Corporate entrepreneurship of emerging market firms: current research and future directions

CE of emerging market firms

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Irem Demirkan

Department of Management, Sellinger School of Business, Loyola University Maryland, Baltimore, Maryland, USA

Qin Yang

Department of Management, Robert Morris University, Pittsburgh, Pennsylvania, USA, and

Crystal X. Jiang

Department of Management, Bryant University, Smithfield, Rhode Island, USA

Abstract

Purpose – The purpose of this paper is to examine the current state of corporate entrepreneurship (CE) of emerging market firms (EMFs) and provide direction for future research on the topic.

Design/methodology/approach – The authors specifically review the recent literature between the years 2000 and 2019 on CE with the keywords "corporate entrepreneurship," "emerging economies" and "emerging countries" published in the Australian Business Deans Council list journals. The authors review the existing literature about CE in emerging markets, summarize current achievements and present an agenda for future research.

Findings – Based on the review, the authors categorized the macro and micro contexts of CE and summarized the current articles on CE in emerging markets within each macro and micro context. The authors conclude that despite the abundance of research on CE that investigates the three prongs of CE in terms of innovation, strategic renewal and new venturing in developed market contexts, there is a scarcity of literature that focuses on CE in emerging markets from a holistic perspective.

Originality/value — While there is an abundance of literature review on CE in general in terms of the drivers of the construct, the contexts contributing to it and the outcomes, the reviews are lacking about CE specifically within the context of emerging markets. Emerging markets vary from developed markets institutionally, economically, culturally, socially and technologically. However, the questions of how these differences impact the CE activities, as it relates to innovation, venturing and strategic renewal in EMFs, and how these differences provide incentives or hinder the activities that contribute to CE remain mostly unanswered. This paper reviewed the research on CE and emerging market contexts from 2000 to present. It targets to provide a better understanding of the current achievement on this topic and what to be done in the future.

Keywords Corporate entrepreneurship, Emerging economies, Review, Organizational characteristics, Emerging market firms, Governments

Paper type Research paper

1. Introduction

By the turn of the century, a developed economy such as the USA had attained a seemingly unimpeachable position as the world's foremost economic powerhouse. It is only recently that an emerging market such as China has rapidly ascended to the position of the world's second-largest economy in nominal gross domestic product terms. Emerging market

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New England Journal of Entrepreneurship Vol. 22 No. 1, 2019 pp. 5-30 Emerald Publishing Limited 2574-8904 DOI 10.1108/NEJE-04-2019-0024 firms (EMFs) have experienced economic growth and become important players in global business. According to the Emerging Market Multinational Report, E20[1] firms represent 30 percent of the Global Fortune 500 companies and are advancing to the top of many industry sectors (Casanova and Miroux, 2018). For instance, the remarkable performance of Chinese technology firms, three frontrunners of which are famously known as BAT (standing for Baidu, Alibaba and Tencent), epitomizes the rapid transformation of the Chinese technology sector from mere imitator to innovator and has become the object of envy. Hence, the need to further explore the activities of EMFs and how they create and sustain competitive advantages has become prevalent.

Corporate entrepreneurship (CE) (also known as intrapreneurship), with its focus on three pillars of innovation, venturing into new markets and strategic renewal (Covin and Slevin, 1991), is a significant source of competitive advantage for firms in emerging economies. Correspondingly, more research has developed to examine how EMFs have undertaken entrepreneurial transformations to revitalize, reconfigure and transform successfully with emerging markets' institutional transition and industrial change (e.g. Luo *et al.*, 2011; Wang *et al.*, 2012; Yiu and Lau, 2008; Yiu *et al.*, 2007; Zahra, Ireland, Gutierrez and Hitt, 2000).

While there is an abundance of literature review on CE in general in terms of the drivers of the construct, the contexts contributing to it and the outcomes (Phan *et al.*, 2009; Sakhdari, 2016), the reviews are lacking about CE specifically within the context of emerging markets. Compared to developed countries, emerging markets vary institutionally, economically, culturally, socially and technologically. However, the questions of how these differences in emerging market contexts impact the CE activities, as it relates to innovation, venturing and strategic renewal in EMFs, and how these differences provide incentives or hinder the activities that contribute to CE remain mostly unanswered. Hence, there is a strong need to consider the situation and contexts to fully comprehend the CE activities in EMFs (Liu and Vrontis, 2017).

When we further investigate the CE research in emerging markets, we find out that most of the existing research focuses on the concepts of innovation, venturing (international or domestic) and strategic renewal separately rather than holistically. From this standpoint, the research is not lacking when it comes to, for example, the antecedents of innovation in emerging markets, international and/or domestic venturing by emerging country firms, and strategic renewal carried out by firms in emerging economies. These concepts have been researched separately, independently of one another, in the context of emerging markets. For example, an EBSCO search that includes the peer-reviewed academic journals in the management and business areas, inclusively between the years 2000 and 2019, with the keywords "innovation" and "emerging markets" or "emerging economies," gives 447 scholarly articles, focusing on various aspects of CE, such as innovation, in emerging economies (retrieved on January 26, 2019). This number drastically decreases to 35 when we limit the keywords only to "corporate entrepreneurship," which considers the concepts of innovation, strategic renewal and venturing in an interconnected, i.e. holistic, way. For example, the literature on CE in developed economies has mostly used the 22-scale item survey (13 items for innovation measurements and 9 items for venturing measurements) developed by Zahra, Neubaum and Huse (2000), we failed to see studies within the context of emerging markets that utilize similar survey measures that include activities of innovation, venturing and strategic renewal together.

Moreover, existing research on CE suggests that the characteristics of corporate governance of a company is very important in driving CE activities within the firm (Zahra, Neubaum and Huse, 2000; Zahra, Ireland, Gutierrez and Hitt, 2000). However, research on emerging economies suggests that because markets are generally imperfect and incomplete, efficient corporate governance mechanisms, as in the case of developed economies, may not exist (Allen, 2005). Hence, there will be differences in CE between emerging economies and

developed country economies. In addition, since emerging markets are different from developed economies in regard to factors such as the intensity of competition, growth and risk implications of industries and markets, we suggest that how firms initiate and employ CE activities can also vary from one another and that this variation will be different across emerging market countries as well.

