

Title: Entrepreneurship in emerging markets: Mapping the scholarship and suggesting future research directions

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Abstract

Purpose – To provide a comprehensive systematic review of entrepreneurship in the context of emerging markets (EMs). The area of research is topical considering the rise of EMs on the global scene, and the importance of entrepreneurship in the development of EMs.

Methodology – The paper utilizes scientometrics to provide a systematic review of the emerging field of entrepreneurship in EMs (EEMs). The entire Web of Science database was searched, and 2,568 scholarly outputs were extracted and analyzed as a result. The review further compares the EEMs research to the mainstream entrepreneurship research based on the top trending and high impact themes, demonstrates which countries published and are studied in the EEMs scholarship, and finally, it provides a proportion of empirical research done on EEMs to highlight methods utilized in the existing research.

Findings – The scientometric review reveals three broad domains of the EEMs scholarship – (i) *Entrepreneurship in EMs and its implications*; (ii) *MNEs, institutional environments, and FDI*; and (iii) *Strategy, innovation, and performance*. The findings demonstrate that EEMs scholarship primarily discusses environments within which EEMs takes place, the implications of EEMs, strategy and performance of EEMs (macro and meso-levels), thus highlighting the need for micro-level (individual-based) analysis of EEMs. Approximately a third of the EEMs research is of empirical nature, more should be done especially in quantitative studies to develop this field further.

Originality/value – This research is unique in providing the largest review of EEMs scholarship. It divides the entire scholarship into three inter-related research streams and identifies future research directions in this immensely important field of research.

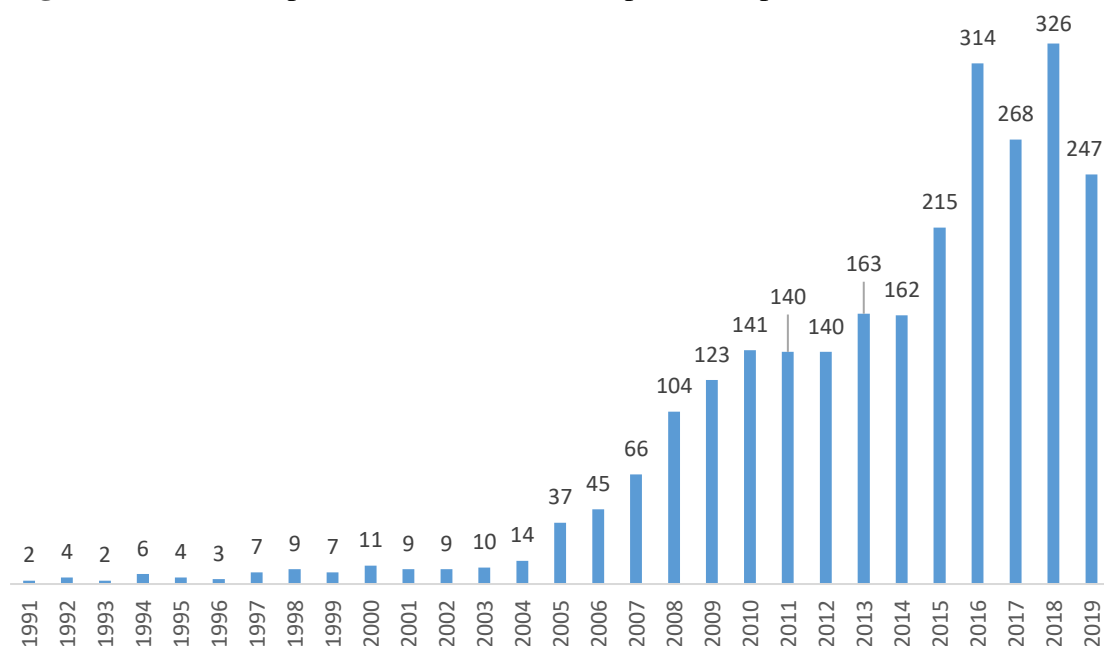
Keywords: Emerging markets, International entrepreneurship, Systematic review, Emerging market firms, Scientometrics, Entrepreneurship in emerging markets

Introduction

The rapid development of emerging markets (EMs) has slowly and confidently replaced the focus of debate from the internationalization of developed countries' multinational enterprises (MNEs) to the growing competitiveness and expansion of firms from EMs (Kim and Song, 2017; Lebedev et al., 2015; Luo and Zhang, 2016). We refer to emerging markets as countries in economic, political, social, and demographic transition from the contexts of higher degrees of volatility to stable institutional commitments. In this paper we adopt a broad stance of supranational organizations (see for example European Commission, 2020; IMF, 2020; WTO, 1996) to combine the analysis of emerging markets and developing countries into one. Emerging and developing countries are increasingly important for global economic development, considering that they constitute approximately 86 percent of the world's total population (IMF, 2020). With average growth rates above their developed counterparts, EMs are considered strategic growth markets (Aggarwal, Brem, & Grottko, 2018; Sinha & Sheth, 2018).

It is no secret that a large part of productivity globally and, especially, in EMs is attributed to small and medium enterprises (SMEs). For example, the World Bank (2019) estimates that 7 of 10 jobs in EMs are generated by SMEs, and SMEs account for approximately 90% of businesses globally. Despite the growing impetus of entrepreneurship in EMs (EEMs), entrepreneurship research is primarily concerned with, and is studied within, the developed country contexts (Bruton et al., 2008; Eijdenberg et al., 2019; Kiss et al., 2012). There has been a steady growth of research in the EEMs literature in the last decade (see Figure 1), nevertheless significant questions still remain about the nature of EEMs. Given that there is scarcity of comprehensive large-scale review articles on the scholarship on EEMs (see the next section), limited attention was focused on what we know so far, and what we can learn further about the topic. A more objective and comprehensive investigation of the EEMs topic is certainly needed in order to assess the developments in the field over a number of years and to identify future research directions that can further enrich the field of EEMs. Thus, this study aims to answer the following research question: What is the state of the knowledge on EEMs and where do we go from here?

Figure 1. Number of published articles on entrepreneurship in EMs (Web of Science)



The core objectives of this study are (i) to explore and map the data into research streams/clusters in relation to the entire inter-disciplinary academic literature on EEMs through a comprehensive scientometric review. In addition, this paper aims to (ii) compare and contrast the academic scholarship of EEMs to the general entrepreneurship literature in order to identify areas of discrepancy between the scholarships and thus suggest further development of the EEMs research. Finally, this paper intends to (iii) identify the empirical structure of the EEMs scholarship and the implications for academia. In this way, this research aims to not only map and provide a systems view of the EEMs literature, but also to identify the gaps in the literature, and suggest future areas for research and practice for theoretical and practical impact.

There are several contributions of this study to the current EEMs literature. The scientometric review approach is different, yet complementary, to the commonly published literature reviews based on content analyses of the literature (see, for example, Bruton et al., 2008, 2013; He et al., 2019; Kiss et al., 2012). While literature reviews have certainly contributed to the field, a scientometric review offers unique insights for the advancement of EEMs scholarship. First, the scientometric review provides a comprehensive approach as it involves a wide coverage of scholarly work (of over 2,500 publications). The overview of the entire academic publication dataset of the topic enables a more comprehensive understanding of the chosen research domain and offers a taxonomy of the field, which is currently unavailable. In addition, the extensive literature allows the bridging of crucial gaps between disparate disciplinary boundaries (Hu and Zhang, 2017; Klarin, 2019; Rafols et al., 2012).

Second, a scientometric review provides an objective analysis of the extent of work on EEMs in a systematic manner, and also provides a semantic analysis of the scholarship, including for example the indication of top trending and top impact themes. The findings are objective, consistent, transparent, and reproducible (van Eck and Waltman, 2014), if compared to traditional reviews that are prone to bias of subjective presentation and interpretation of data. The scientometric method, on the other hand, relies on complex algorithms that allow for an unbiased outlook of the research topic.

Third, scientometric approach enables maps to be generated and clusters of the main themes of research to be depicted. Essentially, the scientometric mapping allows a holistic visualization of a particular research domain (Petticrew and Roberts, 2006; Tranfield et al., 2003). With graphic representations, the approach is able to visually identify existing research domains, this could help depict the trends of the scholarship domains over time. The final overlapping and overarching contribution of this method is the ability to map the EEMs field of research, synthesize the state of knowledge, and create an agenda for further research. By systematically identifying the gaps in the literature we are able to suggest future research agenda at the end of the paper.

