



Knowledge creation capability under different innovation-investment motives abroad: The knowledge-based view of international innovation management

Peter Záborský^{a,*}, Igor Ingršt^b, Krishna Raj Bhandari^c

^a University of Auckland Business School, New Zealand

^b Masaryk University, Czech Republic

^c University of Helsinki, Helsinki, Finland

ARTICLE INFO

Handling Editor: Dr Stelvia Matos

Keywords:

Knowledge-based view
 Knowledge creation capability
 Organisational capabilities
 Foreign direct investment motives
 Internationalisation of innovation
 R&D internationalisation
 Emerging market multinationals
 Ambidexterity
 Knowledge ecosystems

ABSTRACT

This paper focuses on knowledge creation capability and motives for international investment by emerging-market multinational enterprises (EMNEs) innovating in emerging markets. It analyses the motives for the relatively underresearched innovation-intensive investment by non-Chinese EMNEs in Central and Eastern Europe and offers new insights to the knowledge-based view of international innovation management. Building on interviews with senior managers from 11 EMNEs from India, Brazil, Russia, South Africa, Malaysia, and South Korea, this qualitative study develops, through a hybrid thematic analysis approach, a knowledge-based capability perspective on managing knowledge creation under different innovation-investment motives abroad, including knowledge seeking, market seeking, and dual motives. Knowledge creation capability includes knowledge integration, knowledge sharing, and knowledge cocreation. Both internal and external dimensions of knowledge creation capability are conceptualised, along with elements linking internal and external dimensions, namely managerial orchestration and innovation projects. The paper contributes to the knowledge-based view of firm innovation and global strategy by stressing the roles of international innovation-investment motives and organisational capabilities for creating and managing knowledge in EMNEs. It offers implications for managing subsidiaries of multinational enterprises involved in innovation in emerging markets, particularly regarding enhancing and linking the internal and external dimensions of subsidiaries' knowledge creation capability via ambidexterity.

1. Introduction

Knowledge creation capability, an organisational capability of combining information and knowledge into new knowledge and perceiving value from the exchange and combination process (Smith et al., 2005), is crucial for competitiveness. The knowledge-based view (KBV) sees organisational capability as knowledge integration (Grant, 1996), but knowledge creation capability also encompasses elements of knowledge sharing (Noorderhaven and Harzing, 2009) and knowledge cocreation (Su et al., 2016). While the concept of knowledge creation capability has been studied in relation to interfirm knowledge exchanges in clusters (Arikan, 2009), absorptive capacity (Su et al., 2013), and project teams (Stephens and Carmeli, 2016), its applications to international business, global strategy (Colakoglu et al., 2014; Grant and

Phene, 2022) and innovation management (Caloghirou et al., 2004; Conroy et al., 2023) have not focused sufficiently on the knowledge creation capability of emerging-market multinational enterprises (EMNEs). EMNEs are increasingly important in global knowledge creation and often pursue different research and development (R&D) internationalisation strategies than advanced-economy MNEs (Steinberg et al., 2021; Urbig et al., 2022).

Moreover, while extant research on knowledge management of EMNEs (Zhao et al., 2022) has focused on EMNEs' knowledge sourcing in developed countries (Ciabuschi et al., 2017; Yakob et al., 2018), many of the knowledge-seeking investments by EMNEs in advanced economies face setbacks. The setbacks include restrictive screening of foreign acquisitions (Riela and Záborský, 2020), postacquisition integration difficulties (Zhang et al., 2019), and other factors related to differences

* Corresponding author.

E-mail address: p.zaborsky@auckland.ac.nz (P. Záborský).

<https://doi.org/10.1016/j.technovation.2023.102829>

Received 13 February 2022; Received in revised form 2 July 2023; Accepted 19 July 2023

Available online 27 July 2023

0166-4972/© 2023 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>).

in home- and host-country institutions and ecosystems (Anand et al., 2021). With the increasing innovative power of emerging economies (Dutta et al., 2022), EMNEs are realising that other emerging markets also constitute fertile grounds for innovative subsidiaries. This is evidenced by advanced-economy MNEs' interest in innovation in emerging markets (Govindarajan and Ramamurti, 2011). Many emerging economies, including new European Union (EU) members from Central and Eastern Europe (CEE), have progressed in their attractiveness for innovation and R&D investments (Dutta et al., 2022). South Korea and China, for example, were 6th and 11th respectively, and Estonia and the Czech Republic 18th and 30th in the 2022 Global Innovation Index (GII; see Table 1). This coincided with growing interest in knowledge and innovation management in CEE (Dodourova et al., 2023; Vujanović et al., 2022).

The purpose of this research is to advance understanding of *why and how EMNEs are conducting innovation in CEE to develop knowledge creation capability*. The research contributes to the literature on knowledge management in EMNEs (Jiang et al., 2023; Zhao et al., 2022) with a focus on knowledge creation capability of EMNE subsidiaries innovating in emerging markets. Specifically, we enhance the KBV literature in international business and global strategy to explain EMNEs' internationalisation of innovation in CEE. Our research offers implications for future research on international innovation (Lopez-Vega and Lakemond, 2022; Morris et al., 2023) of non-Chinese EMNEs, which is relatively less understood and potentially different to the R&D and foreign direct investment (FDI) motives and strategies of Chinese MNEs (Bruton et al., 2021; Di Minin et al., 2012).

We also contribute to the debates on the potentially different motives for investment and innovation activities of MNEs from emerging and

advanced economies (Gammeltoft and Cuervo-Cazurra, 2021; Lynch and Jin, 2016) and how EMNEs' knowledge creation and management depend on their home country and the host country of investment (Alam et al., 2019). The motives for FDI are typically linked to market-seeking and knowledge-seeking motives (Chung and Alcácer, 2002; Dunning, 1998). In terms of motives for conducting R&D and innovation abroad, scholars have identified market-driven and technology-driven (knowledge-seeking) motives (Schmiele, 2012; von Zedwitz and Gassmann, 2002) and technology-exploration versus exploitation motives for R&D offshoring (Ambos and Ambos, 2011; Papanastassiou et al., 2020). Some studies have recognised dual (Di Minin et al., 2012) or multiple (Håkanson and Nobel, 1993) motives for establishing foreign R&D operations and stressed that the motives for innovation abroad evolve (Achcaoucaou et al., 2014).

We build on Di Minin et al. (2012), who studied the evolving motivations for Chinese investment in R&D and new models of R&D internationalisation, and Giuliani et al.'s (2014) study on subsidiary types of emerging vs. advanced MNEs. However, while Di Minin et al. (2012) and Giuliani et al. (2014) acknowledged dual (market- and knowledge-seeking) R&D FDI motives, it is not clear how innovation-investment strategies of EMNEs are driven by both firm- and country-level antecedents of R&D internationalisation (Urbig et al., 2022). Moreover, we focus on knowledge creation capability, a subset of firm-specific advantages in R&D (Ambos and Ambos, 2011), guided by the knowledge-based theory of organisational capability (Grant, 1996) and KBV of global strategy (Grant and Phene, 2022).

Our multiple-case study qualitative analysis, based on 11 EMNEs innovating in CEE, and subsequent conceptual framework, elucidate the motives that underpin knowledge creation capability (Schneckenberg

Table 1
Selected economies in the Global Innovation Index.

Country	Overall GII rank 2022	Business sophistication (2022 rank)	Institutions (2022 rank)	Knowledge/ technology outputs 2022	Overall GII rank 2012
Switzerland	1	7	2	1	1
USA	2	3	13	3	10
Sweden	3	1	19	2	2
UK	4	22	24	8	5
Netherlands	5	10	4	5	6
S. Korea ^a	6	9	31	10	21
Singapore	7	2	1	13	3
China	11	12	42	6	34
Hong Kong	14	27	10	60	8
Israel	16	6	41	7	17
Estonia	18	25	12	21	19
Czech Rep. ^a	30	28	43	17	27
UAE	31	26	6	59	37
Slovenia	33	29	37	26	26
Hungary	34	30	48	23	31
Bulgaria	35	40	67	30	43
Malaysia ^a	36	41	34	39	32
Turkey	37	47	101	47	74
Poland ^a	38	38	65	38	44
Lithuania ^a	39	37	26	48	38
India ^a	40	54	54	34	64
Latvia	41	36	35	44	30
Croatia	42	46	77	45	42
Thailand	43	43	78	43	57
Slovakia ^a	46	45	68	28	40
Russia ^a	47	44	89	51	51
Vietnam	48	50	51	52	76
Romania	49	51	75	31	52
Brazil ^a	54	35	102	55	58
Serbia ^a	55	65	53	42	46
S. Africa ^a	61	63	81	56	54

Note:
^a Denotes countries included in this study as home or host countries. In addition to business sophistication, institutions, and knowledge and technology outputs, the GII index also takes into consideration human capital and research, infrastructure, market sophistication, and creative outputs. Business sophistication is measured by indicators related to knowledge workers, innovation linkages, and knowledge absorption. Institutions measure political, regulatory, and business environment for innovation. Knowledge/technology outputs measure knowledge creation, impact, and diffusion. The table includes emerging economies in the top 50; three other emerging economies that we analysed, and the top-five ranked countries including developed countries.

Source: Dutta (2012) and Dutta et al. (2022).

et al., 2015). Dependent on the motive (market seeking, knowledge seeking or dual), companies stress different dimensions of knowledge creation capability: internal (internal-knowledge coordination, internal-knowledge flows, and internal-innovation cooperation) and/or external (external-knowledge acquisition, external-knowledge flows, and external-innovation cooperation) in different ways. Moreover, EMNEs with dual motives are more adept at ambidextrously linking internal and external dimensions of their knowledge creation capability (Andriopoulos and Lewis, 2010; Wang and Wang, 2021) via managerial orchestration and innovation projects (Fernandez et al., 2021; Teece, 2014).

The rest of the article is organised as follows. Section 2 reviews the literature and theory. The method is explained next, followed by findings, discussion, and the conclusion.

2. Theoretical foundation

We ground our study in the KBV, which acknowledges the importance of knowledge management in MNEs (Mudambi, 2002), including accessing, transferring, and creating knowledge (Grant and Phene, 2022). Specifically, we link to the knowledge-based theory of organisational capability (Grant, 1996) and focus on knowledge creation capability (Smith et al., 2005), a key firm-specific advantage related to international innovation motives. EMNEs often suffer from scarce resources and emphasise knowledge management, including learning, acquisition, transfer, creation, integration, and dissemination of knowledge (Andersson et al., 2016; Zhao et al., 2022). Accessing and utilising knowledge might be the primary chance for EMNEs to achieve a sustainable competitive advantage (Michailova and Sidorova, 2010; Zhang et al., 2022), as, during their internationalisation (Hertenstein and Alon, 2022), they struggle with the shortage of internationally experienced talent (Ferreira et al., 2022; Meyer and Xin, 2018).

Two streams of knowledge management literature underpin the KBV of international innovation management. First, the literature on knowledge sourcing in and by MNEs (Almeida, 1996; Cantwell and Mudambi, 2011) and EMNEs (Ciabuschi et al., 2017) in emerging economies (Dodourova et al., 2023) is related to accessing knowledge (Awate et al., 2015; Chung and Alcácer, 2002; Shaver and Flyer, 2000) and capability antecedents such as innovation-investment motives and MNE-subsidary types (Murphree et al., 2022). Second, the literature on knowledge management and innovation (Carneiro, 2000; Du Plessis, 2007; Ode and Ayavoo, 2020) in internationalising firms (Ferraris et al., 2021; Naqshbandi and Jasimuddin, 2018) underpins capability elements related to creating and integrating (Almeida and Phene, 2004; Andersson et al., 2015; Cantwell and Mudambi, 2005), transferring and sharing (Anand, 2011; Gupta and Govindarajan, 2000; Kogut and Zander, 1993), and cocreating and orchestrating knowledge in MNEs (Cano-Kollmann et al., 2016; Cantwell, 1989; Castellani et al., 2022) for innovation as an outcome of knowledge management (Martín-de Castro et al., 2011) in EMNEs (Kotabe et al., 2011; Zhao et al., 2022).

Moreover, the KBV and global strategy research on FDI motives also acknowledges the role of location factors and their relation to innovation-investment motives, MNE-subsidary types, and organisational capabilities (Grant and Phene, 2022). According to Dunning (1998), capabilities and resources have received more attention in the international business literature than home-country factors (Dunning, 1998). Home-country characteristics are important in relation to their impact on innovation and international investment (Cuervo-Cazurra et al., 2018; Govindarajan and Ramamurti, 2011). In the home country, EMNEs interact with each other and other stakeholders. These interactions influence their internationalisation strategies (linking institutions, resources, and strategies) as they not only compete, but also share resources, coordinate actions, and learn (Hobdari et al., 2017). Hence, their outward investments abroad reflect both competition and collaboration in their home-country business and knowledge ecosystems (Cha, 2020; Clarysse et al., 2014).

2.1. Strategic motives for innovation investment abroad

This study acknowledges the following main innovation-investment motives: market seeking, knowledge seeking (Achcaoucaou et al., 2014; Dunning, 1998; von Zedtwitz and Gassmann, 2002), and dual—both market and knowledge seeking (Di Minin et al., 2012; Giuliani et al., 2014). While there are other FDI motives, such as efficiency seeking (Dunning, 1998) and diversification seeking (Deng, 2004) related to FDI in innovation-intensive activities (Záborský et al., 2021), we focus on market-seeking, knowledge-seeking and dual motives acknowledged in literature on the internationalisation of R&D and innovation by MNEs (Papanastassiou et al., 2020).