Accordingly, this paper aims to examine the current state of CE in emerging markets and provides direction for future research on the topic. Our primary focus is the studies on CE that have been published since the year 2000 because the first two decades of the twenty-first century have been characterized by rapid transformation of EMFs. First, we review the existing literature about CE in emerging markets; then, we summarize current achievements; and third we present what needs to be explored in the future.

Since EMFs are found to possess a tight coupling between country-specific advantages and firm-specific advantages (FSAs) (Khanna and Palepu, 2006; Ramamurti and Singh, 2009), we reviewed both macro context (institution and government effects) and micro context (firm, team and individual level) topics of CE in emerging markets. Similarly, a recent review by Sakhdari (2016) on CE categorizes the research in this area based on their levels of analysis involving the team management, firm, network/dyad and environment levels corresponding with our macro and micro context review.

We started our sample search in EBSCO, looking for articles that have "corporate entrepreneurship" and "emerging countries" and/or "emerging economies" in their title, abstract or keywords, while spanning the period from 2000 to 2019 in peer-reviewed management, international business and entrepreneurship journals. This search yielded an outcome of 240 papers in various journals. To assess the quality of journals we searched which of these journals are included in the Australian Business Deans Council (ABDC) Journal Quality List[2]. In total, 207 of them listed in the ABDC list, with quality ranging from top-rated A* to C-level journals. From this list, we further identified the academic articles on macro and micro aspects of CE in emerging markets (see Table AI). Although we acknowledge that the list may not be comprehensive since it is dependent on one database source, it sufficiently covers the domain of research in CE from emerging markets in past decades (2000–2019). A more comprehensive list of the journals reviewed in this survey is provided in Table AII.

According to our review, we categorized the macro and micro context of CE as follows. The macro context of CE in EMFs:

- (1) Institutional environment and CE of EMFs.
- (2) Government roles on CE activities of EMFs:
 - governments' direct intervention in CE activities (grabbing hand model);
 - governments' support to promote CE activities (helping hand model); and
 - governments' indirect support to foster CE activities (invisible hand model).

The micro context of CE in EMFs:

- (1) market entry decisions and CE of EMFs;
- (2) organizational resources and capabilities and their impacts on CE;
- (3) EMFs' organizational culture, leadership, and CE;
- (4) EMFs' team characteristics and individual-level studies on CE; and
- (5) CE and EMFs' performance.

Our paper shows two main current issues in the CE literature in emerging markets. First, our review on macro context of CE in emerging markets points out that institutional

contexts and the role of governments are significant in fostering firms' entrepreneurship. Currently, there is considerable amount of research in institutional environments of emerging markets and EMFs' entrepreneurial activities, which is making the study of macro context and the CE link more significant. Second, our review on micro context of CE in emerging markets suggests that while there have been valuable attempts to explore the Issues (1)–(5) above, the studies are still lacking both in quality and quantity. Overall, this review enables us to make better inferences and draw more meaningful conclusions of CE in emerging markets. We explore these two points further in details in the following sections.

2. The macro context of corporate entrepreneurship of emerging market firms

The macro context of research of CE in emerging countries includes how institutional environment affects CE of EMFs. There is a big research gap between the institutional environment and CE in emerging markets, especially when we specifically consider government involvement and how it affects CE differently. Based on Shleifer and Vishny's (2002) model, we summarized government involvement in CE as the invisible hand, the helping hand and the grabbing hand. Under the invisible hand model, governments tend to restrict themselves to providing basic contract enforcement, law and order and regulations. Under the helping hand model, governments are actively involved in promoting economic activities, establishing industry policies and developing close ties to firms. Under the grabbing hand model, governments tend to be interventionists and are more likely to impose lots of regulations on firms.

2.1 Institutional environment and corporate entrepreneurship of emerging market firms Institutions refer to the rules, social norms and cognitive structures in a society that directs or restricts business activities (Scott, 2008). Both formal factors (regulations, laws and rules) and informal factors (culture, norms and values) are included. Only nine articles were found to be related to institutional environment and CE, and only two of them were found to be about EMFs after a search on EBSCO (retrieved on February 12, 2019).

For instance, Gomez-Haro *et al.* (2011) examined how different dimensions of institutional environment of a region influence the level of firms' CE differently. Doh and Pearce (2004) developed that firms employ CE to deal with the changes of government policies. Holmes *et al.* (2016) illustrated how the interaction of the two dimensions of technology policy (state research funding and intellectual property protection) influences CE. Judge *et al.* (2015) found that national-level factors such as the capital flows, legal system and the education system affect corporate technological entrepreneurship. Dai and Liu (2015) found that CE mediates the relationship of the institutional network embeddedness and firm performance after studying a few technology clusters in China. Among them, only two articles mentioned the roles of government. Holmes *et al.* (2016) proposed that some EMFs fell into the categories of high state funding/low IP protection and low state funding/low IP protection, and thus they need to take specific entrepreneurial strategies. Guo *et al.* (2017) developed a stage model to explain how governments play different roles to promote firm CE at different times.

2.2 Summary of government roles on corporate entrepreneurship activities of emerging market firms

Many emerging economies are experiencing large-scale institutional transitions (Carney et al., 2009; Filatotchev et al., 2012; Hoskisson et al., 2000; Krug and Hendrischke, 2012; Meyer and Peng, 2005; Peng, 2003; Wright et al., 2005). Such institutional transitions lead to changes of political and legal climate, business environment, economic situation, and global competition, among others. Institutional environments shape firms' CE because "CE occurs

within environmental contexts that place complex demands on firms and affect the financial returns that CE generates" (Holmes *et al.*, 2016, p. 248). Previous research has shown that institutions affect firm CE process (Guo *et al.*, 2014), and CE-related outcome (e.g. Sine *et al.*, 2005; Globerman and Shapiro, 2003).

Since firms of emerging economies face institutional environments such as changes of rules and regulations, poor IP protection, and insufficient or unavailable external finance sources (e.g. Holmes *et al.*, 2016; Meyer and Peng, 2005), governments in these countries may actively stimulate firms to take entrepreneurial activities directly, which is different from those in the developed countries. Governments are generally an important contextual factor influencing firm behavior (Ring *et al.*, 2005). Especially in emerging markets, governments play critical roles in economic activities (Bruton and Lau, 2008; Malik and Kotabe, 2009; Wright *et al.*, 2005). For instance, governments in Brazil, China and Russia are recognized as being very influential on firms' behavior. Some recent research focused on the effect of government involvement on stimulating innovation and competitive advantage (Lazzarini, 2015; Mazzucato, 2015), and international expansion in countries such as China, Indonesia and Brazil (e.g. Hong *et al.*, 2015; World Investment Report, 2008).

