This is the authors' accepted version of a chapter which is scheduled to be published in 2021
by Taylor & Francis/Routledge (Informa UK Limited) in a book entitled International Human
Resource Management and Development in Emerging Market Multinationals (edited by P.
Sinha, P. Patel and P. Verma).

More than knowledge seeking: A cooperation-seeking motive for innovation in MNEs

Peter Zámborský¹*, Igor Ingršt¹,², and Bernhard Dachs³

¹University of Auckland Business School, New Zealand

²Masaryk University, Czech Republic

³Austrian Institute of Technology, Austria

*Corresponding author: p.zamborsky@auckland.ac.nz

Acknowledgements: We would like to thank Professor David Teece, Christina Günther, Maureen Benson-Rea, Matevž Rašković and Paloma Miravitlles for comments on a draft of this chapter. We would also like to thank Hilary van Uden for English language editing.

Abstract

The aim of this chapter is to explain the differences between the innovation motives underlying subsidiaries of different types and uncover motives that are inconsistent with the current theory, which mainly focuses on innovation between developed multinational enterprises (MNEs) and by MNEs from emerging economies (EMNEs) operating in developed countries. The chapter employs a multiple case-study analysis method. It first compares and contrasts motives for innovation of four multinationals (two from emerging and two from developed countries) from the machinery and equipment manufacturing industry operating in Europe. Then it conceptualises and explores the cooperation-seeking motive in depth with a focus on the two EMNEs, and develops one proposition about it. The motive is elaborated on by linking it to the underlying management of knowledge and cooperation for innovation in EMNEs. Implications are drawn for the EMNE knowledge management literature, the emerging theory-building effort around knowledge connectivity and connectedness, and the broader EMNE international business literature. The main contribution of this chapter is a development of what we term a cooperation-seeking motive for foreign direct investment (FDI) in innovation-intensive activities. We propose that in addition to the knowledge-seeking (or strategic-asset seeking) motive traditionally ascribed to EMNEs, MNEs from both emerging and developed countries, investing abroad, may also have a cooperation-seeking innovation-investment motive. We define this motive as being motivated by both internal cooperation (high internal connectedness within the group) and external cooperation (high external connectedness with stakeholders such as suppliers, clients and universities in the host market).

1. Introduction

This chapter contributes to the debates on potential differences in innovation behaviour between MNEs from emerging and developed countries (Di Minin et al., 2012), including subsidiary-innovation motivations, types, and connections to HQ and local economies (Giuliani et al., 2014). Our research is organised around a typology of international innovation investment based on the country of origin and location of innovation (developed vs. emerging). In particular, we point to the underresearched combination, in which both the home and the host countries of the MNE are emerging economies (Ramamurti & Singh, 2009).

In addition to this development-based framework, we consider four types of international innovation motives, based on the subsidiary's connections to the local market and to HQ (Giuliani et al., 2014): market seeking, knowledge seeking, efficiency seeking and cooperation seeking. While the first three of these motives are well known in international business (IB) research (Dunning & Narula, 1995; Kedia et al., 2012), a cooperation-seeking motive for FDI in innovation has not been explicitly recognised or deeply conceptualised in IB literature (Cuervo-Cazurra & Narula, 2015). We develop the concept of a cooperation-seeking motive for FDI in innovation inductively from our data. It constitutes the main contribution of this chapter, linking it to the theory-building effort related to international-knowledge connectivity (Andersson et al., 2016; Ingršt & Zámborský, 2020) and connectedness (Enkel et al., 2018; Turkina & Van Assche, 2018).

The main aim of our study is to explain the differences between the innovation motives underlying subsidiaries of different types and uncover motives that are inconsistent with the current theory, which mainly focuses on innovation between developed MNEs and by MNEs from emerging economies (EMNEs) operating in developed countries. Emerging economies differ from developed countries in their institutional frameworks and other innovation infrastructure characteristics (such as human capital and other resources available for

innovative activity) affecting their national innovation systems (Furman & Hayes, 2004). The context of our study is Europe, and we analyse case studies of innovation activities in MNEs from both emerging and developed countries in Europe to understand potential differences in the innovation behaviour of multinationals in these two parts of Europe.

We define innovation as the introduction of a new or significantly improved product, process, organisational method, or marketing method (OECD, 2005). It does include—but is not limited to—research and development (R&D), and it only needs to be new to a particular enterprise. We use the Dow Jones Indexes (2012) classification of emerging markets, as it is based on review through both a quantitative and qualitative process and acknowledges a variety of factors including market and regulatory structure, trading environment and operational efficiency.

The literature on EMNEs has sparked a debate about whether we need new theoretical explanations for their internationalisation (e.g., Cuervo-Cazurra, 2012; Hernandez & Guillén, 2018; Narula, 2012). Meyer and Peng (2016) also draw attention to the host-country context, suggesting analysis of Central and Eastern Europe (CEE) as emerging economies, rather than as a distinct geographic entity. They emphasise the need to develop a better understanding of the boundary conditions of theories of business knowledge, including the design and implementation of subsidiary-level strategies, knowledge transfer and intra- and interorganisational knowledge sharing. We use these suggestions to integrate unique context with theory related to the knowledge-based view of the firm (Grant, 1996) and its particular aspects, with a focus on international-knowledge connectivity (Andersson et al., 2016).

We contribute to the literature on EMNEs' FDI motives (Kedia et al., 2012), international innovation-investment motives, and knowledge connectivity and connectedness in a number of ways. Di Minin et al. (2012) concentrate on Chinese MNEs' investment motives and behaviour in Europe but neither consider emerging firms' innovation investment in CEE

nor study innovation among non-Chinese and non-Asian emerging multinationals. Giuliani et al. (2014) find that the behaviour of EMNEs and MNEs from developed markets exhibits important differences based on types of subsidiary (typology based on intra-corporate knowledge transfer and the embeddedness of local innovative activities). While we share common ground with this study and agree with its multifaceted treatment of developed MNEs vs. EMNEs based on subsidiary global–local connections, we acknowledge other motivations (such as efficiency- and cooperation-seeking innovation investments). This allows us to move beyond the dichotomy of market- versus knowledge-seeking strategic orientations implicit in research on the internationalisation of innovation (Achcaoucaou et al., 2014). We also extend the concepts of global–local connections to incorporate insights from the literature on knowledge connectivity (Cano-Kollmann et al., 2016) and connectedness (Enkel et al., 2018).

