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Learning and knowledge management in and out of emerging markets: Introduction to the special issue

1. Introduction

During the past three decades, many emerging markets around the world have undertaken economic reforms of varying magnitude with objectives that include a move away from inward-oriented import substitution policies toward outward-oriented export-led growth, improved access to foreign technology and capital in order to make domestic firms competitive in the global economy, and enhanced capabilities in value-added manufacturing industries to enable a broader shift of the economy away from traditional commodity goods (Hoskisson, Eden, Lau, & Wright, 2000; Wright, Filatotchev, Hoskisson, & Peng, 2005). While these economic reforms have yielded country-level benefits reflected in positive trade balances and economic growth, there is growing concern whether liberalization and global integration has the expected positive influence on the innovation capabilities and competitiveness of emerging economy firms (Chittoor, Aulakh, & Ray, 2015).

Recent research suggests that in place of the projection model of global expansion where firms expand into international markets to exploit their home-grown knowledge advantages, there is an imperative for firms to treat the world as a learning laboratory. Unlike traditional multinationals, new multinationals identify emerging knowledge from around the world, leverage it into innovations, and turn these into value. Companies are transitioning from the vertically integrated "do-it-all-yourself" approach toward a new model of open innovation in which they import ideas from without and let their own innovations enter the wider marketplace. This implies an important 'sensing' role for research and development (R&D), and the need to prospect foreign markets for knowledge, take the knowledge home, convert it into innovation capabilities, and develop new products. Participating in global resources and product markets therefore serves as a critical learning conduit (Hitt, Li, & Worthington, 2005; Luo & Tung, 2007; Mathews, 2006).

Research has focused on ways to understand how multinational corporations (MNCs) from developed nations enter and compete in various emerging markets. Furthermore, scholars are contributing to a growing body of research that concentrates on how firms from emerging markets internationalize to compete in the global arena. There is unanimity among researchers that competing within emerging markets and internationalizing out of these markets require strategic choices that are markedly different from those prescribed in traditional models of MNC behavior (Aulakh & Kotabe, 2008; Contractor, Kumar, & Kundu, 2007; Hoskisson, Wright, Filatochev, & Peng, 2013; Luo & Tung, 2007; Meyer, Estrin, Bhaumik, & Peng, 2009). But how firms learn and manage knowledge as they compete in and out of emerging markets is yet to gain serious scrutiny in the contemporary international business research (Lahiri, 2011; Peng, Bhagat, & Chang, 2010). The aim of this *JWB* special issue is to foster scholarship that develops new theory and promotes novel empirical and practitioner insights on learning and knowledge management (LKM) strategies in the context of emerging markets.

The literature well documents the importance of processes and outcomes of LKM (Argote & Miron-Spektor, 2011). Organizational learning theory considers firms as cognitive enterprises. Although some overlaps exist between learning and knowledge management, one can consider the former a precursor of the latter. Through learning, organizations are able to create, acquire, and transfer knowledge and accordingly modify behavior to reflect new knowledge and insights. Knowledge acquired as a result of learning allows firms to either reinforce or change organizational routines. Scholars advance the notion of *learning organizations*, wherein individual-level learning transfers to the organization level, resulting in shared mental models. These mental models allow leaders to update their firms' beliefs about various cause-effect relationships relating to themselves, their markets, and their competitors, and devise strategies to adjust and respond to internal and external environments. A firms' experience, both positive and negative, facilitates learning and consequent knowledge development (Chang, Gong, & Peng, 2012). Scholars agree that properly implemented LKM processes can be a source of competitive advantage. However, they also caution that firms can make erroneous strategic decisions if the basis for learning is biased representation of past reality.

To compete in foreign markets, MNCs need to learn and gather knowledge about the local business environment, including roles played by various stakeholders, business partners, and competitors. Dealing with various components of learning (information acquisition, information dissemination, shared interpretation, and development of organizational memory) and knowledge management can be tricky as host nations may present institutional environments that may be ambiguous and uncertain to foreign MNCs. Therefore, MNCs may need to frame different LKM strategies that fit local contexts and allow them to compete over local rivals by grafting new knowledge, or engaging in learning and knowledge gathering from others. Given that business environments in emerging markets are markedly different from those in developed nations, question arises as to how MNCs engage in LKM as they

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compete in and out of emerging markets and whether LKM processes differ owing to differences in MNCs' home market attributes.

This special issue comprises scholarly contributions that advance understanding of LKM strategies deployed by both firms operating in and out of emerging markets. In particular, the intent is that submissions address the following issues: How do developed nation MNCs (DMNCs) learn and build knowledge from their prior entries into emerging markets? What strategies and structures do DMNCs employ to use existing knowledge to compete in emerging markets? How do emerging-market MNCs (EMNCs) learn and build knowledge from their prior internationalization moves out of their home markets? What strategies and structures do EMNCs employ to use existing knowledge to compete in developed markets or other emerging markets (Peng, 2012)? How do DMNCs and EMNCs organize resources and capabilities (Lahiri, Kedia, & Mukherjee, 2012) to efficiently formulate and implement LKM strategies?