2.2.1 Governments' direct intervention in corporate entrepreneurship activities (grabbing hand model). Government may take direct intervention in firms' activities such as innovation, international venturing and strategic renewal. State-owned enterprises (SOEs), which refers to firms with majority government ownership (Boisot and Child, 1996; Jefferson et al., 2003) that act as government agencies, are a good example of direct involvement of governments in economic activities because they carry out the state's regulations and policies (Shleifer, 1998).

For instance, in recent years the Chinese Government has put innovation as the top national development priority and encourages firm innovation activities strongly. As the main agencies of Chinese Government, SOEs respond actively to government calls and invest on R&D (Zhou *et al.*, 2017). In addition, firm innovation needs substantial resources, and SOEs have great advantages to access key resources such as funding, land and technical infrastructure, which are mainly controlled by governments (Chen, Li, Shapiro and Zhang, 2014; Sheng *et al.*, 2011). SOEs are priorities for the state-owned banks, which are the major source of financial capital (Chen, Li, Shapiro and Zhang, 2014; Chen, Tang, Jin, Xie and Li, 2014; Xu and Zhang, 2008). In addition, SOEs are more likely to obtain funding with lower cost (Khwaja and Mian, 2005), to get subsidies from governments (Musacchio and Lazzarini, 2014; Ramaswamy, 2001) and to procure government R&D funding and other incentives (Chang *et al.*, 2006; Siegel, 2007; Sun and Liu, 2014; Wang *et al.*, 2012), all of which enable these firms to conduct innovative activities. In sun, state ownership of firms fosters innovation due to access of policy information, government support and valuable resources. However, this effect is weakened with the development of market (Zhou *et al.*, 2017).

Government direct ownership also affects firms' internationalization. Hong *et al.* (2015) mentioned that in some underdeveloped regions, government officials may coerce local firms to "align their goals with government interests" (p. 50). Governments may use their power to make firms realize objectives like globalization. Governments may create normative pressures for SOEs to go international. To accommodate governments' political objectives and show their political standing, SOEs may implement state policies and take the internationalization initiatives (Deng, 2009; Hong *et al.*, 2015; Wang *et al.*, 2012). Further, SOEs can gain access to intelligence reports about foreign markets from government, thus reducing investment cost and uncertainty of their international venturing (Khanna *et al.*, 2005).

Finally, government may directly reorganize some organizations and institutions to better implement its national development policies. For instance, Lenovo was spun off from the Chinese Academy of Sciences (CAS), which is a research and education institution, and started their business in the computer industry. Based on a government initiative, Lenovo was established in Zhongguancun (a technology hub in Beijing, China) to reform the national science and technology system (Lazonick, 2004; Lu, 2000).

2.2.2 Governments' support to promote corporate entrepreneurship activities (helping hand model). According to political economy theory, governments create rules by which businesses must abide (Boddewyn, 1988; Kofele-Kale, 1992). Specially, governments may employ policies, national strategic planning, financing and other regulations to stimulate firms' certain activities (Hoskisson et al., 2000; Sun and Liu, 2014). Various innovation programs, tax incentives, information and technology resources, and other legal protections are applied to promote firm innovation (Lemola, 2002; Mustar and Larédo, 2002).

For instance, Chinese Governments provide subsidies, tax deductions and funds to all firms that conduct their preferred innovation activities (Zhou *et al.*, 2017). It is found that governments' innovation policies and resource allocations in countries like South Korea and China benefit firms' technological development (Fan and Watanabe, 2006; Lee and Lim, 2001). Tax credits, subsidies, low interest loans and other support from governments are helpful in improving new product innovation in South Korea and Taiwan (Schoening *et al.*, 1998). Some Latin American and Caribbean (LAC) countries use fiscal incentives, intellectual property rights protection and other complementary instruments such as cluster policies, special programs and governmental procurement to strengthen technology policies (Hall and Maffioli, 2008). George and Prabhu (2000) found that government uses developmental financial institutions to foster entrepreneurship in large firms of core industries (steel, pharmaceutical and transportation).

Governments also foster collaborative innovation activities to promote firm innovation competitiveness (Kaminski *et al.*, 2008; Zheng *et al.*, 2013). Government policies promote firms to collaborate with others in innovation. These collaborative activities may include multiple institutions across regions, therefore needing formal approval and support from regional governments. As such, networking, cross-regional coordination mechanisms and local governments support are crucial to implement the collaboration (Xie *et al.*, 2017). Better access to government-supported innovation systems (universities, research institutions, etc.) can not only improve firms' technological development, but also increase the attraction of talented personnel for innovation (Li and Li, 2013; Li *et al.*, 2018). Government can help firms gain access to valuable knowledge, provide valuable resources and help firms to accumulate organization capabilities to innovate (e.g. Guo *et al.*, 2014; Zhou *et al.*, 2017).

Established firms' internationalization could be promoted by governments too. Luo et al. (2010) suggested that governments make international treaties that protect outbound foreign direct investment to support EMFs' international expansion. Hong et al. (2015) pointed out that central government "formulates regulatory frameworks to guide internationalization, ease capital controls and provide information and guidance on investment opportunities, governments at lower levels are responsible for implementing central government's policies by, for example, using incentives to encourage and direct EMFs to expand abroad" (Kumar and Worm, 2004, p. 48). In emerging countries, governments may shape firms' internationalization through fiscal incentives, tax laws and trade agreements (Luo et al., 2010; Wang et al., 2012). Chinese Government implements the "go global" policy, providing export subsidies, tax rebates, foreign exchange assistance and other support to stimulate firms' internationalization (Hong et al., 2015). Pinto et al. (2017) also found that government financial support (subsidies, low interest loans) is important for LAC countries to expand abroad. For example, Brazil's Government used its financial institutions, such as state-owned banks and development banks, to support Brazilian multinational corporations' (MNCs) internationalization.

Besides, EMFs may benefit from preferential policies (Cui and Jiang, 2012) and the help of government offices abroad (Buckley *et al.*, 2007) for internationalization. Firms may be motivated to expand internationally through governments' promotion, the assurance of stable political environment and other favorable conditions. Government can help EMFs to reduce cost and risks by connecting the firms with foreign institutions and investors, providing market information and facilitating the political and business relationships in host countries (Malik and Kotabe, 2009; Hong *et al.*, 2015).