This chapter focuses on the following research questions (RQ):

Main RQ: How do motives for multinationals' investment in innovation abroad depend on their home and host country?

There are also two research subquestions (RSQs):

RSQ 1: How do innovation motives of EMNE subsidiaries in Europe differ from developed MNE subsidiaries?

RSQ 2: Why are EMNEs conducting innovation in emerging vs. developed markets (in the European context)?

The chapter is organised as follows. We start with a section reviewing the literature on the internationalisation of innovation and develop a simple conceptual framework of subsidiary types and main motives, based on the subsidiary's connections to the group and to the host market. Then, we explain our research design and methods and present our approach to data collection in Section 3. Section 4 presents findings, Section 5 discussion (which extends the initial framework based on the data and findings), and the final section concludes the study.

2. Literature Review and Theory

2.1 International Innovation of MNEs From Emerging vs. Developed Countries

EMNEs are attracting a great deal of scholarly attention which is attempting to understand whether and how they potentially differ from developed MNEs and whether their international innovation behaviour is consistent with existing IB theory. Di Minin et al. (2012), in their analysis of Chinese FDI in R&D in Europe, find that there are important differences between the R&D internationalisation processes of multinationals from developed and emerging economies. They suggest that EMNEs have concentrated on seeking strategic assets and resources (especially R&D) when entering advanced markets to acquire resources to build a competitive advantage. This is in line with what was termed the third wave of the international expansion of EMNEs, where EMNEs concentrate on seeking strategic assets and resources (especially innovation) when they enter developed markets to acquire resources for a competitive advantage (V. Z. Chen et al., 2012). The question is whether we are transitioning to the fourth wave, perhaps even moving beyond seeking knowledge (Chung & Alcácer, 2002; Kedia et al., 2012) and strategic assets (Meyer, 2015), and how to theoretically explain the rise of innovative activity of EMNEs and its nature, including differences from advanced MNEs (AMNEs) and potential similarities and patterns common to both EMNEs and AMNEs (Luo & Tung, 2018).

An initial step in this direction was taken by Giuliani et al. (2014), who have created a typology of MNE subsidiaries based on the following dimensions. First, the degree to which MNEs transfer and/or receive knowledge to/from their HQ and to/from other subsidiaries (intra-corporate knowledge transfer); and second, the level of locally embedded innovative activities (generating value for the MNE and the local context as well). This second dimension includes formation of local innovative ties and collaborations. Giuliani et al. (2014) find that emerging and developed multinationals often undertake different strategies for tapping into

local knowledge and for transferring it within the company (e.g., EMNEs tend to be more proactive/entrepreneurial and generate more patents). Their study also implies that the differences between them are often blurred.

2.2 Location of International Innovation Investment: Emerging vs. Developed Countries

While the source country of international investment is a significant factor in explaining its motivation, the location of the investment is also an important consideration (Porter, 2000). Makino et al. (2002) examine several hypotheses regarding the location choice for FDI and find that MNEs from emerging countries tend to invest in developed countries when they follow strategic technology-driven or market-driven motivations, and in emerging countries when they have efficiency-seeking (low costs) motivations. Also, when planning entry into developed countries, EMNEs are more likely to seek complementary strategic assets when they already possess technology-based advantages.

According to von Zedtwitz and Gassmann (2016), MNEs started to move innovation investments to countries with fast or future developing market growth to modernise their innovation profile through hiring a young and ambitious generation of staff (including hiring overseas expatriates) focused on new technologies at very reasonable cost. According to von Zedtwitz and Gassmann, EMNEs cooperate across geographical and industry borders to drive internal innovation to become original-design manufacturers in cooperation with global leaders.

There are firm- and location-specific factors driving MNE managers' decisions about where to locate innovation and R&D. According to Ambos and Ambos (2009), who analyse determinants of German MNEs' international innovation investment, two main streams of arguments seem to prevail in location decisions for innovation centres: push and pull factors. Reverse innovation, innovations that are first introduced in an emerging country before being adopted in developed regions (Govindarajan & Ramamurti, 2011), and innovation that is

designed and invented in emerging markets and later transferred into advanced markets (von Zedtwitz et al., 2015), are also increasingly important. AMNEs should accept the fact that learning is a two-way process, and that the knowledge and technology transfer that has gone to emerging markets for a long time has resulted in highly talented and skilled innovators in the former fringe markets (Corsi & von Zedtwitz, 2016).

Innovation in CEE and its relationship to FDI has attracted scholarly attention with a focus on its diffusion and other determinants. For example, Gołębiowski and Lewandowska (2015), in their analysis of internal and external relationships of foreign subsidiaries and innovation performance, stress that there is a positive influence on MNEs' subsidiaries' relationships with local and foreign partners and on product and marketing innovation activities.

2.3 Motives of International Innovation Investment: Connections to Local Economy/HQ

To integrate the discussion of the previous two sections, we have created a typology of international innovation activity (see Table 1) based on the development of the investor's country of origin and the development of the country of the subsidiary. "Developed" countries include for example the USA and Western Europe while "emerging" economies include Brazil and Eastern Europe. This framework is inspired by Ramamurti and Singh (2009) but focuses on innovation. Motivations and innovation behaviour of these four types of subsidiaries can potentially differ. While the traditional research on R&D internationalisation initially focused on Type 1 investments (developed–developed), and now focuses on Type 3 (emerging–developed) and partly on Type 2 (developed–emerging), Type 4 (emerging–emerging) investments are relatively underresearched and their motivations and behaviour are poorly understood.

<<TABLE 1 HERE>>

While home and host country of innovation investment is likely to have an impact on innovation motivation of subsidiaries, the motives associated with the four types of investment need to be considered in more depth. Ambos and Ambos (2011) highlight technology exploration vs. exploitation motives, market vs. technology-driven motives (Almeida, 1996; Kuemmerle, 1999) and push/pull factors (von Zedtwitz & Gassmann, 2002). Di Minin et al. (2012) also stress the dynamics of motives (evolutionary tendency, market-to-technology-driven transition motives) and mandates of innovation units abroad. Furthermore, activities of foreign innovation establishments are usually driven by several motives (Håkanson & Nobel, 1993).