The market-seeking motive for innovation abroad is related to the market-driven model (von Zedtwitz and Gassmann, 2002) of pursuing highly geographically dispersed development (innovations aimed at adjusting to local-market conditions) with relatively little internationalised research (which is typically conducted in the headquarters [HQ]). The knowledge-seeking motive (Chung and Alcácer, 2002) for investment in innovation abroad is pursued by technology-driven companies (von Zedtwitz and Gassmann, 2002), including EMNEs (Kedia et al., 2012), where research is more internationalised than development. The dual (both market- and knowledge-seeking) motive for innovation abroad is typically pursued by companies that have distributed research as well as development worldwide (von Zedtwitz and Gassmann, 2002). The dual motive can also be defined as overseas R&D units undertaking tasks of technology exploration (knowledge seeking) and exploitation (market seeking) simultaneously, driven by both technology and the market (Di Minin et al., 2012).

Finally, the dual motive is related to the concept of relative exploration: the needs of firms to balance their exploration and exploitation efforts (Bhandari et al., 2020; Gama et al., 2022). Firms can achieve this through ambidexterity in pursuing market- and knowledge-seeking goals in international innovation (Lee et al., 2020; Liu et al., 2022; Luo and Rui, 2009). While some studies have claimed that companies tend to have either market- or knowledge-seeking FDI motives (e.g., Wu et al., 2022), the inclusion of the dual motive is important, as market- and knowledge-seeking motives are often interrelated. Companies seeking new foreign markets must gain new knowledge about local customers, regulations, and partners. Even the motive to gain access to new technology can be intertwined with the market conditions and knowledge. While local-market knowledge is important for MNEs that integrate it with their technical knowledge when implementing market-seeking strategies via their foreign subsidiaries (Meyer et al., 2011), we ground our conceptualisation of the knowledge-seeking motive for conducting innovation abroad in the KBV (Grant and Phene, 2022). KBV acknowledges knowledge seeking, sourcing, and accessing as important aspects of international business strategy (Awate et al., 2015; Haas and Cummings, 2015).

The motives for innovation investment abroad are also related to the MNE-subsidary types and roles (Jindra et al., 2009; Meyer et al., 2020). For example, Giuliani et al. (2014) conceptualised dual subsidiaries as those with an orientation to the global market; autonomy in decision making; formal collaborations with domestic firms and research centres, and informal collaborations, mainly with research centres; and a technology-seeking (technical and managerial knowledge, qualified labour skills) motive. These are in contrast with predatory subsidiaries, which also have global-market orientation, autonomy, and technology-seeking motives, but have no formal or informal local collaborations. Finally, passive subsidiaries are oriented to the host-country market, have market-seeking motivation, and low-level innovative activity at the subsidiary level (Giuliani et al., 2014).

It is also important to consider EMNE-specific motives. EMNEs are often driven by strategic asset seeking (Meyer, 2015) rather than asset exploiting (market seeking) while internationalising. The primary goal of knowledge-seeking acquisitions by EMNEs abroad is often to develop and integrate their technology and resources in their domestic market

(Child and Rodrigues, 2005). EMNEs aim to accelerate their technology pool in two stages: knowledge seeking and knowledge integration (Chen et al., 2012). Furthermore, there is heterogeneity in outward FDI drivers and motives of EMNEs from different countries (Záborský and Yan, 2022). While research has recognised that motives for innovation investment abroad are driven by a combination of firm-, industry- and country-related factors (Ambos and Ambos, 2011), the relative importance of these factors may differ for EMNEs and other MNEs (Urbig et al., 2022). Furthermore, the role of home- and host-country knowledge ecosystems and knowledge sources (Caloghirou et al., 2004) is relatively underexplored in the research on EMNEs' international innovation management (Sahasranamam et al., 2019).

2.2. Knowledge creation capability

Knowledge creation and transfer are important processes that allow a firm to turn its acquired external knowledge into a competitive advantage (Argote and Ingram, 2000). The stock of knowledge developed by a firm is its principal source of competitive advantage and relates to the efficiency with which firm knowledge is created and transferred internally (Gupta and Govindarajan, 2000; Kogut and Zander, 1992). For the MNE, knowledge is distributed internationally across a network of dispersed subsidiary units. Knowledge transfer relates not only to the sending of knowledge from the source to a recipient unit (Phin et al., 2022), but also to its integration, understanding, and application (Szulanski, 1996). There are also differences in knowledge transfer and innovation in emerging- and advanced-economy multinationals (Steinberg et al., 2021). Finally, there is a lack of research on R&D subsidiaries in emerging economies moving from local modification to innovating for the world (Morris et al., 2023).

The subsidiary has an important role of absorbing knowledge through its linkages with local partners, which represent an extensive source of knowledge acquired and enable it to contribute to the MNE (Andrews et al., 2022; Murphree et al., 2022). Subsidiaries are not only knowledge receivers from HQ, having the competence-exploiting role related to market seeking, but also knowledge creators within an integrated network with a competence-creating role (Cantwell and Mudambi, 2005) related to knowledge seeking. A subsidiary's role in relation to knowledge creation evolves according to changes in both its degree of external network embeddedness—knowledge assimilation and learning from the host-country environment (Murphree et al., 2022), and its degree of intra-corporate embeddedness—and knowledge transfer to HQ and other subsidiaries (Achcaoucaou et al., 2014). Moreover, while research has traditionally drawn a connection between FDI motives and subsidiary types (Meyer et al., 2020), the setup of the subsidiaries can be both the antecedent and the outcome of the motives.

2.2.1. Knowledge integration capability

The key to sustainable competitive advantage is not proprietary knowledge itself, but the capabilities that permit the generation of new knowledge, as knowledge integration may be more critical than knowledge itself (Grant, 1996). MNEs can acquire and integrate external knowledge via channels such as employees (Dabrowska et al., 2019) and inventors crossing national and organisational boundaries (Castellani et al., 2022). EMNEs can also develop knowledge integration capability through integrating collaborative-innovation strategies (Lopez-Vega and Lakemond, 2022). While sourcing capabilities and embeddedness ensure that knowledge acquisition happens at the subsidiary level, integrative capabilities can transform created knowledge into subsidiary innovation (Michailova and Zhan, 2015). External-market-knowledge acquisition (e.g., the amount and extent of knowledge the firm has acquired from external parties, such as customers, suppliers, and competitors) is an important type of knowledge integration mechanism (Zhou and Li, 2012). Fu et al. (2018) considered it distinct from knowledge sharing in EMNEs, although there remains disagreement whether knowledge integration and sharing are complements or

substitutes (Zeng et al., 2018). Moreover, the network effects on the evolution of the R&D role played by subsidiaries are underdeveloped in the EMNE knowledge management research (Piperopoulos et al., 2018; Zhao et al., 2022).

2.2.2. Knowledge sharing capability

Knowledge sharing in and by MNEs, which entails sharing knowledge inside MNEs, or between MNEs and other firms (Foss and Pedersen, 2019), is an important aspect of knowledge management. Knowledge sharing is influenced by both organisational and national culture (Gooderham et al., 2022), and its key element is knowledge flows within MNEs (Gupta and Govindarajan, 2000). Mudambi and Navarra (2004) identified four MNE knowledge-flow types—flows from subsidiary to parent, flows from subsidiary to location, flows from location to subsidiary, and flows from HQ (and other MNC units) to the subsidiary. When knowledge is generated at two or more locations simultaneously, different knowledge management strategies are chosen by MNEs depending on the type of knowledge generated or shared. When knowledge is not locally bounded, MNEs can create complementary technologies in different geographies and share and integrate them to develop new products and solutions. When knowledge is contextual or cannot be easily shared for other reasons, MNEs adopt a connecting strategy by offering a package of multiple local-knowledge bodies to their customers (Li and Bathelt, 2020). Consequently, subsidiaries can develop and adapt new processes, products, knowledge, or systems (Ghoshal and Bartlett, 1988), and improve their knowledge sharing capability related to MNE knowledge flows (Achcaoucaou et al., 2014; Meyer et al., 2020). Subsidiary capabilities are a critical element of MNEs' international knowledge sharing capabilities and play a key role in explaining MNE knowledge flows (Foss and Pedersen, 2019).

2.2.3. Knowledge cocreation capability

The interaction and relationship management between company and customer are linked to the concept of dialogue in value cocreation, through stakeholder cocreation during the innovation process (Kazadi et al., 2016), knowledge cocreation across national boundaries (Su et al., 2016), and multilevel innovative and knowledge ecosystems explored by EMNEs for disruptive global expansions (Pereira et al., 2022). However, Ashok et al. (2014) demonstrated that benefits from cooperation are not automatic, as the firm's commitment of internal resources mediates the impact of the intensity of end-user collaboration and the breadth of external cooperation on process innovation. Moreover, managerial orchestration of resources—including knowledge—is key to MNE competitive success and is related to both market and knowledge creation and cocreation (Pitelis and Teece, 2018; Teece, 2014).

Dual embeddedness of subsidiaries (embeddedness in internal and external networks) enhances their subsequent contribution to MNEs' competitive advantage. Subsidiaries may upgrade their R&D role within the firm by developing internal and external innovative ties to shape their own evolution and network linkages that allow HQ to exploit its existing assets more effectively and to tap into new market opportunities (Achcaoucaou et al., 2014). Isaac et al. (2019) showed that in emerging markets, subsidiaries' relational embeddedness within the external local network—such as relations with customers, suppliers, and universities—is positively associated with local innovation. Local innovation can also be transformed into global innovation, especially when innovation is developed in the subsidiaries' functional areas with previous reverse knowledge transfers. However, the literature on dual embeddedness of subsidiaries and their knowledge management in emerging markets needs to consider the concepts of knowledge cocreation capability and knowledge ecosystems more closely (Conroy et al., 2023). Building on the existing literature and gaps therein, we develop our research question: *Why and how do EMNEs conduct innovation in other emerging markets (and specifically in CEE) to develop knowledge creation capability?* Next, we explain our method.

3. Method

3.1. Multiple-case-study method

This paper builds on over 3 years of data collection on EMNEs' innovation behaviour. The study employs exploratory qualitative methodology (Miles and Huberman, 1994), founded in a multiple-case-study approach (Yin, 1994). The international innovation activities of EMNEs in CEE are a new phenomenon, and multiple-case studies are appropriate for exploratory study (Ghauri, 2004), as they allow the researcher to develop a deeper relationship with managers while conducting interviews (Daniels and Cannice, 2004). A multiple-case-study method enabled us to conduct a thorough investigation of the processes, since it empowered us to recognise the interactions between single units and the content and context of those interactions (Eisenhardt and Graebner, 2007). We aim to explain the links between EMNEs' knowledge creation capabilities, international-investment motivations, and subsidiary types by theorising from case studies (Eisenhardt, 1989).

3.2. Research context: EMNEs innovating in Central and Eastern Europe

A robust theory explaining EMNEs' innovation investment in other emerging markets, and particularly in emerging innovation and knowledge ecosystems of countries in transition from middle-to high-income levels (such as CEE), is largely missing (Stojčić, 2021). There are several unanswered issues in CEE innovation-management research, such as the role of knowledge ecosystems and differences in local and foreign firms' investment goals and strategies that could influence the innovation strategies of EMNEs investing there (Prokop, 2021; Vujanović et al., 2022; Záborský, 2012). Jaklič et al. (2019) suggested that a better understanding of CEE will come from exploring its rich contexts that allow for testing the presumed global applicability of theories whose replication has been limited to similar environments.

We respond to this call by choosing the CEE empirical setting, which in our case includes the Czech Republic, Lithuania, Poland, Serbia, Slovakia, and Russia as host economies. Brazil, India, Malaysia, Russia, South Africa, and South Korea are the home countries we studied. The criteria for the home–host country selection were driven by a theoretical sampling strategy (Strauss and Corbin, 1998), and included observability of the main phenomenon of interest (innovation by an emerging-market firm in CEE) and variations within key constructs (e.g., differences in innovation-investment motives and knowledge ecosystems).

The Czech Republic ranked 30th globally in the GII in 2022 (see Table 1), with particularly strong scores in knowledge and technology outputs (17) and infrastructure (20). Other host countries were ranked in the GII as follows: Poland, 38; Lithuania, 39; Slovakia, 46; Russia, 47; and Serbia, 55. India was 40th in the GII in 2022, scoring relatively high in terms of market sophistication (19) and knowledge and technology outputs (34), but relatively low in terms of institutions (54) and infrastructure (78). South Korea was 6th overall in the GII (9 in terms of business sophistication), Malaysia 36th, Brazil 54th and South Africa 61st (overall scores), giving us a variety of GII performance combinations of home–host economies.

3.3. Case selection

Employing a theoretical sampling strategy (Bell et al., 2018), we chose cases that were adequately representative of EMNEs from different countries, knowledge ecosystems, and industries; and a variety of innovation-investment motives including knowledge seeking, market seeking, and dual. This diversity of cases was designed to enable us to maximise opportunities to discover variations between concepts and to densify categories, in terms of their properties and dimensions, to develop fruitful theory. We sought to examine enough cases and a

variety of sectors to be convinced that the findings would have some universal applicability (Strauss and Corbin, 1998), while recognising the role of context (Poulis et al., 2013). Hence, we sampled six cases from one home country, India, and six cases from one host country, Czech Republic, to be able to study single-country contexts in depth.

The host-country location in CEE is a unifying element for cases in our research, which aimed to explore and embed the cases in the richness of the host-location context. We used the following criteria to select firms for our research. First, the firm's foreign subsidiary had to be in CEE and involved in innovation activities there in recent years. Second, while we recognise that ownership-control strategies (e.g., choice between wholly owned subsidiaries and joint ventures with different degrees of ownership) may influence parent–subsidiary relationships (Gaur and Lu, 2007), we focused on subsidiaries in dominant or full ownership of the MNE in line with Meyer et al. (2020) and Birkinshaw and Hood (1998). Third, the investing firm had to originate from an emerging market, but not from China. We excluded Chinese MNEs from our research to acknowledge that China is a special case (Bruton et al., 2021), allowing us to explore whether the research on Chinese MNEs can be extended to better explain internationalisation of EMNEs.