2.2.3 Governments' indirect support to foster corporate entrepreneurship activities (invisible hand model). Governments in emerging markets may put effort into improving the institutional development for firms to implement CE. Firms in emerging markets face deficiencies such as weak legal environment, lack of financial resources and shortage of skilled labor, which hinders firms' development (Hoskisson et al., 2000; Zhou et al., 2017). Li et al. (2018) found that government and market stakeholders provide a synergistic effect on firm innovation. The market development includes the improvement of legal environment, capital market, national innovation systems and the education provision. Cheng and Yiu (2016) identified that informal institutions development, the regulative and normative protection of intellectual property and education reform may help Chinese firms to compete successfully in the innovation-driven global economy.

Many governments of emerging markets have designed sets of policies to stimulate innovative activities (Aschhoff and Sofka, 2009; Dolfsma and Seo, 2013). Some policies emphasize pushing the supply of innovations; some emphasize increasing the demand (Edler and Georghiou, 2007); and some utilize the combination of technology-pushing and demand-pulling policies to make radical innovations (van den Ende and Dolfsma, 2005). These diverse policies involve a mix of players, institutions and instruments (Flanagan et al., 2011). Some governments provide such methods as entrepreneurial education, tax concessions, information and technical services, industrial research networks, etc., to improve innovation (Rothwell and Zegveld, 1988).

In addition, governments employ technology policies to build and restructure a country's innovation infrastructure (Etzkowitz and Leydesdorff, 2000). Government also connects firms, universities and other organizational entities to involve in R&D collaboration, knowledge integration and other entrepreneurial activities (Guo *et al.*, 2014; Holmes *et al.*, 2016). Some governments build innovation networks including public universities, government-funded institutions and other research organizations (Walsh *et al.*, 2009). Chinese Governments encourage the linkages of universities, research institutes and enterprises, strengthen the patent laws, and build new technology zones and industrial or science parks (Chen and Kenney, 2007).

To support firm innovation, government facilitates the growth of private capital firms (Gompers and Lerner, 2001). Governments' financial incentives and foreign-related policies enable firms to access financial resources to venture into global markets (Jiang et al., 2016; Rasiah et al., 2010; Wang et al., 2012). Further, governments may take some actions to provide and attract skilled labor. For instance, the municipal government of Shenzhen China created several colleges in the last 30 years to deal with the shortage of human capital. In addition, the local government of Shenzhen City connected with Peking University, the CAS, the Chinese Academy of Engineering, and Hong Kong University of Science and Technology to set up a research base and attract more skilled labor to the city (Chen and Kenney, 2007).

The above studies mainly take the perspective of how external knowledge searches bring novelties into the firm and therefore are drivers of firm innovation in emergent markets. What mostly distinguishes these studies from developed country contexts is that of the firms' reliance on external networks such as business groups (Hong *et al.*, 2015),

specific political ties (Zhang et al., 2015), supply chains (Ren et al., 2015) and collaborative partnerships (Guerrero et al., 2019) in filling the institutional voids that provide support for CE activities.

3. The micro context of corporate entrepreneurship in emerging market firms

The micro context of research of CE constitutes the bulk of research conducted specifically in developed market contexts. Although we recognize that there is no single best way to summarize various topics, they are arranged as follows. First, we summarized research about market entry decisions of CE in emerging markets. Second, research works related to the impact of organizational resources and capabilities on CE are examined. Third, the literature on the impact of organizational culture and leadership on CE is summarized. Fourth, team characteristic is covered. Finally, CE's effect on firm performance is examined.

3.1 Market entry decisions and corporate entrepreneurship of emerging market firms Existing research has suggested that EMFs used acquisition as strategic intent to achieve strategic goals. For instance, Rui and Yip (2007) presented Chinese firms that use cross-border acquisition to acquire strategic capabilities to offset their competitive disadvantages and leverage their FSAs. EMFs are also found to use acquisition to overcome "liability of emergingness" in their catch-up process of opportunity-seeking and capability-transformation (Makhok and Keyhani, 2012).

Based on institutional theory, Ang *et al.* (2015) explained how market entry choices of EMFs are affected by mimetic isomorphism (mimicking home and host country firm behaviors) and how distance between the home and host country affects firms' internationalization. Similarly, Demirbag *et al.*'s (2009) research drew upon institutional, transaction cost theories and the springboard perspective to further internationalization of EMFs proposed by Luo and Tung (2007), and they examined the equity composition of foreign affiliates of Turkish MNCs. EMFs' level of "political constraints, linguistic distance, and the level of knowledge infrastructure in the host country market and parent diversity" affected Turkish MNE's choice of a joint venture vs a wholly owned enterprise (Demirbag *et al.*, 2009, p. 458).

3.2 Organizational resources and capabilities and their impacts on corporate entrepreneurship Like MNCs, EMFs need to develop and utilize unique sets of organizational resources to exploit entrepreneurial opportunities. Existing research has investigated how EMFs exploit FSAs and develop organizational capabilities to achieve CE transformation. Specifically, Luo et al.'s (2011) research proposed a dual strategic intent perspective in which EMFs exploit FSAs and mitigate market imperfections in home-country institutions through CE activities. Luo and Tung (2007) presented a springboard perspective in which EMFs use international expansion as a springboard to acquire strategic resources to overcome their latecomer disadvantages.

By adopting a dynamic capability perspective, Yiu and Lau (2008) suggested that EMFs exploit resource capital configuration and transformation to pursue CE, including innovation and venturing activities. Other research has adopted a process model to investigate CE through a dynamic lens to assess how unique organizational capabilities affect CE activities at various stages involving initiation, development and implementation (Guo et al., 2014). Through qualitative interviews, Guo et al. (2014) examined the evolution of Chinese automobile companies and identified how EMFs develop different organizational capabilities through the CE process. Similarly, built on previous research on guanxi (Luo, 2000), Chen (2017) looked at how Chinese firms overcome their liability of "outsider" status by developing guanxi-like relationships with their western partners in their international

venturing over a period of time. The process perspective reflects the temporal context in which CE evolves over time (Liu and Vrontis, 2017). Khavul *et al.* (2010) examined international venturing of EMFs from India, China and South Africa through a process model by which firms synchronize their international venturing (entrainment) by adapting to international customers.