For the purpose of this study, four main motives for FDI will be used as a starting point. The first motive is market seeking (to exploit, sustain or protect market share in the host country), dating back to Dunning (1993). The second motive is knowledge seeking, defined by Chung and Alcácer (2002) as "expand[ing] abroad in search of capabilities that are not available in their home countries" (p. 1534). In the context of EMNEs, the knowledge-seeking motive was acknowledged by Kedia et al. (2012) and the motive is often associated with the strategic asset-seeking motive and its varieties (Meyer, 2015).

Scholars identify other motivations such as efficiency seeking (Dunning, 1993) and allude to possible cooperation-seeking innovation investments (Mowery et al., 1998). Efficiency-seeking firms are primarily interested in reducing the costs of innovation activities by performing activities in countries with a lower price/productivity ratio for innovation inputs, particularly human capital (Schmiele, 2012). On the other hand, cooperation-seeking ventures create joint ventures and other interfirm agreements that involve the pooling of capital, employees, technology or other expertise, and assets of participating firms or institutions, such

as universities, to an undertaking that combines elements of a market-based and intra-firm organisation (Mowery et al., 1998).

Cooperation refers to a set of interdependent business relationships with various definitions of the concept employed in the IB literature, often without sufficiently considering the depth and nature of cooperation (Casson, 1989). Holm et al. (1996) reinforce this point and emphasise that cooperation can raise the value of business relationships, and that business network connections have an impact on cooperation. Y. Chen and Huang (2004) suggest that the firm should only engage in creating new collaborations if connections are not within reach of their current network. Diversity of these connections is more important than the size of their network and actors can focus on enriching and preserving existing relationships (Y. Chen & Huang, 2004).

We highlight the four dominant motivations (market seeking, knowledge seeking, efficiency seeking and cooperation seeking), their characteristics in terms of subsidiary-innovation behaviour, and connections to local market and the group, as summarised in Table 2. We aim to explore and extend the cooperation-seeking motive in the empirical analysis. The *why* question of motives for international innovation investment is related to the *how* question of knowledge flows and connections between the foreign subsidiaries, HQ, other subsidiaries, and various other actors, especially in the host country. The knowledge flows and internal connections to the group, and external connections to the host country, characterising the motives, are described in Table 2.

While some preliminary conceptual structure was imposed on the motives (with Table 3 highlighting known motives for the commonly researched Types 1–3 investments), the cooperation-seeking motive and motives for the Type 4 investment are poorly understood and will be subject to qualitative inquiry. In particular, there is a need to better conceptualise the cooperation-seeking innovation-investment motive and integrate it better with the emerging

theory-building effort on knowledge connectivity (Andersson et al., 2016; Cano-Kollmann et al., 2016) and connectedness (Enkel et al., 2018; Scalera et al., 2018, Turkina & Van Assche, 2018).

<<TABLE 2 HERE>>

3. Research Design and Method

3.1 Qualitative Research

Qualitative research is uniquely suited to "open the black box" of organisational processes, the how, who, and why of individual and collective, coordinated action as it unfolds over time in context (Yin, 2009). The evidence may be qualitative, quantitative, or both (Eisenhardt, 1989). Birkinshaw et al. (2011) and Doz (2011) persuasively argue that qualitative research can play a significant role in IB and the management literature since it can bring more in-depth insights into the complex constructs and contexts studied.

We employ a case-study approach, which is a widely used qualitative research method employed in the business disciplines (Eisenhardt & Graebner, 2007). Multiple-case studies offer a potentially stronger base for theory building (Yin, 2009), and thus we opt for this method in our study. We use Eisenhardt's (1989) process of building theory from case-study research combined with Yin's (2009) general suggestions for theorising from case studies. A multiple-case-study method approach is required to look "under the hood" of the new phenomena (Ghauri, 2004), such as the key question we try to answer in this study—how do the innovation-investment motives of MNEs in Europe differ depending on the home country of the investor and the location of the investment?

In the first step, we have identified four types of the firms (in line with Types 1–4 from Table 1) from different locations (and destination markets) that are subject to our comparison

and conduct innovation in Europe. We have considered different types of participants based on their position, location, and nationality, as these will possibly affect their views on innovation and R&D:

- Managers responsible for subsidiaries in Europe
- Global (HQ) innovation and R&D managers

Identified managers were contacted by telephone, email or LinkedIn and asked to cooperate in this research project.

3.2 Data Collection

In qualitative research, instruments are traditionally derived from the properties of the setting and its actors' views of them. The researcher is essentially the main "instrument" in the study (Miles et al., 2013). Lee and Lings (2008) find that having a framework allows researchers to structure their later analysis more easily as they have a good idea of what concepts and categories are going to be there. This was our approach in constructing a preliminary framework (Tables 1, 2 and 3) that we further extend through qualitative inquiry. We first conducted a pilot interview with a general manager of a European firm about its innovation strategy in Europe to refine our interview questions and gain initial insights into innovation location and motivation. Then, we proceeded to identify four types of non-European firms that conduct innovation in Europe (in line with Table 1).

We also considered industry effects and chose the equipment and machinery manufacturing sector as a single-industry perspective for investigating MNEs' behaviour. Table 4 summarises our cases and participants. For two of the companies—Firm 2 and 3—we had two interviews with the same participants at two different points in time with a 2-year gap. For Firms 1 and 4 we had one in-depth interview with well-informed participants. Two of the participants were subsidiary managers from the host country while the other two were R&D managers from the HQ.

<<TABLE 4 HERE>>

4. Findings

Table 5 presents findings based on primary and secondary research on the four selected firms identified as representing Types 1–4 in our initial conceptual framework from Table 1. Table 5 shows that subsidiaries appear to have multiple motives. We have ordered the motives by significance based on our analysis of statements by managers and secondary sources. The following presentation integrates the case narratives with findings from the cases, and then is developed theoretically in the Discussion section. The initial focus is on differences in motives between the four types (1–4) of investment in innovation, but the cooperation-seeking motive is then analysed in depth, in particular with regard to the two interviewed EMNEs.

<<TABLE 5 HERE>>

Firm 1: This manufacturing firm from New Zealand, established in the 1980s, has about 70% of its 500-plus employees located in New Zealand and conducts about 85%–90% of its R&D in the HQ. It first expanded to the Americas in the early 2000s (and has about 15% of its employees there and a manufacturing plant in South America), then to China in the late 2000s and to Europe after 2010 (with production plants in both locations). Europe accounts for about 7% of its global headcount and a similar share of R&D, but the firm was planning to increase Europe's share of its R&D to 20% and of the firm's global sales to 40%.