In the following section, an overview of the existing reviews on EEMs is provided. The scientometric review approach that used in this study is then described. Following this, data collection and analysis of results which includes a delineation of EEMs research into three main directions is provided. The paper further compares and contrast EEMs to the general entrepreneurship literature to identify areas of discourse in each to propose possible developments in EEMs literature. Finally, the body of empirical literature in EEMs is analyzed which, taken together with the previous insights, provides grounds for EEMs scholarship development.

Previous literature reviews of EEMs

Figure 1 demonstrates the numbers of academic literature that have been published on the topic of EEMs in the last two decades up to 22 November 2019. As indicated in Figure 1, the number of scholarly publications has been steadily increasing in the past 15 years, and the majority of the publications was published past the Global Financial Crisis, with 2018 showing the highest number of publications so far.

This study examines existing reviews on the topic of EEMs by including studies that depict various themes that have some relevancy to, and mention, entrepreneurship and EMs with the keyword 'review' in the title, abstract, or keywords which results in 194 studies. Following the above, it became necessary to exclude studies that do not investigate EEMs as the primary theme of inquiry by reading through each study individually. For example, Terjesen et al. (2016) study was excluded as it examines the heterogeneous nature of entrepreneurship across countries and its role in explaining outcomes at different levels of analysis as the study primarily examines the holistic nature of entrepreneurship as opposed to limiting the review to EMs. The exclusion process resulted in the final 22 studies that are listed in Table 1.

Table 1. Entrepreneurship in EMs literature review studies

| Review | Type of review study | | | No. of papers | Notes |
|-----------------------------|----------------------|------------|-------|---------------|--|
| | Narrative | Systematic | Other | | |
| Ahlstrom and Ding (2014) | ✓ | | | Not given | No methodology provided; based on the context of China. |
| Ahlstrom et al. (2018) | ✓ | | | Not given | Chinese entrepreneurial environment review study; no methodology provided. |
| Ashraf et al. (2019) | | ✓ | | 53 | Social business model (SBM) for sustainability and economic growth in EMs. |
| Awuah and Amal (2011) | ✓ | | | Not given | No methodology provided; relates to policy and some strategic choices of SMEs. |
| Bruton et al. (2008) | ✓ | | | 43 | Based on 9 journals; no methodology. |
| Bruton et al. (2013) | ✓ | | | Not given | Introduction for a special issue, no methods. |
| Chen et al. (2017) | ✓ | | | 54 | Microfinance in the context of EMs. |
| Chen et al. (2019) | ✓ | | | 85 | Chinese entrepreneurial environment; no detailed methodology provided. |
| De Vita et al. (2014) | | ✓ | | 70 | Women entrepreneurship in EMs. |
| Hackett (2010) | ✓ | | | Not given | No methodology provided; social entrepreneurship in Bangladesh. |
| He et al. (2019) | ✓ | | | Not given | Mostly an introduction to entrepreneurship in China; no methodology provided. |
| Hurley (2018) | | ✓ | | Not clear | SME competitiveness in small island economies; some methodology is missing. |
| Kiss et al. (2012) | | ✓ | | 88 | Based on 14 journals; vague methodology e.g. lack of search criteria. |
| Mahfuz Ashraf et al. (2019) | | ✓ | | 53 | Social business in EMs; search parameters are unclear. |
| Manev and Manolova (2010) | ✓ | | | 129 | No detailed methodology provided; study of transition economies. |
| Nguyen et al. (2015) | | | ✓ | Not clear | Vietnamese SME business environment. |
| Panda (2018) | ✓ | | | 25 | Women entrepreneurs' constraints in EMs; no detailed methodology. |
| Sutter et al. (2019) | | ✓ | | 211 | Entrepreneurship and poverty alleviation. |
| Tesfom and Lutz (2006) | | ✓ | | 40 | No detailed methodology provided; export problems of SMEs from EMs. |
| Todorovic and Ma (2010) | ✓ | | | Not given | Eastern Europe; no methodology provided. |
| Sengupta et al., (2018) | ✓ | ✓ | | 123 | Social entrepreneurship in EMs; no detailed methodology provided. |
| Xheneti et al. (2019) | | ✓ | | 76 | Female entrepreneurship in EMs. |

There are indeed a number of limitations to existing review studies in the scope of this research, as seen in the ‘notes’ column in Table 1. First, most of the review studies concentrate on a particular topic within the broad field of EEMs. For example, three of 22 review studies cover the theme of women EEMs (Panda, 2018; De Vita et al., 2014; Xheneti et al., 2019), while Hackett (2010) and Ashraf et al. (2019) discuss the social aspects of EEMs. Second, most of the current reviews tends to be narrative in nature with limited information on the scientific methodology (e.g., Awuah and Amal, 2011; Bruton et al., 2013; He et al., 2019; Hackett, 2010; De Vita et al., 2014). Third, some existing review studies were conducted using search criteria that were unclear, which subsequently affects the results garnered. For example, Kiss et al. (2012) do not provide a search string in their article which somehow discounts the transparency that is so important for a systematic review. Fourth, the majority of existing reviews are based on a limited number of available published works (e.g., Bruton et al., 2008; Tesfom and Lutz, 2006), and nine of the 22 studies do not provide the number of papers analyzed as part of the reviews. Finally, almost half of the studies research literature on a particular country or region, with the Chinese context being the most prevalent context (Ahlstrom et al., 2018; Ahlstrom and Ding, 2014; Chen et al., 2019; He et al., 2019). Due to the limitations of existing reviews, this paper conducts a further investigation using a scientometric approach that will be discussed in the next section.

Method

The scientometric review adopted in this study is a mixed methods review that includes a mapping review that categorizes current literature into research directions (via clustering), and a state-of-the-art review which addresses the current matters and offers new perspectives for future research (Grant and Booth, 2009). Mapping reviews are valuable in offering the contextualization of systematic reviews and the identification of gaps in the scholarship corpus. The maps demonstrate the total ‘population’ of the studies, their interconnections, and thus offer a holistic understanding of the existing research domains. The state-of-the-art reviews address the current state of the literature. These reviews are particularly valuable to identify potential under-researched areas instead of going through a number of research streams within the disparate domains. The identified clusters/research domains of the scholarship provide a taxonomy of the studied topic (Nazarov and Klarin, 2020).

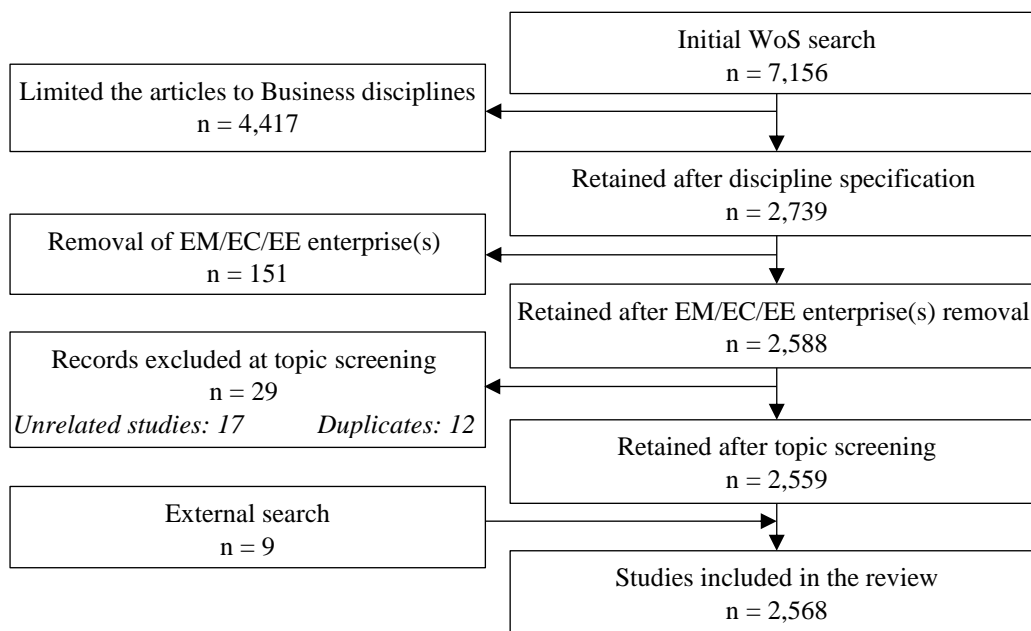
The method of the scientometric review adopted in this study follows one that is proposed by Tranfield et al. (2003) in conducting a thorough, transparent and a reliable systematic review. The method consists of the following stages: 1) planning and outlining a review protocol, 2) execution of the protocol, and 3) reporting. In the planning stage, a protocol for the selection, search strategies, methods of the review, and accompanying data and information was planned and outlined. In this stage, the entire Web of Science (WoS) database was chosen as the source of the scholarship as it is considered one of the largest scientific knowledge databases (Crossan and Apaydin, 2010; Podsakoff et al., 2008). The WoS also has major overlaps with Scopus, and as such, the results will have marginal divergences between the two, particularly as we compare large volumes of publications (Vieira and Gomes, 2009). The dates of the document search were set from the beginning of WoS listing to 04 September 2019.