We define emerging markets as all nonadvanced or semadvanced markets, including developing, frontier, emerging, and (post)transition economies (Hutzschenreuter and Harhoff, 2020), recognising the role of (postcommunist) historical legacies in CEE (Dodourova et al., 2023; Gorynia et al., 2019). The selected cases differed by home and host country, industry, decade of first market entry, and entry mode, so that each case acts as a distinct experiment and provides evidence from different viewpoints (Creswell, 1998; Eisenhardt, 1989).

3.4. Data collection

Data gathering was driven by concepts derived from the evolving theory and was based on the approach of “making comparisons” (Strauss and Corbin, 1998). The study relied on both primary and secondary sources. Thirteen in-depth semistructured interviews were conducted in 2017–2018 with follow-up interviews during 2019 (in some cases). This allowed retrospective and longitudinal data to be collected, and the retrospective bias to be mitigated (Leonard-Barton, 1990). Managers from HQs were interviewed (E1, E5, and E8), but the emphasis was on subsidiary managers, driven by theoretical considerations linked to the need for managers to understand both their subsidiary's knowledge creation and host-country context. For E1, we interviewed the HQ manager (E1a) twice. We also interviewed two subsidiary managers (E1b/E1c). On average, our respondents had 7 years of experience at the firm and 20 years of other relevant industry and functional experience. These kinds of experienced informants are familiar with the firm and phenomena of interest, knowledgeable, and provide highly accurate information (Kumar et al., 1993).

The secondary data covered internal (e.g., company websites and materials) and external sources (e.g., media reports), with over 70 internal and 55 external secondary data sources. The interviews were conducted face to face, by Skype, or by telephone, taking between 45 and 90 min each. Interview notes were written during and rewritten after each interview. Interviews were also audio recorded and transcribed by a professional company. The research resulted in 250 pages of single-spaced text data from interviews. We motivated informants to provide further and more detailed information if their descriptions were brief or novel perspectives emerged (Martin and Eisenhardt, 2010). When conceptual saturation was achieved, data gathering ended (Strauss, 1987). The triangulation of the collected data through secondary sources reinforced the results of our observations (Jick, 1979). This also helped gain a thorough understanding of the cases and ensure the validity of the constructs (Lub, 2015).

3.5. Data analysis

The collected data were coded following a hybrid approach of thematic analysis (Fereday and Muir-Cochrane, 2006), involving a combination of the inductive thematic analysis approach of Braun and Clarke (2006) and a template of codes approach (Crabtree and Miller, 1999). Guided by the research question and the theoretical foundations, we used an iterative number of steps to identify the categories reflecting our theoretical arguments, with enough flexibility so that the empirical evidence would enable the creation of a final theoretical framework. We analysed data in several different steps. First, we read transcribed interviews several times, marking down phrases and interesting quotes, so that empirically grounded theory concepts could be developed from data analysis (Lub, 2015).

We then engaged in coding of words, phrases, and themes; created theoretical categories and subcategories consistent with the data; compared them with existing literature; and identified final theoretical themes (Silverman, 2006). The template subcategories were changed several times and refined and integrated into three aggregate categories (theoretical themes): 1) knowledge integration capability, 2) knowledge sharing capability, and 3) knowledge cocreation capability. The context of the themes was linked to the study’s story and current theory (Ghauri, 2004). Table 2 provides an overview of the studied organisations. Table 3 shows our template coding (data structure). The next section presents findings and analysis.

4. Findings

Based on analysed data, we start by clarifying the role of strategic

Table 2
Overview of analysed firms and interviewed participants.

Firm	Home country (GII Index)	Host country (GII Index)	Industry/entry mode/decade	Primary motive for innovation investment	Interviewee(s) position/location	Years in the firm/industry
E1	Brazil	Slovakia	Machinery	Market seeking	Former R&D development director—Brazil (HQ)—E1a (2 interviews)	19/20+ (E1a)
	33.82	42.05	Greenfield FDI (GFDI)/1990s		R&D senior manager Europe and R&D global product engineering director—Slovakia (subsidiary)—E1b and E1c respectively	5/10+ (E1b)
E2	Malaysia	Czech Republic	E-commerce	Knowledge seeking	General manager—Czech Republic (subsidiary)	17/20 years (E1c)
	42.68	49.43	GFDI/2010s			5/20+
E3	South Korea	Czech Republic	Machinery	Knowledge seeking	Process innovation division lead—Czech Republic (subsidiary)	5/25+
	56.55	49.43	M&A/2000s			
E4	Russia	Serbia	Oil & gas	Knowledge seeking	R&D manager—Serbia (subsidiary)	5/45+
	37.62	35.71	M&A/2000s			
E5	South Africa	Czech Republic	FMCGs	Dual (knowledge and market seeking)	Head of innovation—Netherlands (HQ)	4/30+
	34.04	49.43	M&A/1990s			
E6	India	Lithuania	IT services	Dual (knowledge and market seeking)	Country manager—Lithuania (subsidiary)	5/15+
	36.58	41.46	GFDI/2010s			
E7	India	Czech Republic	Pharmaceuticals	Market seeking	Director of business development—Czech Republic (subsidiary)	4/20+
	36.58	49.4	GFDI/2000s			
E8	India	Czech Republic	Pharmaceuticals	Dual (knowledge and market seeking)	R&D manager—India (HQ)	6/10+
	36.58	49.43	M&A/2010s			
E9	India	Russia	Pharmaceuticals	Market seeking	Business development lead—Russia (subsidiary)	8/10+
	36.58	37.62	GFDI/1990s			
E10	India	Poland	IT services	Market seeking	Deputy general manager—Poland (subsidiary)	4/15+
	36.58	41.31	GFDI/ 2000s			
E11	India	Czech Republic	E-commerce	Dual (knowledge and market seeking)	Head of operations—Czech Republic (subsidiary)	4/15+
	36.58	49.43	M&A/ 2010s			

Note: The research resulted in 195 pages of single-spaced transcribed text data from 13 interviews with 13 participants. We have also collected and analysed related secondary data covering external sources (e.g., media reports) and internal sources (e.g., company web pages), resulting in 71 internal and 55 external secondary data sources.

GII Index = Global Innovation Index score in 2019, capturing the home- and host-country business environment realities in 2018 when most of the data were collected.

motives for EMNEs to innovate in CEE, then focus on knowledge creation capability (including knowledge integration, sharing, and cocreation, and their links) and the relationship to the motives. Finally, we analyse the role of the home-/host-country context.

4.1. Strategic motives for innovation investment abroad

Interviewed managers cited knowledge-seeking (E2–4), market-seeking (E1, E7, E9, and E10), and dual motives (E5, E6, E8, and E11) as the primary motives for their international innovation investment in CEE. Table 4 summarises the definitions of the three main motives and provides representative quotes for each of them, comparing our cases on a continuum (Eisenhardt, 1989), from primarily knowledge-seeking to dual and market-seeking firms. Following Goerzen et al. (2013), we have coded the motives based on the literature and the interview quotes. We have also cross checked the interviewee responses about motives with secondary data sources, following Rabier (2017). The knowledge-seeking motive for innovation investment abroad is to access and acquire knowledge that resides in the host country and its firms. The market-seeking motive is to support local development and adjust innovation to host markets. For E1, motives were cross checked with additional respondents E1b and E1c. E1 showed that motives and knowledge creation capabilities evolve (see Table 5). This is consistent with our definition of the dual motive: being motivated simultaneously, although not always contemporaneously, by market- and knowledge-seeking considerations.

Table 3
Template coding.

Categories	Subcategories	Descriptions
Knowledge integration capability	Internal-knowledge coordination and implementation	<ul style="list-style-type: none"> - HQ–subsidiaries coordination - Attitudes to hierarchy - Use of the same knowledge base by HQ and subsidiaries - Implementation of new ideas, products, and services - Location of the final implementation
	External-market-knowledge acquisition	<ul style="list-style-type: none"> - Acquisition of local firms with knowledge - Acquisition of knowledge from external entities, such as customers, suppliers, research institutes, and academia - Ways, quality, and speed of external market-knowledge acquisition
Knowledge sharing capability	Internal- and external-knowledge flows, decisions, and factors	<ul style="list-style-type: none"> - HQ–subsidiary, subsidiary–HQ, subsidiary–subsidiary - Separate domain innovation centres - Transfer of new innovations - External-knowledge flows from home- and host-country stakeholders - Knowledge-exchange sessions - Decisions based on market pull and technology push factors - Quality and nature of communication lines
Knowledge cocreation capability	Internal- and external-innovation cooperation	<ul style="list-style-type: none"> - Innovation cooperation between different intra-company departments - Innovation cooperation based on customer needs and shared resources with customer(s) - Internal-innovation cooperation aided by lead markets and best practices - Subsidiaries’ innovation cooperation with external stakeholders - Innovation cooperation based on HQ order and subsidiary type - Knowledge silos and clusters - Global R&D managers and global R&D teams - Foreign-site visits by key managers and R&D staff - Orchestration of subsidiary knowledge processes by managers - Orchestration of firm/subsidiary-innovation projects by HQ - Joint R&D projects between subsidiaries and HQ - Innovation project approval processes and aims
Elements linking internal- and external-capability dimensions	Managerial orchestration and innovation projects	<ul style="list-style-type: none"> - Orchestration of subsidiary knowledge processes by managers - Orchestration of firm/subsidiary-innovation projects by HQ - Joint R&D projects between subsidiaries and HQ - Innovation project approval processes and aims

4.2. Knowledge creation capability

While we focused on concepts such as international innovation-investment motives and knowledge creation capability, we also kept an open mind for emergent concepts and themes. Before we summarise specific aspects of knowledge creation capability that emerged from our data structure and template coding (Table 3), we highlight two overarching observations from our data. First, each of the three main elements of knowledge creation capability had both internal (linked to knowledge creation within the MNE) and external (linked to knowledge

Table 4
A continuum of primary innovation-investment motives (with illustrative quotes).

<p>Knowledge seeking (motivated mainly by accessing and acquiring knowledge that resides in the host country and its firms.) E2, E3, E4</p>	<p><i>In Prague, we have data that show us we have a lot of great talent in Eastern Europe. There is a lot of good talent, great people coming out of universities with analytical skills and cooperation with other stakeholders as the Academy of Science, research centres and suppliers are really good. (E2)</i> <i>Headquarters are looking for companies to be acquired that complement their business. That brings specific skills, knowledge and products to their group portfolio. (E3) HQs give us the order to try to realise cooperation with other entities and to be engaged in developing or application of technologies, new knowledge within our scope of work. (E4)</i> <i>Knowledge seeking: The Czech Republic is a leading market in several innovation projects for our whole group. We have learnt a lot from there and it is a very important country. It has historical traditions long way back in our business. (E5)</i> <i>Market seeking: The Czech Republic is probably the biggest market for our products in the world per capita. So, it was very important for us through the acquisition process to get a quite large share of this market (E5)</i> <i>Knowledge seeking: We chose this location also due to the highly skilled and result-oriented workforce, deep knowledge and experience with banking system software and legislation. Vilnius is a well-developed and experienced market and “home” of banking software. (E6)</i> <i>Market seeking: R&D centre in Europe was set up due to the need for geographical proximity to the customer. (E6)</i> <i>Knowledge seeking: You can really gain from all this expertise and research that you can do locally over there. Market seeking: The objective was to convert this old plant into the largest plant in the world... to cater to the European market. (E8)</i> <i>Knowledge and market seeking: The main reason which is driving the innovation outside of India to subsidiaries is local approach and knowledge. (E11)</i> <i>Headquarters decided to follow our customer who asked us to open manufacturing in Slovakia, so we built a plant there, it was a greenfield. We started to collaborate with the customer. (E1a)</i> <i>We did not want to focus only on production, but on what our customers will demand in the future so that our production stays ahead of the game through innovation. (E1b)</i> <i>Three of our product lines were losing competitiveness... and we started to suggest innovations that met the needs of our market better. (E1c)</i> <i>The most important motive is to support our business activities and sales in Europe. (E7)</i> <i>There is not much R&D we do in Russia. Mostly getting closer to the consumer, product modification, adaptation. (E9)</i> <i>The customer approached our company saying—I would start cooperation with you if you set up a branch in Poland. (E10)</i></p>
<p>Dual (knowledge & market) (motivated simultaneously, although not always contemporaneously, by knowledge- and market-seeking considerations.) E5, E6, E8, E11</p>	<p><i>Market seeking (motivated mainly by supporting local development and adjusting innovation to host markets.) E1, E7, E9, E10</i></p>

Table 5
Timeline for E1.