In line with our expectations (Table 3), it appears that significant motives for this developed-country firm conducting innovation in an acquired firm in another developed country were market seeking (using the subsidiary to introduce the group's products to Europe). The interviewed R&D manager from the HQ mentioned in this respect that innovation had to be in Europe as it was close to their customers. He also added that they first would have to build a relationship with local managers and then their core staff (expatriates from New Zealand on assignment in Europe) could return to the HQ.

Another motive uncovered in the research was cooperation seeking, both external (knowledge) connectedness with local/European stakeholders, also called international or global connectedness (Scalera et al., 2018; Turkina & Van Assche, 2018), and internal (knowledge) connectedness, facilitating the transfer of knowledge back to HQ (Nair et al., 2016). However, the company had a bad experience with a local joint-venture project (in a different European country in the past) and was now sending innovation engineers from the HQ to subsidiaries (to the newly acquired company). The interviewed manager stressed that one of the motivations for acquiring a company in Europe and having innovation activities there was to cooperate with European universities and access the EU and national funding for research (Håkanson & Nobel, 1993).

The company has encountered difficulties in communicating with employees in Europe, found it difficult at times to understand and accommodate the different mentality of Southern Europe, and found bureaucracy there cumbersome compared to New Zealand. On the other hand, the size of the EU market, access to EU and national government funding and links to European university research motivated the company to expand its activities in the region, according to the interviewed manager. Additional motives were knowledge seeking, complementary knowledge in the acquired company and in the EU (Blanc & Sierra, 1999), as

well as efficiency seeking (as this firm has located in Southern Europe, where the cost structure is more favourable compared to New Zealand).

Firm 2: This U.S. Fortune 500 technology multinational with over 10,000 employees has operations around the world. In Europe, it has over 20 manufacturing, service and design sites. However, there are two hubs from the innovation process and knowledge/technology viewpoint: one in an advanced European country and one in a CEE country. European subsidiaries contribute significantly to the global best practice (in innovation), according to the interviewed subsidiary manager. The CEE subsidiary became one of the top sites in the area of innovation and automation. While the share of the subsidiary on total innovation output was rather small (small, single digit), its strategic importance was higher, according to the CEE subsidiary manager. He said: "Constant innovative improvements are and must be pushed and developed in every subsidiary site of the company together. Collaborations with universities, institutions, customers, suppliers and consultants are essential."

While efficiency-seeking considerations were perhaps initially most significant in this Type 2 investment from the USA to emerging Europe (in line with our expectations presented in Table 3), the subsidiary also appeared to be a regional/global centre of excellence for a niche activity due to its deep connectedness to the local market and knowledge assets acquired/sourced in the host country (thus reflecting both cooperation-seeking and knowledge-seeking motives). The subsidiary developed significantly improved methods of manufacturing, logistics, product distribution and supply-chain processes, which were transferred within the group around the globe, reflecting high internal cooperation in the group and strong internal connectedness (Enkel et al., 2018), the second element of our definition of the cooperation-seeking motive, in addition to the knowledge transferred from the HQ to the subsidiary (Duvivier et al., 2019).

The interviewed manager mentioned that there were a number of collaborations between partner sites within the CEE region on specific targeted technical issues that required specific knowledge, which was available at a partner site, or specific technology, suggesting high internal cooperation in the group (an aspect of cooperation-seeking investment motive according to our Table 2). There appeared to be an element of a market-seeking motive as well (in relation to the European, African and Middle Eastern markets), as there was a division of labour with the sister company in the Western part of Europe (which is a centre of excellence for a different segment/area of the company's portfolio) resulting in some local adaptation-driven innovation (Leung et al., 2019).

Firm 3: This Latin American multinational has over 500 engineers and technicians around the globe. It embarked on major international expansion in the 1990s with a focus on acquisitions in emerging markets, including China and emerging Europe, but it also acquired a firm in Western Europe. Innovation was traditionally very centralised in the company HQ (about 80%–90%). One of the company's R&D managers from the HQ said in this respect: "Technology development and large projects are designed in the HQ; medium and small projects stay with the subsidiaries. Cost reduction and quality improvement projects happen independently in the plants." There was a trend towards more local-knowledge creation and project sharing in the company over time, including in its emerging-market locations (Jha et al., 2018). The CEE subsidiary started to play an important regional/global role in key innovation projects—even compared to Western European counterparts. The interviewed manager (from the HQ) said about this: "Our local workforce [in CEE] is very skilled and focused."

A large part of the motivation to acquire an innovative firm in Western Europe (Subsidiary 3a) was market seeking—following essential customers in the area (in line with our expectations based on Table 3). The greenfield investment in CEE was also driven by the

new presence of an important customer in the same country. Both European subsidiaries facilitated innovation aimed at product adaptation for local European markets (market seeking), which was somewhat contradictory to our initial expectations based on Table 3 (for the CEE subsidiary) and not in line with research suggesting that EMNEs tend to have knowledge-seeking motivations in advanced economies and efficiency-seeking motivations in emerging markets, rather than market-seeking innovation-investment motives in both of these markets.

However, in line with our expectations and the traditional literature on EMNE innovation motives, Western European subsidiary 3a was acquired partly for knowledge-seeking reasons (not just market seeking). "We needed both their market and know-how," said the R&D manager from the HQ. The CEE plant was also highly efficient, reflecting the efficiency-driven motive in the CEE subsidiary that the literature acknowledges as an investment motive of EMNEs in emerging markets (although the literature usually ignores the possibility that innovation-investment motive, rather than just production-oriented FDI, can be efficiency seeking, with the exception of Schmiele, 2012). Overall, the company's HQ-driven, market-seeking innovation model was followed similarly across all the subsidiaries. The interviewed manager noted that the market-seeking motive and adaptation-driven model was applied similarly to the Western European subsidiary and to CEE and other emerging-market subsidiaries in spite of significant national and organisational cultural differences (Alofan et al., 2020).

Initially, there was a substantial knowledge transfer, mostly from the HQ to subsidiaries (consistent with the market-seeking motive). Cooperation between the HQ and the subsidiaries and between the two European subsidiaries has increased over time, though, suggesting a cooperation-seeking motive, while not present initially, has become a motive for subsequent or increased investment in R&D in the subsidiaries (Decreton et al., 2017), especially after a formal R&D centre was established in the CEE Subsidiary 3b in the late 2010s. The

interviewed manager commented on communication and collaboration between the (two European) subsidiaries:

In the past, they had no communication or were very isolated. But then we created a group that involved all of the product managers of the plants. And we started doing the key performance indicators together so that we try to force them to communicate and help each other to reach those KPIs in terms of the developments. And then things became much better, we had these people having some collaboration problems, some problems that were very similar in different plants. So, yes, put together those guys that know those products, very similar and put them to optimise solutions that will bring results to the company. And in the last years that I was there, I saw some initiatives [in this respect].