The response to our call for papers was 34 manuscripts focusing on the general themes outlined above. After the first round of revision, eight papers were selected for further consideration based on the comments of reviewers (three per submitted paper, see Appendix A), and the authors were asked to make final revisions and resubmit. Six of these papers appear in the special issue. While these six articles do not discuss all the issues we outlined in the call for papers, given their diverse geographical context, theoretical foundations, and methodological approaches, collectively they provide important insights related to knowledge management, innovation, learning, and competitive advantage related to emerging markets. Before discussing the specific contributions of each article, we first provide a broad overview of the research streams focusing on knowledge management and learning in emerging markets (or developing economies).

2. Innovation, learning, and knowledge management in developing/emerging economies[1]

In order to catch up with developed economies in technology development, developing countries have long sought to use national policies to stimulate international technology transfer and domestic absorption of advanced technologies (Hoekmana, Maskusa, & Saggia, 2005). Accordingly, there is a strong tradition in development studies, economics, and management literature to understand both macro- and micro-level factors related to innovation and development (e.g., Abramovitz, 1986; Kim, 1997; Lall, 1992; Li & Kozhikode, 2008; Nelson & Pack, 1999; Nelson, 2005). This literature falls under three broad themes: national-level innovation, innovation and learning through spillovers, and learning by doing. Below we discuss the major underpinning of each theme, fully acknowledging that these are not mutually exclusive categories and that there are interconnections between the themes and their units of analyses. The underlying commonality in all the themes is that developing economies need to have access to international know-how in order to catch up with the innovation frontier. For instance, according to Nelson (2008, p. 5), "[f]or countries aiming to catch up, the basic challenge is to learn to master new ways of doing things . . . . The innovation in catching up involves bringing in and learning to master ways of doing things that may have been used for some time in the advanced economies of the world, even though they are new for the country or region catching up." However, the vehicles through which developing economies access international/global knowledge differ across the three themes in the literature.

2.1. National policies and innovation regimes

The first theme related to innovation and learning in developing countries focuses on national policies related to moving countries toward greater industrialization, which necessarily entails moving up the technology frontier. Based on the success of newly industrialized countries (NICs) in the 1970s and 1980s, studies examine how these countries quickly move toward export-led growth and the associated impact on economic development. For instance, Lall (1992) suggests that national technological capabilities in some of these countries were the outcome of interplay of incentive structures (related to macroeconomics, factor markets, and competition) with human resources, technological effort, and institutions. Since each of these may be underdeveloped in developing economies, the role of government in making corrective interventions becomes important. This idea of government playing a key mediating role in facilitating technology capabilities is fully explored by Kim (1997) in examining the developmental state behind the growth model of South Korea (also see Kohli, 2004). This line of thinking is rooted in what Nelson (2005) characterizes as the accumulation theoretical approaches which see learning and economic growth in developing economies coming mainly through government investments in physical and human capital in order to absorb and adapt imported technological know-how (Abramovitz, 1986; Chittoor et al., 2015; Kim 1997). According to Lall (1992, p. 180), "South Korea has developed arguably the most advanced and competitive base of technological capabilities in the developing world, drawing on foreign technology mainly in non-equity forms (i.e., by capital goods imports, licensing, and minority foreign ventures . . .)" while "Singapore, in contrast, relied entirely on technology generated elsewhere, but intervened (selectively) to induce investors to move up the technological scale and (functionally) to provide a well-trained workforce." Much of this research stream examined the technology and innovation aspects during the period when developing economies practiced some form of import-substitution industrialization and where technology imports in mainly capital goods and arms-length know-how facilitated the development of national level technological regimes.

The above discussed theme of research provided important understanding of national- level technological trajectories and was instrumental in understanding how erstwhile developing economies transitioned to NICs through economic development facilitated by export orientation. However, the level of analysis is at the country level and emphasizes the primacy of the state as the vehicle that facilitates access and absorption of imported know-how. These accumulation theories have been criticized on the grounds that they "pay little explicit attention to firms, seeing their behavior as being determined basically by the environment – the incentives and constraints – they face, which determines the actions that are most profitable" (Nelson, 2005, p. 42). Accordingly, a substantial body of research has developed around evolutionary and behavioral theories of the firm (termed assimilation theories), which stress innovation, learning, and entrepreneurship in developing economies through the lens of 'learning by doing' (Lall, 1997; Nelson, 2005). We discuss the major insights from this theme below.