Recent research suggested that EMFs' CE can be jointly affected (i.e. complementary effect) by their internal organizational resources and capability as well as their access to external resources from their home-country institutions and external partners (Turroa et al., 2016). Among them, Liu et al.'s (2013) study investigates how strategic flexibility affects EMFs in their international venturing efforts. They also incorporated institutional and relational assets into the analysis and argued that high levels of domestic institutional support and strong ties with foreign organizations strengthen the above-mentioned positive relationship. Kotabe et al. (2017) investigated how external resources from institutional support complement EMFs' organizational capability for improved CE (i.e. innovation) performance.

3.3 Emerging market firms' organizational culture, leadership and corporate entrepreneurship

The literature on CE has somewhat established that the organizational culture of the firm impacts the CE activity of the firm by fostering (hindering) a context that encourages (discourages) entrepreneurial behavior. In a developed country context, namely, the USA, Hornsby *et al.* (1999) have shown that entrepreneurial behavior is significantly related to the existence of particular organizational factors. While organizational culture ranks among the factors that most impact CE, by creating an overall entrepreneurial culture within the firm and emphasizing motivational factors that support implementation of entrepreneurial activities (Arz, 2017), the role of organizational culture in EMFs has not been studied extensively. When we take the view that national culture may play a significant role in shaping the organizational culture of the firm (Gerhart and Fang, 2005; Gerhart, 2009; Lee and Kramer, 2016), we need to further look into emerging markets and ask whether the relationship between organizational culture and CE is any different, and if so, in what ways.

Our review has revealed that while there are not many studies published on the organizational culture and CE link – specifically in the context of emerging markets – existing studies have looked into the roles of, for example, how employees' perceived organizational support for entrepreneurial activities within the firm plays a mediating role between high-performance human resource activities and CE in Chinese biotechnology firms (Zhang and Jia, 2010). Similarly, Ziyae (2016) in a recent study of Iranian firms showed a moderating role for organizational culture in the relationship between human resource management and CE. Furthermore, a recent study conducted in Kenyan small- and medium-sized enterprises by Hughes and Mustafa (2017) revealed that supportive internal organizational environments, specifically the role of the top management support, are important antecedents for CE.

While, to the authors' knowledge, the studies that focus on "organizational culture" and CE in EMFs are quite limited, the list increases when we consider the role of leadership as a subset of the organizational culture of the firm. Considering the role of leadership in the firm in a notable study in *Administrative Science Quarterly*, Chen and Nadkami (2017), by focusing on small- and medium-sized Chinese firms, demonstrated that a chief executive officer's (CEO) temporal leadership plays a mediating role between the CEO's temporal dispositions and CE in terms of innovation, corporate venturing and strategic renewal activities. In a similar fashion, in a study of small and medium enterprises in Pakistan, Shafique and Kalyar (2018) showed that the type of leadership, in this case transformational leadership, positively affects CE and its dimensions of innovation, new business venturing, self-renewal, proactivity and risk-taking. In another study that looks at firms in Poland, Zbierowski (2016) found that

leadership type, such as authentic leadership, in addition to the fundamental state of leadership, psychological capital and positive deviance all impact CE positively.

From another angle, some of the notable research that is published in mainstream innovation journals, such as the *Journal of Product Innovation Management*, looks into and fully supports the mediating role of CE on the relationship between CEOs' transformational leadership and product innovation performance (Chen, Tang, Jin, Xie and Li, 2014).

Most studies about EMFs either examined the direct relationship between leadership types and CE or the mediating/moderating role of leadership in impacting the CE activities of the firm. While we think existing studies make important contributions, there are still more opportunities for research in emerging market contexts. Moreover, it is notable that some of the research that focuses on EMFs is not labeled as pertaining to "emergent markets" but have a more generalized focus while still using emerging market countries as the context of their study.

3.4 Emerging market firms' team characteristics and individual-level studies on corporate entrepreneurship

The research has looked into the role of teams on CE from a variety of perspectives. There have been studies that researched product innovation teams, top management teams or entrepreneurial teams. For example, in a recent study published in *Strategic Management Journal*, the authors tested the diversity of top management teams in terms of their national backgrounds and how that diversity affected CE and the innovative performance of multinational companies (Boone *et al.*, 2019). Similarly, Heavey and Simsek (2013) have focused their research on the impact of human and social capital of top management teams on CE, since CE is mostly carried out by the top management team. While these studies make important contributions to the CE literature, specifically considering the role of top management teams, they are mostly in developed country contexts.

Considering team-level studies, the ones that specifically focus on the emergent market context look at innovation teams, taking only the innovation aspect of CE. At the team level, we find that the studies mostly focus on innovation and new product development teams, for example, looking into how behavioral integration and collective efficacy of the new product development teams (Liu *et al.*, 2015) and factors such as team identity (Litchfield *et al.*, 2018) affect the innovativeness performance of the team.

The individual entrepreneurial behavior of employees within the organization is also stated among the important drivers of CE. A recent systematic review of the individual-level antecedents of CE by Mustafa *et al.* (2018) has shown that employee entrepreneurial behavior is an emerging research field and that employee entrepreneurial behavior is also determined by the context of the firm. However, their review and the papers included in this review mostly focus on developed country contexts.

In our study, we reviewed some individual-level studies that investigate the role of the employees within the context of CE. At the individual level, one recent study by Urban and Wood (2015) researches how the opportunity recognition behavior and motivation of employees impact the CE activity of the firm. Their results show a significant relationship between these individual-level behaviors and CE activities of the firms in the financial sector in South Africa. Follow-up studies focusing on individual antecedents of CE are also conducted by Urban and colleagues focusing on South Africa as the emerging market context (Urban, 2017; Urban and Verachia, 2019; Urban and Wood, 2017).