Regarding connections to the European market, the manager mentioned research collaborations with institutes and universities in over five European markets. These may not have been the initial explicit motivations of the investment, but again grew in importance, pointing to a potential co-evolution of motives and institutions in host countries (Hensmans & Liu, 2018).

Firm 4: This machinery manufacturing company from East Asia has over 100 years of history with an extensive product portfolio and four R&D centres worldwide, including R&D centres in Western Europe and CEE. Its central innovation hub remains in the HQ. The knowledge-seeking motive was (somewhat surprisingly) a dominant factor behind its subsidiary acquisition in CEE. "They bought us with the know-how or because of the know-how," the emerging subsidiary manager said, continuing: "We have research capabilities, we are aligned with the universities and other private or government research institutions and we are coordinating research based on the specific tasks from the headquarters." The CEE subsidiary is the group's global innovation hub for a particular product, according to the

interviewed subsidiary manager, who said: "We are doing most of the research, the design ...

We innovate and then we apply what engineering is done."

Access to complementary knowledge (Blanc & Sierra, 1999) was important in both the acquisition of Subsidiary 4b in CEE and of the subsidiary in Western Europe. "Headquarters are looking for companies to be acquired that complement their business. That brings specific skills, knowledge, and products to their group portfolio," according to the CEE subsidiary manager. The efficiency-seeking motive was present as well (more in line with our initial expectations), in particular, the manager and our secondary research pointed to the favourable cost structure in emerging Europe, combined with relatively high productivity and other skills (technical and language) of staff in this industry and country.

Europe is an important market for this firm's products, so it also wanted to be close to customers and have an innovation staff that understands customers' needs (reflecting partly the market-seeking motive). The highly skilled and results-oriented workforce, with in-depth knowledge of European markets and customers' needs, experienced some difficulties in communication about innovation projects due to the cultural distance between the source country of investment and the subsidiary (Alofan et al., 2020). The CEE subsidiary manager commented on this issue: "They might be [too] formal in some cases." Innovation strategy was highly unified with business development integrated in HQ and subsidiaries, indicating high internal cooperation in the group (an aspect of cooperation-seeking motive noted in Table 2).

Cooperation seeking was one of the motives (although not the dominant one) for the investment, as the acquirer was cognisant of the CEE subsidiary's research collaborations in Europe. The interviewed managers said that the parent company was well aware that "we have research capabilities and we are aligned with universities." Connections and collaboration with other subsidiaries in Europe were not a significant motivation as they were in somewhat different product segments, according to the manager. However, there was some cooperation

between the HQ and the CEE subsidiary, although this was not probably the primary motivation for the investment in the long run: "For a certain period of time, we also had designers and technicians [from the HQ] practising here," according to the subsidiary manager.

In terms of the potential relocation of CEE staff to the HQ or other subsidiaries, the manager expressed the independent role of "his" subsidiary as follows, "We are the subsidiary with the know-how. No one should try to transfer development or research to HQ. I think that if headquarters want to keep a local skilled workforce, they have to give them the chance to work in their home country and not move them to HQ. I think that it is a little bit politically internally sensitive." This quote points to the crucial role of subsidiary power (Mudambi et al., 2014) and local (external) embeddedness of subsidiaries stressed in IB research on emerging markets and EMNEs (Isaac et al., 2019), although not enough attention has been given to the specific case of EMNE subsidiaries' innovation in emerging markets and to the dual case of both internal and external (knowledge) connectedness as an international innovation motive. The next section fills this gap with further discussion and theorising from case studies.

5. Discussion

Our findings confirm that FDI decisions are usually not based on a single motive, but the result of a bundle of reasons (Cuervo-Cazurra & Narula, 2015). While the main results from our case studies seem to confirm the main motives typically ascribed by the literature to the reasonably well-understood Type 1–3 investments (especially for our Type 1 and 2 AMNE cases), there are some new findings that can help to better understand other motives for these innovation investments. In all our cases, we uncovered what we termed a cooperation-seeking motive where the company's decision to invest in innovation in Europe is motivated by pursuing high external cooperation and connectedness with local entities and high internal cooperation and connectedness between the European subsidiary/subsidiaries and the group (Enkel et al., 2018). This was different from knowledge seeking in two respects: (1) the subsidiary is seen as a

conduit to conduct innovation, not just a source of knowledge assets; (2) knowledge transfer between the subsidiary and the rest of the group is reciprocal (Duvivier et al., 2019).

The concept of the cooperation-seeking motive was not explicitly recognised in the extant IB literature on FDI motives (Cuervo-Cazurra & Narula, 2015) or motives for FDI in R&D and innovation (Chung & Alcácer, 2002; Dunning & Narula, 1995). This chapter contributes to the literature on FDI (innovation) motives by conceptualising a new type of motive reflecting the crucial role of cooperation as a driver of innovation activities. Theoretically, this is consistent with the seminal work by Mowery et al. (1998), which shows how interfirm cooperation (including equity joint ventures and alliances) is an important element of and consistent with the resource-based view of the firm. Mowery et al. (1998) distinguish between technology-based and market-access motives for joint ventures (akin to knowledge- and market-seeking motives in this chapter's terminology), but we extend this view in two respects. First, the cooperation-seeking motive is motivated by improving the innovative connections to the local market entities (external connectedness), not just by technology/knowledge and market seeking. Second, the cooperation-seeking motive is also about internal cooperation and connectedness (Jha et al., 2018).

This is consistent with research on internal and external relationships of foreign subsidiaries, as both of these were shown to be essential influencers of innovation performance in the European context including in CEE (Gołębiowski & Lewandowska, 2015). However, we extend this literature by building on Enkel et al. (2018), who have theoretically embedded internal and external collaborations in the concepts of internal and external *connectedness*. The concept of connectedness draws on the economic geography and IB literatures (Scalera et al., 2018; Turkina & Van Assche, 2018) indicating a deeper level of embeddedness than the concept of knowledge seeking. Enkel et al. (2018) draw on embeddedness and absorptive-capacity literature to explore how social integration mechanisms translated into different

learning outcomes in distant collaborations *within* and *across* organisational boundaries. We borrow their concepts of internal and external connectedness but apply them to the literature on motives for FDI in innovation (and to what we term as *cooperation-seeking* motive for FDI in innovation) rather than just to social integration mechanisms in collaborations.