	1989		1990s	2000s	2010s		2020s	
Key events in the MNE–subsidiary relationship	E1 was established in the 1970s in Brazil. Other than in Slovakia, it also established operations in Italy, China, and Mexico.	Key customer forms a joint venture with a Slovak firm.	E1 enters the Slovak market via greenfield FDI.	Production subsidiary in Slovakia with over 2000 staff.	Preparatory innovation activities in the subsidiary.	HQ decision to open an R&D centre in Slovakia.	Slovak R&D centre staff grows to over 50, has a key role in the EU.	E1 along with its Slovak subsidiary was bought by a competitor.
Primary motive for FDI in innovation	Market seeking		<i>HQ decided to follow our customer who asked us to open manufacturing in Slovakia. E1a</i>	<i>We started to cooperate with the customer. E1a</i>	<i>We didn't want to focus only on production, but on innovating for what our customers will demand in the future. E1b</i>		<i>Three of our product lines were losing competitiveness ...and we started to suggest and create innovations. E1c</i>	
Knowledge integration	Internal-knowledge coordination					<i>HQ managers making decisions about the R&D centre visited our plant and knew about our potential through their previous interactions with us. E1c</i>		
	External-knowledge acquisition		<i>If the customer asks for something that needs to be changed on the product, subsidiaries are responsible for it. E1a</i>					
Knowledge sharing	Internal-knowledge flows					<i>We created cells of internal specialists who share knowledge internally between the HQ and us. E1b</i>		
	External-knowledge flows			<i>We exchange ideas on joint areas of interest with academics and firms from other industries, especially in our region. E1c</i>				
Knowledge cocreation	Internal-innovation cooperation					<i>We cooperate with our sister subsidiary in Italy, with an aim to increase the impact of European R&D on the whole group. E1b</i>		
	External-innovation cooperation					<i>We intensified our cooperation with nearby Krakow Polytechnic in Poland. E1c</i>		
Host-country context (Slovakia)	Institutions and knowledge ecosystems	Velvet Revolution in Czechoslovakia (1989)	Breakup of Czechoslovakia (1992), Slovakia founded (1993)	Reformist government in Slovakia (1998)	Slovakia joins the European Union (EU) (2004)	Slovak government and the EU support a move away from low-cost production FDI to more R&D and innovation, including FDI-lead. Better linkages to (EU) universities and better (EU) funding for R&D. (2004–present)		
	Global Innovation Index (GII) Global Rank					37 (2011), 37 (2021)—39 (institutions), 43 (business sophistication)		
Home-country context (Brazil)	Institutions and knowledge ecosystems		Brazil supports technological advancement and innovation through industrial policies		<i>In our HQ, there is a history of innovation and development, networks are really good, it's got cheap, skilled people, good laboratories, support with the equipment. In Brazil, the government gives us strong support if you collaborate with universities, which makes things cheaper. E1a</i>			
	GII Rank					47 (2011), 57 (2021)—78 (institutions), 34 (business sophistication)		

creation embedded in the knowledge ecosystem) dimensions. Firms stressed the internal or external dimensions (and their subdimensions and links) of knowledge creation capability differently based on whether they had primarily market-, knowledge-seeking or dual motivations. Subsidiaries associated with dual motivations tended to emphasise and develop elements of ambidextrously linking internal and external dimensions of knowledge creation via managerial orchestration and innovation projects. Managerial orchestration in MNEs involves creating, accommodating, and fashioning resources (including knowledge) inside and outside the firm, at home, and abroad (Teece, 2014). Finally, the process of developing knowledge creation capability was embedded in host- and home-country contexts, particularly in their knowledge ecosystems. We explain these findings in more detail in the following sections.

4.2.1. Knowledge integration: Coordinating internal and acquiring external knowledge

Knowledge integration in subsidiaries is connected to knowledge coordination and acquisition (Narula, 2014). According to Michailova and Zhan (2015), integrative capability can channel created knowledge to the subsidiary. E1's HQ interviewee (E1a) confirmed, in this respect, that the utilisation and integration of knowledge, and how it is stored within the firm, are important: *Customisation in subsidiaries is being done a lot. The strong role that those subsidiaries play is related to technical and customer support. So, if the customer asks for something that needs to be changed on the product, subsidiaries are responsible for it.* In the case of market-seeking E1, in respect to the subsidiary implementing and conducting innovation and HQ coordinating it, subsidiary managers play a critical role in helping establish the knowledge linkages and pipelines. E1a commented:

When you are in the subsidiary and you need to implement a new product, it's kind of trade-off, because you need to stop some of the lines and you are going to lose some money if you cannot produce quantities according to production plans... if you do not have a novel product, next year you are not going to have the market... Headquarters have to give the green light to subsidiaries if they decide about some project.

The Slovak subsidiary manager, E1c, who by the mid-2010s became the R&D global product engineering director for E1 (while still based in Slovakia), said:

We were able to get an R&D centre opened here... based on our competencies but also on the fact that Brazilian HQ managers making decisions about this issue visited our plant and knew about our potential through their previous interactions with us. We also had to give them concrete proof of our competence in R&D... solving a major problem proactively and coming up with an innovative solution.

Grant (1996) showed the importance of the integration of individuals' specialised knowledge, linking to what a respondent from E3 said: *Innovation comes from us [subsidiary] as we are the owners of the licence, products, and know-how. We also had designers and engineers from headquarters for practice and learning here.* Firms associated with the knowledge-seeking motive often stressed the external dimension of knowledge integration, namely external-knowledge acquisition, a key knowledge integration mechanism (Zhou and Li, 2012). For example, E4 commented in this respect: *We are focused to apply that already-made technology or to realise the other companies' technologies. For example, one of the French institutes of technology made a new technology. We applied already related technology made by a university. And, based on that, we are at home with the new technology when we acquire it.* Dual subsidiaries tended to stress elements linking internal-knowledge coordination and external-knowledge acquisition, including managerial orchestration (Teece, 2014). E5, for example, explained subsidiary-innovation implementation based on HQ approval as follows:

Although being a part of worldwide conglomerate seems to be very useful, in some cases such as flexibility, very specific/creative ideas and projects may be more difficult to get approved by HQ. Until now, most of the innovation activities were created in subsidiaries, based on local knowledge. This is very important, but we want to change it and get HQ involved and coordinate strategy, exchange ideas, project results, etc.

The respondent from E6, another dual subsidiary, stated, about linking elements: *Our business development units understand and specify the needs of the market. R&D and innovation create solutions and, based on these, marketing and sales departments highlight the business, sales, and marketing strategy. Once the innovation project is finished, it is transferred to Bangalore headquarters for implementation.* E6 added, regarding knowledge integration, local-market adaptation (Criscuolo and Narula, 2007), and the role of coordination and orchestration in innovation projects, *We innovate globally, and our innovation development is well integrated between HQ and innovation subsidiaries. We have now very developed and integrated cooperation between HQ and subsidiaries with unified innovation strategy.*

Thus, knowledge integration capability can be characterised as comprising both internal (internal-knowledge coordination) and external (external-knowledge acquisition) dimensions. Additionally, managerial orchestration of assets and resources (including knowledge) links internal and external dimensions of this capability (Badrinayan et al., 2019; Schreiber and Löwstedt, 2018), particularly for subsidiaries with dual motives.

4.2.2. Knowledge sharing: Managing internal- and external-knowledge flows

HQ of the companies from our sample had different points of view on subsidiary independence in knowledge creation and decisions about innovation projects and the related knowledge flows, suggesting varied levels and depths of knowledge sharing. Market-seeking firms tended to stress internal-knowledge flows, particularly from HQ to subsidiaries. E7 said in this respect: *Company is run by one man sitting on the top of the pyramid who decides everything. The most is happening in India. Communication lines are not really good. Most of the knowledge flows are from HQ to subsidiaries, back mostly clinical-trial raw data.* This aligns with the suggestion that MNEs in the past concentrated most innovation projects in HQ, with a gradual change in subsidiary roles away from replicating and supporting market expansion (market seeking) or lowering the costs to more cross-MNE knowledge transfer and knowledge creation (knowledge seeking), based on HQ needs. Market-seeking E9 concluded: *We share knowledge with HQ and other markets in our cluster. We are connected through a global portal where all those kinds of information are always available. But if there is some radical innovation or something very innovative happening in some of the markets, then we talk about it and send a memo to the entire team or organisation.*

On the other hand, many knowledge-seeking subsidiaries of MNEs from our sample acted as independent innovators, developers, and researchers (Rugman and Verbeke, 2001). For example, E3 has knowledge creation with company-wide value: *Ninety percent of innovation in our segment is done in the Czech Republic, we are headquartered for innovation in this segment. A similar situation is with knowledge flows—90% to the headquarters and 10% to our subsidiary.* Knowledge-seeking E2 added on a related topic, stressing both internal- and external-knowledge flows:

Now we have four innovation centres... we have divided these centres into four separate domains and they innovate within that domain. In Prague, specifically, we start innovating based on how we can now integrate with a partner much quicker. Knowledge flow initially is good, bigger, and easier within the region itself—so we do knowledge sharing sessions weekly.

The external dimension of knowledge sharing (external-knowledge flows) was often mentioned by knowledge-seeking subsidiaries. For example, E2 said, *We don't do any collaboration or cooperation yet. That's something I wish to do ... We are only 1 year old; we are just finally letting the*

dust settle and get our operations going smoothly. My initial plan is to work with a university in Brno. Companies with dual motivations also stressed knowledge transfer, including internal- and external-knowledge flows. E8 said, about internal-knowledge flows, *there is strong knowledge transfer to an acquired European subsidiary*. Dual subsidiaries were also engaging in managerial orchestration. For example, E1, E5, and E8 emphasised the importance of knowledge-related orchestration with customers, consumers, distributors, public and private agencies, universities, knowledge-orchestration silos within their network, distributors, and other companies. However, some of the participants mentioned a fear of knowledge leakage (Ritala et al., 2015), based on a mistrust of risky external cooperation, and the potential loss of their competitive technology advantage (Narula, 2004):

Innovation... also might be motivated by universities that want to educate students on practical programmes and our company uses academic knowledge as well. We cooperate with universities, Czech Academy of Science, and private entities to do a certain part of our research, but we must be careful to whom and what we are saying as we do not want to expose sensitive information to our competitors. (E3)

Innovation projects were an important linking element related to managerial orchestration. E5 explained how more experienced and settled subsidiaries help others with projects and how this is orchestrated throughout the organisation:

We also share projects between subsidiaries and HQ, including sharing knowledge between subsidiaries directly and concerning product development for other countries... if there is a need to launch new tests or product modification in certain markets. Our subsidiary may help them with recipes, manufacturing processes, marketing, and launching a new product under a new name somewhere.

Based on the above evidence and reasoning, knowledge sharing comprises internal- and external-knowledge flows (often stressed by knowledge-seeking MNEs). Dual subsidiaries in particular link internal- and external-knowledge flows via managerial orchestration of knowledge and innovation projects (Albis et al., 2021; Stephens and Carmeli, 2016).

4.2.3. Knowledge cocreation: Managing internal and external-innovation cooperation

Managing knowledge processes in value cocreation among multiple knowledge-ecosystem actors is a key requirement for process innovation (Eriksson et al., 2016). Knowledge cocreation can also be linked to other aspects of innovation such as new-product development (Kohlbacher, 2008) and open-innovation digital platforms (Abbate et al., 2019). Knowledge cocreation capability is both about managing and enhancing internal and external cooperation (Ferraris et al., 2019), as MNEs are networked firms whose subsidiaries act as nodes embedded in a variety of local contexts (Mudambi and Swift, 2011). Dual-motivation E6 stressed the importance of linking internal and external-innovation cooperation: *Cooperation with our customers is based on sharing resources on marketing, sales, training, and technical knowledge. There are strong technological synergies and interactions with customers' regional innovation centre to utilise our expertise and knowledge*. MNEs often look outside their boundaries (e.g., partners, customers, and suppliers) for knowledge sources that are needed to spark innovation. Dual-motivation E5 mentioned innovation outsourcing (linked to external-innovation cooperation): *We outsource the knowledge to different agencies for marketing, design, and strategy—this could be around 30% and the rest is done internally. Each country can choose, according to their needs, experiences and preferences, their collaborative partners. There are several preferred suppliers for the group*.

Dual-motivation E8 commented regarding the combination of internal/external stakeholders in innovation cooperation and the role of managerial orchestration of knowledge-silo innovation projects: *We are using silos... created with scientists, universities, and industry. They are really*

connected only to industry collaboration. Industry–academy collaborations are really poor. I am working on the idea to change the way silos are organised and managed... do it in a more orchestrated manner. Strong interaction between MNEs and external stakeholders can improve the quality of innovation performance (Ashok et al., 2014). Regarding external-knowledge cocreation, managers mentioned cooperation with universities, external agencies, customers, suppliers, and end-users. For example, knowledge-seeking E3 noted, about external-innovation cooperation: *We have research capabilities and are aligned with the universities. Innovation is a mixture of local requirements and requirements of our Korean partners from headquarters. It also might be motivated by universities that want to educate students on practical programmes and our company uses academic knowledge as well*.

This is consistent with the findings of Arant et al. (2019), namely that cooperation between universities and MNEs can be a critical driver of radical innovation. Knowledge-seeking E4 added, concerning collaboration with universities and partner companies:

We have smaller scale innovation activities and we are generally using the knowledge and we are cooperating with other companies here that work on new technologies and new solutions for us. We share very long cooperation within Serbia with local universities in all disciplines that are applied to our scope of work, including, to some extent, developed-country institutions from Europe and the US.

Strong ties and joint research with universities were mentioned by several companies. However, market-seeking firms stressed this aspect in their home market, not in the host country. For example, E1a commented: *In our headquarters, there is a history of innovation and development, networks are really good, it's cheap, skilled people, good laboratories, support with the equipment. In Brazil, the government gives us strong support if you collaborate with universities, which makes things cheaper*. Industry–university cooperation facilitates access to firm/university external knowledge and complementary resources and enhances knowledge diffusion through collaboration. Market-seeking E10 commented, on this topic, *Definitely we work together with universities and other organisations, but this is also from a recruitment perspective... to get skilled resources, we make sure that our brand is recognised by students*. On the other hand, market-seeking E7 stressed the cooperation aspect linked to local-market adaptation: *We target people who are at the top tier of their particular area and we let them develop business for us, including creating consumer networks*.

MNEs face increasing demands in managing the complexity of different interactions, as they must deal with multiple embeddedness, across different geographies (Meyer et al., 2011). They must effectively organise their networks, including innovation HQ and subsidiary locations and roles. This shows in the case of market-seeking E1:

If I have one part that was designed in headquarters, it was designed with the knowledge of those people from that location. However, in subsidiaries, they may need to make some changes based on regulation, market requirement, customisation, and adaptation—and that's the role of local innovation teams. Radical innovation and technology development is done in HQ and improvements independently in the plant.

Considering all these aspects and building on arguments of Ferraris et al. (2019) about the link between global R&D partnerships and search capacity, we conclude that both internal- and external-innovation cooperation are involved in knowledge cocreation. However, external-innovation cooperation in host markets is emphasised by knowledge-seeking firms. Furthermore, dual-motive subsidiaries tend to develop stronger links between internal and external cooperation ambidextrously via managerial orchestration and innovation projects.