In the execution of the protocol stage, the study followed the procedures set out in the planning stage by identifying the (i) search terms, (ii) selection of studies, (iii) and the extracting, mapping and synthesizing data. Using these guides, the search criteria were set as: *"emerging market*" or "emerging countr*" or "emerging econom*" or "developing market*" or "developing countr*" or "developing econom*" AND TOPIC: "entrepreneur*" or "enterpris*"* using Boolean search of WoS. The search returned 7,156 documents that were

consequently filtered to ‘business’ WoS category which includes management, economics, development studies, finance, ethics, operations research, marketing, other business management disciplines resulting in the total of 2,739 documents.

In the second phase of the execution stage, which is the selection of studies, all publication types (including editorials, letters, books, book chapters, proceedings) as a large-sample thematic study of the entire scholarship to provide a more holistic overview of the field (van Eck and Waltman, 2014; Justeson and Katz, 1995) were selected. We further excluded *Emerging Market Enterprise(s)*, *Emerging Country Enterprise(s)*, and *Emerging Economy Enterprise(s)* as these are often used interchangeably with *Emerging Market Corporations/ Companies/ Firms*. These often have little to do with entrepreneurship, thus we added the exclusion clause – ‘*NOT TOPIC: "countr* enterprise*" or "market* enterprise*" or "econom* enterprise*"*’ in the WoS search criteria, resulting in 151 papers that had no relevance to EEMs being removed. We then went through each publications’ topic (title, abstract, and keywords) to exclude 29 studies, of which 17 had an unrelated discussion and 12 were duplicates in either conference and journal or listed twice. While utilizing the same search criteria in Scopus as for WoS and searching for publications using ‘*emerging markets" entrepreneurship*’ phrase in Google Scholar (as this search garners the most results in this field), we further added 9 articles that were not found through the WoS search. Figure 2 demonstrates the publications selection process.

Figure 2. Results of the search and study selection criteria



In the third phase of the execution of the protocol stage, the mapping and state-of-the art reviews were done using an innovative science mapping software, VOSviewer. The software utilizes citation analysis that demonstrates relationships between scientometric indicators (including authors, organizations, and terms) in a visual map (Rafols et al., 2012). The VOSviewer software identifies (1) the most frequently used concepts within a body of text, and (2) the relationships between these concepts. Thus, this approach systematically reveals the key concepts within the EEMs paradigm by using a number of keywords from the text (thematic analysis) and how they are linked with each other based on the frequency and occurrence of words within the contexts (semantic analysis).

In the process of generating the mapping reviews, the default settings of the software which generally represent best practices in conducting scientometric mapping were utilized (van Eck and Waltman, 2010). Noun phrases that occur in at least 10 different documents were extracted, and generic phrases and terms that generally relate to academic articles including ‘*structural equation model*’, ‘*mediating effect*’, ‘*case study approach*’, ‘*theoretical contribution*’, and others were further removed. These terms occur indiscriminately across the corpus of the research and provide no value in the data analysis (Lee et al., 2014). British English-spelling terms with American English-spelling terms were combined into the later (e.g. ‘organisation’ was counted as ‘organization’). Based on the entire extracted literature (2,568 documents) on EEMs, the mapping then categorized the content according to the clusters. Terms that are strongly associated with each other are placed in the same cluster, demonstrating an emergent view of the existing literature of EEMs.

To gain the state-of-the-art view of the scholarship, VOSviewer clustering software which is based on identifying high similarity terms and placing on a map close to each other was utilized. The software, then, allows to create clusters which occur as a result of assigning nodes in a network on the basis of relationship between terms. Publications that are assigned to the same clusters are likely to have a theme in common (for a more detailed technical explanation please see Korom, 2019, and van Eck and Waltman, 2010, 2014). The findings are reported in the following section.

Findings and discussion

In this study the software clearly produced three major clusters of existing EEMs research, the (i) red cluster denoting *EEMs, its nature, implications, and responsibilities*, (ii) green cluster highlighting the *MNEs, institutional environments, and foreign direct investment (FDI)*, and (iii) blue cluster indicating the *strategy, innovation, and performance*. To provide a thorough investigation of the areas of research, each cluster is analyzed according to the themes that are presented within each cluster. The results of the thematic analysis are represented visually in Figure 3. In the map, the frequency of occurrences is represented by the size of the noun phrase, i.e. larger circles represent higher number of occurrences of the term. Figure 4 represents the comparative growth of each of the five clusters shown as percentages of the distribution of the clusters by key terms from 2010–2017 (the majority of terms are saturated by 2017, after which it becomes difficult to present meaningful data).

Figure 3. The scientometric mapping of entrepreneurship in EMs

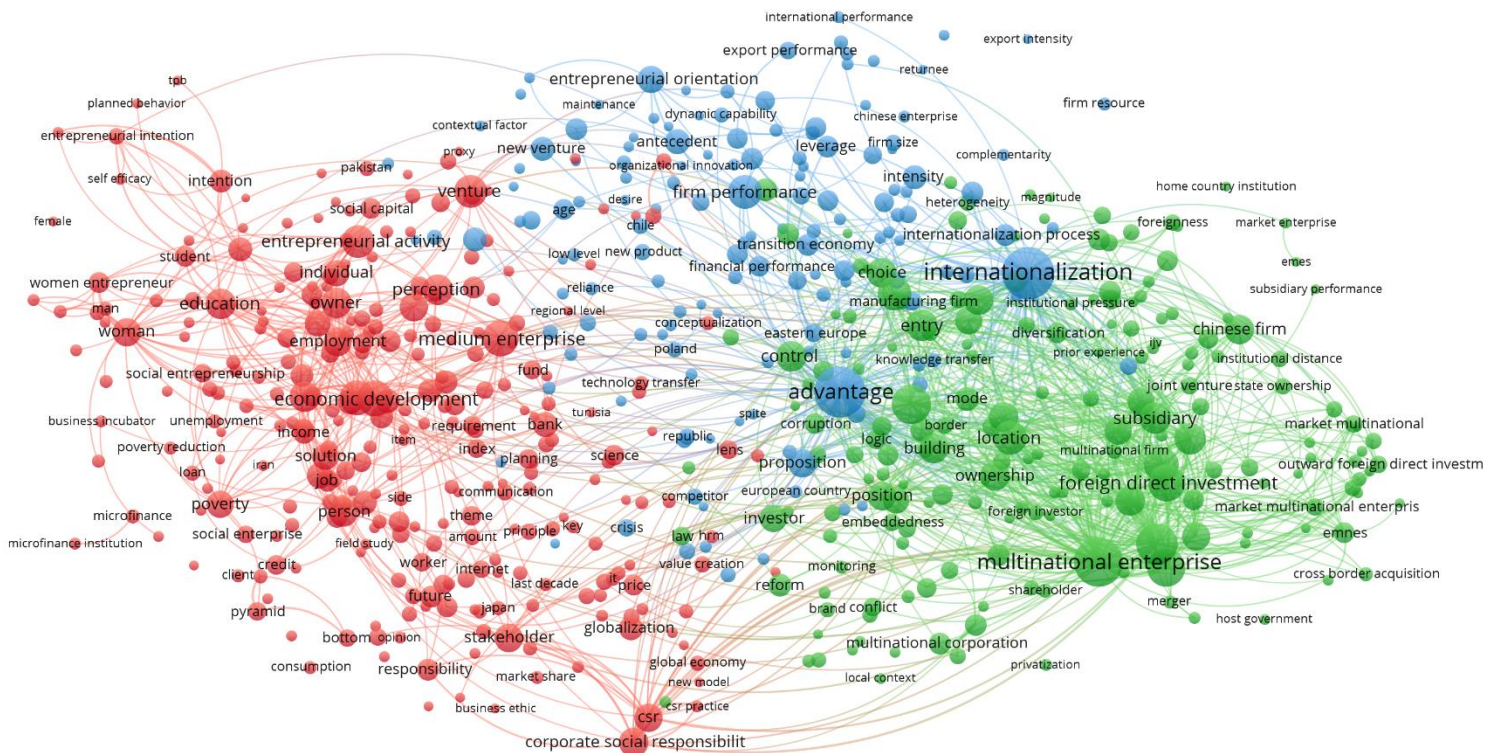
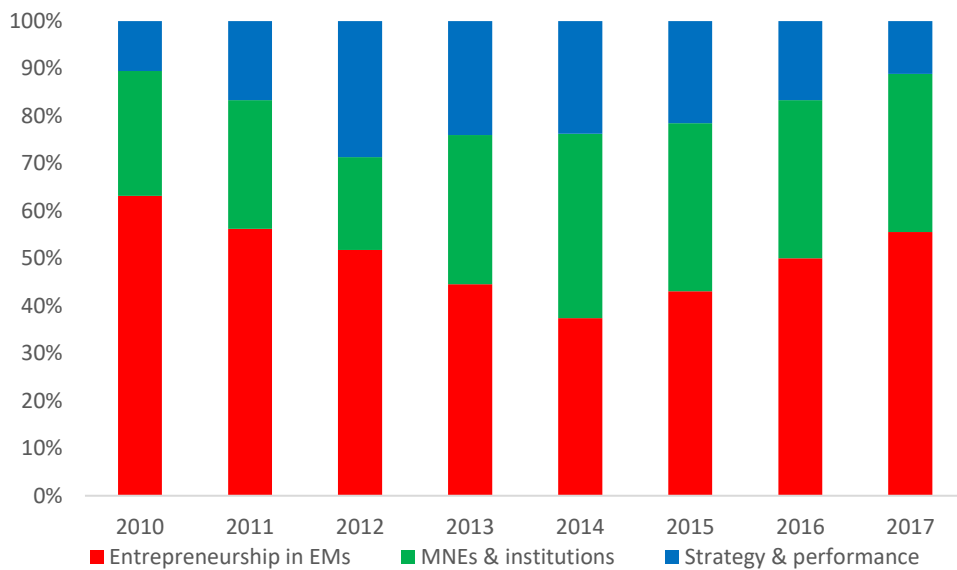


