# MOTIVES FOR INTERNATIONAL INNOVATION IN EUROPE

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A thesis submitted in fulfilment of the requirements for the degree of

Doctor of Philosophy in International Business

The University of Auckland

#### **Abstract**

In this thesis, I investigate international innovation strategies of firms from New Zealand, Australia, and emerging markets in the European host-country context, with a focus on their investment motives. The main research question, contributing to the international business field, is: "How do investment motives, knowledge flows and location decisions about investment in international innovation differ for multinationals from emerging and developed countries?" I contribute to the literature on the internationalisation of innovation, R&D internationalisation models and international-knowledge sourcing and creation. The knowledge-based theory of the firm and of organisational capability is the core theoretical anchor of this thesis. The thesis employs a multiple-case-study qualitative research method. It is presented as a series of three academic journal papers (Chapters 3 to 5), preceded by a literature, theory, and method overview (Chapter 2). Chapter 3 investigates location decisions for innovation by multinational enterprises (MNEs), including the case of MNEs from emerging markets (EMNEs) which engage in innovation activities in Central and Eastern Europe (CEE). It compares and contrasts motives for innovation of four MNEs from the machinery and equipment manufacturing industry operating in Europe. In Chapter 4, I study the international innovation strategies of seven Australian and New Zealand firms in the European context, to explain their investment motives, knowledge flows, and innovation performance. Chapter 5 focuses on the motives for foreign direct investment in innovation and knowledge-creation capabilities of 11 EMNEs innovating in emerging markets. It incorporates the cooperation-seeking motive (conceptualised in Chapter 3), diversificationseeking motive, and knowledge flows (analysed in Chapter 4) into the analysis of the motives and location decisions related to the underresearched R&D and innovation by non-Chinese EMNEs in CEE. The concluding Chapter 6 summarises thesis and chapter contributions, develops an integrative model, and highlights implications, limitations, and future research directions.

#### **Dedication**

This thesis is dedicated to my family.

Special feeling of gratitude is dedicated to my wife Gabi, whose words of encouragement, support and her never-ending love were so important to me in finalising this research.

I would also like to thank my beloved children, Maty, Štěpi, Ami, Agi, and Otík for their good attitude, laughs and giving me a chance to concentrate in a quiet room to write, most of the time.

Finally, I am grateful to my parents who gave me the education, moral lessons, and friendship from an early age.

Když jsem byl malý kluk, tak mi taťka říkával, ať se stanu doktorem, abych ho mohl léčit, když bude starý. Lékařem jsem se nestal, ale aspoň něco... Děkuji vám všem.

If we knew what it was we were doing, it would not be called research, would it?

\*\*Albert Einstein\*\*

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# **Table of Contents**

| Abstract     |  | ii   |
|--------------|--|------|
| Acknowled    | gements  | V    |
| List of Figu | ires   | xi   |
| List of Tabl | les  | xii  |
| Paper Status | s at the Time of Submission  | xiii |
| Abbreviatio  | ons  | xiv  |
| Chapter 1. I | Introduction   | 1    |
| 1.1 Unde     | erstanding the Motives for International Innovation in Europe              | 3    |
| 1.2 Why      | Study the Motives for International Innovation in Europe?                  | 5    |
| 1.3 The C    | Overarching Research Question and Sub-Questions                            | 6    |
| 1.3.1        | Summaries of Main Chapter Findings   | 7    |
| 1.3.2        | Thesis Contributions   | 9    |
| 1.4 Thesi    | s Structure  | 10   |
| Chapter 2. I | Background, Literature Review, Theory, and Method                          | 12   |
| 2.1 Chapt    | ter Overview   | 12   |
| 2.2 Backs    | ground and Context of the Research   | 13   |
| 2.3 Litera   | ature Review and Theory  | 15   |
| 2.3.1        | Foreign Direct Investment and Innovation Motives                           | 15   |
| 2.3.2        | Knowledge gap in the FDI and the Literature on the Internationalisation of |      |
|              | Innovation Motives   | 18   |
| 2.3.3        | Models of R&D and Innovation Internationalisation                          | 19   |
| 2.3.4        | The Knowledge-Based View and Knowledge Flows in MNEs                       | 21   |
| 2.3.5        | Location- and Firm-Specific Determinants of International Innovation       | 23   |

| 2.3.6      | An Initial Framework: The Motives for and Determinants of FDI in Innovation   | 25    |
|------------|---|-------|
| 2.4 Rese   | earch Method  | 28    |
| 2.4.1      | Philosophical and Epistemological Orientations of This Thesis                 | 28    |
| 2.4.3      | Data Collection and Interviews  | 32    |
| 2.4.4      | Data Analysis   | 36    |
| 2.5 Chap   | oter Summary and Conclusion   | 37    |
| Chapter 3. | Innovation in Foreign Subsidiaries: New Players, New Locations, New Motives?. | 39    |
| 3.1 Chap   | oter Overview   | 39    |
| 3.2 Intro  | duction   | 39    |
| 3.3 Liter  | rature Review and Theory  | 46    |
| 3.3.1      | International Innovation of MNEs From Emerging vs. Developed Countries (Ho    | me    |
|            | Country)  | 46    |
| 3.3.2      | Location of International Innovation Investment: Emerging vs. Developed Count | tries |
|            | (Destination Country)   | 49    |
| 3.3.3      | Motives of International Innovation Investment: Connections to Local          |       |
|            | Economy/Headquarters  | 53    |
| 3.4 Rese   | earch Design and Method   | 58    |
| 3.4.1      | Qualitative Research  | 59    |
| 3.4.2      | Data Collection   | 62    |
| 3.5 Find   | ings  | 64    |
| 3.6 Disc   | ussion  | 72    |
| 3.7 Cond   | clusions  | 78    |
| Chapter 4. | Knowledge Flows, Strategic Motives, and Innovation Performance: Insights from |       |
| Δ116       | stralian and New Zealand Investment in Furone                                 | 81    |

| 4.1 Chap   | oter Overview   | 81     |
|------------|---|--------|
| 4.2 Intro  | duction   | 81     |
| 4.3 Revie  | ew of Literature  | 85     |
| 4.3.1      | Innovation Motives  | 86     |
| 4.3.2      | Knowledge Flows   | 88     |
| 4.4 Theo   | ry  | 89     |
| 4.5 Meth   | od  | 92     |
| 4.5.1      | Qualitative Research  | 92     |
| 4.5.2      | Data Collection and Analysis  | 94     |
| 4.6 Case   | s   | 95     |
| 4.7 Findi  | ings  | 98     |
| 4.7.1      | Characteristics of ANZ Firms  | 98     |
| 4.7.2      | Strategic Motives   | 99     |
| 4.7.3      | Knowledge Flows   | 102    |
| 4.7.4      | Innovation Performance  | 105    |
| 4.8 Discu  | ussion  | 107    |
| 4.9 Conc   | clusions  | 113    |
| Chapter 5. | Emerging Multinationals Innovating in Emerging Markets: Investment Motive | es and |
| Kno        | owledge-Creation Capabilities   | 116    |
| 5.1 Chap   | oter Overview   | 116    |
| 5.2 Intro  | duction   | 117    |
| 5.3 Liter  | ature Review and Theory   | 121    |
| 5.3.1      | Strategic Motives for Innovation Investment Abroad                        | 125    |
| 5.3.2      | Knowledge-Creation Capabilities   | 127    |

| 5.3.3     | Emerging MNEs Innovating in (Central and Eastern) Europe: The Role of Conto | ext   |
|-----------|---|-------|
|           |   | . 135 |
| 5.3.4     | Theories Other Than the Knowledge-Based View (LLL Model, Springboard        |       |
|           | Theory)   | . 136 |
| 5.4 Meth  | od  | . 139 |
| 5.4.1     | Multiple-Case-Study Method  | . 139 |
| 5.4.2     | Case Selection  | . 140 |
| 5.4.3     | Data Collection   | . 141 |
| 5.4.4     | Data Analysis   | . 143 |
| 5.5 Case  | Descriptions  | . 144 |
| 5.6 Findi | ings and Discussion   | . 154 |
| 5.6.1     | Characteristics of Emerging MNEs: Home-Country Location (Dis-)Advantages    | . 156 |
| 5.6.2     | Characteristics of CEE: Host-Country Location (Dis-)Advantages              | . 157 |
| 5.6.3     | Strategic Motives for Innovation Investment Abroad                          | . 159 |
| 5.6.4     | Knowledge-Creation Capability   | . 165 |
| 5.6.5     | Knowledge-Integration Capability  | . 168 |
| 5.6.6     | Knowledge-Sharing Capability  | . 175 |
| 5.6.7     | Knowledge-Cocreation Capability   | . 178 |
| 5.7 Conc  | ceptual and Theoretical Development   | . 185 |
| 5.7.1     | Knowledge-Creation Capability: Contributions to Understanding the Concept   | . 185 |
| 5.7.2     | Innovation Motives, Location-Specific Factors and Knowledge-Creation Capabi | lity  |
|           |   | . 189 |
| 5.8 Conc  | clusions  | . 191 |
| 5 8 1     | Future Research Directions  | 191   |

| 5.8.2 Limitations and Policy and Managerial Implications | 192 |
|--|-----|
| 5.9 Chapter Summary                                      | 193 |
| Chapter 6. Conclusions                                   | 195 |
| 6.1 Chapter Overview                                     | 195 |
| 6.2 Introduction   | 195 |
| 6.3 Research Contributions                               | 196 |
| 6.3.1 Chapter Contributions                              | 196 |
| 6.3.2 Final Integrative Framework                        | 201 |
| 6.3.3 Overall Thesis Contributions                       | 204 |
| 6.4 Managerial Implications                              | 205 |
| 6.5 Research Limitations                                 | 206 |
| Appendices   | 210 |
| Appendix A: Interview Questions                          | 210 |
| Appendix B: Ethics Approval Documents                    | 212 |
| References   | 222 |

# **List of Figures**

| <b>Figure 1.1</b> Positioning of the Thesis and its Chapters in the International Business Literature 4 |
|---|
| Figure 2.1. A Framework for Understanding (Motives For) International Innovation Investment             |
|   |
| Figure 4.1 Factors Affecting MNE Knowledge Flows and Innovation Performance                             |
| Figure 4.2 The Model of International-Knowledge Connectivity and Knowledge-Creation                     |
| Capability  |
| Figure 4.3 Summary: The Model of International-Knowledge Connectivity and Knowledge-                    |
| Creation Capability   |
| Figure 5.1 A Framework for Understanding EMNEs Innovating in Emerging Markets 121                       |
| Figure 5.2 First-Order Indicators, Second-Order Concepts, and Final Theoretical Themes 168              |
| Figure 5.3 International Innovation Motives and Knowledge-Creation Capabilities                         |
| Figure 5.4 Cooperation Seeking, Knowledge Integration, Sharing & Cocreation Capabilities 188            |
| Figure 5.5 Home/Host-Country Context, Investment Motives and Knowledge-Creation                         |
| Capabilities  |
| Figure 6.1 Integrative Theoretical Framework of the Thesis: Determinants of International               |
| Innovation  |