4.3. Home- and host-country context: Knowledge-related institutions and ecosystems

There are also home-country influences on FDI motives, knowledge

creation capability, and the relationship between them. E8, for example, referred to the positive features of their home market: *Location of our headquarters is rich in government institutions, universities or research organisations, it is a knowledge cluster.* On the other hand, they also highlighted a perception of relatively poor resource munificence and different knowledge ecosystems in India compared to Europe, *With respect to management, the business management in Europe is at least 15 years ahead of India. Bio incubators are very lacking in India right now.*

Indian firms are leaders in the global generic-pharmaceutical industry and have a history of developing new, low-cost processes for drugs going off patent. However, their efforts to create new products have been often notably less successful. E7 said, in this respect: *They have probably one of the best laboratories in clinical trials outside of big pharma, skilled scientists, great machinery, but the problem is that they don't know how to market innovation of new products.* However, some Indian EMNEs such as e-commerce firms are already developing innovation that is at the cutting edge worldwide. E11 noted: *The technical team in India is mainly there because of their good approach, labour, and skilled people at reasonable costs. Most of the innovation is coming from HQ... we have a technical team in India and almost every innovation creation is connected to the technological team there, but innovation is also coming from subsidiaries.* Additionally, several of the interviewed Indian firms confirmed that contextual issues—such as the changing innovation and knowledge ecosystem in India (Sahasranamam et al., 2019)—may affect the relationship between the investment motivations and knowledge creation capability.

It is also important to consider host-country context impacting the relationship between investment motives and knowledge creation capability. For example, network ties and a subsidiary's understanding of how to benefit from the host country's knowledge ecosystems through dual embeddedness affect MNE subsidiaries' innovation (Conroy et al., 2023). E2 highlighted relatively strong resource munificence in terms of human capital and connections to the wider knowledge ecosystem (see Table 1): *We did not initially decide on Prague. First, we went to Poland, but Prague seemed more diversified, finally. There is a lot of good talent, great people coming out of universities with analytical skills and cooperation with other stakeholders as the Academy of Science, research centres, and suppliers are really good.* In other words, the stronger the linkages subsidiaries build with their partners within the knowledge-ecosystem network, the higher their propensity to share knowledge (Michailova and Minbaeva, 2012). E8 commented on this issue: *We have to feed the knowledge silos properly with information from different areas, including from scientists and students.* Additionally, both the home- and host-country contexts and their dynamics (e.g., EU accession and knowledge-ecosystem evolution) influence the relationship between EMNEs' investment motives and knowledge creation capability while innovating in CEE (see Table 5).

5. Discussion

This paper acknowledges and expands the concept of knowledge integration, a key element of Grant's (1996) knowledge-based theory of organisational capability and the critical challenge in the process of developing knowledge creation capability. We move beyond external market-knowledge acquisition versus the internal-knowledge-sharing paradigm of Zhou and Li (2012) by highlighting that internal-knowledge coordination is an important element of knowledge integration (Anand, 2011). Moreover, we recognise knowledge sharing and cocreation as elements of the knowledge creation capability of MNE subsidiaries. We uncover that internal and external elements of knowledge creation capability are linked through managerial orchestration (Teece, 2014)—not only of resources (Andersén and Ljungkvist, 2021), but also of knowledge and innovation projects (West and Olk, 2023). Innovation-orchestration capability has been conceptualised with a focus on the organisational- and individual-level determinants (Ritala et al., 2009). Our study has developed the concept of managerial orchestration by linking it not only to organisational-level factors

(Carnes et al., 2017), but also to country- and ecosystem-level factors (Nambisan and Sawhney, 2011) underpinning knowledge-based capabilities and knowledge creation (Robertson et al., 2023).

Fig. 1 encapsulates our findings and related arguments explaining innovation-investment motives abroad and knowledge creation capability of MNE subsidiaries. The KBV of international innovation management highlights the relationships between knowledge creation capability elements (knowledge integration, sharing, and cocreation), capability antecedents (innovation-investment motive and MNE-subsidiary type) and contextual factors (including knowledge-related institutions and ecosystems). Fig. 1 also highlights the role of home- and host-country contexts (e.g., emerging economies and CEE). Our initial considerations, based on the extant literature (e.g., Hobdari et al., 2017), implied that international-investment motives are influenced by firm-specific advantages, including organisational capabilities, and both home- and host-country-location advantages (Dikova et al., 2019) and disadvantages (Cuervo-Cazurra and Genc, 2008). Our findings and conceptual framework suggest that innovation-investment motives and knowledge creation capability are related in a more complex way, with FDI motives interlinked with MNE-subsidiary types, and both interrelated with knowledge creation capability of subsidiaries and contextual factors.

5.1. Contributions

This paper contributes to the calls for a multilevel research agenda on managing the subsidiaries and knowledge in MNEs (Gaur et al., 2019; Meyer et al., 2020). We show how EMNEs' perspectives on making strategic decisions about subsidiary roles and autonomy are often unique (Lee et al., 2020) and driven by their knowledge about and evidence of subsidiaries' innovative capacity (Wang et al., 2014). While operations of EMNEs in emerging markets are increasingly gaining the attention of scholars (Luo and Zhang, 2016), motives for investment by EMNEs in R&D and innovation (Lynch and Jin, 2016) in CEE are still poorly understood (Dymitrowski and Ratajczak-Mrozek, 2019; Vujanović et al., 2022). Our study contributes to this research stream by linking it to the knowledge management research on managerial orchestration (Ness, 2017; Ritala et al., 2023; Tang et al., 2023).

Specifically, we expand this research by rooting the orchestration of knowledge processes for innovation in the KBV and global strategy (Grant and Phene, 2022). For example, Haider and Mariotti (2016) focused on the orchestration of alliance portfolios, including the role of alliance-portfolio capability, but did not draw strong links to the KBV and internationalisation of innovation streams of literature. We also contribute to the knowledge-based theory of organisational capability (Grant, 1996) by incorporating the concepts of internal-knowledge coordination and managerial orchestration and linking them to knowledge creation capability (Arikan, 2009; Robertson et al., 2023; Su et al., 2016) and orchestration theory in MNEs (Bhandari et al., 2023; Pitelis and Teece, 2018; Teece, 2014).

Moreover, we contribute to the understanding of the relationship between international innovation motives and knowledge creation capability (Ingršt and Záborský, 2021). The alignment of strategic motives for international innovation abroad and knowledge creation capability is captured in (1) alignment between market-, knowledge-seeking, and dual motives, and internal and external dimensions of knowledge creation capability; and (2) alignment between motives and elements linking internal and external dimensions. We add to the literature on MNE subsidiaries (Meyer et al., 2020) by stressing the role of managerial orchestration of innovation projects in linking internal and external dimensions of knowledge creation capability. We also contribute to the related literature on innovation and ambidexterity in international business (Liu et al., 2022; Wang and Wang, 2021) by connecting it to EMNEs' internationalisation (Khan et al., 2022) and knowledge management (Zhao et al., 2022). We add to the understanding of MNE subsidiaries' ambidexterity in emerging markets by

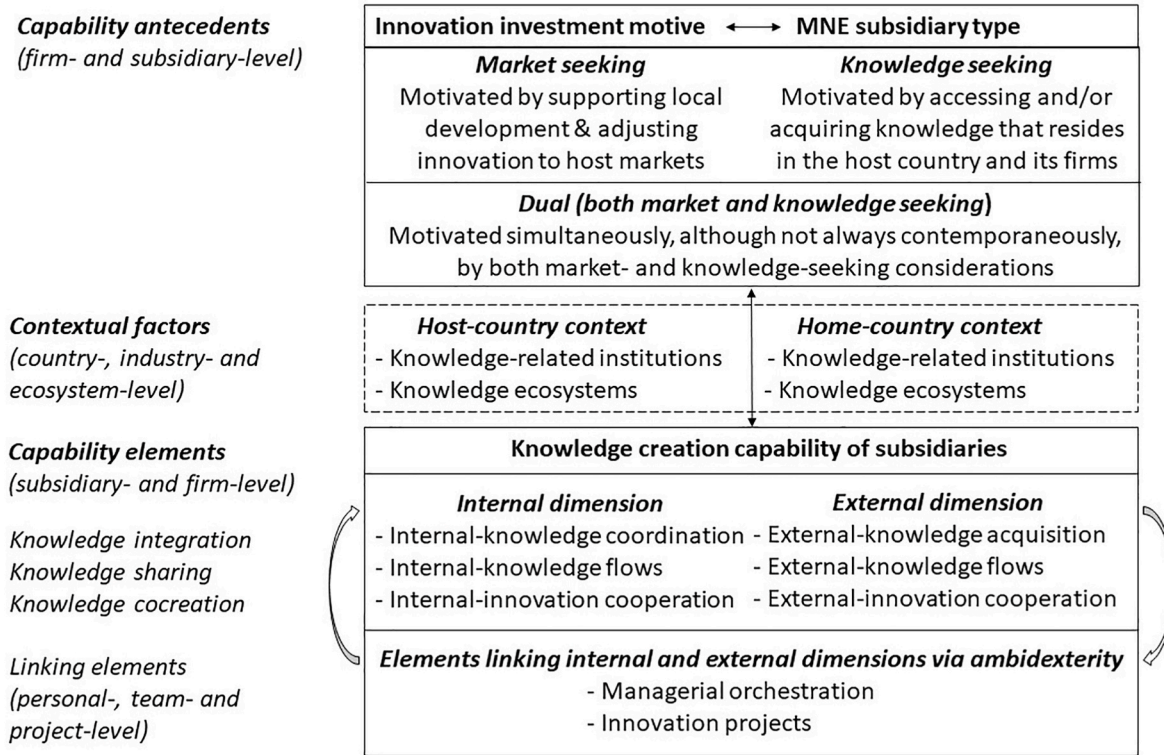


Fig. 1. The knowledge-based view of international innovation management.

acknowledging its links to knowledge creation, complementing studies linking it to knowledge sourcing (Dodourova et al., 2023) and transfer (Borini in et al., 2022).

Finally, we extend the literature on MNEs and business ecosystems (Cha, 2020; Robertson et al., 2023) by linking it to the KBV and the concepts of knowledge ecosystems and innovation (Järvi et al., 2018; Valkokari, 2015; West and Olk, 2023). Hobdari et al. (2017) suggested that home-country-level characteristics of emerging economies, such as resource munificence and institutions, may affect business ecosystems and these can, in turn, affect FDI motives. Our findings suggest that home- and host-country factors can be boundary conditions in contextualising firms' strategic choices (Lu et al., 2014), such as the relationship between strategic motives, subsidiary types, and capabilities.

While more evidence for this relationship is needed, we suggest that home- and host-country factors such as knowledge ecosystems not only affect FDI motives and firm capabilities directly but are also contextual factors in the relationship between firm-specific factors (Marano et al., 2016; Rhee and Cheng, 2002), in our case capability antecedents and elements. We caution against reducing innovation-investment motives to location advantages or country factors as they are also related to firm-, subsidiary- and ecosystem-specific factors. Overall, our analysis has revealed that a complex interplay of multiple factors at different levels underpins the internationalisation of innovation by EMNEs in CEE.

5.2. Limitations and future research

The findings of this study are based on interviews at 11 firms from specific emerging markets investing in specific CEE countries and industries and may not be applicable to MNEs from other countries or industries, or those which invest in countries not covered by our study. It is difficult for qualitative research to provide statistically generalisable results. However, this was not the aim of this study. International innovation by EMNEs is an important trend (Wu and Park, 2019), and innovation by EMNEs in other emerging markets is underresearched.

Most of the current attention in the research on knowledge and innovation management in EMNEs is devoted to knowledge sourcing by EMNEs from advanced-market subsidiaries (Ciabuschi et al., 2017; Yakob et al., 2018; Zhao et al., 2022). This paper opens a new direction for exploring innovation investment in emerging markets (Jha et al., 2018; Khan et al., 2019), focusing on the link between EMNEs' innovation-investment motives and knowledge creation capability. Quantitative studies could further investigate this topic, for example by using surveys to create proxies for investment motives or corporate capabilities (Urbig et al., 2022).

We see several other areas for research on the KBV of international innovation management. Microfoundations related to innovation management, knowledge sharing, and capability development in MNEs and knowledge ecosystems are fruitful areas for future research (Felin and Foss, 2023; Foss and Pedersen, 2019). We also encourage further work recognising both knowledge sharing and leaking (Ritala et al., 2015) in EMNEs (Jiang et al., 2023) and related asset-specificity considerations in MNE subsidiaries' outsourcing and insourcing of R&D (Santangelo et al., 2016). Future studies could also explore the transfer and nature of knowledge (e.g., tacit knowledge) and its sources (e.g., internal and external) in specific sectors (Guo et al., 2018; Sahasranamam et al., 2019), and the role of HR-management practices in improving innovation performance through knowledge acquisition (Papa et al., 2018). Other areas for future research could be the roles of boundary spanners in knowledge management for innovation in EMNEs (Liu and Meyer, 2020).

Furthermore, there is an opportunity to integrate our theoretical framework with the research on offshoring and global sourcing of innovation to better understand the rationale for firms to source innovation beyond their home country (Lin, 2020) and how MNE-subsidary relationships evolve (Andrews et al., 2022). Knowledge creation capability is a topic of interest beyond MNEs and/or emerging markets (Su et al., 2016), and future research could extend our conceptualisation to internationalising SMEs and firms from other economies (Ge and Liu, 2022; Kim et al., 2022). Location-specific factors are important

considerations in multilevel perspectives on knowledge management in MNEs (Gaur et al., 2019). Future research could extend our understanding of knowledge creation capability in international contexts by focusing on home- or host-country factors in single-country studies.