We also contribute to understanding innovation-investment motives by studying them not just in the context of emerging vs. developed host countries (Demirbag & Glaister, 2010; Schmiele, 2012), or with an emphasis on emerging economies only (von Zedtwitz & Gassmann, 2016), but pointing to the role of a *combination* of developed vs. emerging home and host countries. While this typology is used by Ramamurti and Singh (2009) for general FDI, we used it for innovation and R&D FDI, where it has not been applied in depth.

Finally, our findings do not only point to a new type of motive (cooperation seeking) for international innovation investment, but also to how the emergence and presence of this motive is related to a subsidiary's evolution in the host country (Achcaoucaou et al. 2014). Evolution of R&D internationalisation motives by EMNEs has been studied by Di Minin et al. (2012), who show and partly explain a transition of motives for Chinese MNEs in Europe from pure technology seeking to home-base augmenting and then home-base exploitation. Jha et al.'s (2018) study of nine European MNEs and their R&D units in India uncovers a transition from efficiency-seeking motives (leveraging cost arbitrage) to three unique configurations towards a global product mandate of subsidiaries, linking the evolution of subsidiary R&D mandates to the building of embeddedness of subsidiaries within the MNE network (internal embeddedness and connectedness) and within the local host-country ecosystem (what they call business embeddedness, related to what we call external connectedness). Jha et al. (2018) suggest that research on MNE R&D in emerging markets must shift from focusing on the macroenvironment to exploring the dynamics of embeddedness.

Our study connects to this call and extends its scope from advanced MNEs innovating in emerging markets to a wider typology including EMNEs investing in innovation in emerging markets. We discover that the cooperation-seeking motive can become more relevant (for EMNEs innovating in emerging markets) over time, suggesting an evolution from the traditional knowledge-, market- and efficiency-seeking motives towards a cooperation-seeking motive (Firm 3). Furthermore, internal cooperation and connectedness are also staged gradually from HQ–subsidiary dyads (Firm 4) to only later possibly taking place at a group level between subsidiaries (Firm 3), extending the arguments of Duvivier et al. (2019).

Based on the above discussion, we define a new concept and develop a new proposition:

Proposition: Over time, MNEs will not only have market-seeking, knowledge-seeking, and efficiency-seeking motives for (increasing) innovation investment abroad, but also a cooperation-seeking motive (to build external connectedness with stakeholders in host countries and internal connectedness in the group), first between the HQ and subsidiaries, then between subsidiaries.

6. Conclusions

Our study uncovered what we termed the cooperation-seeking motive, when innovation investment is motivated by both internal cooperation (high internal connectedness within the group) and external cooperation (high external connectedness with stakeholders such as suppliers, clients and universities in the host market). It has implications for our understanding of the rationale for innovation investment in emerging markets. While MNEs often view these locations through predominantly market-seeking and efficiency-seeking optics, our cases show that these regions can be attractive locations for innovation, including knowledge-seeking and cooperation-seeking investment.

This is consistent with findings of Jha et al. (2018), who stress that arbitrage (efficiency seeking) and adaptation (market seeking) R&D units in emerging markets can evolve towards global product units with competence-creating mandates (Narula, 2014). We extend this argument from developed MNEs innovating in emerging markets to EMNEs innovating in emerging markets. One of the critical lessons learned from our cases was that without prioritising cooperation seeking and substantial reciprocal knowledge transfer between the emerging-market innovation subsidiary and the HQ (and later other subsidiaries), there could be substantial obstacles to elevating the emerging-market innovation subsidiary's status to higher importance within the group (Jha et al., 2018). Future research on international innovation can explain the complementarity of the multiple motives behind different types of investments. There is also an opportunity to link our study to the literature on boundary spanning in global organisations (Schotter et al., 2017).

Finally, this study also has managerial implications. While EMNEs have often entered developed countries with knowledge-seeking motives, the new generation of EMNEs can evolve towards a cooperation-seeking motive for innovation abroad. Rojc, a Czech craft brewery, for example, cooperates with New Zealand's Mussel Inn on both a Pilsner-style lager and Mānuka beer (using native New Zealand ingredients), benefiting from the rich heritage of Czech brewing and a thriving craft beer culture in New Zealand (see Figure 1). Other EMNEs can also benefit from a strategic shift towards cooperation-seeking innovation abroad.

<<FIGURE 1 HERE>>

References

- Achcaoucaou, F., Miravitlles, P., & León-Darder, F. (2014). Knowledge sharing and subsidiary R&D mandate development: A matter of dual embeddedness. *International Business Review*, 23(1), 76–90. https://doi.org/10.1016/j.ibusrev.2013.08.006
- Almeida, P. (1996). Knowledge sourcing by foreign multinationals: patent citation analysis in the US semiconductor industry. *Strategic Management Journal*, *17*(S2), 155–165. https://doi.org/10.1002/smj.4250171113
- Alofan, F., Chen, S., & Tan, H. (2020). National cultural distance, organizational culture, and adaptation of management innovations in foreign subsidiaries: A fuzzy set analysis of TQM implementation in Saudi Arabia. *Journal of Business Research*, 109, 184–199. https://doi.org/10.1016/j.jbusres.2019.11.037
- Ambos, B., & Ambos, T. C. (2009). Location choice, management and performance of international R&D investments in peripheral economies. *International Journal of Technology Management*, 48(1), 24–41. https://doi.org/10.1504/IJTM.2009.024598
- Ambos, B., & Ambos, T. C. (2011). Meeting the challenge of offshoring R&D: an examination of firm-and location-specific factors. *R&D Management*, 41(2), 107–119. https://doi.org/10.1111/j.1467-9310.2010.00625.x
- Andersson, U., Dasí, À., Mudambi, R., & Pedersen, T. (2016). Technology, innovation and knowledge: The importance of ideas and international connectivity. *Journal of World Business*, *51*(1), 153–162. https://doi.org/10.1016/j.jwb.2015.08.017
- Birkinshaw, J., Brannen, M. Y., & Tung, R. L. (2011). From a distance and generalizable to up close and grounded: Reclaiming a place for qualitative methods in international business research. *Journal of International Business Studies*, 573–581. https://doi.org/10.1057/jibs.2011.19

- Blanc, H., & Sierra, C. (1999). The internationalisation of R&D by multinationals: A tradeoff between external and internal proximity. *Cambridge Journal of Economics*, 23(2), 187–206. https://doi.org/10.1093/cje/23.2.187
- Cano-Kollmann, M., Cantwell, J., Hannigan, T. J., Mudambi, R., & Song, J. (2016).