# **List of Tables**

| Table 1.1 Chapter Titles, Research Questions and Sub-Questions                                 |
|--|
| Table 2.1 An Overview of the Method of Theorising From Case Studies in this Thesis         31  |
| Table 2.2 Overview of Analysed Firms and Interviewed Participants    33                        |
| Table 3.1 Origin and Location of International Innovation: Typology of Subsidiaries         54 |
| Table 3.2 Motives for Innovation Investment: Connections to Local Market and Headquarters 58   |
| Table 3.3 Origin and Location of International Innovation: Typical Main Motives Based on the   |
| Extant Theory58  |
| Table 3.4 Firm Characteristics and Interview Participants    64                                |
| Table 3.5 Findings: Diversity of Regions and Motives    65                                     |
| Table 4.1 Foreign Firms Innovating in the European Union    85                                 |
| Table 4.2 Strategic Motives for International innovation Investment         89                 |
| Table 4.3 Description of Cases   95  |
| Table 4.4 Findings   |
| <b>Table 4.5</b> Comparison of Findings for ANZ Firms and Extant Literature                    |
| Table 5.1 Overview of Analysed Firms and Interviewed Participants    144                       |
| <b>Table 5.2</b> Innovation Motives by Frequency (Out of 11 Emerging–Emerging Cases)           |
| Table 5.3 Indicative Keywords and Phrases That Informed Thematic Analysis of Interview Data    |
|  |
| Table 6.1 Origin and Location of International Innovation: Motives Based on Findings of This   |
| Thesis   |

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An earlier version of Chapter 3 was presented at the 2015 Annual Meeting of the Australian and New Zealand Academy of Management in Queenstown, New Zealand and then submitted to the *European Business Review* and the *European Management Journal*. It went through the review process in both journals. (*European Management Journal* only sends 24% of its submissions for review, according to Kastanakis, 2018). The reviewer's feedback from the conference and both journals has been applied in substantially rewriting the manuscript, which is now under contract to be published in 2021 by Routledge (New York) as a chapter in a research book entitled *International Human Resource Management and Development in Emerging Market Multinationals* (edited by P. Sinha, P. Patel, and P. Verma).

Chapter 4 was published online (first view) in the *Journal of Management & Organization* in January 2020. An earlier version of Chapter 4 was presented at the 5th Ashridge International Research Conference (Global Disruption: Organizational Innovation) at the Hult International Business School in Ashridge, UK. The developmental feedback from both the conference attendees and the *Journal of Management & Organization* was used to rewrite the chapter in the thesis.

An earlier version of Chapter 5 was presented at the 2017 Global Strategy and Emerging Markets Conference at Northeastern University in Boston, Massachusetts. The developmental feedback from the conference attendees, including some senior scholars in the field such as Professor Ravi Ramamurti and Professor Alvaro Cuervo-Cazurra (co-editor of *Global Strategy Journal*), was used to rewrite the chapter in the thesis.

#### **Abbreviations**

AMNE—advanced-economy multinational enterprise

ANZ—Australia and New Zealand

CEE—Central and Eastern Europe

EM—emerging market

EMNE—emerging-market multinational enterprise

EU—the European Union

FDI—foreign direct investment

FMCG—fast-moving consumer goods

FSA—firm-specific advantage

IB—International Business

M&A—mergers and acquisitions

MNE—multinational enterprise

OECD—the Organisation for Economic Co-operation and Development

OLI—ownership location internalisation paradigm

R&D—research and development



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| Please indicate the chapter/section/pages of this thesis that are extracted from a co-authored work and give the title and publication details or details of submission of the co-authored work.   |   |  |  |  |
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| Chapter 3. Innovation in   | Chapter 3. Innovation in foreign subsidiaries: New players, new locations, new motives?   |  |  |  |
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## **Chapter 1. Introduction**

Chapter 1 presents the structure and motivation of the thesis to position its contribution to knowledge. It investigates motives for the internationalisation of innovation-focused foreign direct investment (FDI), addressing both firm-specific and location-specific factors. The thesis analyses 21 non-European-headquartered firms with innovation activities in Europe, with a focus on underresearched Australian and New Zealand (ANZ) innovation investment in Europe and innovation by emerging-market multinational enterprises (MNEs) in Central and Eastern Europe (CEE). Using thematic analysis, the findings are analysed to theorise the relationship between the motives for FDI in innovation, knowledge flows, and location choices. The knowledge-based view serves as a theoretical backbone of the thesis and is applied in conjunction with models of internationalisation of research and development (R&D) and innovation and frameworks incorporating location-specific factors, including host and home-country context, into understanding international innovation motives and processes of knowledge creation and capability building.

The thesis first presents background, conceptual and theoretical foundations, and an overview of the approach to method, followed by three chapters representing articles submitted to journals or presented at conferences. It concludes with a chapter integrating findings and the contributions. International innovation and R&D by MNEs in Europe are becoming more diversified in terms of their origins and locations (Dachs et al., 2014). Firms from non-traditional investor countries outside of Europe and North America are increasingly conducting innovation in Europe (Montout & Sami, 2016). This thesis focuses on the relatively underresearched multinationals from New Zealand and Australia and from emerging economies such as India and Brazil, and their innovation investment in Europe, including CEE which is underresearched as a

location for FDI in innovation and offers a unique and rich context for international business (IB) research (Rašković et al., 2020).

The motivations and knowledge flows of ANZ and emerging MNEs (EMNEs) investing in innovation in Europe (and particularly in CEE) are poorly understood. Outward FDI from emerging economies is regarded as becoming one of the "big issues" of the new millennium in the IB research agenda (Luo & Tung, 2018; Mathews, 2006). The main aim of this study is to identify and explain how location decisions about investment in innovation abroad differ for multinationals from emerging and developed countries. It gives a particular attention to the ANZ investing firms and investigation of an emerging—emerging type of innovation investment from emerging economies into CEE. Furthermore, the thesis examines why and how EMNEs are conducting innovation in emerging markets and uncovers motives that I find to be inconsistent with the current theory that mainly focuses on Northern Hemisphere developed MNEs' innovation and EMNEs' innovation in developed countries (Håkanson & Nobel, 1993).

This doctoral research in IB asks one overarching question: "How do investment motives, knowledge flows and location decisions about investment in international innovation differ for multinationals from emerging and developed countries?" and explores it in the European host-country contexts. The study uses a multiple case-study-method approach (Ghauri, 2004). Interviews were conducted mainly with R&D managers and subsidiary managers based on a semi-structured questionnaire. To ensure rich, robust, and comprehensive understanding, the study develops confidence in its findings by conducting interviews with different managers (from headquarters [HQ] and subsidiaries), and checking MNEs' official websites and innovation databases. The qualitative data is then analysed through thematic analysis. The research contributes to the debate on motivations for internationalisation of innovation (Papanastassiou et al., 2019) and knowledge flows in MNEs (Gaur et al., 2019), attempting to enhance the IB

literature including models of R&D internationalisation and knowledge-based theory to explain motives for internationalisation of innovation. The thesis offers implications for policymakers, business people, and future research on international innovation.

#### 1.1 Understanding the Motives for International Innovation in Europe

This section summarises the research aims and objectives of this thesis. The main aim of this study is to explore how motives, knowledge flows, and location decisions related to investment in international innovation differ for multinationals from emerging and developed countries. More specifically, the objectives of the research are to explain why and how EMNEs are conducting innovation in emerging markets, how ANZ MNEs manage their innovation investments in Europe, and to uncover motives that would be inconsistent with the current theories that mainly focus on traditional (European, North American, and Japanese) developed MNEs' innovation (B. Ambos & Ambos, 2011; von Zedtwitz & Gassmann, 2002) and EMNEs' innovation in developed countries (Ciabuschi et al., 2017). Emerging economies differ from developed countries in their institutional framework and other characteristics affecting their national innovation systems (Furman & Hayes, 2004; Gong & Keller; 2003), and a substantial literature stream in the IB field ascribes "unique" strategic asset-seeking FDI motives to EMNEs and their internationalisation (Luo & Tung, 2018; Meyer, 2015).

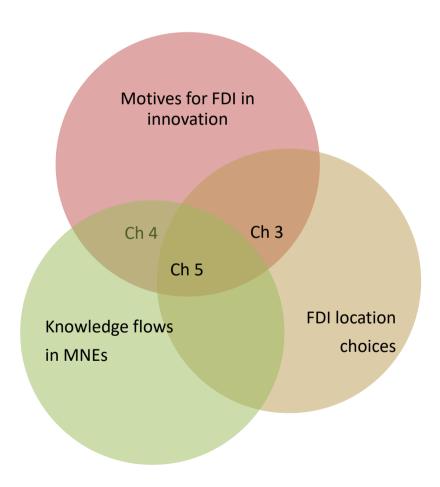
The empirical context of this research is Europe, and the analysis seeks to examine case studies of innovation practices in both emerging and developed Europe in order to better understand differences in motives for innovation and MNEs' knowledge management in these two parts of Europe (Radosevic, 1999). The research also considers a variety of sources of innovation among developed markets, that is, MNEs from developed-country regions such as Australasia (Bhattacharya & Bloch, 2004). New Zealand and Australian innovation systems have been studied, but not enough attention has been given to FDI in innovation by MNEs from these countries (Bond-

Smith et al., 2016; Crawford et al., 2007; Feeny & Rogers, 2003; Gregory, 1993). Context is essential theoretically for EMNEs (Hobdari et al., 2017) and in models of knowledge flows in MNEs (Gaur et al., 2019).

This thesis aims to contribute to three related literature streams in IB: motives for FDI in innovation (and for internationalisation of innovation), international-knowledge flows in MNEs, and location choices related to FDI in innovation (see Figure 1.1) in EMNEs and ANZ MNEs innovating in Europe. All of these streams are related to the main research question of this thesis.

Figure 1.1

Positioning of the Thesis and its Chapters in the International Business Literature



#### 1.2 Why Study the Motives for International Innovation in Europe?

This section summarises the motivation of the study including its theoretical motivations and the research problem. This thesis examines international-knowledge architecture in MNEs and their internationalisation of innovation (Awate et al., 2015). From the industrial revolution to the age of technology of today, the two forces of innovation and internationalisation have become increasingly intertwined as core drivers of MNEs' growth (Cantwell, 2016). The growing amount of international investment based on knowledge-seeking motivations and knowledge-building competence at a subsidiary level have connected regional innovation structures to global knowledge sharing, so international-knowledge connectivity has become critical for sustained innovation and expansion (U. Andersson et al., 2016).