Figure 4. Entrepreneurship in EMs research distribution by key terms, 2010-2017



In addition to providing a visual representation of the EEMs scholarship as shown in Figure 3, a number of tables to highlight bibliometric (descriptive citation information), thematic, and semantic results extracted from the scientometric review of the topic is also provided. Table 2 demonstrates: (i) the themes that are prevalent in the documents that receive the highest citation counts, (ii) the themes that appear in the articles with the most recent publication date, and (iii) the indicative disciplinary domains. Table 3 represents the top five articles for each of the clusters as well as the top fifteen journals that have published research on EEMs. In addition, Table 4 reveals the top fifteen authors or groups of authors who have published on EEMs in terms of the number of citations as of 04 September 2019.

Table 2. Key themes discussed in the three research areas

| | Top article citation impact terms^a | Top trending terms^b | Indicative fields |
|---|--|--|---|
| Red – Entrepreneurship in EMs: Its nature, implications, and responsibilities | Poverty alleviation; Germany; emerging economy; institutional framework; CSR; informal entrepreneurship; Japan; informal institution; formal institution; LDC(s); developing countries; manufacturing; intersection; value creation; informality; entrepreneurial ecosystem; ethic; poverty; regional level; economic activity; inclusion; entrepreneurial opportunity; base of the pyramid; Pakistan; creativity; future; cultural context; business failure; environmental management; financial capital; venture capitalist; sustainable development. | Self-efficacy; entrepreneurial ecosystem; informal entrepreneurship; entrepreneurial intention; social problem; ecosystem; theory of planned behavior; macro level; social value; micro entrepreneur; female entrepreneur; HRM; Sub- Saharan Africa; entrepreneurial skill; CSR practice; social entrepreneurship; competitive environment; intention; Tanzania; Global Entrepreneurship Monitor; informal economy; startup; business failure; inclusion; SCM; senior manager. | Entrepreneurship; international business; management; political science; sustainability; operations management |
| Green – MNEs, institutional environments, and FDI | Local context; institutional constraint; home country institution; strategic resource; disadvantage; institutional pressure; convergence; past decade; void; OFDI; institutional void; international expansion; foreign investor; institutional change; embeddedness; transaction cost economics; state ownership; international diversification; international business; variation; economy firm; EMEs; institutional theory; internalization theory; entry strategy; institutional development; host; cross border acquisition; corruption; political connection; brand; Chinese state; subsidiary performance. | EMNE(s); Chinese MNE; political risk; cross border merger; OFDI; cross border acquisition; host market; home country institution; heterogeneity; institutional void; government support; market firm; border; transparency; legitimacy; developed market; state ownership; local context; institutional development; firm specific advantage; home market; applicability; logic; strategic asset; institutional distance; institutional perspective; conflict; international competitiveness; internalization theory; political connection; EME(s). | International business; organizational theory/studies; strategy |
| Blue – Strategy, innovation, and performance | Firm strategy; strategic management; CEE; contingency; global competition; performance outcome; market orientation; product innovation; Latin American country; new product; resource constraint; bribery; newness; returnee entrepreneur; international new venture; market context; institutional transition; international performance; organizational innovation; organizational capability; export intensity; firm performance; entrepreneurial orientation; strategic orientation; foreign market; Hungary; returnee; Eastern Europe. | Institutional quality; international performance; global firm; Latin American country; open innovation; absorptive capacity; openness; manufacturing sector; market context; contextual factor; returnee; new idea; business operation; export performance; proactiveness; complementarity; leverage; business network; Romania; innovativeness; innovative performance; international new venture; foreign market; moderate interplay; distinction; Colombia; internationalization process. | Strategy; international business; entrepreneurship; marketing; innovation management; |

^a Top impact terms appear in the highest average normalized citation articles, arranged in the descending order.

^b Top trending terms appear in the most recent articles, arranged in descending order from the most recent publication date.

Table 3. Five highly cited (normalized citations) representative articles¹ and journals² in each cluster

Red – Entrepreneurship in EMs: Its nature, implications, and responsibilities

- London T, Hart SL. 2004. Reinventing strategies for emerging markets: Beyond the transnational model. *Journal of International Business Studies* **35**(5): 350–370.
- Cuervo-Cazurra A, Genc M. 2008. Transforming disadvantages into advantages: Developing-country MNEs in the least developed countries. *Journal of International Business Studies* **39**(6): 957–979.
- Bruton GD, Ahlstrom D, Obloj K. 2008. Entrepreneurship in emerging economies: The research go in the future. *Entrepreneurship: Theory and Practice* **32**(1): 1–14.
- Makino S, Isobe T, Chan CM. 2004. Does country matter? *Strategic Management Journal* **25**(10): 1027–1043.
- Manolova TS, Manev IM, Gyoshev BS. 2010. In good company: The role of personal and inter-firm networks for new-venture internationalization in a transition economy. *Journal of World Business*. **45**(3): 257–265.

- Journal of International Business Studies
- Entrepreneurship: Theory and Practice
- Journal of World Business
- Small Business Economics
- International Business Review

Green – MNEs, institutional environments, and FDI

- Peng MW, Wang DYL, Jiang Y. 2008. An institution-based view of international business strategy: A focus on emerging economies. *Journal of International Business Studies* **39**(5): 920–936.
- Luo Y, Tung RL. 2007. International expansion of emerging market enterprises: A springboard perspective. *Journal of International Business Studies* **38**(4): 481–498.
- Meyer KE, Estrin S, Bhaumik SK, Peng MW. 2009. Institutions, resources, and entry strategies in emerging economies. *Strategic Management Journal* **30**(1): 61–80.
- Tihanyi L, Griffith DA, Russell CJ. 2005. The effect of cultural distance on entry mode choice, international diversification, and MNE performance: A meta-analysis. *Journal of International Business Studies* **36**(3): 270–283.
- Peng MW, Sun SL, Pinkham B, Chen H. 2009. The institution-based view as a third leg for a strategy tripod. *Academy of Management Perspectives* **23**(3): 63–81.