3.5 Corporate entrepreneurship and emerging market firms' performance Two review articles about the relationship between CE and firm performance were found (Serai et al., 2017; Trang, 2018). Serai et al. (2017) summarized from the previous literature

that the effect of CE dimensions and firm performance could be positive, negative or moderating. The firm performance includes financial performance and firm growth. Trang (2018) found that CE, which includes entrepreneurial orientation, innovation, risk-taking and proactiveness, is positively related to firm performance. In addition, government, economic condition and environmental factors moderate the link of CE and firm performance. From a meta-analysis of CE and performance, Bierwerth et al. (2015) revealed the positive relationship of CE and firm performance. Zahra and Garvis (2000) showed that international CE was positively associated with a firm's profitability and growth. After examining some Turkish companies, it was found that CE helps to improve firm performance (Aktan and Bulut, 2008; Kaya, 2006; Karacaoglu et al., 2013). Mohamad et al. (2011) found that CE affects firm performance positively in some Indonesian medium-sized manufacturing firms. Ambad and Wahab (2016) concluded that corporate venturing was related to firm growth but not firm profitability in Malaysian large companies. Hanci-Donmez and Karacay (2019) argued that CE mediates the link between high-performance human resource practices and firm performance. Eze (2018) evaluated the effect of CE on non-financial performance of manufacturing firms in Nigeria and found that all parts of CE (innovation, venturing, strategic renewal, proactiveness and risk-taking) are important for improving firms' market share and employees' satisfaction. More information of some literature we reviewed above is listed in Table I.

4. Future directions

4.1 Focus on the concept of CE in emerging markets

While all the studies mentioned above further our understanding of the factors that contribute to firm innovation *per se*, they do not offer a holistic perspective of CE since they do not simultaneously cover the venturing and strategic renewal dimensions of CE, as established in the literature. One exception to this holistic perspective is the study of Guo *et al.* (2014), in which the authors have investigated a case study of the automobile industry in China and identified how unique organizational capabilities affect CE activities at different stages. In another study, Yiu and Lau (2008) researched the role of non-market forms of capital in an emerging market context – namely, network-based relationships of the firm in political, social and reputational forms on the relationship between CE and firm performance – using innovation and venturing as the pillars of CE.

Despite many calls for research on the CE concept in emerging markets (Zahra, Neubaum and Huse, 2000; Zahra, Ireland, Gutierrez and Hitt, 2000; Bruton *et al.*, 2008), our review shows that scholars have not made much progress in this area, especially when we consider the concept at the holistic level, using the three prongs of entrepreneurship (Zahra, 1996). Mathews (2002) offered an alternative model to explain EMFs internationalization by using linkage, leverage and learning model. Yet, no other theories have been developed to examine which aspects of existing theory are valid, which aspects are not and what to do about the latter to enhance our understanding of EMFs (Ramamurti, 2012). Moreover, existing studies are mainly conducted in countries such as China, India, South Africa and Turkey, leaving more of the emerging economies still untested. Our review suggests that there is huge potential in looking at the drivers of CE and the organizational capabilities that contribute to it (CE) within the context of emerging markets.

4.2 Methodological and theoretical innovation of CE in emerging countries

Empirical studies that focused on CE, in general, used surveys as a primary source of data to measure the CE behavior of a firm. A recent exception to this is the study by Boone *et al.* (2019), where they measure CE using secondary data sources. While Boone *et al.*'s study focuses mainly on developed country contexts (such as the USA, Germany, France, the UK

Contexts (regions, countries, etc.) Findings	Spain The results show that both the normative and cognitive dimension of the institutional environment influence an organization's entrepreneurial orientation. They also show that regulatory dimension influences what type of correct outcomes outcomes and type of correct outcomes and they are a considered outcomes and the correct outcomes of the correct of the cor		USA, China, It illustrates how technology policies – Russia, specifically those related to state funding for Cyprus, research and IP protection – shape firms' innovation opportunities and constraints, thus Indonesia affecting their incentives and abilities for CE and	Transitional It demonstrates how corporations affected by policy government policy can use entrepreneurial environments strategies to exploit discontinuities generated by uncertain and unstable public policy environments. Specific strategies will be effective depending on the degree and slope/inflection	China It proposes a stage model to explain how governments play different roles to promote firm CE at different times in Chinese automobile industry
Research methodology	Quantitative study (a questionnaire study of 150 Spain firms in trade, metallurgy, machinery and transportation industries)	Quantitative study (secondary data and in-depth USA, Japan, phone interviews were conducted. 211 largest Germany, MNCs listed in the Global 500 in Fortune China, etc. magazine in 24 countries were analyzed)	Theoretical study	Theoretical study	Theoretical study
Journal	Management Decision, 2011	Entrepreneurship Theory and Practice, 2015	Academy of Management Perspective, 2016	Journal of Management Studies, 2004	New England Journal of Entrepreneurship, 2017
Authors	Gomez-Haro, Aragon- Correa and Cordon-Pozo	Judge, Liu- Thompkins, Brown and Pongpatipat	Holmes, Zahra, Hoskisson, Deghetto and Sutton	Doh and Pearce	Guo, Jiang and Yang
Topic area	Institutional		Government policies		

Table I. Selected literature reviewed in the paper

Findings	Institutional forces and the internationalization effects of state ownership are contingent upon location- and industry-specific idiosyncrasies. State ownership in an emerging economy enables a firm to obtain crucial R&D resources but makes the firm less efficient in using those resources to generate innovation, and a minority state ownership is an optimal structure for innovation development in this context. And the inefficiency of state ownership in transforming R&D input into innovation output decreases when industrial compactions is high.		firms EMFs market entry choices are affected by mimicking home and host country firm behavior and distance between home and host country affects firms' internationalization Turkish MNE's equity composition of foreign subsidiary was affected by political constraints, linguistic distance and level of knowledge infrastructure in host country and parent diversity (continued)
Contexts (regions, countries, etc.)	China China	Latin America and Caribbean countries China	Emerging markets Turkey
Research methodology	Quantitative study (626 Chinese firms including 615 manufacturing firms and 11 mining firms and their OFDI) Quantitative study (a balanced panel of 12,288 manufacturing firms in 31 provinces and 182 industries was analyzed. The 12,288 firms consist of 2,235 SOEs, 647 mixed firms and 9,406 firms without state capital	Quantitative study (surveys collected in Chile and Panama and secondary sources of information, such as the innovation and industrial surveys used in Argentina and Brazil) Theoretical study	Quantitative study (analyzed 673 cross-border acquisition and alliances conducted by EMFs) Quantitative study (522 foreign affiliates of Turkish multinational enterprises (MNEs))
Journal	British Journal of Management, 2015 Administrative Science Quarterly	European Journal of Development Research, 2008 Long Range Planning, 2016	Strategic Management Journal, 2015 Journal of World Business, 2009
Authors	Hong, Wang and Kafouros Zhou, Gao and Zhao	Hall and Maffioli Cheng and Yiu	Ang, Benischke and Doh Demirbag, Tatoglu and Glaister
Topic area	State ownership	Informal institutions and other external mechanisms	Market entry decision