The goal of this research is to shed light on the specific drivers that significantly contribute to the internationalisation of innovation (Papanastassiou et al., 2019) and uncover and explain different motives for FDI in innovation than those presented in extant research (Kuemmerle, 1999), which do not account for an increasing diversity of home and host countries of FDI in innovation. The thesis analyses major factors driving motives for international innovation in Europe, focusing on the role of knowledge and organisational capabilities (Grant, 1996a), the features of the firm's business environment, and the impact of home- and host-country innovation policies, including incentives and barriers. In particular, the role of knowledge integration (Grant 1996a), knowledge sharing (Foss & Pedersen, 2019), and knowledge-cocreation capabilities (Kazadi et al., 2016), which create the firm's knowledge architecture, are explored in an MNE and subsidiary context.

The creation of knowledge is a dynamic process in which individual and organisational boundaries are shifting and establish a new knowledge background (Nonaka, 1994; Von Krogh et al., 2012). The knowledge-based approach views the MNE as a social community in which knowledge is processed and distributed internally more effectively than through external

exchanges (B. Kogut, 2000). The information base generated by an MNE can serve as its primary source of competitive advantage and the effectiveness by which firm knowledge is developed and efficiently transmitted internally can increase its competitiveness (Gupta & Govindarajan, 2000; Kostova, 1999). The thesis builds on the knowledge-based view of the firm (Grant, 1996b) and is informed by its four main theoretical strands (competition as a dynamic process, the firm's resource base, organisational capabilities, and organisational knowledge and learning) where knowledge integration is the main objective of the enterprise and the core of its organisational capability (Grant, 1996a). This research also responds to challenge from Cano-Kollmann et al. (2016) to deeply investigate knowledge creation, knowledge transfer, and knowledge connectivity within MNEs' networks, since enablers of knowledge creation, rather than merely its transfer, are theoretically unresolved.

#### 1.3 The Overarching Research Question and Sub-Questions

This thesis addresses and focuses on the following overarching research question:

"How do investment motives, knowledge flows and location decisions about investment in international innovation differ for multinationals from emerging and developed countries?"

My Ph.D. research consists of three separate research papers containing the sub-questions highlighted in Table 1.1.

Based on the reviewed theory, literature, background, context, and motivations, the main objective of my study is to explore MNEs' motivations for investing in knowledge and innovation-sensitive activities in Europe. The first objective of this research is to explore EMNEs' motives, knowledge flows, and innovation performance in the geographical context of Europe, particularly in CEE (Chapter 5). The second objective is to compare differences, in the above-mentioned areas, with firms from developed home countries, mainly from Australia and New Zealand (Chapter 4). Chapter 3 sets the stage for this investigation by an in-depth single-industry investigation of

international innovation motives of both developed and EMNEs in both developed and emerging (CEE) Europe.

**Table 1.1**Chapter Titles, Research Questions and Sub-Questions

| _  |   |
|--|---|
| Chapter/title  | Research questions/sub-questions  |
| Chapter 3: Innovation in Foreign<br>Subsidiaries: New Players, New<br>Locations, New Motives?  | Main RQ of the paper: How do motives for multinationals' location decisions about investment in innovation abroad depend on their home and host country?  |
|  | 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)?   |
| Chapter 4: Knowledge Flows, Strategic<br>Motives, and Innovation<br>Performance: Insights from<br>Australian and New Zealand<br>Investment in Europe | RQ1: Why and how do ANZ MNEs conduct innovation in Europe and how does distance from the EU affect it?  |
|  | RQ2a: How do the innovation motives and knowledge flows of European subsidiaries of ANZ firms align with one another and how do they affect innovation performance (especially radical vs. incremental innovation)? |
|  | RQ2b: How do they differ from the motives and knowledge flows of European subsidiaries of other MNEs?   |
| Chapter 5: Emerging Multinationals Innovating in Emerging Markets:   | RQ1: Why and how do EMNEs conduct innovation in emerging Europe?  |
| Investment Motives and Knowledge<br>Creation Capabilities  | RQ2: How do innovation motives align with organisational knowledge-creation capabilities (knowledge sharing, cocreation, and integration) of EMNE subsidiaries in CEE?  |

## 1.3.1 Summaries of Main Chapter Findings

The main research sub-questions of Chapter 3 are: (1) How do innovation motives of EMNE subsidiaries in Europe differ from MNEs from developed countries? (2) Why are EMNEs

conducting innovation in emerging vs. developed markets (in the European context)? This multiple-case-study research is based on in-depth interviews with innovation and subsidiary managers. I analyse the multinationals' motives for innovation in Europe and consider contextual factors such as home and host country. The main findings of this chapter are that the differences in innovation motives depend both on the location of the investment and the home country of the investor. EMNEs can behave in a way that is different from the stereotypes of asset-stripping behaviour, while developed MNEs (from Australasia) can be knowledge seeking, a motive often ascribed to EMNEs. In the theoretical and conceptual development, I develop a concept of the cooperation-seeking innovation investment, and propose that it is motivated by both increasing internal connectedness (within the group) and external connectedness (with stakeholders such as suppliers, clients, and universities in the host market).

Chapter 4 employs a thematic analysis of seven case studies of ANZ investors in Europe. It finds that their motives for innovation in Europe are often both market and knowledge seeking and that some are also motivated by diversification and cooperation. While the strategic intent is often for the knowledge to flow in multiple directions among subsidiaries and HQ, distance poses challenges to the efficiency of the process. European subsidiaries are often seen as potentially playing a key role in firms' global innovation systems, particularly with regard to radical innovation. However, because of distance and communication bottlenecks (e.g., time-zone differences), HQ does not always recognise this potential. The chapter presents a new model and four propositions, arguing that HQ–subsidiary trust and strategic motives are moderators in the process of international-knowledge connectivity and knowledge creation.

Chapter 5, building on rich data from 11 EMNEs originating from India, Brazil, Russia, South Africa, Malaysia, and South Korea, develops through thematic analysis a process model explaining the relationship between cooperation-seeking innovation-investment motives and

knowledge-creation capabilities including knowledge integration, knowledge sharing, and knowledge cocreation. Finally, home- and host-country context, including resource munificence and institutions, are considered in the model as moderators of the relationship between innovation-investment motives and knowledge-creation capabilities. This chapter offers a rich account of the CEE context, extending the argument from Chapter 3 that the host-country context plays a crucial role in its relationship with motives for FDI in innovation.

#### 1.3.2 Thesis Contributions

The contribution of this Ph.D. research lies in enhancing current empirical and theoretical understanding of underresearched fields such as motives of innovation-based FDI, knowledge connectivity and connectedness, and knowledge creation and cocreation capabilities influencing MNEs' overall innovation performance. Empirically, this research analyses FDI in innovation by emerging and ANZ MNEs in the European context.

The theoretical explanations and evidence presented in this thesis help to expand our understanding of the implications of motives for FDI in innovation by framing them within the knowledge-based theory and also considering location-specific factors linked to host and home countries. My analysis of motives for internationalisation of innovation and its overall impact on MNEs' innovation results is underpinned, from a theoretical point of view, by IB and strategic-management literature grounded in the knowledge-based view of the firm (Grant, 1996b) and the knowledge-based view of organisational capability (Grant, 1996a). This work analyses and identifies innovation-based location decisions of MNEs which engage in innovation activities, seeking differences in motives among distinct MNEs' HQ geographies in the European context and their impacts on innovation outcomes.

More specifically, I investigate strategies of ANZ MNEs investing in the European Union (EU) and their motives for international innovation investment, knowledge flows, and innovation

performance. I find that multiple motivations are present with the prevalence of market- and knowledge-seeking motives (with cooperation- and diversification-seeking motives occurring as well), while the distance of ANZ firms from Europe, and trust, play an essential role in knowledge creation, integration, and capability-building process. Moreover, this thesis analyses motives for investment by emerging multinationals in innovation-intensive activities in European emerging markets. This part of my research focuses on innovation by non-Chinese EMNEs from multiple industries in CEE. Comparing MNEs from different home-country locations, I contribute to the discussion on the potentially different motives for investment and behaviours of MNEs from emerging and advanced countries (Cuervo-Cazurra & Ramamurti, 2014; Di Minin et al., 2012; Giuliani et al., 2014; Narula, 2012) and how MNEs' location decisions and knowledge-sourcing strategies in terms of innovation in advanced vs. emerging countries differ depending on their country of origin (Awate et al., 2015; Ciabuschi et al., 2017).

#### 1.4 Thesis Structure

This thesis consists of six chapters. In the first, introductory, chapter, I present the background and context of the study, research problem, aims and objectives, theoretical motivations, overarching research question, and sub-questions, followed by a summary of findings, significance, and contributions of this research. Chapter 2 is devoted to the literature review and theoretical considerations about innovation motives, models of innovation internationalisation, location- and firm-specific determinants of international innovation, and knowledge-based view of the firm. Research methods, philosophical orientation, and data-analysis sections conclude Chapter 2.

Chapters 3, 4, and 5 contain three research papers written during the time of my Ph.D. research. Chapter 3: "Innovation in Foreign Subsidiaries: New Players, New Locations, New Motives?" was presented at the 2015 Annual Meeting of the Australian and New Zealand Academy of Management in Queenstown, New Zealand, then submitted to the *European Business* 

Review and the European Management Journal, revised and is currently under contract to be published in 2021 by Routledge (New York) as a chapter in a research book entitled International Human Resource Management and Development in Emerging Market Multinationals, edited by P. Sinha, P. Patel, and P. Verma.

Chapter 4: "Knowledge Flows, Strategic Motives, and Innovation Performance: Insights from Australian and New Zealand Investment in Europe," was accepted and is in press (published online in First View) in the *Journal of Management & Organisation* (Ingršt & Zámborský, 2020). Chapter 5: "Emerging Multinationals Innovating in Emerging Markets: Investment Motives and Knowledge-Creation Capabilities," was presented at the 2017 Global Strategy and Emerging Markets Conference at Northeastern University in Boston, Massachusetts. In the concluding Chapter 6, I discuss the findings in the context of previous literature and show different theoretical implications for IB literature, managers, and policymakers. Finally, I show suggestions for future research and limitations of the study

## Chapter 2. Background, Literature Review, Theory, and Method

#### 2.1 Chapter Overview

Chapter 2 covers the literature review, theoretical considerations, and methodology of the thesis. As the following three chapters (research papers) have their own sections on theory, review of the literature, and method, Chapter 2 concisely summarises these issues and unifies all the chapters, creating an overarching perspective. In doing so, it summarises the concepts analysed in the main chapters. The literature review concentrates on motives for FDI in innovation and explains differences in each type of motive. This section also addresses the knowledge gap in the literature by explaining the less known motives that have not been sufficiently conceptualised before, namely cooperation-seeking and diversification-seeking motives for FDI in innovation.

In this chapter, I critically examine the empirical and theoretical research related to the three areas of focus of this thesis: motives for FDI in innovation, knowledge flows in MNEs, and location decisions about FDI in innovation. After presenting the background and context of the research, I discuss motives for FDI in innovation; models of innovation internationalisation; the knowledge-based view of the firm; knowledge flows in MNEs; knowledge-creation capabilities; and location- and firm-specific determinants of international innovation, to review what has been undertaken in the past in the areas of research to which my thesis contributes. The methodological section concludes this chapter. All the above-mentioned themes are discussed in more depth in the three separate research papers (Chapters 3, 4, and 5) that form this thesis. This chapter provides an overarching literature review and presents a theoretical framework and research design that unifies the whole thesis.