- Journal of International Business Studies
- Journal of Management Studies
- International Business Review
- Strategic Management Journal
- Academy of Management Perspectives

Blue – Strategy, innovation, and performance

- Hoskisson RE, Eden L, Lau CM, Wright M. 2000. Strategy in emerging economies. *Academy of Management Journal* **43**(3): 249–267.
- Peng MW. 2003. Institutional transitions and strategic choices. *Academy of Management Review* **28**(2): 275–296.
- Khanna T, Palepu K. 1997. Why focused strategies may be wrong for emerging markets. *Harvard Business Review* **75**(4): 41–48.
- Zhou KZ, Yim CK, Tse DK. 2005. The effects of strategic orientations on technology- and market-based breakthrough innovations. *Journal of Marketing* **69**(2): 42–60.
- Zhou L, Wu WP, Luo X. 2007. Internationalization and the performance of born-global SMEs: The mediating role of social networks. *Journal of International Business Studies* **38**(4): 673–690.

- Strategic Management Journal
- Journal of Business Venturing
- Academy of Management Journal
- Journal of International Business Studies
- Journal of Marketing

¹ The articles identified above met the criteria of containing a minimum of two terms in their title/abstract, with at least 70% of terms belonging to a single cluster.

² Clusters are assigned on the basis that over 50% of the terms in the titles and the abstracts belong to that cluster.

Table 4. Top 15 authors or groups of authors (with at least 3 publications) by a number of citations

| Author(s) | Cluster* | Documents | Citations | Avg. pub. year | Avg. citations |
|--|--------------|-----------|-----------|----------------|----------------|
| Peng, Mike W. | Green & Blue | 20 | 5,304 | 2007.84 | 265.2 |
| Bruton, Garry D., Ahlstrom, David, & Khavul, Susanna | Red & Green | 26 | 2,740 | 2005 | 105.38 |
| Meyer, Klaus E. & Estrin, Saul | Green & Blue | 19 | 3,201 | 2008.46 | 168.47 |
| Luo, Yadong | Green | 20 | 2,441 | 2006 | 122.05 |
| Wright, Mike & Hoskisson, Robert E. | Blue | 22 | 2,938 | 2006.71 | 133.54 |
| Cuervo-Cazurra, Alvaro | Red | 8 | 878 | 2013 | 109.75 |
| Zhou, Lianxi | Blue | 7 | 787 | 2011.9 | 112.43 |
| Bhaumik, Sumon Kumar | Green | 3 | 712 | 2012 | 237.33 |
| Sun, Sunny Li | Green | 8 | 638 | 2014.37 | 79.75 |
| Tihanyi, Laszlo | Blue & Green | 6 | 669 | 2008.66 | 111.5 |
| Mudambi, Ram | Blue & Green | 6 | 593 | 2015 | 98.8333 |
| Kolk, Ans | Red | 12 | 551 | 2013.25 | 45.9167 |
| Wang, Chengqi | Blue | 10 | 539 | 2013.1 | 53.9 |
| Mair, Johanna | Green | 4 | 509 | 2009 | 127.25 |
| Jamali, Dima | Red | 7 | 484 | 2013.71 | 69.14 |

* Note that the allocation to a cluster is based on the author's/authors' work being visually predominant in the corresponding cluster.

Identified clusters of EEMs scholarship

Red cluster: Entrepreneurship in EMs and its implications

This cluster is the largest in terms of the diversity of discussed themes. There are three main intertwined themes that are frequently discussed: (i) entrepreneurship and economic development of EMs, (ii) entrepreneurial characteristics of individuals and firms, and (iii) focus on corporate social responsibility (CSR) and sustainability within the theme of entrepreneurship. For the first theme, the terms that are prominent in this cluster include *economic growth, poverty, social entrepreneurship, solution, emerging economy, entrepreneurial ecosystem*, as well as various emerging and least developed country (LDC) and region names which suggest the tendency of publications within this cluster to focus more on improving the state of entrepreneurial ecosystems that will have a positive effect on the economic development of EMs. For example, a special issue hosted by *Entrepreneurship: Theory and Practice* and facilitated by Bruton et al. (2008) examined entrepreneurial ecosystems in EMs that highlight idiosyncrasies and commonalities of entrepreneurship in the developing world. While the special issue included only 10 studies, there is an abundance of research that examines the interrelationships between entrepreneurship and economic development of EMs. For the second theme, as shown in Figure 3, the terms that stand out include *entrepreneurial intention, self-efficacy, theory of planned behavior (TPB), gender, female entrepreneurship, microenterprise*, and others. These terms indicate discussions around the micro aspects of EEMs. Studies that provide an example include an empirical study of 215 informal microenterprises in Jamaica which argues that microentrepreneurs represent the 'most visibly vibrant and growing economic activity' in the country (Honig, 1998). A study into women entrepreneurs in Israel sheds light on how entrepreneurship offers a vehicle for Israeli women to achieve economic parity despite a widespread occupational segregation and general inequality in employment (Lerner et al., 1997).

For the third theme, there are terms (present in Figure 3 and Table 2) that signal the direction of research in addressing CSR and sustainability issues in EEMs. The frequently occurring terms include *CSR practice, stakeholder, environmental management, ethic, social impact, community, sustainability*, and others. Studies underpinned by this theme tend to emphasize the triple bottom line of EEMs (Urban and Hwindingwi, 2016), the need for ‘sustainable entrepreneurship’ that focuses on preservation of the natural environment, life support, and the community (Shepherd and Patzelt, 2011), and the inevitable progression in creating socially and environmentally responsible value chains (Kolk and van Tulder, 2010).

Green cluster: MNEs, institutional environments, and FDI

The second cluster is a broader analysis of multinational enterprises and the institutional environments. The terms that are immediately evident and partially define this stream of research are *MNE, FDI, institutional environment, location, subsidiary, host country, ownership, institutional theory, international expansion, and entry mode*. This cluster examines FDI, both inward and outward, which results in addressing investment location analysis as well as local business environments. A large part of the studies covers EEMs through the institutional perspective (Cantwell et al., 2009; Klarin and Ray, 2019; Peng, 2003; Puffer et al., 2010), for example, Eijdenberg et al. (2019) demonstrate how informal cultural institutions play an important role in enabling and constraining entrepreneurship in the Tanzanian context. Other studies explore outward FDI (OFDI) antecedents and behaviors of emerging market multinationals (EMNEs) (Estrin et al., 2016; Gaur et al., 2014; Luo and Tung, 2007; Paul and Benito, 2018; Wang et al., 2012). As an example, a popular ‘springboard perspective’ suggests that EMNEs utilize acquisitions of assets to overcome latecomer disadvantages (Luo and Tung, 2007; Surdu et al., 2018). Of the studies that cover institutions and internationalization of EMNEs, the vast majority of highly cited studies is on China and Chinese MNEs (Cui and Jiang, 2012; Luo et al., 2010; Ramamurti and Hillemann, 2018; Rui and Yip, 2008).

Another related sub-theme in this cluster is the discussion of various FDI entry modes and their implications, either into the EMs (Hernández and Nieto, 2015; Meyer et al., 2009; Schwens et al., 2011; Tihanyi et al., 2005) or EMNEs’ foreign market entry modes (Demirbag et al., 2009; Liu, 2017; Luo and Tung, 2007; Surdu et al., 2018). As such, Maekelburger et al. (2012) found that international experience, host-country networks, and imitation as knowledge safeguards as well as institutional safeguards (property rights protection and cultural proximity) weaken the effect of asset specificity on the choice of equity foreign market entry modes, based on the study of 206 internationalizing SMEs.

Blue cluster: Strategy, innovation, and performance

This cluster has a strategy and performance orientation which becomes evident through an in-depth analysis of the key terms and the associated publications. The key terms in this cluster include *internationalization, internationalization strategy, performance, entrepreneurial orientation, market orientation, internationalization process*, and many terms related to *innovation*. As the direction of this cluster relates to strategy, a number of influential studies in this field depict strategic choices of firms operating in these domains (Doh et al., 2017; Hoskisson et al., 2000; Peng, 2003). For example, Marquis and Raynard (2015) identified three strategic directions entrepreneurs utilize in emerging markets – relational (management of key stakeholder relations), infrastructure-building (e.g. addressing institutional voids), and socio-cultural bridging (addressing socio-cultural and demographic issues) strategies.