2.2. Knowledge transfer through spillovers

A second prominent theme in learning and knowledge management in developing economies relates to the spillover

[1] We use the terms developing economies and emerging markets interchangeably. While recent articulations in the academic literature and popular press distinguish emerging markets based on high and persistent growth rates, we believe that the issues related to institutional development, absorptive capacities, and learning and knowledge management persist in most non-OECD countries and, therefore, implications from the papers in the special issue apply to a broad definition of developing economies.

effects of the presence of foreign MNCs in local markets. Since the 1980s, there has been a general trend of market liberalization and, to a certain extent, privatization in a large number of developing economies. One major motivation behind liberalization is to increase inward foreign direct investment (FDI) in key industries. With the growth of FDI into developing markets, especially by advanced country MNCs setting up operations in developing country markets, there has been an active stream of research that examines whether the know-how associated with such FDI benefits developing economy firms. Placed in the context of spillover effects, this stream of research identifies conditions under which "[a]n MNE's investment in a country enables local enterprises to observe its technologies, organizational practices, and strategies and to imitate these techniques in their own operations" (Spencer, 2008, p. 342). Labeled as demonstration effect, these positive spillovers lead to internalization of know-how by local firms that manifests in increased productivity. However, research also suggests the crowding out of local firms whereby MNCs, with greater resource endowments, limit access to critical but scarce resources to local firms and, thus, their superior capabilities may drive out local firms from an industry. Spencer (2008) develops some theoretical arguments as to when the positive and negative spillovers will occur in developing economies. Her model primarily outlines the activities of MNCs and the institutional context as determinants of horizontal spillovers to local firms. Meyer and Sinani (2009) perform a meta-analysis of published empirical studies to examine the effect of inward FDI on positive spillovers to recipient countries. Using a country's level of development in terms of income, institutional framework, and human capital, they find a curvilinear relationship between level of development and positive spillovers, i.e., "very poor and very rich countries appear to benefit most from inward FDI" (Meyer & Sinani, 2009, p. 1089). The authors attribute the spillover benefits to the awareness, motivation, and capability of local firms to react to the presence of foreign entry and the technology gap that exists between foreign and local firms. Criscuolo and Narula (2008) combine the arguments of the accumulation theories with behavioral theory insights related to absorptive capacity to examine the relationships between national absorptive capacity, technology gap, and spillover effects of inward FDI. While the spillover literature uses MNC characteristics (rather than developing economy firm characteristics) and the institutional context of the FDI as determinants of spillover effects, it extends the first theme of research by focusing on the potential of knowledge flows and learning among organizations.

2.3. Learning-by-doing and knowledge management

The third theme in the literature related to knowledge management and innovation in developing countries focuses on 'learning by doing' at the firm-level unit of analysis. The precursor to this stream of research is the "learning by exporting" literature in economics and development studies that examine how exporting influences innovation capabilities (see Wagner, 2007 for a review of this literature). Given the firm-level analysis of this stream of research, the theoretical underpinnings are rooted in learning, evolutionary, and behavioral theories of the firm (Argote & Miron-Spektor, 2011; Crossan, Lane, & White, 1999; Easterby-Smith, Lyles, & Tsang, 2008). According to Lall (1992, p. 166), "[t]he starting point of these theories is that firms cannot be taken to operate on a common production function. Firms do not share technological knowledge equally, nor is this knowledge easily imitated by or transferred across firms. Transfer necessarily requires learning because technologies are tacit, and their underlying principles are not always clearly understood." Thus, the characteristics of the firms, their learning strategies, absorptive capacities, internal processes, etc. become important determinants of accessing and internalizing external know-how. One substantial substream of research within the learning by doing literature, especially in the context of emerging economies, deals with understanding the knowledge transfer mechanisms through inter-organizational alliances (Dhanaraj, Lyles, Steensma, & Tihany, 2004; Easterby-Smith et al., 2008). In fact, some of the empirical context of these studies is rooted in public policy choices made by a number of liberalizing developing economies to force MNC entrants to form joint ventures or strategic alliances with indigenous firms in order to facilitate knowledge spillovers.

Besides the inter-organizational alliances with developed country firms as a conduit for knowledge transfer and learning, an active area of research in the context of emerging markets is the phenomenon of emerging market multinationals, especially those internationalizing through high commitment modes of entry including foreign acquisitions. There is an active debate in the international business literature about whether the internationalization paths of these firms conform to the traditional theories of the multinational firms. While this debate is ongoing, there is general agreement in the literature that the motivation behind the rapid internationalization of emerging market firms is more exploratory in nature. In fact, the springboard (Luo & Tung, 2007) and the linkage, leverage, and learning (Mathews, 2006) frameworks explaining the emerging market multinationals are predicated on the learning and the associated knowledge transfer motivations behind the unique trajectories of emerging economy firms. A number of studies attribute the unconventional paths of emerging economy firms' internationalization, including expanding to institutionally distant markets and using high-risk entry modes such as acquisitions (Gubbi, Aulakh, Ray, Sarkar, & Chittoor, 2010), to knowledge acquisition being their primary motivation. However, there is relatively less work on understanding the mechanisms through which the acquired knowledge transfers and internalizes. Thus, with its focus on firm-level analysis, the learning by doing literature has the potential to complement the assimilation and spillover themes of research, especially related to micro-level analysis of learning and knowledge management. The six papers in this special issue primarily use the learning by doing research approach to understand knowledge management in and out of emerging markets. However, some allude to the other two themes in elaborating fine-grained mechanisms of knowledge management and learning strategies. We summarize these papers in Table 1 and we discuss their main focus and findings below.