#### 2.2 Background and Context of the Research

This study defines innovation based on the third edition of the *Oslo Manual of Innovation* (Organisation for Economic Co-operation and Development [OECD] & Eurostat, 2005) which defines innovation as the implementation of a new or significantly improved product (goods or service), or process, a new marketing method, or a new organisational method in business practices, workplace organisation, or external relations. By definition, all innovation must contain a degree of novelty. The *Oslo Manual* distinguishes between three types of novelty: innovation can be new to the firm, new to the market, or new to the world.

The first concept covers the diffusion of existing innovation to a firm—the innovation may have already been implemented by other businesses, but it is new to the firm. Innovations are new to the market when the firm is the first to introduce the innovation in its market. Innovation is new to the world when the firm is the first to introduce the innovation for all markets and industries. Innovation, thus defined, is clearly a much broader notion than R&D and is therefore influenced by a broad range of factors, some of which can be influenced by policy (OECD & Eurostat, 2005). There are other definitions of innovation (Archibugi & Iammarino, 2002; Baregheh et al., 2009; Schumpeter, 1934), but the *Oslo Manual* definition is widely accepted and used and provides a good starting point for the research in this thesis.

The EU spent EUR 320 billion on R&D in 2017, which represented 2.07% of GDP, a modest rise from 1.77% in 2007, according to Eurostat (2019). Expenditure on R&D is split into four institutional sectors: government, business enterprise, higher education, and the private non-profit sector. The two sectors with the highest expenditure on R&D in Europe have been the business enterprise sector, which made up 63.8 % (EUR 174.4 billion), and the higher education sector, which made up 23.62 % (EUR 63.4 billion) of total R&D expenditure in 2013 (Eurostat, 2014). With a 12.2 % share (EUR 33.4 billion), the government sector also plays an important role,

especially in terms of the long-term stability of R&D expenditure (Eurostat, 2014). The importance of the private non-profit sector is small, spending less than 1% of the total.

An overview of the innovation strategies brought into the European market is presented in the *Community Innovation Survey*, a survey of innovation activities of domestic and foreign-owned firms in Europe. This survey is administered by national statistical offices and Eurostat. The data reveal that EMNEs exhibit roughly the same propensity to introduce new products to the market as companies in the other groups; however, they do relatively little R&D and cooperate relatively little internally and with clients and suppliers, in contrast to ANZ firms that engage in R&D and cooperate (especially within the group) more often than other firms.

ANZ innovation systems and the resulting strategies of ANZ firms are potentially distinct from other small, open, advanced economies due to their relative isolation (distance from major innovation powerhouses in Northern America, Europe and Northern Asia) and proximity to emerging economies in Southeast Asia (B. R. Martin & Johnston, 1999). Australia and New Zealand are also somewhat distinctive in the OECD with their economies' industrial structure biased towards primary industries and the relatively small size of firms (Crawford et al., 2007).

There is no official definition of emerging and developed countries and researchers employ various definitions that fit their study design (Hoskisson et al., 2000). Many researchers use empirical sources to define emerging versus advanced economies (Giuliani et al., 2014). Different organisations and institutions use their own specifications (OECD, World Bank, Gallup, Inc., United Nations, International Monetary Fund, Dow Jones Indexes, etc.). Some of the most common criteria for evaluating a country's degree of development are per capita income or gross domestic product, the level of industrialisation, the general standard of living, the amount of widespread infrastructure and other non-economic factors, such as the Human Development Index, which reflects relative degrees of education, literacy, and health.

For the purpose of this research, Dow Jones Indexes' (2012) classification will be used as it is based on review through both quantitative and qualitative processes. It results in a classification of Developed Market, Emerging Market, or Frontier Market (Dow Jones Indexes, 2012). Their review process begins with analysts' examination of countries based on three broad categories of metrics for each country: Market & Regulatory Structure, Trading Environment, and Operational Efficiency. These categories reflect the market characteristics that are often considered by investors. According to Dow Jones Indexes classification, developed markets are as follows: USA, Canada, Australia, New Zealand, Hong Kong, Singapore, Japan, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, and Israel. In this thesis, all other remaining countries from emerging and frontier market groups will be integrated into one category: emerging market.

#### 2.3 Literature Review and Theory

In this section, I will first review the literature on FDI and innovation motives and clarify the knowledge gap in the literature on FDI in innovation and the internationalisation of innovation motives. I will then provide a theoretically driven literature review of models of R&D and innovation internationalisation, the knowledge-based view and knowledge flows in MNEs, and location- and firm-specific determinants of international innovation. Finally, I develop an integrative framework for understanding the motives for and determinants of FDI in innovation.

#### 2.3.1 Foreign Direct Investment and Innovation Motives

The focus of this thesis is the phenomenon of FDI in innovation activities and its motives, with a focus on the European host-country context and the potential differences in motives and innovation behaviours depending on the country of origin (developed vs. emerging economies, ANZ investors vs. others) and host country (CEE versus the rest of Europe). I will first set a wider context for

exploring this phenomenon before I turn my attention to the theoretical literature that can help us to understand the motives for FDI in innovation, knowledge flows, and determinants of location decisions related to FDI in innovation.

FDI has snowballed worldwide and the size of the global FDI stock has more than doubled over a 10-year period from 2009 to hit a level of more than US\$ 32 trillion in 2018 (United Nations Conference on Trade and Development [UNCTAD], 2019). The growth of FDI flows has slowed markedly though, as it was about 1% per year in 2011–2018 compared with 8% in 2000–2007, and more than 20% per year before 2000 (UNCTAD, 2019). MNEs engaging in FDI are the sources of a significant share of global R&D, with the top 100 MNEs in the world accounting for more than one third of business-funded R&D worldwide, according to UNCTAD (2019).

International greenfield investment in R&D and innovation is sizeable and growing, according to UNCTAD. During 2014–2018, MNEs announced 5,300 R&D projects outside their home countries, representing more than 6% of all announced greenfield investment projects. This was a rise from 4,000 in the preceding five years (UNCTAD, 2019). Emerging economies accounted for about 45% of these projects; however, the majority of R&D-related FDI projects were in relatively lower value-added design, development, and testing activities. The number of R&D FDI projects in Europe doubled in 2013–2018 (EY, 2019), indicating the region remains an attractive destination for international R&D investments (Laurens et al., 2015).

Recognising the factors that influence FDI is especially relevant as it can play a significant role as a driving force in the transition from underdeveloped to developed economies and as an influential driver of integration in the global financial system. FDI is among the most robust networks through which knowledge can be spread through parts of the world and has a direct and indirect influence on productivity growth in host markets (Jacobs et al., 2017; Konings, 2001).

Blomström et al. (2000) identify the significant impact of FDI on the host country, such as jobs, finance, exports, and new technologies. The literature of industrial organisations sheds light on mergers and acquisitions that are completed to enhance economic power or that occur because of the likelihood of achieving productivity improvements that leverage economies of scale and scope (Kamien & Zang, 1990). The rising demand for new strengthened innovation ability leads companies to increase technology deployment and partnership with numerous and, increasingly, geographically diverse stakeholders (Cantwell & Piscitello, 2000; Narula & Zanfei, 2005).

The motives behind FDI, in general, were theoretically explained and conceptualised in John Dunning's (1998, 1993) seminal works as part of his ownership, location, and internalisation (OLI) eclectic paradigm of FDI. Market seeking, resource seeking, and efficiency seeking are underlying FDI motives proposed by Dunning:

- Market seeking—companies that venture abroad to find customers (to supply goods or services to a particular country or region).
- Efficiency seeking—companies that venture abroad to lower their costs of performing economic activities, and/or that aim at rationalising their already existing operations in various locations.
- Resource seeking—companies that venture abroad to access resources that are not readily
  available at home or that can be obtained at a lower cost abroad.

The above-mentioned three main motives were extended by Dunning (1991) to include a strategic asset-seeking motive. Strategic asset seeking can be interpreted as firms that venture abroad to obtain strategic assets (tangible or intangible), which may be critical to their long-term strategy, but that are not available at home. There are many definitions and interpretations of this motive (Meyer, 2015). Cuervo-Cazurra and Narula (2015, p. 5) interpret and define it as "to promote long-term strategic objectives—especially that of sustaining or advancing global

competitiveness." Meyer (2015) notes that conceptually there are distinctions between strategic asset-seeking FDI (Deng, 2009; Dunning, 1991; Dunning & Lundan, 2008), strategic asset-seeking R&D (Dunning & Narula, 1995), technology-seeking FDI (B. Kogut & Chang, 1991), knowledge-seeking FDI (Chung & Alcacer, 2002), asset-seeking FDI (Ivarsson & Jonsson, 2003; Makino et al., 2002) and springboard FDI (Luo & Tung, 2018).

Dunning's work also implied other motives. Cuervo-Cazurra and Narula (2015) infer these additional motives from Dunning (1993): escape investment, trade-supportive investment, finance-supportive investment, management-supportive investment, and passive investment. Because of market changes and development of international business practices, and managerial and organisational procedures within the firm, motives often change and develop, like strategies, since they are aspirational, and when they fail to offer the intended goals, a reassessment of motivation is required (Cuervo-Cazurra & Narula, 2015). Quite a high proportion of MNEs are coordinated in classical structures incorporating FDI and wholly owned affiliates, yet, at the same time, are being developed into a vast network of non-equity interactions and interrelationships among other protagonists (Giroud & Mirza, 2015).

# 2.3.2 Knowledge gap in the FDI and the Literature on the Internationalisation of Innovation Motives

IB has unfolded energetically over the last few decades bringing some serious changes in the nature of worldwide innovation processes (Mudambi, 2008) which have produced new possibilities for IB research and challenges to and extensions of Dunning's motive typology (Moghaddam et al., 2014). According to Cuervo-Cazurra and Narula (2015), there is no strong rationale for IB researchers to remain constrained by the arbitrary restriction of the four seeking motivations driving MNE:

There is no logical or conceptual reason for the IB community to remain bound by the artificial constraint that the MNE is driven primarily by four seeking motivations, three of which are based on exploiting existing assets and one that is angled toward exploration of assets. That these particular motives remain primary, and the others are "secondary," has no basis in theory ... Indeed, the concept of internationalisation motives is somewhat atheoretical, in the sense that—like the eclectic paradigm—it provides a toolkit that permits its use (or disuse) in conjunction with other theories and frameworks. Its value is greatest when used in conjunction with other frameworks. (Cuervo-Cazurra & Narula, 2015, p. 11)

I accept this challenge and develop other FDI motives, such as cooperation-seeking and diversification-seeking motives for FDI in innovation in my doctoral research, and link them theoretically to extend the models of R&D and innovation internationalisation, contribute to the knowledge-based view (including the theoretical frameworks and models of MNE knowledge flows and knowledge-creation capabilities of MNEs), and to the literature on firm- and location-specific determinants of FDI in innovation. I discuss these in the next section.