5.3. Implications for practice

In terms of advice for managers, both HQ and subsidiary managers from MNEs should recognise the increasing innovative potential of their subsidiaries in emerging markets. Second, they should reevaluate their strategic motivations for conducting innovation activities there and consider ambidextrous approaches and subsidiary roles combining market and knowledge seeking. Third, the knowledge creation capability of MNE subsidiaries in CEE and emerging markets must be built by emphasising both their internal and external dimensions. A shift of thinking from knowledge creation to cocreation within knowledge ecosystems may be fruitful in unleashing the full innovative potential of those subsidiaries. In terms of policy implications, governments in emerging markets need to invest not only in general business and innovation-friendly institutions, but also in their knowledge ecosystems to increase their business sophistication and country attractiveness and potential for innovation and R&D investments.

6. Conclusion

This paper highlights the importance of understanding strategic motives for innovation investment abroad in the process of building knowledge creation capability. We have developed the nature of this relationship with a discussion of how EMNEs' knowledge-seeking, market-seeking and dual motives abroad relate to each other and to knowledge integration, sharing, and cocreation. The paper has stressed internal and external elements of knowledge creation capability and elements linking them (e.g., managerial orchestration and innovation projects) via ambidexterity. Finally, the KBV of international innovation management integrates the research streams on the KBV of firm innovation and global strategy (Grant and Phene, 2022; Martín-de Castro et al., 2011) by emphasising the role of home- and host-country context (e.g., knowledge ecosystems) in the relationship between international innovation-investment motives and knowledge creation capability of MNE subsidiaries.

Data availability

The data that has been used is confidential.

Acknowledgements:

We would like to thank the participants at the Emerging Markets and Global Strategy Conference in Boston, Massachusetts (including Professors Ravi Ramamurti and Aldo Musacchio), Professor David Teece, Paloma Miravittles, Matevž Raškovič, and Maureen Benson-Rea for their comments on the earlier drafts of this paper. We would also like to thank the *Technovation* editors and three anonymous reviewers for their helpful feedback.

References

- Abbate, T., Codini, A.P., Aquilani, B., 2019. Knowledge co-creation in open innovation digital platforms: processes, tools and services. *J. Bus. Ind. Market.* 34 (7), 1434–1447.
- Achcaoucaou, F., Miravittles, P., León-Darder, F., 2014. Knowledge sharing and subsidiary R&D mandate development: a matter of dual embeddedness. *Int. Bus. Rev.* 23 (1), 76–90.
- Alam, A., Uddin, M., Yazdifar, H., 2019. Institutional determinants of R&D investment: evidence from emerging markets. *Technol. Forecast. Soc. Change* 138, 34–44.
- Albis, N., Álvarez, I., García, A., 2021. The impact of external, internal, and dual relational embeddedness on the innovation performance of foreign subsidiaries: evidence from a developing country. *J. Int. Manag.* 27 (4), 100854.
- Almeida, P., 1996. Knowledge sourcing by foreign multinationals: patent citation analysis in the US semiconductor industry. *Strat. Manag. J.* 17 (S2), 155–165.
- Almeida, P., Phene, A., 2004. Subsidiaries and knowledge creation: the influence of the MNC and host country on innovation. *Strat. Manag. J.* 25 (8–9), 847–864.
- Ambos, B., Ambos, T.C., 2011. Meeting the challenge of offshoring R&D: an examination of firm-and location-specific factors. *R D Manag.* 41 (2), 107–119.
- Anand, J., 2011. Permeability to inter-and intrafirm knowledge flows: the role of coordination and hierarchy in MNEs. *Global Strategy J.* 1 (3–4), 283–300.
- Anand, J., McDermott, G., Mudambi, R., Narula, R., 2021. Innovation in and from emerging economies: new insights and lessons for international business research. *J. Int. Bus. Stud.* 52, 545–559.
- Andersén, J., Ljungkvist, T., 2021. Resource orchestration for team-based innovation: a case study of the interplay between teams, customers, and top management. *R D Manag.* 51 (1), 147–160.
- Andersson, U., Dasí, Á., Mudambi, R., Pedersen, T., 2016. Technology, innovation and knowledge: the importance of ideas and international connectivity. *J. World Bus.* 51 (1), 153–162.
- Andersson, U., Gaur, A., Mudambi, R., Persson, M., 2015. Unpacking interunit knowledge transfer in multinational enterprises. *Global Strategy J.* 5 (3), 241–255.
- Andrews, D.S., Nell, P.C., Schotter, A.P., Laamanen, T., 2022. And the subsidiary lives on: harnessing complex realities in the contemporary MNE. *J. Int. Bus. Stud.* 1–12.
- Andriopoulos, C., Lewis, M.W., 2010. Managing innovation paradoxes: ambidexterity lessons from leading product design companies. *Long. Range Plan.* 43 (1), 104–122.
- Arant, W., Fornahl, D., Grashof, N., Hesse, K., Söllner, C., 2019. University-industry Collaborations—The Key to Radical Innovations? *Review of Regional Research*, 39, pp. 119–141.
- Argote, L., Ingram, P., 2000. Knowledge transfer: a basis for competitive advantage in firms. *Organ. Behav. Hum. Decis. Process.* 82 (1), 150–169.
- Arikan, A.T., 2009. Interfirm knowledge exchanges and the knowledge creation capability of clusters. *Acad. Manag. Rev.* 34 (4), 658–676.
- Ashok, M., Narula, R., Martínez-Noya, A., 2014. End-user Collaboration for Process Innovation in Services: the Role of Internal Resources. *Unu-Merit*.
- Awate, S., Larsen, M.M., Mudambi, R., 2015. Accessing vs sourcing knowledge: a comparative study of R&D internationalization between emerging and advanced economy firms. *J. Int. Bus. Stud.* 46 (1), 63–86.
- Badrinarayanan, V., Ramachandran, I., Madhavaram, S., 2019. Resource orchestration and dynamic managerial capabilities: focusing on sales managers as effective resource orchestrators. *J. Personal Sell. Sales Manag.* 39 (1), 23–41.
- Bell, E., Bryman, A., Harley, B., 2018. *Business Research Methods*. Oxford University Press.
- Bhandari, K.R., Rana, S., Paul, J., Salo, J., 2020. Relative exploration and firm performance: why resource-theory alone is not sufficient? *J. Bus. Res.* 118, 363–377.
- Bhandari, K.R., Zámbořský, P., Ranta, M., Salo, J., 2023. Digitalization, internationalization, and firm performance: a resource-orchestration perspective on new OLI advantages. *Int. Bus. Rev.* 102135.
- Birkinslaw, J., Hood, N., 1998. Multinational subsidiary evolution: capability and charter change in foreign-owned subsidiary companies. *Acad. Manag. Rev.* 23 (4), 773–795.
- Borini, F.M., Santos, L.L., Raziq, M.M., Pereira, R.M., Brunhara, A.J., 2022. The differentiated role of organizational ambidexterity and organizational innovation in the subsidiary reverse knowledge transfer process. *J. Knowl. Manag.* 26 (1), 146–164.
- Braun, V., Clarke, V., 2006. Using thematic analysis in psychology. *Qual. Res. Psychol.* 3 (2), 77–101.
- Bruton, G.D., Ahlstrom, D., Chen, J., 2021. China has emerged as an aspirant economy. *Asia Pac. J. Manag.* 38, 1–15.
- Caloghirou, Y., Kastelli, I., Tsakanikas, A., 2004. Internal capabilities and external knowledge sources: complements or substitutes for innovative performance? *Technovation* 24 (1), 29–39.
- Cano-Kollmann, M., Cantwell, J., Hannigan, T.J., Mudambi, R., Song, J., 2016. Knowledge connectivity: an agenda for innovation research in international business. *J. Int. Bus. Stud.* 47, 255–262.
- Cantwell, J.A., 1989. *Technological Innovation and Multinational Corporations*. Basil Blackwell.
- Cantwell, J., Mudambi, R., 2005. MNE competence-creating subsidiary mandates. *Strat. Manag. J.* 26 (12), 1109–1128.
- Cantwell, J.A., Mudambi, R., 2011. Physical attraction and the geography of knowledge sourcing in multinational enterprises. *Global Strategy J.* 1 (3–4), 206–232.
- Carneiro, A., 2000. How does knowledge management influence innovation and competitiveness? *J. Knowl. Manag.* 4 (2), 87–98.
- Carnes, C.M., Chirico, F., Hitt, M.A., Huh, D.W., Pisano, V., 2017. Resource orchestration for innovation: structuring and bundling resources in growth-and maturity-stage firms. *Long. Range Plan.* 50 (4), 472–486.
- Castellani, D., Lavoratori, K., Perri, A., Scalera, V.G., 2022a. International connectivity and the location of multinational enterprises' knowledge-intensive activities: evidence from US metropolitan areas. *Global Strategy J.* 12 (1), 82–107.
- Castellani, D., Perri, A., Scalera, V.G., 2022b. Knowledge integration in multinational enterprises: the role of inventors crossing national and organizational boundaries. *J. World Bus.* 57 (3), 101290.
- Cha, H., 2020. A paradigm shift in the global strategy of MNEs towards business ecosystems: a research agenda for new theory development. *J. Int. Manag.* 26 (3), 100755.
- Chen, V.Z., Li, J., Shapiro, D.M., 2012. International reverse spillover effects on parent firms: evidences from emerging-market MNEs in developed markets. *Eur. Manag. J.* 30 (3), 204–218.