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				Contexts (regions, countries,	
Topic area	Authors	Journal	Research methodology	etc.)	Findings
	Rui and Yip	Journal of World Business, 2007	Qualitative study (in-depth interview of three Chinese companies about the strategic intents reflected in internationalization strategies)	China	Chinese firms use cross-border acquisition to acquire strategic capabilities to offset their competitive disadvantages and leverage their firms-neerific advantages.
Organizational resources and capabilities	Chen	Thunderbird International Business Review, 2017	Theoretical study	China	Chinese firms overcome their liability of outsider status by developing guanxi-like relationships with western partners
	Guo, Jiang and Yang	Thunderbird International Business Review, 2014	Qualitative study (examined two Chinese automobile firms' corporate entrepreneurship over time)	China	Chinese firms develop different organizational capabilities at various stages of CE, involving initiation, development and implementation
	Khavul, Pérez- Nordtvedt and Wood	Journal of Business Venturing, 2010	Quantitative study (analyzed international new ventures from China, India and South Africa)	China, India, South Africa	International venturing of EMFs from China, India and South Africa through a process model by which firms synchronize their international venturing by adapting to international customers.
	Kotabe, Jiang and Murray	Journal of Management, 2017	Quantitative study (interviewed 108 senior executives in China)	China	Institutional support complements EMFs' organizational capability for improved innovation performance
	Liu, Jiang, Zhang and Zhao	Journal of International Marketing, 2013	Qualitative study (conducted 20 in-depth interviews with senior managers from ten Chinese firms)	China	Strategic flexibility affects EMFs international venturing efforts
	Luo and Tung	Journal of International Business Studies, 2007	Theoretical study	Emerging markets	Springboard perspectives in which EMFs use international expansion as a springboard to acquire strategic resources to overcome their latecomer disadvantages
					(Possitimos)

(continued)					
Authentic leadership, in addition to the fundamental state of leadership, psychological capital and positive deviance all impact CE positively	Poland	Qualitative study	Journal of Positive Management, 2016	Zbierowski	
Contributes to the role of transformational leadership on CE	Pakistan		Administrative Sciences, 2018	Shafique and Kalyar	
			Management, 2017		
Cultural and contextual factors appear to influence the extent of CE activity	Kenya	Qualitative study	Journal of Small Business	Hughes and Mustafa	
CLO dispositions de reducionip impace CL		Administry (diad.) and 120 (diag.)	Science Quarterly, 2017	Nadkami	
			Management, 2014		leadership
CE has a mediating role between managers' leadership style and innovation practices	China	Journal of Product Quantitative (analyzed 151 TMT members and Innovation CEOs)		Organizational Chen, Tang, culture, Jin, Xie and Li	Organizational culture,
transformation to pursue CE	markets	THOU COURT STORY	Theory and Practice, 2008		
home-country institutions and external partners	() ()	Thomastical etradit	Enturbum mundaik Thomastion of atrida	Vin ond I on	
organizational resources and capability as well as their access to external resources from their		Spallt III 2011)	ana Kegiorai Development, 2016	Alyarezo allu Urbanoa	
CE activities EMFs' CE can be jointly affected by their internal organizational resources and canability as well	Spain	Quantitative study (analyzed GEM database for Spain Snain in 2011)	Entrepreneurship	Turroa, Alvarezh and	
exploit firm-specific advantages and mitigate market imperfections in home country through	markets	private enterprises' international venturing)	International Review, 2011	Wang and Xi	
Dual etratorio intent norcenortivos in which RMRs	Froeming	Oughting of dw (gooty and 1 255 Chinese	Managamant	J. 110 Zbao	
Findings	(regions, countries, etc.)	Research methodology	Journal	Authors	Topic area
	Contexts				

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				Contexts (regions, countries	
Topic area	Authors	Journal	Research methodology	etc.)	Findings
	Zhang and Jia	Human Resource Management, 2010	Quantitative study (analyzed Chinese biotechnology pharmaceutical enterprises	China	Organizational culture mediates the relationship between high-performance human resource practices and CE
	Ziyae	World Journal of Entrepreneurship, 2016	Quantitative study	Iran	Organizational culture moderates the relationship between human resource management and CE
Team- and Licht individual-level et al. studies	Lichtfield $et al.$	Journal of Product Innovation Management, 2018	Journal of Product Quantitative study (analyzed 61 R&D teams) Innovation Management, 2018	Turkey	Team identity's impact on team innovation in cross-functional teams (as innovation relates to CE)
	Liu, Chen and _ Tao	Journal of Product Innovation Management, 2015	Journal of Product Quantitative (analyzed 96 product development China Innovation teams) Management, 2015	China	Information exchange within teams positively affects innovation (as innovation relates to CE)
	Urban and Wood	Journal of Business Economics and Management, 2015	Quantitative (analyzed 187 employees in finance South Africa sector)		Opportunity recognition behavior of employees is positively related to innovative behavior (as innovation relates to CE)
Performance	Li, Xia and Zajac	Strategic Management Journal, 2018	Quantitative study	China	A focal firm's innovation performance will be enhanced by both its government connections and the innovativeness of its economic stakeholders
	Trong	Advances in Management, 2018	Theoretical study	USA, Turkey, Indonesia, Malaysia and China	This is a review paper to find out the relationship between corporate entrepreneurship and firm performance

and Japan), we suggest that using innovative measures such as Boone *et al.*'s can also open up more research that focuses on CE in emerging market contexts. While using primary sources of data is valuable, methodological innovations using secondary data to identify innovation, strategic renewal and venturing may also allow for more holistic and higher-quality research stemming out of EMFs. Moreover, the literature on CE in EMFs should be more open to case studies. Like secondary data sources, case studies enable the researchers to look into these concepts at a more interconnected level.

Our review also indicates the need to move the field from applying previous theory to developing and testing theory of CE in emerging markets in order to fully comprehended evolutionary development of EMFs, the evolution of institutions, and EMFs' unique resources and capabilities that have been uncovered in classic theories. This calls for theoretical innovation in CE research, instead of simply comparing EMFs with traditional MNCs. This is because existing theories are inadequate to examine the process-focused and evolutionary development of EMFs (Ramamurti, 2012). We hope new theories will emerge, or that scholars will be able to reconcile, extend and synthesize existing theories to expand our understanding of CE research in emerging countries.