An important theme in this stream is of *entrepreneurial orientation* which instructs firm’s strategy, ideologies, and behavior. Boso et al. (2013) studied SMEs in Ghana and found that *entrepreneurial orientation* needs to be aligned with *market orientation*. Further, the study

demonstrates that well developed social and business network ties improve business performance. Covin and Miller (2014) have carried out a review of *international entrepreneurial orientation* (IEO) research and found that the majority of the studies on this theme tend to belong to one of three categories – IEO and international performance, IEO and culture, and measurement issues involving IEO.

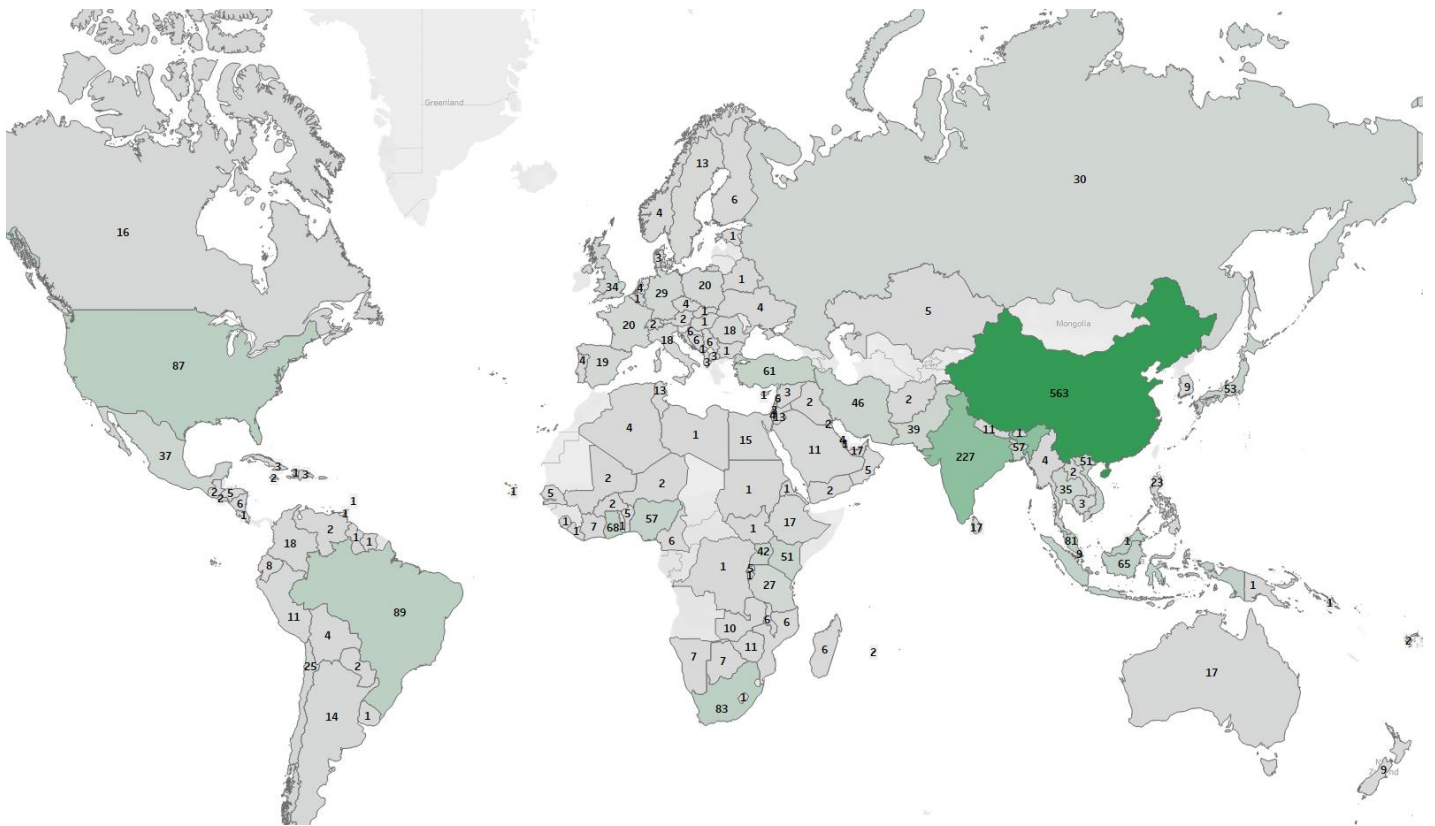
Terms including *innovation performance, open innovation, innovation strategy, technological innovation, organizational innovation, innovation system, product innovation, and innovation activity* are prominent in this cluster and indicate that innovation-related research is very much the domain in this stream of EEMs. For example, an empirical study of Turkish SMEs demonstrated that a firm's market orientation is positively correlated with learning orientation, while learning orientation results in innovativeness, which in turn positively affects firm performance. Also, learning orientation mediates market orientation and innovativeness, and finally market orientation indirectly impacts firm performance via firm innovativeness and learning (Keskin, 2006).

Last but not least, all export-related terms including *export performance, exporter, export market, and export intensity* appear in this cluster. As such, a comprehensive study of SMEs and exporting by Paul et al. (2017) provides a review of the current literature and offers a number of valuable future research directions into the study of this pertinent subject.

The locale of EEMs research

Figure 5 demonstrates where research on EEMs has been conducted, each country indicates the number of publications stemming from the organizations within the said country. The map shows that most of the research has been carried out in the developed country context, the higher the number of publications the darker the shade, as seen from the associated number of publications for each country. Not surprisingly, the USA, the UK, China, Canada, Australia, India, Brazil, and the Western European countries account for the vast majority of all research on EEMs. As shown in Figure 5, there is still lack of research in the least developed countries (LDCs), most of Eastern Europe, the Middle East, South America, and Asia. These countries and regions traditionally lack in institutional development and arguably more research needs to be done to promote and evaluate the development of EEMs for higher impact in these countries.

Figure 6. Country context publications in the EEMs scholarship



Comparing EEMs and general entrepreneurship scholarships: trending terms and high impact terms

EEMs as a subfield of entrepreneurship research is often compared to the mainstream entrepreneurship scholarship (Ahlstrom and Bruton, 2010; Bruton et al., 2008; Kiss et al., 2012; Marquis and Raynard, 2015). In addition to identifying the main clusters of existing EEMs research, this study utilizes scientometric reviews to compare and contrast the two streams of literature together. This will then enable to obtain an overview of the trending terms and high impact terms between EEMs and the mainstream entrepreneurship literature. Thus, we aim provide two comparisons: (i) comparison of top recent topics between EEMs and entrepreneurship i.e. what are the top trending topics in each scholarship; (ii) comparison of the top citation terms in each scholarship i.e. the most cited topics in each scholarship.

As the field of entrepreneurship is vast, it is therefore necessary to select the most rigorous and representative list of publications. Katz and Boal's (2003) levels 1 and 2 entrepreneurship journal rankings were utilized that identify 13 top-indexed entrepreneurship journals in order to extract terms that identify the directions of entrepreneurship research. The resultant comparison of the top trending and high impact terms between entrepreneurship (extracted from the top entrepreneurship journals) and EEMs (from the entire scholarship on EEMs available from the WoS) is provided in Table 5. It is useful to note that the majority of entrepreneurship literature, especially in the top entrepreneurship journals selected in this sample, studies the developed country contexts (Bruton et al., 2008; Eijdenberg et al., 2019; Kiss et al., 2012). As such, we can infer that the comparison between our EEMs scholarship and the entrepreneurship scholarship essentially compares EEMs and developed country counterparts. This is not a major impediment as the themes compared outline the differences between the two fields and are investigated in more detail.

When comparing the top trending terms between the entrepreneurship and EEMs research, there are a number of terms that can differentiate the two fields from each other, (see the terms highlighted in bold in Table 5). First, the top trending term in entrepreneurship research is *big data* (Schwab and Zhang, 2019), with a number of recent entrepreneurship publications focusing on how entrepreneurs can utilize big data for opportunities (Del Vecchio et al., 2018). This is absent in EEMs, perhaps due to technological advancements required to maintain big data analytics for business purposes which is a feat of mid- to large-sized or technology-oriented organizations.