 Knowledge connectivity: An agenda for innovation research in international business. *Journal of International Business Studies*, 47(3), 255–262.

 https://doi.org/10.1057/jibs.2016.8
- Casson, M. (1989). A theory of cooperation in international business. In *The Multinational Enterprise* (pp. 46-74). Palgrave Macmillan.
- Chen, H. L., & Huang, Y. (2004). The establishment of global marketing strategic alliances by small and medium enterprises. *Small Business Economics*, 22(5), 365–377. https://doi.org/10.1023/B:SBEJ.0000022207.90510.46
- Chen, V. Z., Li, J., & Shapiro, D. M. (2012). International reverse spillover effects on parent firms: Evidences from emerging-market MNEs in developed markets. *European Management Journal*, 30(3), 204–218. https://doi.org/10.1016/j.emj.2012.03.005
- Chung, W., & Alcácer, J. (2002). Knowledge seeking and location choice of foreign direct investment in the United States. *Management Science*, 48(12), 1534–1554. https://doi.org/10.1287/mnsc.48.12.1534.440
- Corsi, S., & von Zedtwitz, M. (2016). Reverse innovation: A new world order for global innovation? *The European Business Review*.

 https://www.europeanbusinessreview.com/
- Cuervo-Cazurra, A. (2012). Extending theory by analyzing developing country multinational companies: Solving the Goldilocks debate. *Global Strategy Journal*, 2(3), 153–167. https://doi.org/10.1111/j.2042-5805.2012.01039.x

- Cuervo-Cazurra, A., & Narula, R. (2015). A set of motives to unite them all? Revisiting the principles and typology of internationalization motives. *The Multinational Business Review*, 23(1), 2–14. https://doi.org/10.1108/MBR-03-2015-0010
- Decreton, B., Dellestrand, H., Kappen, P., & Nell, P. C. (2017). Beyond simple configurations: the dual involvement of divisional and corporate headquarters in subsidiary innovation activities in multibusiness firms. *Management International Review*, *57*(6), 855–878. https://doi.org/10.1007/s11575-017-0325-z
- Di Minin, A., Zhang, J., & Gammeltoft, P. (2012). Chinese foreign direct investment in R&D in Europe: A new model of R&D internationalization? *European Management Journal*, 30(3), 189–203. https://doi.org/10.1016/j.emj.2012.03.004
- Dow Jones Indexes. (2012). *Country classification system*. Accessed on 1 May 2019: https://www.djindexes.com/mdsidx/downloads/brochure_info/Dow_Jones_Indexes_C ountry_Classification_System.pdf
- Doz, Y. (2011). Qualitative research for international business. *Journal of International Business Studies*, 42(5), 582–590. https://doi.org/10.1057/jibs.2011.18
- Dunning, J. H. (1993). Internationalizing Porter's diamond. *Management International Review*, 33(2), 7. https://doi.org/10.1108/10595421311305325
- Dunning, J. H., & Narula, R. (1995). The R&D activities of foreign firms in the United States. *International Studies of Management & Organization*, 25(1–2), 39–74. https://doi.org/10.1080/00208825.1995.11656651
- Duvivier, F., Peeters, C., & Harzing, A. W. (2019). Not all international assignments are created equal: HQ–subsidiary knowledge transfer patterns across types of assignments and types of knowledge. *Journal of World Business*, *54*(3), 181–190. https://doi.org/10.1016/j.jwb.2019.02.003

- Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review*, *14*(4), 532–550. https://doi.org/10.2307/258557
- Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: Opportunities and challenges. *Academy of Management Journal*, 50(1), 25–32. https://psycnet.apa.org/doi/10.5465/AMJ.2007.24160888
- Enkel, E., Groemminger, A., & Heil, S. (2018). Managing technological distance in internal and external collaborations: absorptive capacity routines and social integration for innovation. *The Journal of Technology Transfer*, *43*(5), 1257–1290. https://doi.org/10.1007/s10961-017-9557-0
- Furman, J. L., & Hayes, R. (2004). Catching up or standing still? National innovative productivity among 'follower' countries, 1978–1999. *Research Policy*, *33*(9), 1329–1354. https://doi.org/10.1016/j.respol.2004.09.006
- Ghauri, P. (2004). Designing and conducting case studies in international business research.

 In R. Marschan-Piekkari & C. Welch (Eds.), *Handbook of qualitative research*methods for international business (pp. 109–124). Edward Elgar Publishing.
- Giuliani, E., Gorgoni, S., Günther, C., & Rabellotti, R. (2014). Emerging versus advanced country MNEs investing in Europe: A typology of subsidiary global–local connections. *International Business Review*, *23*(4), 680–691. https://doi.org/10.1016/j.ibusrev.2013.06.002
- Gołębiowski, T., & Lewandowska, M. S. (2015). Influence of internal and external relationships of foreign subsidiaries on innovation performance. Evidence from Germany, Czech Republic and Romania. *Journal for East European Management Studies*, 2015. https://doi.org/10.1688/JEEMS-2015-03-Golebiowski

- Govindarajan, V. & Ramamurti, R. (2011). Reverse innovation, emerging markets, and global strategy. *Global Strategy Journal*, 1(3–4), 191–205. https://doi.org/10.1002/gsj.23
- Grant, R. M. (1996). Toward a knowledge-based theory of the firm. *Strategic Management Journal*, 17(S2), 109–122. https://doi.org/10.1002/smj.4250171110
- Håkanson, L., & Nobel, R. (1993). Determinants of foreign R&D in Swedish multinationals.