3. Papers in the special issue

As discussed above, the three themes related to learning and innovation highlight the need for emerging markets to access and internalize foreign-based knowledge, whether it is through selective intervention in technology factor markets (i.e., selectively facilitating imports of technology and know-how), spillovers through inward FDI, or learning through export orientation. While macro-level evidence suggests that the liberalized trade and investment regimes in developing economies have attracted increased R&D investments by established multinationals (U.N. World Investment Report, 2005) and there have been increased flows for foreign technology and know-how, there are concerns about whether such access to international know-how has induced investments in innovation of developing economy firms. Literature highlights that increased access to global technology markets may lead to a concurrent decline in innovation efforts by indigenous firms, either because of a substitution effect whereby easy access to externally developed technology substitutes for in-house investments in innovation (Kumar & Aggarwal, 2005), or because of local firms' psychological and economic dependence on foreign

partners for know-how creates a disincentive to invest in innovation (Wang, 2005).

3.1. Complementarity of external and internal knowledge management

The question as to whether external knowledge complements or substitutes in-house innovation efforts by emerging economy firms is addressed through the quantitative paper of Jiang, Branzei, and Xia (2016) in this issue. The authors address how internationalization choices help EMNCs transition from external knowledge dependence to internal knowledge-based self-sufficiency. Relying on theories of indigenous innovation and knowledge management, and utilizing a sample of Chinese manufacturing firms drawn from 1998 to 2007 census datasets, the authors develop and test seven hypotheses. Their testing of the moderation effect of foreign equity and export orientation on the relationship between knowledge and indigenous innovation suggests that while firms' export orientation incentivizes investments in internal knowledge, foreign equity dis-incentivizes such investments. The paper's main contribution lies in explaining how progressive engagement in international transactions gradually shifts Chinese firms' reliance from external to internal knowledge and impacts indigenous innovation outcomes. Since innovation is an important aspect of firms' competitiveness and growth, this paper adds value by shedding light on knowledge and innovation in Chinese firms. The paper also contributes to public policy choices regarding the relative impact of pushing the export orientation of local firms versus allowing access to foreign knowledge by forcing foreign firms to share knowledge by investing in local firms.

The recent literature on emerging market multinationals converges on the idea that the unconventional internationalization path of these firms is motivated by access to top strategic resources including technological and market know-how. An increasing trend related to this is the aggressive cross-border acquisitions (CBA) by emerging market firms including those in developed markets (some high-profile CBAs include Lenovo's acquisition of IBM's computer division and Tata's acquisitions of Jaguar and Landrover) (Gubbi et al., 2010). The literature also has highlighted that EMNCs do not possess the traditional competitive advantages identified on in the study of traditional MNCs. This poses an important question: what type of emerging market firms (given their lack of traditional advantages) are likely to undertake CBAs, that is, do firms need some base advantages to be able to access know-how through CBAs. The paper by Buckley, Munjal, Enderwick, and Forsans (2016) examines EMNC internationalization through CBAs. Using a sample of 1138 acquisitions undertaken by 515 Indian MNEs during the period of 2000–2013, the authors show that EMNCs possess *interface competence* and are able to combine in-house resources with experiential market knowledge

Table 1
Summary of Articles in the Special Issue.

Authors	Research focus	Theoretical foundations	Setting	Approach	Data sources and methodology	Main findings
Jiang, Branzei, & Xia	Internationalization, internal and external knowledge, and indigenous innovation	Theories of indigenous innovation and interplay between external and internal knowledge	China	Quantitative	–1998-2007 census dataset of Chinese manufacturing firms. –Use of Generalized Estimating Equations (GEE) adopting STATA 12.0 XTGEE regression.	Investments in internal knowledge is incentivized by export orientation and dis-incentivized by foreign equity in Chinese firms
Buckley, Munjal, Enderwick, & Forsans	In-house resource, experiential and non-experiential knowledge, cross-border acquisition	Uppsala model and Global factory model	India	Quantitative	–2000 to 2013 archival data from Thomson One Banker and Prowess databases. –Use of Panel data set, Generalized Least Square method and Negative Binomial method	Cross-border acquisitions are facilitated by a combination of in-house resources with experiential market knowledge and externally sourced technological knowledge
Rui, Cuervo-Cazurra, & Un	Learning-by-doing processes, country-of-origin and capability upgrading to international level	Learning-by-doing and capability upgrading	China	Qualitative	–Documents (annual reports, web sites etc.), field observations, and semi-structured interviews –In-depth case study of a Chinese construction firm	Learning-by-doing involves four distinct processes and country-of origin influences learning-by doing
Bilgili, Kedia, & Bilgili	Resource environment, learning strategies, knowledge source, and absorptive capacity	Organizational learning	Three types of emerging markets	Conceptual	NA	Develops a framework that outlines how firms' home country environment influences absorptive capacity by necessitating appropriate learning strategies and sources of new knowledge
Rui, Zhang, & Shipman	Knowledge transfer amongst emerging markets	Theory of knowledge transfer including composition-based view (CBV)	Africa	Qualitative	– Documentation (annual reports, market analysis etc.), fieldwork observations and interviews – Case studies of 19 Chinese MNCs that carried out infrastructure projects in Africa between 2008 and 2015	The resultant "relevant knowledge recipient ownership model" contributes to knowledge transfer theory by describing and explaining the new type of knowledge and its distinct form of transfer associated with EMNCs.
Kotabe & Kothari	Paths to building competitive advantage in developed countries	Institutional environment and firms' competitive advantage	India and China	Qualitative	–Historical longitudinal analysis of 16 firms from 7 industries using documents from 1950-2008 – Computer-assisted, network-based text analysis	EMNCs' evolutionary paths to building competitive advantage from home market to developed countries is based on EMNCs' ability to (a) acquire and absorb resources to build own advantage, and (b) find new market niches and enhance innovation capabilities to overcome liability of emergingness.