Second, from the list of top trending terms of entrepreneurship research, several terms emphasize the topics of *entrepreneurial passion, entrepreneurial intentions, entrepreneurial self-efficacy, passion, enactment, behavioral control, effectuation, socioemotional wealth, resilience* among others. This indicates an interest in the micro-level of entrepreneurship, focusing on the qualities and traits of entrepreneurs such as passion. A recent systematic review by Newman et al. (2019) demonstrates that there is an increased emphasis on entrepreneurial thinking and acting in today's careers in the last two decades, which relates to entrepreneurial self-efficacy. Interestingly, as shown in Table 5, this and other micro-level aspects are not trending as extensively in the thousands of articles that were gathered on EEMs.

Third, the general entrepreneurship research is also interested in examining family firms and relationships within these firms as indicated by such terms as *family SMEs* and *socioemotional wealth*. Once again, this appears to be micro-level in comparison to many of the trending terms in EEMs that are largely focused on macro and meso-levels such as business models and logics. Indeed, this topic is significant not only in entrepreneurship (Cruz et al., 2012; Goel et al., 2013), but in other related disciplines including management, innovation management, organizational behavior, and others (Deephouse and Jaskiewicz, 2013; Filser et al., 2018; Martínez-Romero and Rojo-Ramírez, 2016). The topic of family entrepreneurship is rare in the EEMs domain.

Fourth, a variety of strands of entrepreneurship including *opportunity, innovative, necessity, co-creation, sustainable, microfinance* and *informal*, which once again tend to indicate the process of entrepreneurship. See for example, a special issue presented by Bruton et al. (2015) that discusses emerging innovations in entrepreneurship, which is less obvious in the EEMs scholarship. Finally, a number of disparate topics each deserve attention in entrepreneurship research including *financial crisis, microfinance institution, knowledge spillover theory, prospect theory, and gender* are of interest to entrepreneurship scholars as compared to EEMs research. Topics including *entrepreneurial journey* and *life satisfaction* are also of interest to entrepreneurship in general.

Another observation from comparing the entrepreneurship and EEMs research in terms of being high impact terms is the consistent theme of *personal networks* as well as *human/social capital* in many top entrepreneurship journals. A meta-analysis of existing research demonstrates a significant positive between personal networks and small firm performance, where the relationship is highly dependent on the firm age, industry, and institutional contexts (Stam et al., 2014). This theme appears to be present (see Table 2) but underutilized in EEMs research (see for example, Batjargal, 2007).

The rest of the themes seem to align in both literatures. The other top trending and impactful terms are macro-focused in terms of examining ecosystems and institutions. Entrepreneurial ecosystems are the institutional environments affecting all types of entrepreneurship. Such

research is an important impetus for economic policy as well as business development (Acs et al., 2017). Furthermore, the competitive nature of entrepreneurship, strategy, and economic sustainability of these ventures is an important area within the general entrepreneurship as well as EEMs. Other entrepreneurship themes that come up as top trending and remain in the top normalized citation themes include internationalization aspects, entrepreneurial traits, mobility of entrepreneurial ventures, and cultural and country aspects which are present in both scholarships.

Table 5. Entrepreneurship in EMs and entrepreneurship comparison – trending and highest impact topics

| Entrepreneurship top trending terms | EEMs top trending terms | Entrepreneurship by normalized citations | EEMs by normalized citations |
|--|--------------------------------|---|-------------------------------------|
| 1 Big data | Self-efficacy | Crowdfunding | Firm strategy |
| 2 Entrepreneurial ecosystem | Entrepreneurial ecosystem | Planned behavior | Market enterprise |
| 3 Equity crowdfunding | Informal entrepreneurship | Financial intermediary | Local context |
| 4 Crowdfunding | World bank enterprise survey | Personal network | Institutional constraint |
| 5 Entrepreneurial passion | EMNE | Operationalization | International business study |
| 6 Institutional logic | Chinese MNE | Business education | International business research |
| 7 Ecosystem | Female | Equity crowdfunding | Entrepreneurship research |
| 8 Entrepreneurial identity | Entrepreneurial intention | Competitive aggressiveness | Home country institution |
| 9 Entrepreneurial journey | TPB | Hofstede | Strategic resource |
| 10 Social | Social problem | Crowd | Disadvantage |
| 11 Certification | Ecosystem | International activity | Institutional pressure |
| 12 Entrepreneurial finance | Political risk | Scarce resource | Convergence |
| 13 Global financial crisis | Cross border merger | General human capital | Past decade |
| 14 Propensity score | Institutional quality | Altruism | Void |
| 15 Journey | OFDI | Entrepreneurial finance | Strategic management |
| 16 Life satisfaction | International performance | Social norm | OFDI |
| 17 Bricolage | Macro level | Entrepreneurship course | Institutional void |
| 18 Socioemotional wealth | Social value | Individualism | CEE |
| 19 Effectuation | Cross border acquisition | Entrepreneurial alertness | Quantity |
| 20 Crowd | Host market | Business founder | International expansion |
| 21 Knowledge spillover theory | Global firm | Panacea | Foreign investor |
| 22 Informal entrepreneurship | Latin American country | Opportunity identification | Poverty alleviation |
| 23 Social enterprise | Open innovation | Personality trait | Contingency |
| 24 Gender gap | Home country institution | Entrepreneurship process | Institutional change |
| 25 Innovative entrepreneurship | Absorptive capacity | Dynamic environment | Conceptualization |
| 26 Poverty reduction | Heterogeneity | Financier | Germany |
| 27 Enactment | Openness | New venture performance | Embeddedness |
| 28 Prospect theory | Micro entrepreneur | Entrepreneurial practice | Transaction cost economics |
| 29 Family SMEs | Institutional void | Advisor | Emerging economy |
| 30 Behavioral control | Female entrepreneur | Successful entrepreneur | Global competition |
| 31 Intersection | Government support | Entrepreneurial intention | State ownership |
| 32 Financial crisis | Manufacturing sector | Entrepreneurial potential | International diversification |
| 33 Cross country difference | Market context | Entrepreneurship activity | International business |
| 34 Economic freedom | Contextual factor | Campaign | Performance outcome |
| 35 Opportunity entrepreneurship | Border | Extensive use | Variation |
| 36 Compliance | Transparency | Planned behavior | Institutional framework |
| 37 Passion | Entrepreneurship literature | International business | Market orientation |
| 38 Co-creation | Entrepreneurship research | Large organization | Economy firm |
| 39 VC financing | HRM | Entrepreneurial decision-making | CSR |
| 40 Necessity entrepreneurship | Sub Saharan Africa | Inventory | EMEs |
| 41 Resilience | Legitimacy | Venture performance | Institutional theory |
| 42 Informal institution | Developed market | Family control | Internalization theory |
| 43 Microfinance institution | Entrepreneurial skill | VC financing | Product innovation |
| 44 Social entrepreneur | CSR practice | Entrepreneurial behavior | Informal entrepreneurship |

| | | | | |
|----|--------------------------------------|---------------------------|-------------------------------|-----------------------------|
| 45 | SME performance | Social entrepreneurship | Uncertainty avoidance | Latin American country |
| 46 | Platform | Institutional development | Stewardship | Entrepreneurship literature |
| 47 | Corruption | Returnee | Entrepreneurial self-efficacy | Japan |
| 48 | Formal institution | Social enterprise | Risk taking | New product |
| 49 | Sustainable entrepreneurship | Competitive environment | Efficacy | Entry strategy |
| 50 | Entrepreneurial self-efficacy | Tanzania | International new venture | Institutional development |

Empirical studies in the EEMs scholarship

To further examine the nature of the EEMs research, approximations of empirical efforts in this growing scholarship are necessary to examine whether there is a need for further empirical research (Giachetti, 2016; Kiss et al., 2012; Terjesen et al., 2016; Tracey and Phillips, 2011). Further, breaking down empirical research into methods utilized in research will help to gain a more in-depth understanding of the scholarly work in this field. Even though it is difficult to measure exactly the percentage of conceptual papers against empirical publications due to the sheer volume of over 2,500 publications on EEMs, the text mining techniques to identify all the empirical study-related terms from within the topics of publications of the entire scholarship on EEMs were utilized (Table 6). We utilized Padgett's (2014) and Creswell's (1998, 2009) extensive work on qualitative methodology as well as UCLA's Institute for Digital Research & Education (2019) for quantitative methods to identify the variety of data collection and analysis methods. We individually searched each of the classified methods through the entire scholarship of EEMs in the WoS.