#### 2.3.3 Models of R&D and Innovation Internationalisation

Technological change and progress, price pressures, and significant market uncertainty are constantly forcing businesses to explore new avenues for managing and organising their operations around the planet. In the new millennium, MNEs have begun to discover new paths of competing and organising their practices worldwide. Various activities of their value chains have started to be offshored to different ventures to sustain or strengthen their ability to compete (Coucke & Sleuwaegen, 2008).

Offshoring of innovation helps to enhance the innovation capabilities of companies. Nieto and Rodriguez (2011) find that both captive offshoring (wholly owned) and offshore outsourcing (from independent parties) have a significant influence on R&D results (productivity). However,

the effect for captive offshoring (through FDI R&D projects) is mediated through its impact on innovation; in other words, captive R&D offshoring has a positive impact on productivity, which is observed insofar as the firm innovates (Nieto & Rodriguez, 2011). This means that looking internationally for knowledge pockets can reap the benefits of location and specialisation advantages to improve their performance in innovation.

In the past, MNEs' internationalisation of innovation was due to the process and product adaptation according to host-country market needs by the exploitation of FSAs (Cantwell & Mudambi, 2005). Going beyond this point, firms use strategic asset-seeking R&D overseas (Dunning & Narula, 1995) or knowledge acquisitions to get access to location-specific advantages (Florida, 1997). Additionally, as found by Narula and Zanfei (2005), MNEs with access to different locations can benefit from the diversity of knowledge received from different places. The above connectivity and connectedness to vibrant knowledge, resources, and distinct technological advantages accelerates the innovation capabilities and brings economies of scale and more effective knowledge sharing (Cummings, 2003).

In recent years, there has been a growing interest in the literature to examine the motivations and indicators of alternative knowledge-acquisition techniques such as own innovation centres, outsourcing, or cooperation with third parties on innovation activities (Cassiman & Veugelers, 2006). Scholars have also suggested that the "old" models of R&D internationalisation, such as von Zedtwitz and Gassmann's (2002), can not sufficiently account for R&D internationalisation of EMNEs (Di Minin et al., 2012). While the extant models acknowledge the roles of investment motives and knowledge flows within the MNE and between the MNE and host-country location (Achcaoucaou et al., 2014; Giuliani et al., 2014), there is an opportunity to embed them theoretically in the knowledge-based view and extend the models of R&D internationalisation to consider innovation (Vrontis & Christofi, 2019).

## 2.3.4 The Knowledge-Based View and Knowledge Flows in MNEs

The massive increase of new technologies and information in the last decades has developed pressures on MNEs to grow their capabilities faster and use external resources of knowledge (Low & Ho, 2016). This has led companies to encourage their affiliates abroad to use their external networks and exploit available sources of knowledge (Nonaka & Takeuchi, 1995). Robert Grant's (1996a) knowledge-based theory of organisational capability distinguishes integrative capabilities—the ability to acquire, absorb, and reconfigure information to create new knowledge and productive capabilities—and the managerial and technological know-how needed for the production of goods and services.

In this thesis, I build upon the knowledge-based theory of organisational capability (Grant, 1996a) and more generally on the knowledge-based theory of the firm (Grant, 1996b) as its concentration on knowledge delivers the required theoretical base to explain the dynamic processes of knowledge creation and the strategies to create knowledge and to understand and clarify organisational behaviour (Casselman & Samson, 2007). The knowledge-based view focuses on the mechanisms through which knowledge is integrated within firms and the role of firm networks, in order to create a capability to explore firms' potential for establishing a competitive advantage in the market. It argues that knowledge is the most critical asset and most valuable resource of the firm, enabling managers and firms to successfully achieve the competitive advantage of the firm (Grant, 1996a, 1996b).

It is strategically vital, even for market-leading firms, to continually create new innovations (Burns et al., 2014). The role of employees is crucial, specifically in the case of tacit knowledge (Krogh et al., 2012; Nonaka, 1994) and social interactions (Hadjimichael & Tsoukas, 2019; Tsoukas, 1996) as knowledge creation is dependent on combining and exchanging ideas and information between company managers (B. Kogut & Zander, 1992) to new knowledge-receiving

settings (Smith et al., 2005) while using multiple mechanisms such as management and marketing systems, processes, and leadership to disperse it across their boundaries (Almeida et al., 2002). Coordination of the above-mentioned elements is supported by procedural knowledge and routines (Grant, 1996b; Nelson & Winter, 1982).

The ability to create, maintain and manage knowledge in connection with new product development is a fundamental proposition of the knowledge-based theory of organisational capability (Grant, 1996a). While a firm's base of knowledge is the most important source for the development of radical innovation (K. Z. Zhou & Wu, 2010), MNEs can benefit also from their external collaborative ties to acquire missing knowledge (Szulanski, 1996). As part of the knowledge set is tacit and, in some cases, complicated to codify, it is difficult to transfer it with the firm, geographies, or individuals (Nonaka, 1994). Once novel knowledge arrives at an MNE, managers, based on their experience, decide upcoming steps. Codified rules and routines are important for successful knowledge integration within MNEs through their internal and external flows of knowledge and information (Gaur et al., 2019; Michailova & Zhan, 2015).

Internal and external knowledge flows in MNEs can also be analysed within the research on MNE subsidiaries (Meyer & Schotter, 2020). For example, internal knowledge inflows from HQ and peer subsidiaries can play a vital role in improving subsidiaries' innovation (Crespo et al., 2020). The stream of this literature emphasising embeddedness (i.e., U. Andersson & Forsgren, 2000; U. Andersson et al., 2002; Foss & Pedersen, 2002) is important in understanding the external flows of knowledge in particular. Many studies also emphasise the implications of dual and multiple embeddedness of subsidiaries (Meyer et al., 2011) on innovation processes (Achcaoucaou et al., 2014). Recent studies in this area also incorporated the role of distance into their frameworks, for example institutional distance (Rodrigues et al., 2020), and considered various types of innovation (for example product and process innovation). Specific types of knowledge transfer

(such as repatriate knowledge transfer) and embeddedness (e.g., embeddedness fit in the host unit and the HQ) have also been studied recently (Froese et al., 2020). Finally, subsidiary innovation performance also depends on balancing external knowledge sources and internal embeddedness (Ferraris et al., 2020).

## 2.3.5 Location- and Firm-Specific Determinants of International Innovation

Location decisions about R&D and innovation internationalisation have both firm-specific and location-specific determinants (B. Ambos & Ambos, 2011). It takes time until a company can take full advantage of an investment by selecting an overseas location based on MNEs' executives' decisions concerning new locations for innovation based on local advantages/disadvantages (Chung & Yeaple, 2008; Lewin et al., 2009) and according to local knowledge related to physical closeness (Nachum et al., 2008). Based on their components, host countries will draw FDI, and therefore investment decisions will be located in marketplaces with different attributes in terms of the market size, salaries, tax subsidies, infrastructure network, and technologies, and based on the company's underlying motives (Caccia & Baleix, 2018).

Innovation and research are based on two processes: the creation and discovery of new knowledge and the transfer of knowledge to the required location for further implementation (Amin & Cohendet, 2004) where knowledge circulates in either organisation-based (Bathelt et al., 2004) or personnel-based linkages (Lorenzen & Mudambi, 2013). Foreign companies can gain from access to new opportunities, accessing low-cost-factor resources and accumulating key assets (Healey, 1994). The intention to locate knowledge-based establishments abroad will be influenced by the company's previous experience in similar foreign markets to lower possible risks, along with overall expectations of the intended demographic (Johanson & Vahlne, 1977).

A difficult challenge for entrepreneurs was, and in some cases and locations still is, the process of assimilating their operations in emerging economies into their global innovation

systems. For example, studies on the CEE region (Paliwoda, 1995; Svetličič & Rojec, 1994) suggest that market-seeking motives strongly overshadow other FDI motivations. However, CEE economies have earned considerable exposure in previous years to global corporate operations as their economies have grown rapidly, with emerging domestic innovation systems emphasising collaborative innovation (Stojčić, 2020). FDI capital and knowledge flows are crucial to CEE's process of rehabilitation into the globalised economy (Marinov & Marinova, 2000). The countries of CEE have provided a fascinating research laboratory in which to assess the explanatory and predictive power of different theories (Meyer & Peng, 2005; Rašković et al., 2020).

Recent research on FDI motivations in CEE as a destination region, conducted by Popovici and Călin (2018), points to potential knowledge-seeking elements. Emerging-country investors are market-oriented and targeted destinations with strategic resources in their quest to exploit advantages and competencies. On the other hand, investors from developed economies pick host countries for the rationale of technology development and usability and on the principle of strategic asset seeking. MNEs based in locations with different levels of economic growth have divergent investment motives. Popovici and Călin (2018) find that firms from emerging countries exhibit market-seeking and asset-enhancing intentions, whereas those from developed nations are more willing to engage in exploiting assets, attracting new markets, and providing profitable and strategic assets with bountiful host destinations.

In order to obtain strategic assets, EMNEs prefer to engage in FDI to maximise the ownership advantages that they neglect (Child & Rodrigues, 2005). Knowledge and innovation in EMNEs are becoming a crucial topic in IB research (Lynch & Jin, 2016), with many intriguing avenues for research opening up. For example, while knowledge sourcing by EMNEs from advanced market subsidiaries has been recognised (Ciabuschi et al., 2017) and explored in terms

of political embeddedness and reverse knowledge-transfer barriers, there remains a question of why EMNEs would engage in knowledge sourcing in other emerging markets such as CEE.

In many cases, the only ownership advantage EMNEs have appears to occur from their HQ location, such as low-cost manufacturing centres, home networks, and business expertise and additional government involvement (Cui & Jiang, 2008). EMNEs might endeavour to overcome the disadvantages related to their relatively low product quality, weak applied science and technology of their home countries, lack of high-quality capabilities and recognised brand names, and weak governance (Buckley, 2012). EMNEs can rely primarily on mergers and acquisitions to obtain their knowledge resources faster and cheaper. Some IB scholars call this approach into question by claiming that EMNEs might profit from specific ownership advantages (Cuervo-Cazurra & Ramamurti, 2017; Narula, 2012; Ramamurti, 2012).

# 2.3.6 An Initial Framework: The Motives for and Determinants of FDI in Innovation

To integrate the theoretical discussion from the previous sections and set the stage and road map for the rest of the thesis, I present Figure 2.1. Motives for FDI in innovation, the main subject of this thesis, play a central role in this framework. Along with knowledge-creation capabilities (including knowledge integration, sharing, and cocreation capabilities, discussed in depth in Chapter 5) and knowledge flows within MNEs (the focus of Chapter 4), they can be classified as firm-specific determinants of international innovation, and they jointly affect innovation performance and competitiveness. Knowledge-creation capabilities are interrelated, and need to fit, with motives for FDI in innovation and knowledge flows in MNEs (as explained in Chapters 4 and 5). Chapter 4 also investigates how motives for FDI in innovation affect knowledge flows in MNEs (both internal and external) and how they both affect innovation performance (of MNE subsidiaries). Chapter 5 expands on the nature of knowledge-creation capabilities and considers the fit between knowledge flows and knowledge-sharing capabilities.