- Child, J., Rodrigues, S.B., 2005. The internationalization of Chinese Firms: a case for theoretical extension? *Manag. Organ. Rev.* 1 (3), 381–410.
- Chung, W., Alcácer, J., 2002. Knowledge seeking and location choice of foreign direct investment in the United States. *Manag. Sci.* 48 (12), 1534–1554.
- Ciabuschi, F., Kong, L., Su, C., 2017. Knowledge sourcing from advanced markets subsidiaries: political embeddedness and reverse knowledge transfer barriers in emerging-market multinationals. *Ind. Corp. Change* 26 (2), 311–332.
- Clarysse, B., Wright, M., Bruneel, J., Mahajan, A., 2014. Creating value in ecosystems: crossing the chasm between knowledge and business ecosystems. *Res. Pol.* 43 (7), 1164–1176.
- Colakoglu, S., Yamao, S., Lepak, D.P., 2014. Knowledge creation capability in MNC subsidiaries: examining the roles of global and local knowledge inflows and subsidiary knowledge stocks. *Int. Bus. Rev.* 23 (1), 91–101.
- Conroy, K.M., Jacobs, S., Liu, Y., 2023. The dual knowledge role of open innovation intermediaries: internal weaving and external filtering for MNE subsidiaries. *Technovation* 123, 102721.
- Crabtree, B., Miller, W., 1999. A template approach to text analysis: developing and using codebooks. In: Crabtree, B., Miller, W. (Eds.), *Doing Qualitative Research*. Sage, pp. 163–177.
- Creswell, J., 1998. *Qualitative Inquiry and Research Design: Choosing Among Five Traditions*. Sage Publications.
- Crisuolo, P., Narula, R., 2007. Using multi-hub structures for international R&D: organisational inertia and the challenges of implementation. *Manag. Int. Rev.* 47 (5), 639–660.
- Cuervo-Cazurra, A., Genc, M., 2008. Transforming disadvantages into advantages: developing-country MNEs in the least developed countries. *J. Int. Bus. Stud.* 39 (6), 957–979.
- Cuervo-Cazurra, A., Luo, Y., Ramamurti, R., Ang, S.H., 2018. The impact of the home country on internationalization. *J. World Bus.* 53 (5), 593–604.
- Dabrowska, J., Lopez-Vega, H., Ritala, P., 2019. Waking the sleeping beauty: swarovski's open innovation journey. *R&D Manag. J.* 49 (5), 775–788.
- Daniels, J.D., Cannice, M.V., 2004. Interview studies in international business research. In: Piekari, R., Welch, C. (Eds.), *Handbook of Qualitative Research Methods for International Business*. Edward Elgar Publishing, pp. 185–206.
- Deng, P., 2004. Outward investment by Chinese MNCs: motivations and implications. *Bus. Horiz.* 47 (3), 8–16.
- Dikova, D., Panibratov, A., Veselova, A., 2019. Investment motives, ownership advantages and institutional distance: an examination of Russian cross-border acquisitions. *Int. Bus. Rev.* 28 (4), 625–637.
- Di Minin, A., Zhang, J., Gammeltoft, P., 2012. Chinese foreign direct investment in R&D in Europe: a new model of R&D internationalization? *Eur. Manag. J.* 30 (3), 189–203.
- Dodourova, M., Zhao, S., Harzing, A.W., 2023. Ambidexterity in MNC knowledge sourcing in emerging economies: a microfoundational perspective. *Int. Bus. Rev.* 32 (2), 101854.
- Dunning, J.H., 1998. Location and the multinational enterprise: a neglected factor? *J. Int. Bus. Stud.* 45–66.
- Du Plessis, M., 2007. The role of knowledge management in innovation. *J. Knowl. Manag.* 11 (4), 20–29.
- The global innovation index 2012. In: Dutta, S. (Ed.), 2012. *Stronger Innovation Linkages for Global Growth*. Cornell University, INSEAD & WIPO. <https://www.globalinnovationindex.org/userfiles/file/GII-2012-Report.pdf>.
- Dutta, S., Lanvin, B., Rivera León, L., Wunsch-Vincent, S. (Eds.), 2022. *The Global Innovation Index 2022. What Is the Future of Innovation-Driven Growth?, fifteenth ed.* Cornell University, INSEAD & WIPO <https://www.wipo.int/edocs/pubdocs/en/wipo-pub-2000-2022-en-main-report-global-innovation-index-2022-15th-edition.pdf>.
- Dymitrowski, A., Ratajczak-Mrozek, M., 2019. The changing roles of a multinational enterprise's subsidiaries and headquarters in innovation transfer: a network perspective. *Creativ. Innovat. Manag.* 28 (4), 550–562.
- Eisenhardt, K.M., 1989. Building theories from case study research. *Acad. Manag. Rev.* 14 (4), 532–550.
- Eisenhardt, K.M., Graebner, M.E., 2007. Theory building from cases: opportunities and challenges. *Acad. Manag. J.* 50 (1), 25–32.
- Eriksson, P.E., Patel, P.C., Sjödin, D.R., Frishammar, J., Parida, V., 2016. Managing interorganizational innovation projects: mitigating the negative effects of equivocality through knowledge search strategies. *Long. Range Plan.* 49 (6), 691–705.
- Felin, T., Foss, N., 2023. Microfoundations of ecosystems: the theory-led firm and capability growth. *Strat. Organ.*, 14761270231159391
- Fereday, J., Muir-Cochrane, E., 2006. Demonstrating rigor using thematic analysis: a hybrid approach of inductive and deductive coding and theme development. *Int. J. Qual. Methods* 5 (1), 80–92.
- Fernandez, A.S., Chiambaretto, P., Chauvet, M., Engsig, J., 2021. Why do MNEs both make and cooperate for innovation? *Technovation* 106, 102313.
- Ferraris, A., Devalle, A., Ciampi, F., Couturier, J., 2019. Are global R&D partnerships enough to increase a company's innovation performance? The role of search and integrative capacities. *Technol. Forecast. Soc. Change* 149, 119750.
- Ferraris, A., Giachino, C., Ciampi, F., Couturier, J., 2021. R&D internationalization in medium-sized firms: the moderating role of knowledge management in enhancing innovation performances. *J. Bus. Res.* 128, 711–718.
- Ferreira, J.J., Fernandes, C.I., Guo, Y., Rammal, H.G., 2022. Knowledge worker mobility and knowledge management in MNEs: a bibliometric analysis and research agenda. *J. Bus. Res.* 142, 464–475.
- Foss, N.J., Pedersen, T., 2019. Microfoundations in international management research: the case of knowledge sharing in multinational corporations. *J. Int. Bus. Stud.* 50 (9), 1594–1621.
- Fu, X., Sun, Z., Ghauri, P.N., 2018. Reverse knowledge acquisition in emerging market MNEs: the experiences of Huawei and ZTE. *J. Bus. Res.* 93, 202–215.
- Gama, F., Sjödin, D., Parida, V., Frishammar, J., Wincent, J., 2022. Exploratory and exploitative capability paths for innovation: a contingency framework for harnessing fuzziness in the front end. *Technovation* 113, 102416.
- Gammeltoft, P., Cuervo-Cazurra, A., 2021. Enriching internationalization process theory: insights from the study of emerging market multinationals. *J. Int. Manag.* 27 (3), 100884 <https://doi.org/10.1016/j.intman.2021.100884>.
- Gaur, A.S., Lu, J.W., 2007. Ownership strategies and survival of foreign subsidiaries: impacts of institutional distance and experience. *J. Manag.* 33 (1), 84–110.
- Gaur, A.S., Ma, H., Ge, B., 2019. MNC strategy, knowledge transfer context, and knowledge flow in MNEs. *J. Knowl. Manag.* 23 (9), 1885–1900.
- Ge, S., Liu, X., 2022. The role of knowledge creation, absorption and acquisition in determining national competitive advantage. *Technovation* 112, 102396.
- Ghauri, P., 2004. Designing and conducting case studies in international business research. In: Marschan-Piekkari, R., Welch, C. (Eds.), *Handbook of Qualitative Research Methods for International Business*. Edward Elgar Publishing, pp. 109–124.
- Ghoshal, S., Bartlett, C.A., 1988. Creation, adoption, and diffusion of innovations by subsidiaries of multinational corporations. *J. Int. Bus. Stud.* 19, 365–388.
- Giuliani, E., Gorgoni, S., Günther, C., Rabellotti, R., 2014. Emerging versus advanced country MNEs investing in Europe: a typology of subsidiary global-local connections. *Int. Bus. Rev.* 23 (4), 680–691.
- Goerzen, A., Asmussen, C.G., Nielsen, B.B., 2013. Global cities and multinational enterprise location strategy. *J. Int. Bus. Stud.* 44, 427–450.
- Gooderham, P.N., Pedersen, T., Sandvik, A.M., Dasi, A., Elter, F., Hildrum, J., 2022. Contextualizing AMO explanations of knowledge sharing in MNEs: the role of organizational and national culture. *Manag. Int. Rev.* 62 (6), 859–884.
- Gorynia, M., Nowak, J., Trapczynski, P., Wolniak, R., 2019. Friend or foe? On the role of institutional reforms in the investment development path of Central and East European economies. *Int. Bus. Rev.* 28 (3), 575–587.
- Govindarajan, V., Ramamurti, R., 2011. Reverse innovation, emerging markets, and global strategy. *Global Strategy J.* 1 (3–4), 191–205.
- Grant, R.M., 1996. Prospering in dynamically-competitive environments: organizational capability as knowledge integration. *Organ. Sci.* 7 (4), 375–387.
- Grant, R.M., Phene, A., 2022. The knowledge based view and global strategy: past impact and future potential. *Global Strategy J.* 12 (1), 3–30.
- Guo, Y., Jasovska, P., Rammal, H.G., Rose, E.L., 2018. Global mobility of professionals and the transfer of tacit knowledge in multinational service firms. *J. Knowl. Manag.* 24 (3), 553–567.
- Gupta, A.K., Govindarajan, V., 2000. Knowledge flows within multinational corporations. *Strat. Manag. J.* 21 (4), 473–496.
- Haas, M.R., Cummings, J.N., 2015. Barriers to knowledge seeking within MNC teams: which differences matter most? *J. Int. Bus. Stud.* 46 (1), 36–62.
- Haider, S., Mariotti, F., 2016. The orchestration of alliance portfolios: the role of alliance portfolio capability. *Scand. J. Manag.* 32 (3), 127–141.
- Håkanson, L., Nobel, R., 1993. Determinants of foreign R&D in Swedish multinationals. *Res. Pol.* 22 (5), 397–411.
- Hertenstein, P., Alon, I., 2022. A learning portal model of emerging markets multinationals. *Global Strategy J.* 12 (1), 134–162.
- Hobdari, B., Gammeltoft, P., Li, J., Meyer, K., 2017. The home country of the MNE: the case of emerging economy firms. *Asia Pac. J. Manag.* 34 (1), 1–17.
- Hutzschenreuter, T., Harhoff, P.L., 2020. National capital city location and subsidiary portfolio expansion: the negative effect of geographic distance to the capital city at inception on the speed of subsequent investments. *J. Int. Bus. Stud.* 51, 1107–1132.
- Ingrst, I., Záborský, P., 2021. Knowledge flows, strategic motives and innovation performance: insights from Australian and New Zealand investment in Europe. *J. Manag. Organ.* 27 (5), 948–971.
- Isaac, V.R., Borini, F.M., Raziq, M.M., Benito, G.R., 2019. From local to global innovation: the role of subsidiaries' external relational embeddedness in an emerging market. *Int. Bus. Rev.* 28 (4), 638–646.
- Jaklič, A., Obloj, K., Svetličič, M., Kronegger, L., 2019. Evolution of Central and Eastern Europe related international business research. *J. Bus. Res.* 108, 421–434.
- Järvi, K., Almpantopoulou, A., Ritala, P., 2018. Organization of knowledge ecosystems: prefigurative and partial forms. *Res. Pol.* 47 (8), 1523–1537.
- Jha, S.K., Dhanaraj, C., Krishnan, R.T., 2018. From arbitrage to global innovation: evolution of multinational R&D in emerging markets. *Manag. Int. Rev.* 58 (4), 633–661.
- Jiang, Y., Ma, Z., Wang, X., 2023. The impact of knowledge management on intellectual property risk prevention: analysis from China's strategic emerging industries. *J. Knowl. Manag.* 27 (1), 197–207.
- Jick, T.D., 1979. Mixing qualitative and quantitative methods: triangulation in action. *Adm. Sci. Q.* 24 (4), 602–611.
- Jindra, B., Giroud, A., Scott-Kennel, J., 2009. Subsidiary roles, vertical linkages and economic development: lessons from transition economies. *J. World Bus.* 44 (2), 167–179.
- Kazadi, K., Lievens, A., Mahr, D., 2016. Stakeholder co-creation during the innovation process: identifying capabilities for knowledge creation among multiple stakeholders. *J. Bus. Res.* 69 (2), 525–540.
- Kedia, B., Gaffney, N., Clampit, J., 2012. EMNEs and knowledge-seeking FDI. *Manag. Int. Rev.* 52, 155–173.
- Khan, Z., Amankwah-Amoah, J., Lew, Y.K., Puthusserry, P., Czinkota, M., 2022. Strategic ambidexterity and its performance implications for emerging economies multinationals. *Int. Bus. Rev.* 31 (3), 101762.