and externally sourced technological knowledge to undertake CBAs. The authors explain that while experiential market knowledge helps to identify opportunities and constraints for overseas acquisition, externally sourced technological knowledge augments the technological competence possessed by the firm. To conduct their research, the authors utilize the Uppsala model of internationalization and the Global Factory model. This paper's primary contribution lies in explaining how knowledge management matters as a precursor to CBAs.

3.2. Organizational processes and knowledge management

While the first two papers in the special issue examine the relationship between external and in-house knowledge generation in developing economies, Rui, Cuervo-Cazurra, and Un (2016) use a qualitative methodology to understand the internal processes used by emerging market firms in pursuing learning-by-doing and capability upgrading to international levels. The authors conduct an in-depth case study of a large Chinese construction firm (CSCEC) and explain how learning-by-doing entails four processes: integration, trial and error, repetition, and extension. In addition, the authors explain how particular attributes of emerging markets modify the relationships between the four learning-by-doing processes and the upgrading of capabilities. The authors develop seven propositions that could serve as a framework for future empirical studies in different geographical contexts. Their article makes important contributions to both the learning and emerging market literature. In particular, by going in-depth into the fine-grained processes and linking those to the specific characteristics of emerging markets, this article allows future research to develop context-specific hypotheses to further probe the processes and boundary conditions underlying the learning by doing approaches identified in the literature.

Besides the importance of resources and capabilities as precursors and outcomes of participating in international factor markets, the internalization of external knowledge and having effective knowledge management strategies depends on the firms' ability to effectively identify, access, and internalize relevant knowledge—in other words, by successfully utilizing its absorptive capacity. The conceptual article by Bilgili, Kedia, and Bilgili (2016) focuses on EMNCs' learning strategies and absorptive capacity development. Using an organizational learning perspective, the authors develop a framework that explains how the environmental factors of firms' home countries (institutional development and factor market development) influence the choice of learning strategies. The authors suggest that firms' institutional factors can be low, medium, or high, and their learning strategies can be duplicative imitation, creative imitation, and innovation. The authors elaborate how firms can search for internal or external sources of new knowledge (or a combination thereof) to obtain a low, moderate, or high form of absorptive capacity. The discussion covers three types of economies: traditional emerging market economies, mid-range emerging market economies and developed economies. The authors develop six propositions to summarize their main arguments. The article is interesting since (a) absorptive capacity is important for EMNCs' growth, competitiveness, and survival, and (b) research is lacking on how these firms develop absorptive capacity utilizing learning and various knowledge sources.

3.3. Knowledge flows and competitive advantage

Much of the literature on knowledge management in emerging markets focuses on accessing know-how from advanced economies and employing it to adapt to local markets or use it as a springboard for indigenous innovation. The assumption here is that the knowledge flows from the North (developed economies) to the South (developing economies). However, there has been a strong tradition of South–South flows of factors of production as reflected in the literature on third-world multinationals (Aulakh, 2007) and, more recently, on investments by large emerging market firms in other developing economies (for example, Chinese overseas investments in developing economies, Mahindra & Mahindra Limited investing in auto manufacturing in South Africa, etc). There is relatively little research on how South-South knowledge flows. Rui, Zhang, and Shipman (2016), contribute to this gap in the literature by examining the types of knowledge emerging market multinationals transfer to other emerging markets and the mechanisms through which such knowledge is transferred. They base their research on case studies of 19 Chinese MNCs that carried out infrastructure projects in Africa between the period 2008 and 2015. Utilizing theories of knowledge transfer including the composition-based view (CBV), the authors identify a new type of knowledge (relevant knowledge) and a new model of transfer (recipient ownership) that are associated with EMNCs. The authors develop a *relevant knowledge recipient ownership model* that suggests EMNCs create competitiveness in emerging markets from distinct characteristics of their relevant knowledge (applicability, assimilability, and affordability) and recipient-driven transfer (selection, scrutiny, and synthesis). The authors develop seven propositions in their paper to summarize their main points.