There are also location-specific factors to consider as determinants of FDI in innovation, namely home- and host-country context, home-host country typology of home-host combinations (according to development or region such as Europe or ANZ) and distance (along dimensions such as geography and institutions including culture). These home and host factors affect both motives for FDI in innovation (explained in more detail in Chapter 3) and location choices related to FDI in innovation (explained in more detail in Chapter 5). Location choices for FDI in innovation are affected by motives for FDI in innovation, and location choices impact innovation performance in my framework (innovation performance is considered in more depth in Chapter 4).

Figure 2.1 graphically highlights how each chapter explores elements of this initial conceptual framework. Since this thesis is guided by a qualitative research design (see the next section), the concepts and relationships highlighted in this figure are only preliminary and based on the extant literature and a simplified summary of the models and frameworks from Chapters 3–5 that are informed by the data. However, Figure 2.1. acknowledges the theoretical focus and anchors of this thesis, namely the knowledge-based theory of organisational capability (Grant, 1996a) linked to firm-specific determinants of FDI in innovation, and models of innovation internationalisation (linked to location-specific determinants of FDI in innovation). It suggests that the firm-specific factors are in many ways related to location-specific factors and they should be considered in conjunction. For example, knowledge-creation capabilities are related to home- and host-country factors (explained in Chapters 4 and 5) and knowledge flows in MNEs and location choices for FDI in innovation are also interrelated. Chapters 3–5 further explain and extend this framework with new frameworks, models, propositions, and explanations. Chapter 6 provides a final, integrated model.

Figure 2.1. A Framework for Understanding (Motives For) International Innovation Investment

Firm-specific determinants of FDI in innovation Location-specific determinants of FDI in innovation **Knowledge-creation capabilities** Home- & host-country factors Knowledge-integration capabilities Home-country context Ch 5 Knowledge-sharing capabilities Host-country context Ch 4 Knowledge-co-creation capabilities Home/host typology/distance Ch 4 Ch 5 Ch 3 Ch 5 **Motives for FDI** in innovation **Knowledge flows Location choices** in MNEs for FDI in innovation Ch 4 Models of innovation A knowledge-based theory **Innovation performance** of organisational capability internationalisation

#### 2.4 Research Method

This section outlines my approach to research methodology and offers specifics of the study's research design along with its methodological and philosophical foundations. The section shows the philosophical position on which this Ph.D. research is based, such as the selected research strategy, the research design, the data-collection approach, and the explanation of data analysis. The methodology for each of the major Chapters 3–5 is described in each of the following three chapters; this overarching thesis methodology section unites them all and provides an overview of the approach and design common to the thesis. Information concerning participants, their selection, data analysis, and their management are presented in this section.

This thesis adopts a qualitative research method under a broad umbrella of qualitative studies of strategy and management (Langley & Abdallah, 2011). The significant benefits of selecting qualitative research methods are that they expand our understanding and allow us to engage in in-depth exploration of theoretical underpinnings in a specific environment and the interactions between them (Yin, 2003). It is also an advantage to be able to discover the differences between various constructs and contexts, as it can eventually lead to a thorough understanding of how organisations from my sample operate and explains the unique stories of the participants from their point of view (Gioia et al., 2013). Qualitative research methods including case-study-based research are an important part of IB research (Welch et al., 2020) and can help build deeper insights and contribute to theory (Doz, 2011).

# 2.4.1 Philosophical and Epistemological Orientations of This Thesis

Qualitative research can provide a comprehensive picture of system activities that can offer deeper insights that can go beyond what can be described by a few variables (Gephart, 2004). My study uses a qualitative, comparative case-study methodology, followed by an inductive, theory-building approach (Eisenhardt, 1989; Yin, 2003). Process theories stress the utility of such an approach in offering a rich explanation of how systems proceed to a certain result

(Langley, 1999). I have adopted a multiple case-study method (Ghauri, 2014) to explore the role of motives for FDI in innovation in MNEs' knowledge-management processes, with particular attention given to the context of both host countries (of Europe and specifically CEE) and home countries (with a focus on New Zealand and Australia and emerging markets).

The robust social science doctrine of using qualitative data to establish "grounded theory" inductively offers insightful and detailed analytical explanations of the situations in which organisational phenomena exist (Glaser & Strauss, 1967; Strauss & Corbin, 1998). A data structure is built by progressive abstraction, beginning with first-order indicators and building to second-order concepts based in the IB literature (Gligor et al., 2016) and concluding with theoretical themes (Langley & Abdallah, 2011), such as knowledge-integration capability, knowledge-sharing capability, and knowledge cocreation capability derived from the thematic analysis in Chapter 5, and theory with explanations of the relationships between/among them (Gehman et al., 2018).

Overall, the method of theorising from case studies (Eisenhardt, 1989) that I employ in this thesis is inductive theory building. This method is associated with a positivist (empiricist) philosophical orientation (Welch et al., 2020), objective search for generalities, explanation in the form of testable propositions, a regularity model proposing associations between events (weak form of causality), and contextual description as a first step only. The epistemological foundations of this "Eisenhardt method" are sometimes also labelled "post-positivist" (Guba & Lincoln, 1994) and the design is targeted to maximise credible novelty, with multiple cases chosen (typically 4–10) to be sharply distinct on one key dimension while similar on others, and interview data with diverse participants (Langley & Abdallah, 2011).

While the thesis overall employs the Eisenhardt method, there are some variations across chapters. The method is used in particular in Chapter 4, which results in an inductive model with testable propositions, a typical purpose of studies using the Eisenhardt method

(Langley & Abdallah, 2011). Chapter 4 is, to a large degree, post-positivist, with the contextual description a first step only in theory-building process (Welch et al., 2020). On the other hand, Chapter 3 develops one new concept (of a cooperation-seeking international innovation motive), places it in a framework extending the extant literature, and develops a proposition related to the new concept, indicating a blend of post-positivist assumptions (Guba & Lincoln, 1994) mostly associated with the Eisenhardt method (Eisenhardt, 1989) and the "Gioia method" often associated with interpretive assumptions and aspirations to develop a novel concept (Langley & Abdallah, 2011).

The role of context (especially CEE) is most emphasised in Chapter 5, where no propositions are developed, and a process model is presented as the outcome of theorising from case studies, partly aligned with the Gioia method that stresses the search for informants' understandings of organisational events (Gioia et al., 2013). There are longer case narratives in that chapter and participant experiences and interpretations are given more space as well. According to Morgan and Smircich (1980), multiple realities exist, and different individuals can give different meanings to the same constructs. Understanding these realities (especially in Chapter 5) involves acknowledging interviewed participants' background, participation, and experience—capturing and modelling informants' meanings, and searching for informants' understanding of organisational events (Langley & Abdallah, 2011). Table 2.1 summarises the methods used in the thesis/chapters.

**Table 2.1**An Overview of the Method of Theorising From Case Studies in this Thesis

|                              | Chapter 3  | Chapter 4   | Chapter 5   | Chapter 6   |
|------------------------------|--|---|---|---|
| Overall method               | Theorising from case studies   | Theorising from case studies  | Theorising from case studies  | Theorising from case studies  |
| Main research strategy       | Mostly inductive<br>theory building/<br>some<br>contextualised<br>explanation                | Mostly inductive theory building  | Mostly inductive<br>theory<br>building/some<br>interpretive &<br>contextualised<br>explanation  | Mostly inductive theory building  |
| Key methodological reference | Yin (2009)   | Eisenhardt (1989)   | Eisenhardt and<br>Graebner (2007)   | Eisenhardt and<br>Graebner<br>(2007)  |
| Philosophical orientation    | Post-positivist/<br>empiricist   | Post-positivist/<br>empiricist  | Empiricist  | Post-positivist/<br>empiricist  |
| Epistemological foundation   | Post-positivist assumptions  | Post-positivist assumptions   | Post-positivist & interpretive  | Post-positivist assumptions   |
| Case-study outcome           | Explanation in the form of new concept & a proposition                                       | Explanation in the form of testable propositions  | Explanation in the form of causal mechanisms  | Explanation in<br>the form of<br>process model  |
| Theoretical outcome/product  | New concept & related proposition  | Causal model with propositions  | Process model (no propositions)   | Process model (no propositions)   |
| Role of context              | Contextual<br>description partly<br>integrated into<br>explanation                           | Contextual<br>description a<br>first step only  | Contextual<br>description partly<br>integrated into<br>explanation                              | Contextual<br>factors partly<br>integrated into<br>explanation                                    |
| Logic of method              | Multiple cases (4)   | Multiple cases (7)  | Multiple cases (11)   | Multiple cases (21)   |
| Rhetoric of writing          | Summary data table<br>& case narratives<br>integrated with<br>themes, short &<br>long quotes | Summary data<br>tables & short<br>case narratives<br>Context first, then<br>themes, short<br>quotes | Detailed case<br>narratives, data<br>structure with 2nd<br>order themes,<br>tables, long quotes | Summary data<br>table, themes<br>from chapters<br>integrated into<br>a framework<br>and discussed |

Source: adapted from Langley and Abdallah (2011) and Welch et al. (2020), applied to thesis

### 2.4.3 Data Collection and Interviews

Semi-structured interviews (the data-collection method used in this thesis) fit the philosophical and epistemological perspectives summarised in the previous section. In my thesis, I have used an exploratory research design as a holistic view. I recognise that to understand and explain knowledge-based processes and motives for international innovation investments, insights and interpretations from both participating managers and the researcher are required (Ghauri & Grønhaug, 2010). To describe and explain the knowledge of these study informants in a context-specific setting, I used a qualitative research approach (Denzin & Lincoln, 2000). I analysed data to establish the theoretical model, according to Gioia et al.'s (2013) systematic methodology for analysing qualitative data. Since emerging and ANZ MNEs' innovation activities in Europe have not been thoroughly studied in the past, the inductive case-study approach leads to valuable insights. Qualitative data and methods have a vital place in studying the complexity of knowledge creation in MNEs (Birkinshaw et al., 2011).

As different industrial settings increase the generalizability and universal applicability (Strauss & Corbin, 1990) of my research, a purposive sampling strategy was used (Patton, 1990) and cases from different industry settings were chosen. There were other criteria used to select cases, such as: subsidiaries had to be located in Europe when HQ were from ANZ or subsidiaries had to be located in CEE when HQ were from emerging (non-Chinese) country; subsidiaries had to be involved in innovation activities; subsidiaries had to be owned by HQ and participating firms had to be of a larger size—a well-established multinational enterprise. The final sample comprises firms from India, Malaysia, Brazil, Russia, South Africa, South Korea, New Zealand, and Australia, in industries including pharmaceuticals/healthcare, IT, machinery, fast-moving consumer goods (FMCG), financial, and raw materials. See Table 2.2 for an overview of all the firms and interview participants for this thesis.

