneurship have shifted over time. The increasing salience of concepts such as innovation, entrepreneurial orientation, internationalization, and performance reflects a convergence between entrepreneurship research and strategic management perspectives. This convergence aligns with recent arguments that entrepreneurship must be embedded within broader strategic frameworks of decision making and organizational transformation (10). The emergence of entrepreneurship education and digital entrepreneurship as secondary but growing themes mirrors empirical evidence that educational interventions and technological platforms are reshaping entrepreneurial opportunity structures and capability development pathways (14, 15, 18). These trends reinforce the conclusion that the next phase of international entrepreneurship research will likely be characterized by increasing integration of human capital development, institutional design, and capability-based competition.

Methodologically, the study's results validate the value of bibliometric performance analysis and scientific mapping for structuring complex research domains. The application of network and co-occurrence techniques made visible the latent intellectual architecture that narrative reviews alone often fail to capture (30, 32). The consistency between performance indicators and thematic clusters strengthens confidence in the robustness of the observed structures, while also demonstrating the importance of combining citation analysis with conceptual mapping (20, 25). At the same time, the findings echo long-standing cautions regarding the interpretation of citation-based metrics, reinforcing the view that scholarly influence must be understood as multidimensional rather than reducible to simple counts (27, 28).

Taken together, the findings of this study extend existing literature by empirically demonstrating how international entrepreneurship and dynamic capabilities research has coalesced around a capability-innovation-performance nexus, with emerging markets serving as increasingly important contexts for theoretical development. The results also suggest that future research agendas should emphasize the integration of resilience, innovation, and education within dynamic capability frameworks, particularly in volatile institutional environments. This synthesis aligns with contemporary calls for more contextually grounded, methodologically rigorous, and theoretically integrated entrepreneurship research (2, 21, 43).

Despite its contributions, this study is subject to several limitations. The exclusive reliance on a single citation database may have restricted coverage of relevant publications, particularly those indexed in alternative platforms. In addition, the bibliometric design precluded detailed content analysis of individual studies, limiting the depth of theoretical interpretation. The focus on English-language bibliographic records may also have excluded important regional scholarship published in other languages. Finally, the dynamic nature of publication databases implies that results represent a temporal snapshot rather than a permanently stable structure of the field.

Future studies should extend the present analysis by integrating multiple bibliographic databases and applying longitudinal content analysis techniques to deepen theoretical interpretation. Comparative bibliometric studies across entrepreneurship subfields and geographic regions could further illuminate structural differences and convergence patterns. Greater integration of qualitative synthesis with quantitative mapping would also enhance understanding of emerging theoretical trajectories.

For practitioners and policy makers, the findings underscore the importance of fostering innovation-driven capability development and resilience among entrepreneurial firms, particularly in emerging markets. Educational institutions should strengthen entrepreneurship curricula aligned with international market demands, while governments should encourage cross-border collaboration networks to enhance knowledge diffusion and global competitiveness.

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Authors' Contributions

All authors equally contributed to this study.

Declaration of Interest

The authors of this article declared no conflict of interest.

Ethical Considerations

All ethical principles were adheried in conducting and writing this article.

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

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