Since a major underlying objective of external knowledge acquisition by emerging market firms is to move up the value curve in order to compete in domestic and international markets, research providing linkages between knowledge management and competitive advantages has the potential to improve our understanding of the determinants and outcomes of knowledge management strategies. Kotabe and Kothari (2016) provide new insights through an examination of how EMNCs build competitive advantage from their home markets to developed markets. By conducting a historical longitudinal analysis of 16 firms originating from India and China, the authors find that the evolutionary paths to building competitive advantage is based on the ability of EMNCs to (a) acquire resources and absorb them to build own advantage, and (b) find new market niches and enhance innovation capabilities to overcome the liability of emergingness. The authors' multiple case-based inductive approach suggests that EMNCs acquire resources through cash-rich positions and acquisitions, and absorb them through learning and knowledge sharing. The authors highlight that building competitive advantage by EMNCs involves features that are distinct from those of the DMNCs. Since competitive advantage relates to a firm's growth, competitiveness and survival, this article contributes to the literature by shedding light on developing breakthrough innovations in emerging markets and selectively transferring these innovations to developed-country markets.

As evident from the above discussion, the articles in this special issue increase our understanding of LKM in and out of emerging markets. As expected, LKM is the dominant theme in all six papers. However, the articles differ in their contexts (emerging market groups, India, China, and Africa) and in the firm-level outcomes they study: absorptive capacity, cross-border acquisitions, indigenous innovation, competitive advantage, knowledge transfer, learning-by-doing, and capability upgrading. Various components of the papers (literature review, models, tables, propositions, empirical findings, and theoretical and managerial implications) add to the current knowledge about LKM in the emerging market context and provide useful avenues for subsequent scholarship.

4. Areas for future research

Now that our collective understating of EMNCs' LKM has significantly increased, what do we do next? Probably the best way

to progress is to build on the current research and continue to engage in meaningful and relevant scholarship. The six articles suggest several fruitful avenues for future research. These include increasing study sample size, replicating study using different geographical contexts, industry settings and ownership type (state versus private) for the purpose of comparison/generalization of findings, and including additional factors/relevant constructs to conceptualize/examine firm strategy and behavior and outcomes. Other future research directions proposed by the authors include analyzing newer and different types of knowledge, innovation processes, and learning approaches to compare the current findings, and undertaking the comparison of business-group affiliated firms with stand-alone firms in their capabilities for combining knowledge and resources required in the internationalization process. The papers further suggest that future research may investigate entry of EMNCs into other emerging markets and examine if such entries have any impact on the firms' strategies in developed markets.

In terms of research methodology, the authors suggest engaging in more in-depth case studies, obtaining micro-level information using field studies, participant observations etc., and adopting multilevel approaches. These are worthwhile research directions for the future. The call for papers for this special issue included an illustrative list of questions for the contributing authors to consider. Indeed the six papers selected for the special issue have addressed several of those suggested questions. We are hopeful that scholars in the future will continue to extend our understanding of LKM in the context of emerging markets. While we do not want to restate the importance of what the contributing authors have already suggested, we can certainly outline a few important directions of research to pursue in the future.

Extant research suggests that emerging markets are heterogeneous (Bilgili et al., 2016; Hoskisson, Wright, Filatotchev, & Peng, 2013). Therefore, future research with the goal of understanding in more detail how such heterogeneity impacts LKM and related strategies of EMNCs and DMNCs will be useful. Such research needs to examine the heterogeneity issue for EMNCs venturing into other emerging markets and developed markets, and DMNCs entering various emerging markets. Within this stream of future research, scholars can investigate how EMNCs and DMNCs learn and build knowledge from their prior entries into emerging markets or developed markets, as the case may be. It will be interesting to study how firms modify their entry strategies and competitive behavior in different host markets based on knowledge and insights gained from prior entries in those or similar markets. To further advance our understanding, future scholars need to investigate how and why LKM strategies of DMNCs and EMNCs differ. Since industry context impacts firm strategy, future research also needs to shed light on how LKM and related strategies differ across industries and sectors (Madsen & Desai, 2010). Although we were hoping to receive papers examining different kinds of knowledge flows across North-South, South-North, and South-South directions, as well as papers comparative in nature, most of the articles in the special issue focus on emerging market firms' knowledge management in and out of their own markets. How advanced country firms manage knowledge generated in emerging markets continues to be an area that needs work. This is particularly important because both the popular press and academic articles recognize the possibility of such flows broadly termed as 'reverse innovation' (e.g., Govindarajan & Ramamurti, 2011). The contemporary global environment for businesses has increased the possibility of multidirectional knowledge flows as well as diverse loci of innovation, and future research can develop models that capture the underlying mechanisms that facilitate or restrict the effective integration of such flows.