**Table 2.2**Overview of Analysed Firms and Interviewed Participants

| Firm     | Home country    | Host countries            | Industry                 | Interviewee(s) location  |
|----------|-----------------|---------------------------|--------------------------|--|
| EU1      | Germany         | Czech Rep.                | FMCGs                    | Czech Republic: 2 interviews Phase 1 & Phase 2 pilots Czech Republic marketing manager |
| US1      | US              | Czech Rep.                | Equipment manufacturing  | Czech Republic: 2 interviews USA: 1 interview  |
| NZ1      | NZ              | Netherlands<br>UK         | Machinery manufacturing  | NZ-based R&D director  |
| NZ2      | NZ              | Spain<br>Italy            | Machinery manufacturing  | NZ-based R&D manager   |
| NZ3      | NZ              | UK<br>France              | Hi-tech<br>manufacturing | NZ-based innovation staff  |
| NZ4      | NZ              | Italy                     | Home appliances          | NZ-based innovation staff  |
| NZ5      | NZ              | France, UK,<br>Germany    | Medical appliances       | NZ-based innovation manager  |
| AU1      | Australia       | Belgium,<br>Sweden        | Medical devices          | EU-based innovation manager  |
| AU2      | Australia       | UK                        | Financial services       | EU-based CEE director  |
| EU2      | Poland          | China                     | Machinery                | Poland (HQ)<br>Phase 2 pilot   |
| E1       | India           | Lithuania                 | IT services              | Lithuania (subsidiary)   |
| E2       | Malaysia        | Czech Rep.                | E-commerce               | Czech Republic (subsidiary)  |
| E3       | South<br>Korea  | Czech<br>Republic         | Machinery                | Czech Republic (subsidiary)  |
| E4       | Russia          | Serbia                    | Oil & gas                | Serbia (subsidiary)  |
| E5       | South<br>Africa | Czech Rep.<br>Netherlands | FMCGs                    | Netherlands (HQ)   |
| E6       | Brazil          | Slovakia,<br>China        | Machinery                | Brazil (HQ)—2 interviews   |
| E7       | India           | Poland?<br>Czech Rep.     | Pharmaceuticals          | Poland? (subsidiary)<br>Czech Republic   |
| E8       | India           | Czech Rep.                | Pharmaceuticals          | Czech Republic (subsidiary)  |
| E9       | India           | Russia                    | Pharmaceuticals          | Russia (subsidiary)  |
| E10      | India           | Poland                    | IT services              | Poland (subsidiary)  |
| E11      | India           | Czech Rep. &<br>Slovakia  | E-commerce               | Czech Republic (subsidiary)  |
| 21 firms |                 | •                         |                          | 25 interviews  |

Once I formulated the research questions, I conducted several pilot interviews to test initial interview questions and interviewer's probes. I then followed the logic of theoretical experimentation and preselected cases, which vary by field, home and host country, and mode of entry, to ensure that each case functions as a 'distinct experiment' and shows evidence from different perspectives (Creswell, 1998; Eisenhardt, 1989). The study relied on both primary and secondary sources, with an emphasis on primary sources. Based on the pilot interview, I prepared the final in-depth, open-ended interview questions based on the secondary data and theory while using semi-structured guidelines.

Interviewer's probes were also prepared to ensure a fruitful base of thematic follow-up questions. Potential participants were first contacted in writing, to acquaint them with the focus of the research and necessary information about themes of the research. Identified managers were then contacted by telephone, email or LinkedIn, and interviews were conducted in 2016–2018 with second-round follow-up interviews during 2019 (in some cases). This allowed retrospective and longitudinal data to be collected, with the retrospective bias to be mitigated (Leonard-Barton, 1990). Interviews were conducted with highly informed and knowledgeable executive managers in subsidiaries, in positions such as country manager, head engineering manager, process innovation division lead, project manager for scientific R&D projects, head of innovation, director of business development, R&D director and head of operations, ensuring that information gained was highly accurate (Kumar et al., 1993).

To enhance the robustness of the research, all the interviews were conducted face to face, by Skype or telephone, taking between 45 to 90 minutes. While most of the interviews were conducted in English, during the pilot research phase a few were conducted in Czech language. Transcription and coding in English provided more high-quality and consistent data, allowing for better comparisons between cases. All interviewed managers are fluent in English. During the interview, a good relationship was set up as interview-based case studies enable

researchers to establish a closer relationship with interviewees (Daniels & Cannice, 2004). More detailed information about interview content was delivered to participants prior to the interview if they asked for it. I usually started with general questions about the informant's position in the business, their job description, and how long they had worked with their company. I asked questions about the background, business, and innovation strategy of the companies. Then I questioned the managers about location decisions, market-entry modes, knowledge creation, and motives for their internationalisation (of innovation and R&D). I used open-ended questions and probed them with questions about how they conduct their innovation activities, why they innovate abroad, and how they proceed with knowledge creation (please refer to Appendix A for a full list of interview questions and Appendix B for documents related to the Ethics approval for this project).

I motivated informants to provide further and more detailed information when their descriptions were brief or novel messages emerged (J. A. Martin & Eisenhardt, 2010). In many cases, I also asked additional questions on the same theme to get an in-depth answer to fully understand the discussed phenomenon. These questions were directed at innovation managers who had day-to-day experience of the issues mentioned in the research explored in this thesis. I used interview techniques such as non-directive questioning and activity monitoring that elicit accurate information (Huber & Power, 1985). Specific relevant evidence (e.g., dates, incidents, managers involved, subjects discussed) and open story details (e.g., motivations, knowledge orchestration) was gathered through this interview process. When conceptual saturation was achieved, data gathering ended (Strauss, 1987).

Finally, I applied detailed archival and observational data to the interview results. Qualitative data were triangulated with secondary sources as databases (http://www.fdiintelligence.com), companies' internet sites, newspapers, company presentations, academic work, internet resources, and personal interviews, to ensure research validity and

establish connections between different theoretical concepts in literature streams (Ghauri, 2004; Jick, 1979) which gained complex information about the cases and ensured the validity of the constructs (Lub, 2015). The interviews were recorded and fully transcribed by a professional company whenever possible, and detailed notes were also taken and rewritten immediately after each interview, usually within 24 hours, for further analysis. Results were summarised chronologically and the key segments of the interviews highlighted and coded (Gioia & Thomas, 1996; Strauss & Corbin, 1998).

## 2.4.4 Data Analysis

I started the analysis of the data, in line with suggestions of Miles and Huberman (1994), with within-case analysis, followed by the cross-case analysis with no a priori hypotheses. I went through and studied over 500 pages of transcribed interviews and my notes from the interviews to understand the similarities and differences of different firms (and responses from different participants from the same firm in some cases). First, I studied each firm to understand their innovation processes through a within-case analysis to identify meanings and descriptions of their innovation performance while writing interesting notes and phrases to be able to develop empirically grounded theory concepts (Lub, 2015). During the study of transcripts, I was looking for new indicators and ideas, and, during this process, I either dismissed or accepted indicators in case-summary tables to improve research validity (Yin, 2003). In the following step, I managed cross-case comparisons (each firm was treated as a case) that resulted in first-order indicators (based on the opinions and knowledge of participants). A review of the literature was used to theoretically interpret and explain emerging concepts, also leading to further validation and trustworthiness of my work (Eisenhardt, 1989).

Based on the first-order indicators and current theory, I have created second-order concepts (H. C. Su et al., 2014), which were refined while studying transcripts, codes, and literature (Yin, 2003). First-order indicators and second-order concepts were studied several

times and brought new theoretical themes. For example, in Chapter 5, they were: 1) knowledge-integration capability, 2) knowledge-sharing capability, and 3) knowledge-cocreation capability. These themes were derived from case studies and interviewee comments but also built on and extended the literature (Reissner, 2005; Silverman, 2015). The theoretical map of themes and concepts was a result of refined analysis linked to literature, theory, and research story (Ghauri, 2004), while using different scores and relevance for each first-order indicator allowed me to group them according to their importance and create second-order concepts and theoretical themes—distilling the essence (Langley & Abdallah, 2011), in relation to different epistemological and ontological positions (Braun & Clarke, 2006). Information from case evidence, extant theory and logic let propositions emerge (J. A. Martin & Eisenhardt, 2010) in Chapters 3 and 4 and a process model in Chapter 5. The final theoretical synthesis resulted in the overarching theoretical framework developed in this thesis (summary given in this chapter and a more detailed discussion in the final Chapter 6) and theoretical frameworks (and in Chapter 4 a model) in each of the Chapters 3–5.

## 2.5 Chapter Summary and Conclusion

This chapter has summarised the relevant theoretical and empirical literature and research design of this thesis. Theoretically, the thesis is positioned in the knowledge-based view of the firm (Grant, 1996b) and the knowledge-based theory of organisational capability (Grant, 1996a). This theory is used and extended in particular in Chapters 4 and 5 (with a focus on knowledge-creation capability), while Chapter 3 sets the context for the study by conceptually developing a new type of international innovation investment motive, namely the *cooperation-seeking motive*. Chapter 3 also previews the contextual, location-specific factors that I explore in all the chapters (home-country effects, host-country effects, home-host typology combinations, and home-host distance) to contribute to the knowledge-based view, which can benefit from further contextualising its findings in international settings (Gaur et al., 2019).

The literature review and theory have presented one of the main motivating factors behind this thesis, namely the fact that the IB field is starting to experiment with FDI motives beyond the four main motives derived from John Dunning's seminal work (Cuervo-Cazurra & Narula, 2015; Moghaddam et al., 2014). I take this effort further to focus on motives for FDI in *innovation* investment (not just FDI or R&D), contributing to the recent efforts towards theory building and a better understanding of international innovation and knowledge in established (U. Andersson et al., 2016) and EMNEs (Lynch & Jin, 2016). The thesis marries the deep insights of the knowledge-based theory from strategic management with the contextual sensitivity of the IB field to provide fresh insights to both disciplines.

Qualitative research methods are appropriate to understand and unpack the nuances of knowledge creation and capability building and they fit with the revised and expanded understanding of motives of cross-border investors engaged in international innovation. The next four chapters present interrelated perspectives that develop a comprehensive framework for understating the role of investment motives in the internationalisation of innovation.

# Chapter 3. Innovation in Foreign Subsidiaries: New Players, New

# **Locations, New Motives?**

## 3.1 Chapter Overview

This chapter investigates location decisions about innovation by multinational firms, including the case of MNEs from emerging countries (EMNEs) which engage in innovation activities in CEE. It compares and contrasts motives for innovation of four multinationals from the machinery and equipment manufacturing industry operating in Europe. This multiple-casestudy research is based on in-depth interviews with innovation and subsidiary managers. A triangulation approach is used to analyse the multinationals' motives for innovation in Europe. We also consider contextual factors such as country and industry, and mode of entry in Europe. The main contribution of this chapter is to point to the fact that the differences in innovation motives depend on the combination of the location of the investment and the home country of the investor. In the conceptual and theory development, we propose that in addition to market-, knowledge- and efficiency-seeking FDI motives, firms may also have cooperation-seeking innovation-investment motives, defined as being motivated by both high internal cooperation in the group (high internal connectedness) and high external cooperation with stakeholders such as suppliers, clients, and universities in the host market (high external connectedness). We would like to encourage more research into this type of innovation-investment motive and its links to the knowledge connectivity literature.