 *Research Policy, 22(5), 397–411. https://doi.org/10.1016/0048-7333(93)90009-7
- Hensmans, M., & Liu, G. (2018). How do the normativity of headquarters and the knowledge autonomy of subsidiaries co-evolve? Capability-upgrading processes of Chinese subsidiaries in Belgium. *Management International Review*, *58*(1), 85–119. https://doi.org/10.1007/s11575-017-0333-z
- Hernandez, E., & Guillén, M. F. (2018). What's theoretically novel about emerging-market multinationals? *Journal of International Business Studies*, 49(1), 24–33. https://doi.org/10.1057/s41267-017-0131-7
- Holm, D. B., Eriksson, K., & Johanson, J. (1996). Business networks and cooperation in international business relationships. *Journal of International Business Studies*, 27(5), 1033–1053.
- Ingršt, I., & Zámborský, P. (2020). Knowledge flows, strategic motives and innovation performance: Insights from Australian and New Zealand investment in Europe.

 **Journal of Management & Organization*, 1–24. https://doi.org/10.1017/jmo.2020.1
- 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. *International Business Review*, 28(4), 638–646. https://doi.org/10.1016/j.ibusrev.2018.12.009

- Jha, S. K., Dhanaraj, C., & Krishnan, R. T. (2018). From arbitrage to global innovation:

 Evolution of multinational R&D in emerging markets. *Management International Review*, 58(4), 633–661. https://doi.org/10.1007/s11575-018-0353-3
- Kedia, B., Gaffney, N., & Clampit, J. (2012). EMNEs and knowledge-seeking FDI. *Management International Review*, 52(2), 155-173.
- Kuemmerle, W. (1999). The drivers of foreign direct investment into research and development: An empirical investigation. *Journal of International Business Studies*, 1–24. https://doi.org/10.1057/palgrave.jibs.8490058
- Lee, N., & Lings, I. (2008). Doing business research: A guide to theory and practice. Sage.
- Leung, F. F., Tse, C. H., & Yim, C. K. (2019). Engaging customer cocreation in new product development through foreign subsidiaries: Influences of multinational corporations' global integration and local adaptation mechanisms. *Journal of International Marketing*. https://doi.org/10.1177%2F1069031X19890345
- Luo, Y., & Tung, R. L. (2018). A general theory of springboard MNEs. *Journal of International Business Studies*, 49(2), 129–152. https://doi.org/10.1057/s41267-017-0114-8
- Makino, S., Lau, C. M., & Yeh, R. S. (2002). Asset-exploitation versus asset-seeking: Implications for location choice of foreign direct investment from newly industrialized economies. *Journal of International Business Studies*, 403–421. https://doi.org/10.1057/palgrave.jibs.8491024
- Meyer, K. E. (2015). What is "strategic asset seeking FDI"? *The Multinational Business Review*, 23(1), 57–66. https://doi.org/10.1108/MBR-02-2015-0007
- Meyer, K. E., & Peng, M. W. (2016). Theoretical foundations of emerging economy business research. *Journal of International Business Studies*, 47(1), 3–22. https://doi.org/10.1057/jibs.2015.34

- Miles, M. B., Huberman, A.M. & Saldana, J.M. (2013). *Qualitative data analysis: A methods sourcebook*. SAGE Publications.
- Mowery, D. C., Oxley, J. E., & Silverman, B. S. (1998). Technological overlap and interfirm cooperation: implications for the resource-based view of the firm. *Research Policy*, 27(5), 507–523. https://doi.org/10.1016/S0048-7333(98)00066-3
- Mudambi, R., Pedersen, T., & Andersson, U. (2014). How subsidiaries gain power in multinational corporations. *Journal of World Business*, 49(1), 101–113. https://doi.org/10.1016/j.jwb.2013.02.001
- Nair, S. R., Demirbag, M., & Mellahi, K. (2016). Reverse knowledge transfer in emerging market multinationals: The Indian context. *International Business Review*, 25(1), 152–164. https://doi.org/10.1016/j.ibusrev.2015.02.011
- Narula, R. (2012). Do we need different frameworks to explain infant MNEs from developing countries? *Global Strategy Journal*, 2(3), 188–204. https://doi.org/10.1111/j.2042-5805.2012.01035.x
- Narula, R. (2014). Exploring the paradox of competence-creating subsidiaries: balancing bandwidth and dispersion in MNEs. *Long Range Planning*, 47(1–2), 4–15. https://doi.org/10.1016/j.lrp.2013.10.006
- Organisation for Economic Co-operation and Development & Eurostat. (2005). *Oslo Manual*-Guidelines for collecting and interpreting innovation data. OECD.
- Porter, M. E. (2000). Location, competition, and economic development: Local clusters in a global economy. *Economic Development Quarterly*, *14*(1), 15–34. https://doi.org/10.1177%2F089124240001400105
- Ramamurti, R., & Singh, J. V. (Eds.). (2009). *Emerging multinationals in emerging markets*.

 Cambridge University Press.

- Scalera, V. G., Perri, A., & Hannigan, T. J. (2018). Knowledge connectedness within and across home country borders: Spatial heterogeneity and the technological scope of firm innovations. *Journal of International Business Studies*, 49(8), 990–1009. https://doi.org/10.1057/s41267-017-0109-5
- Schmiele, A. (2012). Drivers for international innovation activities in developed and emerging countries. *The Journal of Technology Transfer*, *37*(1), 98–123. https://doi.org/10.1007/s10961-011-9221-z
- Schotter, A., Mudambi, R., Doz, Y. L., & Gaur, A. (2017). Boundary spanning in global organizations. *Journal of Management Studies*, *54*(4), 403–421. https://doi.org/10.1111/joms.12256
- Turkina, E., & Van Assche, A. (2018). Global connectedness and local innovation in industrial clusters. *Journal of International Business Studies*, 49(6), 706–728. https://doi.org/10.1057/s41267-018-0153-9
- von Zedtwitz, M., Corsi, S., Søberg, P. V., & Frega, R. (2015). A typology of reverse innovation. *Journal of Product Innovation Management*, *32*(1), 12–28. https://doi.org/10.1111/jpim.12181
- von Zedtwitz, M., & Gassmann, O. (2002). Market versus technology drive in R&D internationalization: Four different patterns of managing research and development. Research Policy, 31(4), 569–588. https://doi.org/10.1016/S0048-7333(01)00125-1
- von Zedtwitz, M., & Gassmann, O. (2016). Global corporate R&D to and from emerging economies. In S. Wunsch-Vincent & R. Escalona (Eds.), *Global innovation index* 2016—Winning with global innovation (pp. 125–131). INSEAD and WIPO.
- Yin, R. K. (2009). Case study research: Design and methods (4th ed.). SAGE.