- Khan, Z., Lew, Y.K., Marinova, S., 2019. Exploitative and exploratory innovations in emerging economies: the role of realized absorptive capacity and learning intent. *Int. Bus. Rev.* 28 (3), 499–512.
- Kim, H., Reiche, B.S., Harzing, A.W., 2022. How does successive inpatriation contribute to subsidiary capability building and subsidiary evolution? An organizational knowledge creation perspective. *J. Int. Bus. Stud.* 53 (7), 1394–1419.
- Kogut, B., Zander, U., 1992. Knowledge of the firm, combinative capabilities, and the replication of technology. *Organ. Sci.* 3 (3), 383–397.
- Kogut, B., Zander, U., 1993. Knowledge of the firm and the evolutionary theory of the multinational corporation. *J. Int. Bus. Stud.* 24, 625–645.
- Kohlbacher, F., 2008. Knowledge-based New Product Development: fostering innovation through knowledge co-creation. *Int. J. Technol. Intell. Plann.* 4 (3), 326–346.
- Kotabe, M., Jiang, C.X., Murray, J.Y., 2011. Managerial ties, knowledge acquisition, realized absorptive capacity and new product market performance of emerging multinational companies: a case of China. *J. World Bus.* 46 (2), 166–176.
- Kumar, N., Stern, L.W., Anderson, J.C., 1993. Conducting interorganizational research using key informants. *Acad. Manag. J.* 36 (6), 1633–1651.
- Lee, J.Y., Jiménez, A., Bhandari, K.R., 2020a. Subsidiary roles and dual knowledge flows between MNE subsidiaries and headquarters: the moderating effects of organizational governance types. *J. Bus. Res.* 108, 188–200.
- Lee, J.Y., Taras, V., Jiménez, A., Choi, B., Pattnaik, C., 2020b. Ambidextrous knowledge sharing within R&D teams and multinational enterprise performance: the moderating effects of cultural distance in uncertainty avoidance. *Manag. Int. Rev.* 60, 387–425.
- Leonard-Barton, D., 1990. A dual methodology for case studies: synergistic use of a longitudinal single site with replicated multiple sites. *Organ. Sci.* 1 (3), 248–266.
- Li, P., Bathelt, H., 2020. Headquarters-subsidiary knowledge strategies at the cluster level. *Global Strategy J.* 10 (3), 585–618.
- Lin, N., 2020. Designing global sourcing strategy for cost savings and innovation: a configurational approach. *Manag. Int. Rev.* 1–31.
- Liu, Y., Collinson, S., Cooper, C., Baglieri, D., 2022. International business, innovation and ambidexterity: a micro-foundational perspective. *Int. Bus. Rev.* 31 (3), 101852.
- Liu, Y., Meyer, K.E., 2020. Boundary spanners, HRM practices, and reverse knowledge transfer: the case of Chinese cross-border acquisitions. *J. World Bus.* 55 (2), 100958 <https://doi.org/10.1016/j.jwb.2018.07.007>.
- Lopez-Vega, H., Lakemond, N., 2022. Tapping into emerging markets: EMNEs' strategies for innovation capability building. *Global Strategy Journal* 12 (2), 394–417.
- Lu, J., Liu, X., Wright, M., Filatotchev, I., 2014. International experience and FDI location choices of Chinese firms: the moderating effects of home country government support and host country institutions. *J. Int. Bus. Stud.* 45 (4), 428–449.
- Lub, V., 2015. Validity in qualitative evaluation: linking purposes, paradigms, and perspectives. *Int. J. Qual. Methods* 14 (5).
- Luo, Y., Rui, H., 2009. An ambidexterity perspective toward multinational enterprises from emerging economies. *Acad. Manag. Perspect.* 23 (4), 49–70.
- Luo, Y., Zhang, H., 2016. Emerging market MNEs: qualitative review and theoretical directions. *J. Int. Manag.* 22 (4), 333–350.
- Lynch, R., Jin, Z., 2016. Knowledge and innovation in emerging market multinationals: the expansion paradox. *J. Bus. Res.* 69 (5), 1593–1597.
- Marano, V., Arregle, J.L., Hitt, M.A., Spadafora, E., van Essen, M., 2016. Home country institutions and the internationalization-performance relationship: a meta-analytic review. *J. Manag.* 42 (5), 1075–1110.
- Martin, J.A., Eisenhardt, K.M., 2010. Rewiring: cross-business-unit collaborations in multi-business organizations. *Acad. Manag. J.* 53 (2), 265–301.
- Martín-de Castro, G., López-Sáez, P., Delgado-Verde, M., 2011. Towards a knowledge-based view of firm innovation. Theory and empirical research. *J. Knowl. Manag.* 15 (6), 871–874.
- Meyer, K.E., 2015. What is “strategic asset seeking FDI”? *Multinat. Bus. Rev.* 23 (1), 57–66.
- Meyer, K.E., Li, C., Schotter, A.P., 2020. Managing the MNE subsidiary: advancing a multi-level and dynamic research agenda. *J. Int. Bus. Stud.* 51, 538–576.
- Meyer, K.E., Mudambi, R., Narula, R., 2011. Multinational enterprises and local contexts: the opportunities and challenges of multiple embeddedness. *J. Manag. Stud.* 48 (2), 235–252.
- Meyer, K.E., Xin, K.R., 2018. Managing talent in emerging economy multinationals: integrating strategic management and human resource management. *Int. J. Hum. Resour. Manag.* 29 (11), 1827–1855.
- Michailova, S., Minbaeva, D.B., 2012. Organizational values and knowledge sharing in multinational corporations: the Danisco case. *Int. Bus. Rev.* 21 (1), 59–70.
- Michailova, S., Sidorova, E., 2010. Knowledge management in transition economies: selected key issues and possible research avenues. *Org. Markets Emerg. Economies* 1 (1), 68–81.
- Michailova, S., Zhan, W., 2015. Dynamic capabilities and innovation in MNC subsidiaries. *J. World Bus.* 50 (3), 576–583.
- Miles, M.B., Huberman, A.M., 1994. *Qualitative data analysis. A source book of new methods* (Sage Publishing).
- Morris, S., Oldroyd, J., Allen, R.T., Chng, D.H.M., Han, J., 2023. From local modification to global innovation: how research units in emerging economies innovate for the world. *J. Int. Bus. Stud.* 54, 418–440.
- Mudambi, R., 2002. Knowledge management in multinational firms. *J. Int. Manag.* 8 (1), 1–9.
- Mudambi, R., Navarra, P., 2004. Is knowledge power? Knowledge flows, subsidiary power and rent-seeking within MNCs. *J. Int. Bus. Stud.* 35 (5), 385–406.
- Mudambi, R., Swift, T., 2011. Leveraging knowledge and competencies across space: the next frontier in international business. *J. Int. Manag.* 17 (3), 186–189.
- Murphree, M., Petersen, B., Warrian, P., Gosine, R., 2022. Scope and scale of technology challenge and MNE subsidiary knowledge sourcing in host countries. *Technovation* 116, 102485.
- Nambisan, S., Sawhney, M., 2011. Orchestration processes in network-centric innovation: evidence from the field. *Acad. Manag. Perspect.* 25 (3), 40–57.
- Naqshbandi, M.M., Jasimuddin, S.M., 2018. Knowledge-oriented leadership and open innovation: role of knowledge management capability in France-based multinationals. *Int. Bus. Rev.* 27 (3), 701–713.
- Narula, R., 2004. R&D collaboration by SMEs: new opportunities and limitations in the face of globalisation. *Technovation* 24 (2), 153–161.
- Narula, R., 2014. Exploring the paradox of competence-creating subsidiaries: balancing bandwidth and dispersion in MNEs. *Long. Range Plan.* 47 (1–2), 4–15.
- Ness, I.J., 2017. Polyphonic orchestration: facilitating creative knowledge processes for innovation. *Eur. J. Innovat. Manag.* 20 (4), 557–577.
- Noorderhaven, N., Harzing, A.W., 2009. Knowledge-sharing and social interaction within MNEs. *J. Int. Bus. Stud.* 40 (5), 719–741.
- Ode, E., Ayavoo, R., 2020. The mediating role of knowledge application in the relationship between knowledge management practices and firm innovation. *J. Innov. Knowledge* 5 (3), 210–218.
- Papa, A., Dezi, L., Gregori, G.L., Mueller, J., Miglietta, N., 2018. Improving innovation performance through knowledge acquisition: the moderating role of employee retention and human resource management practices. *J. Knowl. Manag.* 24 (3), 589–605.
- Papanastassiou, M., Pearce, R., Zanfei, A., 2020. Changing perspectives on the internationalization of R&D and innovation by multinational enterprises: a review of the literature. *J. Int. Bus. Stud.* 51, 623–664.
- Pereira, V., Temouri, Y., Shen, K.N., Xie, X., Tarba, S., 2022. Exploring multilevel innovative ecosystems and the strategies of EMNEs through disruptive global expansions—The case of a Chinese MNE. *J. Bus. Res.* 138, 92–107.
- Phin, P., Záborský, P., Kruesi, M.A., 2022. Achieving institutional isomorphism in international franchising through knowledge transfer: evidence from the food and beverage industry in Cambodia. *Int. J. Hospit. Tourism Adm.* 1–32. <https://doi.org/10.1080/15256480.2022.2055696>.
- Piperopoulos, P., Wu, J., Wang, C., 2018. Outward FDI, location choices and innovation performance of emerging market enterprises. *Res. Pol.* 47 (1), 232–240.
- Pitelis, C.N., Teece, D.J., 2018. The new MNE: ‘Orchestration’ theory as envelope of ‘internalisation’ theory. *Manag. Int. Rev.* 58 (4), 523–539.
- Poulis, K., Poulis, E., Plakoyiannaki, E., 2013. The role of context in case study selection: an international business perspective. *Int. Bus. Rev.* 22 (1), 304–314.
- Prokop, D., 2021. University entrepreneurial ecosystems and spinoff companies: configurations, developments and outcomes. *Technovation* 107, 102286.
- Rabier, M.R., 2017. Acquisition motives and the distribution of acquisition performance. *Strat. Manag. J.* 38 (13), 2666–2681.
- Rhee, J.H., Cheng, J.L., 2002. Foreign market uncertainty and incremental international expansion: the moderating effect of firm, industry, and host country factors. *Mir. Manag. Int. Rev.* 42 (4), 419–439.
- Riela, S., Záborský, P., 2020. Screening of foreign acquisitions and trade in critical goods. *Asia-Pacific J. EU Studies* 18 (3), 55–83.
- Ritala, P., Armila, L., Blomqvist, K., 2009. Innovation orchestration capability—defining the organizational and individual level determinants. *Int. J. Innovat. Manag.* 13 (4), 569–591.
- Ritala, P., De Kort, C., Gailly, B., 2023. Orchestrating knowledge networks: alter-oriented brokering. *J. Manag.* 49 (3), 1140–1178.
- Ritala, P., Olander, H., Michailova, S., Husted, K., 2015. Knowledge sharing, knowledge leaking and relative innovation performance: an empirical study. *Technovation* 35, 22–31.
- Robertson, J., Caruana, A., Ferreira, C., 2023. Innovation performance: the effect of knowledge-based dynamic capabilities in cross-country innovation ecosystems. *Int. Bus. Rev.* 32 (2), 101866.
- Rugman, A.M., Verbeke, A., 2001. Subsidiary-specific advantages in multinational enterprises. *Strat. Manag. J.* 22 (3), 237–250.
- Sahasranamam, S., Rentala, S., Rose, E.L., 2019. Knowledge sources and international business activity in a changing innovation ecosystem: a study of the Indian pharmaceutical industry. *Manag. Organ. Rev.* 15 (3), 595–614.
- Santangelo, G.D., Meyer, K.E., Jindra, B., 2016. MNE subsidiaries’ outsourcing and insourcing of R&D: the role of local institutions. *Global Strategy J.* 6 (4), 247–268.
- Schmiele, A., 2012. Drivers for international innovation activities in developed and emerging countries. *J. Technol. Tran.* 37, 98–123.
- Schneckenberg, D., Truong, Y., Mazloomi, H., 2015. Microfoundations of innovative capabilities: the leverage of collaborative technologies on organizational learning and knowledge management in a multinational corporation. *Technol. Forecast. Soc. Change* 100, 356–368.
- Schreiber, S., Löwstedt, J., 2018. Managing asset orchestration: a processual approach to adapting to dynamic environments. *J. Bus. Res.* 90, 307–317.
- Shaver, J.M., Flyer, F., 2000. Agglomeration economies, firm heterogeneity, and foreign direct investment in the United States. *Strat. Manag. J.* 21 (12), 1175–1193.
- Silverman, D., 2006. *Interpreting Qualitative Data: Methods for Analyzing Talk, Text and Interaction*, third ed. Sage Publishing.
- Smith, K.G., Collins, C.J., Clark, K.D., 2005. Existing knowledge, knowledge creation capability, and the rate of new product introduction in high-technology firms. *Acad. Manag. J.* 48 (2), 346–357.
- Steinberg, P.J., Urbig, D., Procher, V.D., Volkman, C., 2021. Knowledge transfer and home-market innovativeness: a comparison of emerging and advanced economy multinationals. *J. Int. Manag.* 27 (4), 100873.

- Stephens, J.P., Carmeli, A., 2016. The positive effect of expressing negative emotions on knowledge creation capability and performance of project teams. *Int. J. Proj. Manag.* 34 (5), 862–873.
- Stojčić, N., 2021. Collaborative innovation in emerging innovation systems: evidence from central and eastern Europe. *J. Technol. Tran.* 46 (2), 531–562.
- Strauss, A.L., 1987. *Qualitative Analysis for Social Scientists*. Cambridge University Press.
- Strauss, A., Corbin, J., 1998. *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*, second ed. Sage Publications.
- Su, C.Y., Lin, B.W., Chen, C.J., 2016. Knowledge co-creation across national boundaries: trends and firms' strategies. *Knowl. Manag. Res. Pract.* 14 (4), 457–469.
- Su, Z., Ahlstrom, D., Li, J., Cheng, D., 2013. Knowledge creation capability, absorptive capacity, and product innovativeness. *R D Manag.* 43 (5), 473–485.
- Su, Z., Peng, M.W., Xie, E., 2016. A strategy tripod perspective on knowledge creation capability. *Br. J. Manag.* 27 (1), 58–76.
- Szulanski, G., 1996. Exploring internal stickiness: impediments to the transfer of best practice within the firm. *Strat. Manag. J.* 17 (S2), 27–43.
- Tang, H., Xie, Y., Liu, Y., Boadu, F., 2023. Distributed innovation, knowledge re-orchestration, and digital product innovation performance: the moderated mediation roles of intellectual property protection and knowledge exchange activities. *J. Knowl. Manag.* <https://doi.org/10.1108/JKM-07-2022-0592>.
- Teece, D.J., 2014. A dynamic capabilities-based entrepreneurial theory of the multinational enterprise. *J. Int. Bus. Stud.* 45, 8–37.
- Urbig, D., Procher, V.D., Steinberg, P.J., Volkmann, C., 2022. The role of firm-level and country-level antecedents in explaining emerging versus advanced economy multinationals' R&D internationalization strategies. *Int. Bus. Rev.* 31 (3), 101954.
- Valkokari, K., 2015. Business, innovation, and knowledge ecosystems: how they differ and how to survive and thrive within them. *Tech. Innov. Manag. Rev.* 5 (8), 17–24.
- von Zedtwitz, M., Gassmann, O., 2002. Market versus technology drive in R&D internationalization: four different patterns of managing research and development. *Res. Pol.* 31 (4), 569–588.
- Vujanović, N., Radošević, S., Stojčić, N., Hisarciklilar, M., Hashi, I., 2022. FDI spillover effects on innovation activities of knowledge using and knowledge creating firms: evidence from an emerging economy. *Technovation* 118, 102512.
- Wang, N., Wang, Y., 2021. Does parenting matter in subsidiary innovation in emerging economies? Exploring the role of parent superior competitiveness in affecting subsidiary contextual ambidexterity. *Int. Bus. Rev.* 30 (1), 101673.
- Wang, S.L., Luo, Y., Lu, X., Sun, J., Maksimov, V., 2014. Autonomy delegation to foreign subsidiaries: an enabling mechanism for emerging-market multinationals. *J. Int. Bus. Stud.* 45 (2), 111–130.
- West, J., Olk, P., 2023. Distributed governance of a complex ecosystem: how R&D consortia orchestrate the Alzheimer's knowledge ecosystem. *Calif. Manag. Rev.* 65 (2), 93–128.
- Wu, J., Park, S.H., 2019. The role of international institutional complexity on emerging market multinational companies' innovation. *Global Strategy J.* 9 (2), 333–353.
- Wu, J., Zhou, N., Park, S.H., Khan, Z., Meyer, M., 2022. The role of FDI motives in the link between institutional distance and subsidiary ownership choice by emerging market multinational enterprises. *Br. J. Manag.* 33 (3), 1371–1394.
- Yakob, R., Nakamura, H.R., Ström, P., 2018. Chinese foreign acquisitions aimed for strategic asset-creation and innovation upgrading: the case of Geely and Volvo Cars. *Technovation* 70, 59–72.
- Yin, R.K., 1994. *Case Study Research: Design and Methods*, second ed. Sage.
- Záborský, P., 2012. Emergence of transnational clusters: evidence from the Slovak automotive industry. *J. East Eur. Manag. Stud.* 464–479.
- Záborský, P., Ingrst, I., Dachs, B., 2021. More than knowledge seeking: a cooperation-seeking motive for innovation in MNEs. In: Sinha, P., Patel, P., Prikshat, V. (Eds.), *International HRM and Development in Emerging Market Multinationals*. Routledge, pp. 149–172.
- Záborský, P., Yan, Z.J., 2022. Institutional distance and the motivations to springboard. *Am. Bus. Rev.* 25 (2), 355–389.
- Zeng, R., Grøgaard, B., Steel, P., 2018. Complements or substitutes? A meta-analysis of the role of integration mechanisms for knowledge transfer in the MNE network. *J. World Bus.* 53 (4), 415–432.
- Zhang, Y., Enang, E., Sminia, H., 2019. Post-acquisition integration of emerging market multinational corporations: a research agenda. *Multinat. Bus. Rev.* 27 (1), 4–34.
- Zhang, Y., Xiong, P., Zhou, W., Sun, L., Cheng, E.T., 2022. Exploring the longitudinal effects of emotional intelligence and cultural intelligence on knowledge management processes. *Asia Pac. J. Manag.* 1–24.
- Zhao, S., Liu, X., Andersson, U., Shenkar, O., 2022. Knowledge management of emerging economy multinationals. *J. World Bus.* 57 (1), 101255.
- Zhou, K.Z., Li, C.B., 2012. How knowledge affects radical innovation: knowledge base, market knowledge acquisition, and internal knowledge sharing. *Strat. Manag. J.* 33 (9), 1090–1102.