Scholars who want to dig deeper into the *process* aspect of LKM may study how firms acquire, absorb, and manage knowledge internally as they internationalize, and how learning from success as well as failure actually happens within the firm. In this line of research, scholars may study how individual-level learning transfers to the organization level resulting in shared mental models. Scholars may also investigate how firms' internationalization reinforces or changes organizational routines and how such routines affect further internationalization in and out of emerging markets. Future researchers who want to conduct research at the individual level may find the concept of microfoundation and behavioral strategy useful in understanding how individuals, decisions makers, and top management (and their interactions) drive LKM and associated strategies (Contractor, Foss, Kundu, & Lahiri, 2016). This aspect of research is important to pursue since firm-level decisions are ultimately undertaken by living individuals whose backgrounds (age, gender, education, etc.) may differ substantially.

Whatever the process undertaken by firms with regard to their LKM, it should ultimately lead to important outcomes that include successful internationalization. Prior research has shown how internationalization can affect firm performance in different ways (Hennart, 2011). Therefore, it will be interesting to learn how LKM strategies of EMNCs and DMNCs influence firm performance through internationalization in and out of emerging markets. Previous research further suggests that many EMNCs are latecomers in the domain of internationalization and are trying to catch up with established players in the global market (Li & Kozhikode, 2008). Future research should delve into how LKM helps EMNCs overcome the latecomer disadvantage and enable catching up with more resource-endowed competitors. Finally, future research needs to undertake a longitudinal examination of firms' LKM strategies and their consequences, both positive and negative.

Appendix A.

Reviewers for the special issue

The editors thank the following reviewers for reading and providing detailed comments to the authors regarding their papers.

Ahmet Kirca
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Rabi Bhagat
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References