Table 6. Empirical studies in entrepreneurship in EMs of the total of 2,568 publications

| Qualitative methods | 452 (18%) | Quantitative methods | 386 (15%) | Data collection | 939 (37%) |
|-------------------------|-----------|------------------------|-----------|----------------------|-----------|
| Case stud* | 290 (11%) | Regression | 66 (3%) | Survey | 395 (15%) |
| Grounded | 53 (2%) | Correlation | 53 (2%) | Interview* | 248 (10%) |
| Comparative analysis | 21 | Structur* equation | 44 (2%) | Questionnaire | 136 (5%) |
| Content analysis | 21 | Cluster analysis | 32 (1%) | Observation | 70 (3%) |
| Qualitative method* | 21 | Factor analysis | 27 (1%) | Statistical analysis | 38 (1%) |
| Mapping | 20 | Descriptive statistic* | 19 | Experiment* | 22 |
| Qualitative analysis | 12 | T-test | 9 | Content analysis | 21 |
| Ethnograph* | 8 | Simulation | 7 | Simulation | 6 |
| Action research | 3 | Discriminant analysis | 5 | Group discussion | 2 |
| Feminist | 2 | Chi-square | 4 | Document analysis | 1 |
| Symbolic interactionist | 1 | ANOVA | 3 | | |
| | | Discriminant analysis | 3 | | |
| | | Binomial | 2 | | |
| | | Wilcoxon | 1 | | |
| | | MANOVA | 1 | Empiric* | 467 |
| | | Statistic* | 110 | Review | 436 |

From Table 6, approximately 18% (452 out of 2,568) of the studies that have explicitly noted data analysis methods utilized qualitative research methods. The majority of those that adopt qualitative research utilizes the case study approach (approximately 11% of the 18%). This is reasonable given that the field is still in its development. Eisenhardt (1989), for instance, argues for the use of case study research in the early stages of research where the creation of novel theory provides the basis for future research. Grounded theory relates to 53 studies – approximately 2% of the EEMs scholarship. The other types of qualitative study are marginal, each exhibiting less than 1% of the scholarship.

In comparison, only about 15% (386 of 2,568) of studies utilized quantitative methods in their analysis. Regression (3%), correlation (2%), and structural equation modelling (2%)

method studies were more popular in researching larger sets of data. Other quantitative analysis techniques equate to approximately 1% and less in studying EEMs. These numbers are approximate as they only consider studies that explicitly mention the methods in the title, abstract, or keywords fields of the publications. When considering data collection methods, surveys/questionnaires are estimated to be around 20% of the studies. Interviews amount to about 10%, observations to 3%, and all other methods are 1% and less.

We believe that the proportion of quantitative studies in this field needs to increase, as such EEMs research requires large sample empirical tests of the determinants and consequences of entrepreneurship in EM contexts. Thus, the findings highlight the need for future research on EEMs to focus on data collection and analysis that produces generalizable findings.

Conclusion and directions for future research

Heeding the call for entrepreneurship research in the context of EMs (Bruton et al., 2008, 2013; Eijdenberg et al., 2019; Tracey and Phillips, 2011) this paper evaluates and proposes a taxonomy and future directions in this pertinent field. The scientometric review based on 2,568 academic publications reveals three broad domains of the EEMs scholarship – i) *Entrepreneurship in EMs and its implications*; ii) *MNEs, institutional environments, and FDI*; and iii) *Strategy, innovation, and performance*.

Through the extensive scientometric review this study has not only been able to identify the prevalent themes and clusters in existing research on EEMs, but also compares and contrasts the EEMs research to the mainstream entrepreneurship research based on the trending terms and high impact terms. This holistic representation is helpful in clarifying the themes and directions of research within the EEMs, identifying the gaps in the literature, and suggesting further areas for research and practice. Within each of these sections, some topics or areas of EEMs have not been extensively covered in existing literature, which consequently offer fruitful avenues for future research in the area, as follows and in Table 7.

First, in terms of country-based research (see Figure 5), the lack of research on the topic stemming from emerging countries themselves, particularly from LDCs and throughout Asia, is noted. Entrepreneurship is particularly an important topic in these countries as it can drive social impact given the state of institutionalization in these countries (Hall et al., 2012; Seelos and Mair, 2005). Thus, it is only logical that research should be stemming from and studies countries that are most in need of entrepreneurship to understand the application, development and progress of entrepreneurship in practice in these countries. Although it has to be acknowledged that research on China and its entrepreneurship is rich and is continuously expanding, while other EM-context research still needs further development (see Figure 6). This demonstrates that emerging markets receive far more attention than the rest of the developing world, an issue which is worth investigating by decoupling emerging markets from the developing countries to gain a clearer understanding of each.

Second, having compared EEMs to that of the general entrepreneurship scholarship, there are several themes that can highlight some directions for future research in this area. The overall assessment demonstrates the holistic level (micro, meso, and macro) analysis of entrepreneurship literature as opposed to primarily the macro- and meso-level analysis of EEMs (see Table 5). The themes of entrepreneurship research that would benefit EEMs scholarship development include the prevalent use of *big data* for research and opportunities, as well as future studies that examine the personality traits of entrepreneurs, the typology of entrepreneurial ventures (e.g., *family-operated to opportunistic, innovative, and informal*), the prevalence of *human/social capital research*, and the themes that study *entrepreneurial journeys and life satisfaction*. Having carried out this analysis we can infer that the general

entrepreneurship research may, in its majority, represent the developed country context, which is significantly more developed and we invite the readers to investigate the differences highlighted in Table 5 and in the relevant section of this paper.

Third, when analyzing the current body of knowledge in terms of theoretical contribution against empirical research, it is seen that most of the research on EEMs is conceptual in nature. Of those studies that are empirical, the vast majority is based on case study research (11%). Thus, there is a scope for further empirical research papers as well as those that adopt rigorous theory testing using quantitative methods. The mere 15% of studies that utilized some form of quantitative analysis in an applied field as EEMs is rather limited for generalizability and as such, this serves as an area of further research in the future. The future research directions are provided in Table 7.

Table 7. Research gaps and further research recommendations

| EEMs, its nature, implications, and responsibilities | MNEs, institutional environments, and FDI | Strategy, innovation, and performance |
|---|---|---|
| Research from institutions based in EMs is needed to gain a richer perspective and drive the research forward (see Figure 5 and related discussion). | Institutional development and effects on entrepreneurs literature is relatively rich in the BRICS context, but less so in other developing nations. | Strategies and performance of internationalization of EMEs requires further attention from the less researched countries (Figures 5 and 6). |
| Entrepreneurship research in countries that lack research (see Figure 6) is needed to gain a diverse perspective on EEMs. | How do informal institutions or institutional voids affect entrepreneurs in developing countries? | Family SMEs and socioemotional wealth from and in EMs research needs further development. |
| How technological developments aid EEMs, e.g. big data and sharing platforms. | Foreign direct investment of entrepreneurs from developing nations other than China requires further attention. | How are innovation strategies in EMs different from those in developed and larger emerging economies? |
| Personality traits of enterprises and entrepreneurs from EMs research is scant – more research needed into the micro-level analysis. | | |
| Comparative analysis of entrepreneurial strands between EEMs and general entrepreneurship is required, e.g. opportunity, necessity, co-creation, and sustainable. | | |
| Social entrepreneurship research in and from EMs is required. | | |
| More empirical studies are required across all facets of EEMs, especially larger datasets that are analyzed quantitatively. | | |

This paper essentially contributes to the EEMs literature in several ways. First, the visual representations of the results offer a clearer and richer representation of the entire EEMs literature and the themes. The scientometric mapping essentially creates a delineation of the EEMs academic scholarship into the three clusters discussed in the findings section, highlighting the main areas of existing research on EEMs. The scientometric review offers an innovative way of a comparative analysis of the EEMs to mainstream entrepreneurship scholarships. The comparison demonstrates the need for micro-level investigations of EEMs,

which is also supported by the theoretical lenses utilized in the research. Further, country-based research demonstrates the need for more varied research that would stem from developing countries rather than the traditional Western country investigations. And finally, more empirical research, especially in quantitative investigations is required to bring the rigor and the development of the field further.

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