4.3 Quality of research of CE in emerging countries

Our review also reveals that most of the literature that is about CE in EMFs is published in journals that are ranked below A level in the ABDC list. We think that this may be because most of the A-level and above journals still do not consider the research in emerging markets as mainstream. This is an important limitation considering that by 2050 the economies of Brazil, Russia, India and China (the "BRIC" economies) will be larger than that of the USA, Japan, Germany, the UK, France and Italy (Peng, 2018). We suggest that moving forward, mainstream management and entrepreneurship journals should be more open to publishing manuscripts that focus on firms from emerging market contexts.

5. Conclusion and contributions

We conclude by emphasizing two main contributions of our review. First, our literature review of CE in EMFs reveals that, despite an abundance of research on CE looking into the three prongs of CE (innovation, strategic renewal and new venturing) in developed market contexts, there is a scarcity of literature focusing on CE in emerging markets from a holistic perspective. The research on EMFs that focus on CE mainly looks at the concepts of CE individually. We contribute to both the CE and EMF literature by showing that a holistic perspective on CE, where studies look into the role of innovation, strategic renewal and venturing simultaneously, is a huge potential for further studies. Scholars focusing on these areas can research the concept of CE *per se* in EMFs.

Moreover, our review reveals that scholars need to make an effort to further explore both the macro context and the micro context of CE, or how external and internal environment of the firm impacts CE, especially in emerging markets. Given the unique context of emerging markets, how CE is affected by such factors as formal and informal institutions, governments' roles, the organizational culture, corporate governance, leadership styles, use of organizational resources, managerial capabilities, employee behavior and what outcome CE brings are all potential areas of study that are still under-researched.

Finally, we also contribute to the literature by showing that this stream of research needs more novel methodologies. Specifically, our review shows that the CE research should also focus on developing novel research methods that not only use secondary sources of information but also include case studies. Given the fast changes in global conditions that can significantly affect CE of EMFs, case studies allow scholars to examine EMFs' CE in a dynamic manner through stage models. Longitudinal case studies

will also enable the researchers to carve out the processes that EMFs use to foster CE. In addition, longitudinal research designs, in general, will enable future research to examine the CE process within the context of the institutional, technological and industrial evolution of emerging markets.

Notes

- E20 countries include Argentina, Brazil, Chile, China, Columbia, Egypt, India, Indonesia, Iran, Malaysia, Mexico, Nigeria, the Philippines, Poland, Republic of Korea, Russia, Saudi Arabia, South Africa, Thailand and Turkey.
- ABDC Journal Quality List, retrieved from https://abdc.edu.au/research/abdc-journal-list/ on February 16, 2019.

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Appendix 1

ABDC	Journal name	Number
A*	Journal of Economic Literature	8
A*	Academy of Management Review	7
A*	Academy of Management Journal	3
A*	Journal of the Academy of Marketing Science	2
A*	Journal of Product innovation Management	14
A	Asia Pacific Journal of Management	25
A	Journal of Small Business Management	13
A	Small Business Economics	11
A	Management International Review	8
A	R&D Management	8
A	Journal of International Marketing	6
A	International Journal of Management Reviews	5
A	Management & Organization Review	4
A	British Journal of Management	3
A	Entrepreneurship & Regional Development	3
A	Journal of Strategic Marketing	3
A	Academy of Management Perspectives	2
A	Corporate Governance: An International Review	2
A	Global Strategy Journal	2
A	Human Resource Management	2
A	International Journal of Human Resource Management	$\frac{1}{2}$
В	Thunderbird International Business Review	15
В	Emerging Markets Finance & Trade	7
В	Journal of Business Economics & Management	6
В	Asia Pacific Business Review	3
В	Journal of Marketing Theory & Practice	3
В	Service Industries Journal	3
В	International Journal of the Economics of Business	$\tilde{2}$
C	Journal of International Entrepreneurship	11
č	Emerging Markets Journal	5
Č	Journal of Developmental Entrepreneurship	5
č	Journal of Enterprising Culture	3
C C C C	South Asian Journal of Management	3
č	Creativity & Innovation Management	2
č	European Management Review	2
Č	Journal of Management & Governance	$\frac{2}{2}$

Table AI. Articles from ABDC journal list

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Appendix 2

	1 Academy of Management Journal 2 Academy of Management Perspectives 3 Academy of Management Review	30 Journal of Economic Perspective 31 Journal of enterprising Culture 32 Journal of Evolutionary Economics
30	4 Administrative Science Quarterly	33 Journal of Global Marketing
	5 Administrative Sciences	34 Journal of International Business Studies
	6 Asia Pacific Journal of Management	35 Journal of International Marketing
	7 Asian Journal of Technology Innovation	36 Journal of Management Studies
	8 British Journal of Management	37 Journal of Marketing
	9 China Economic Review	38 Journal of Product Innovation Management
	10 Chinese Management Studies	39 Journal of Small Business Management
	11 Entrepreneurial Business and Economics Review	40 Journal of World Business
	12 Entrepreneurship and Regional Development	41 Law and Policy in International Business
	13 Entrepreneurship Theory and Practice	42 Long Range Planning
	14 European Journal of Economics, Finance and	43 Management and Organization Review
	Administrative Science	- · · · · · · · · · · · · · · · · · · ·
	15 Global Strategy Journal	44 Management Decision
	16 Harvard Business Review	45 Management International Review
	17 Human Resource Management	46 Organizational Science
	18 Human Resource Management Review	47 Research Policy
	19 Industry & Innovation	48 Small Business Economics
	20 International Business Research	49 Strategic Management Journal
	21 International Business Review	50 Technology in Society
	22 International Journal of Business and Emerging Markets	51 Technology Innovation Management Review
	23 International Journal of Business Society	52 Technovation
	24 International Journal of Conflict Management	53 The European Journal of Development
	25 International Journal of Emerging Markets	Research 54 The International Journal of Human Resource Management
	26 International Journal of Organizational Leadership	
Table AII.	27 International Journal of Technology Management	56 The Quarterly Journal of Economics
List of journals	28 Journal of Business Economics and Management	57 Thunderbird International Business Review
reviewed	29 Journal of Business Venturing	58 World Development

Corresponding author
Qin Yang can be contacted at: yang@rmu.edu