Abramovitz, M. (1986). Catching up, forging ahead, and falling behind. *Journal of Economic History*, *46*(2), 385–406.
Argote, L., & Miron-Spektor, E. (2011). Organizational learning: From experience to knowledge. *Organization Science*, *22*(5), 1123–1137.
Aulakh, P. S., & Kotabe, M. (2008). Institutional changes and organizational transformation in developing economies. *Journal of International Management*, *14*(3), 209–216.
Aulakh, P. S. (2007). Emerging multinationals from developing economies: Motivations, paths and performance. *Journal of International Management*, *13*(3), 235–240.
Bilgili, T. V., Kedia, B. L., & Bilgili, H. (2016). Exploring the influence of resource environments on absorptive capacity development: The case of emerging market firms. *Journal of World Business*.
Buckley, P. J., Munjal, S., Enderwick, P., & Forsans, N. (2016). The role of experiential and non-experiential knowledge in cross-border acquisitions: The case of Indian multinational enterprises. *Journal of World Business*.
Chang, Y., Gong, Y., & Peng, M. W. (2012). Expatriate knowledge transfer, subsidiary absorptive capacity, and subsidiary performance. *Academy of Management Journal*, *55*(4), 927–948.
Chittoor, R., Aulakh, P. S., & Ray, S. (2015). Accumulative and assimilative learning, institutional infrastructure, and innovation orientation of developing economy firms. *Global Strategy Journal*, *5*, 133–153.
Contractor, F. J., Kumar, V., & Kundu, S. K. (2007). Nature of the relationship between international expansion and performance: The case of emerging market firms. *Journal of World Business*, *42*(4), 401–417.
Contractor, F. J., Foss, N., Kundu, S. K., & Lahiri, S. (2016). Microfoundations of global strategy: Role of leadership and manager characteristics. *Call for Papers: Global Strategy Journal* . http://gsj.strategicmanagement.net/pdf/GSJ_-_Microfoundations.pdf.
Criscuolo, P., & Narula, R. (2008). A novel approach to national technological accumulation and absorptive capacity: Aggregating Cohen and Levinthal. *The European Journal of Development Research*, *20*(1), 56–73.
Crossan, M. M., Lane, H. W., & White, R. E. (1999). An organizational learning framework: From intuition to institution. *Academy of Management Review*, *24*(3), 522–537.
Dhanaraj, C., Lyles, M. A., Steensma, H. K., & Tihany, L. (2004). Managing tacit and explicit knowledge in IJVs: The role of relational embeddedness and the impact on performance. *Journal of International Business Studies*, *35*(5), 428–442.
Easterby-Smith, M., Lyles, M. A., & Tsang, E. W. K. (2008). Inter-organizational knowledge transfer: Current themes and future prospects. *Journal of Management Studies*, *45*(4), 677–690.
Govindarajan, V., & Ramamurti, R. (2011). Reverse innovation: emerging markets and global strategy. *Global Strategy Journal*, *1*, 191–205.
Gubbi, S. R., Aulakh, P., Ray, S., Sarkar, M. B., & Chittoor, R. (2010). Do international acquisitions by emerging-economy firms create shareholder value? The case of Indian firms. *Journal of International Business Studies*, *41*(3), 397–418.
Hennart, J.-F. (2011). A theoretical assessment of the empirical literature on the impact of multinationality on performance. *Global Strategy Journal*, *1*(1–2), 135–151.
Hitt, M. A., Li, H., & Worthington, I. V. (2005). Emerging markets as learning laboratories: Learning behaviors of local firms and foreign entrants in different institutional contexts. *Management and Organization Review*, *1*(3), 353–380.
Hoekmana, B. M., Maskusa, K. E., & Saggia, K. (2005). Transfer of technology to developing countries: Unilateral and multilateral policy options. *World Development*, *33*(10), 1587–1602.
Hoskisson, R., Eden, L., Lau, C.-M., & Wright, M. (2000). Strategy in emerging economies. *Academy of Management Journal*, *43*, 249–267.
Hoskisson, R. E., Wright, M., Filatotchev, I., & Peng, M. W. (2013). Emerging multinationals from mid-range economies: The influence of institutions and factor markets? *Journal of Management Studies*, *50*(7), 1295–1321.
Jiang, M. S., Branzei, O., & Xia, J. (2016). DIY: How internationalization shifts the locus of indigenous innovation for Chinese firms. *Journal of World Business*.
Kim, L. (1997). *Imitation to innovation: the dynamics of Korea's technological learning*. Boston, MA: Havard Business School Press.
Kohli, A. (2004). *State-directed development: political power and industrialization in the global periphery*. Cambridge, U.K: Cambridge University Press.
Kotabe, M., & Kothari, T. (2016). Emerging market multinational companies' evolutionary paths to building a competitive advantage from emerging markets to developed countries. *Journal of World Business*.
Kumar, N., & Aggarwal, A. (2005). Liberalization: outward orientation and in-house R&D activity of multinational and local firms: A quantitative exploration for Indian manufacturing. *Research Policy*, *34*, 441–460.
Lahiri, S., Kedia, B. L., & Mukherjee, D. (2012). The impact of management capability on the firm resource-performance relationship: Evidence from Indian offshore outsourcing service providers. *Journal of World Business*, *47*(1), 145–155.
Lahiri, S. (2011). India-focused publications in leading international business journals. *Asia Pacific Journal of Management*, *28*(2), 427–447.
Lall, S. (1992). Technological capabilities and industrialization. *World Development*, *20*(2), 165–186.
Lall, S. (1997). Selective policies for export promotion: Lessons from the Asian Tigers. In Research for Action, 43. Helsinki, Finland: United Nations University, World Institute for Development Economics Research (UNU/WIDER).
Li, J., & Kozhikode, R. K. (2008). Knowledge management and innovation strategy: The challenge for latecomers in emerging economies. *Asia Pacific Journal of Management*, *25*(3), 429–450.
Luo, Y., & Tung, R. L. (2007). International expansion of emerging market enterprises: A springboard perspective. *Journal of International Business Studies*, *38*(4), 481–498.
Madsen, P. M., & Desai, V. (2010). Failing to learn? The effects of failure and success on organizational learning in the global orbital launch vehicle industry. *Academy of Management Journal*, *53*(3), 451–476.
Mathews, J. A. (2006). Dragon multinationals: New players in 21st century globalization. *Asia Pacific Journal of Management*, *23*, 5–27.
Meyer, K. E., & Sinani, E. (2009). When and where does foreign direct investment generate positive spillovers? A meta-analysis. *Journal of International Business Studies*, *40*, 1075–1094.
Meyer, K. E., Estrin, S., Bhaumik, S. K., & Peng, M. W. (2009). Institutions, resources, and entry strategies in emerging economies. *Strategic Management Journal*, *30*(1), 61–80.
Nelson, R. R., & Pack, H. (1999). The Asian miracle and modern growth theory. *Economic Journal*, *109*(457), 416–436.
Nelson, R. R. (2005). *Technology, institutions and economic growth*. Cambridge, MA: Harvard University Press.
Nelson, R. R. (2008). Economic development from the perspective of evolutionary growth theory. *Oxford Development Studies*, *36*(1), 9–21.
Peng, M. W., Bhagat, R. S., & Chang, S.-J. (2010). Asia and global business. *Journal of International Business Studies*, *41*(3), 373–376.
Peng, M. W. (2012). The global strategy of emerging multinationals from China. *Global Strategy Journal*, *2*(2), 97–107.
Rui, H., Cuervo-Cazurra, A., & Un, C. A. (2016). Learning-by-doing in emerging market multinationals: Integration, trial and error, repetition and extension. *Journal of World Business*.
Rui, H., Zhang, M., & Shipman, A. (2016). Relevant knowledge and recipient ownership: Chinese MNCs' knowledge transfer in Africa. *Journal of World Business*.
Spencer, J. W. (2008). The impact of multinational enterprise strategy on indigenous enterprises: Horizontal spillovers and crowding out in developing countries. *Academy of Management Review*, *33*(2), 341–361.
U.N. World Investment Report (2005). *Transnational corporations and the internationalization of R&D*. New York and Geneva: United Nations.
Wagner, J. (2007). Exports and productivity: A survey of the evidence from firm level data. *The World Economy*, *30*(1), 60–82.
Wang, Z. (2005). *2005 report of transnational corporations in China*. Hong Kong: China Economic Publishing House.
Wright, M., Filatotchev, I., Hoskisson, R., & Peng, M. (2005). Strategy research in emerging economies: Challenging the conventional wisdom. *Journal of Management Studies*, *42*(1), 1–33.

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