## 3.2 Introduction

Research on IB and innovation is growing (Cantwell, 2016; Dunning & Lundan, 2009). However, there are still gaps in our understanding of how characteristics of the home country affect the innovativeness and innovation motives of firms in their global expansion (Govindarajan & Ramamurti, 2011). We analyse this research topic in the context of

international innovation in the EU and other European countries, which is becoming more diversified regarding its origins and locations (Dachs et al., 2014). Firms from Asia and the Southern Hemisphere are increasingly conducting innovation in Europe. The bulk of their investments are still in the "old" EU-member countries in Western Europe; however, they have also started to locate R&D and innovation activities in CEE, including many member states of the EU. These new locations differ considerably from locations in old EU-member states in some important features such as GDP per capita, growth expectations, aggregate R&D intensity, culture, and institutional legacy (Meyer & Peng, 2005; Rašković et al., 2020). The motivation of these new players in new locations may not be readily explained by the existing models of R&D internationalisation developed by scholars focused on North American and European firms and developed-country R&D locations.

More specifically, we link to the debates on potential differences in behaviour between MNEs from emerging and developed countries (Amal et al., 2013; V. Z. Chen et al., 2012; Cuervo-Cazurra & Genc, 2008; Tang et al., 2018), including subsidiary-innovation motivations, types, and connections to global HQ and local economies (Giuliani et al., 2014). We also link to the debate on reverse knowledge spillovers (Driffield et al., 2014; Zámborský & Jacobs, 2016). Our research is initially organised around a typology of international innovation investment based on the country of origin (developed vs. emerging) and location of innovation (developed vs. emerging). In particular, we point to the potentially underresearched "Type 4" combination, in which both the home and the host countries of the multinational firm are emerging economies (Ramamurti & Singh, 2009). In addition to this simple development-based framework, we consider four types of international innovation motives (based on the subsidiary's connections and connectivity to the local market and to HQ): market seeking, knowledge seeking, efficiency seeking and cooperation seeking. While the first three of these motives are well known and recognised in IB research (Dunning, 1993), a cooperation-seeking

motive for FDI in innovation has not been explicitly recognised or deeply conceptualised in IB literature (Cuervo-Cazurra & Narula, 2015). We developed the concept of a cooperation-seeking motive for FDI in innovation inductively from our data and it constitutes the main conceptual contribution of this chapter, linking it to the recent theory-building effort related to international-knowledge connectivity and connectedness (U. Andersson et al., 2016; Turkina & Van Assche, 2018) and Chapter 4, which links in more detail to this concept.

This chapter focuses on the following research questions:

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

There are also two research sub-questions (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 main aim of our study is to explain the differences between the innovation motives of subsidiaries of different types (especially the emerging–emerging type) and potentially uncover motives that are inconsistent with the current theory, which mainly focuses on developed MNEs and EMNEs' innovation in developed countries. In addition to shedding light on EMNEs' innovation in emerging markets, we also focus on sub-regional aspects. Emerging economies differ from developed countries in their institutional framework and other characteristics affecting their national innovation systems (Furman & Hayes, 2004; Gong & Keller; 2003). The context of our study is Europe, and we analyse case studies of innovation activities in both emerging and developed countries in Europe to understand potential differences in the innovation behaviour of multinationals in these two parts of Europe. We also consider diversity among firms from developed and emerging economies as a source of

innovation, for example, Australian, New Zealand, and South African MNEs. These firms are interesting from a research perspective for two reasons; first, they are similar in many respects of corporate governance, accounting standards, language, etc. to US and UK firms. However, they suffer, just like firms from Eastern Asia, from the considerable distances between European subsidiary and HQ, which increase the costs of coordination, control, and knowledge transfer.

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—R&D, and it only needs to be new to a particular enterprise (e.g., it could have been originally developed or used by other enterprises). There is not an official definition of emerging and developed countries and researchers employ various definitions that fit their study design. Different organisations and institutions use their own specifications (OECD, World Bank, Gallup, United Nations, International Monetary Fund, Dow Jones Indexes, etc.).

For the purpose of this research, Dow Jones Indexes (2012) classification will be used as it is based on review through both a quantitative and qualitative process. It results in classifications of Developed Market, Emerging Market or Frontier Market. These categories reflect the market characteristics that are often considered by investors. According to Dow Jones Indexes (2012) classification, developed markets are as follows: USA, Canada, Australia, New Zealand, Hong Kong, Singapore, Japan, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, and Israel. All other remaining countries from emerging and frontier market groups will be integrated into one category: Emerging Market.

Due to the growing amount of empirical evidence, the recent literature on EMNEs has shifted towards a debate about whether we need new theoretical explanations for them (Ramamurti, 2012). There are currently three main different approaches to this topic. The first

school of thought suggests that new theoretical concepts are needed, as EMNEs follow a different and much more aggressive internationalisation that was not previously seen among established MNEs (Luo & Tung, 2007). It highlights the aggressive, risk-taking, asset-accumulating, leveraging-from-others nature of these EMNEs' international expansions as different behaviours that justify their own theoretical explanations (Mathews, 2006). Mathews (2002), in his linkage, leverage, and learning (LLL) framework, argues that EMNEs internationalise to acquire capabilities and advantages rather than to exploit pre-existing capabilities, which creates the question of how these firms offset their disadvantages and costs of competing in foreign markets. Luo and Tung (2007) show a similar view in their "springboard model" of EMNE internationalisation, where the argument is that EMNEs internationalise to obtain new advantages rather than use initial advantages as a springboard for internationalisation.

In contrast, the second school of thought argues that the rise of EMNEs can be explained within the realm of existing IB theories (Narula, 2010). Dunning (2006) and Narula (2010) explain how the established OLI model can be extended to explain the EMNEs' rise and behaviour. Narula (2010, 2012) elaborates on how the asset-augmenting international activities of EMNEs can yield benefits only when these firms already possess some unique ownership advantages that can then be integrated with the newly acquired resources. He also argues that the different behaviours observed when studying EMNEs result from their early stage of internationalisation. Once these "infant" developing-country MNEs grow up, they will increasingly behave like MNEs from developed countries, whose behaviours are covered by the existing IB theories. The third school of thought is set somewhere in the middle and suggests that studies of EMNEs can be used to extend existing IB theories (Cuervo-Cazurra, 2012; Ramamurti, 2009, 2012) and suggests that the unique conditions of emerging countries, and the

early stage of internationalisation of EMNEs, could offer new opportunities to extend well-known theoretical concepts (Hernandez & Guillén, 2018).

The heterogeneity of EMNEs makes it challenging to generalise about how they are like, or unlike, MNEs that appeared before. Studies making such generalisations are often vague about their aim—that is, about what is being compared with what—and, therefore, it is not clear how to interpret their findings (e.g., Luo & Tung, 2007). EMNEs can serve as the basis for extending current theories and arguments because the characteristics of their countries of origin differ from those assumed in these theories (Cuervo-Cazurra, 2012).

Meyer and Peng (2016) suggest analysing 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 with the shifts from adaptation to unfamiliar contexts to developing capabilities for frequently changing environments, the choice of entry strategy to the design and implementation of subsidiary-level strategies, and top-down knowledge transfers to intra- and inter-knowledge sharing. These insights can be used to integrate unique context with theory related to the knowledge-based view of the firm (Grant, 1996b), knowledge management, and its particular aspects and concepts, such as international-knowledge connectivity (U. Andersson et al., 2016).

We contribute to the literature on EMNEs, international innovation-investment motives, and knowledge connectivity in a number of ways. Di Minin et al. (2012) concentrate on Chinese MNEs' investment motives and behaviour in Europe but did not consider emerging firms' innovation investment in emerging European countries and did not study innovation among non-Chinese and non-Asian emerging multinationals. Driffield et al. (2014) highlight an essential theme of regionalisation in reverse productivity spillovers (knowledge flows from domestic establishments to foreign MNEs) and showed that these are concentrated in hometriad regions for European and American MNEs, but not for Asian MNEs. However, they did

not address why Asian MNEs search for knowledge in different triad regions, particularly in Europe, and did not adequately consider either diversity within Asian MNEs or the potentially different motivations for non-triad investments in innovation by firms from Australasia or from outside of Asia.

Giuliani et al. (2014) find that the behaviour of emerging-market MNEs 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 much common ground with this study and agree with its multifaceted treatment of developed vs. EMNEs based on subsidiary global—local connections, we acknowledge other motivations (such as efficiency-seeking innovation investments) and aim to more fully incorporate sub-regional effects (e.g., ANZ/non-Asian origin of investors and CEE locations) into our study. We also extend the concept of global—local connections to incorporate insights from the emerging literature on knowledge connectivity (Cano-Kollmann et al., 2016; Lorenzen & Mudambi, 2013).

This research explains potentially different motives for EMNEs' internationalisation of innovation and knowledge flows in emerging markets, as EMNEs, in some cases, follow a very different internationalisation that was not previously seen among developed MNEs. There are several theoretical concepts investigating EMNEs' motivation (Cuervo-Cazurra, 2012; Dunning, 2006; Luo & Tung, 2002, 2007; Mathews, 2002, 2006; Narula, 2010; Ramamurti, 2009, 2012), mainly focusing on EMNEs' innovation investment in developed markets, but robust and full-scope theory explaining EMNEs' innovation investment in emerging markets is missing. Specific conditions of emerging markets and the different timings of internationalisation and circumstances of EMNEs' development could lead this research to extend current theoretical concepts. Differences may be driven by the fact that some advanced-economy multinational enterprises (AMNEs) have had more time to develop the capabilities to

support internationalisation (newly internationalising AMNEs may have not enough strong or well-defined firm-specific advantages [FSAs]). No previous studies have focused on the underresearched phenomena of EMNEs investing in innovation in emerging Europe or on the innovation of ANZ MNEs in Europe.

The chapter is organised as follows. We start with a section looking at the literature on the internationalisation of innovation and develop a simple initial conceptual framework of subsidiary types and main motives, based on the subsidiary's connections and knowledge connectivity to the group and to the local (host) market. Then, we explain our research design and methods in Section 3 and present our approach to data collection in Section 4. Section 5 presents findings, Section 6 discussion (which extends the initial framework theoretically based on the data and findings), and the seventh and final section concludes the study.

## 3.3 Literature Review and Theory

# 3.3.1 International Innovation of MNEs From Emerging vs. Developed Countries (Home Country)

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), for example, 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 economic markets to acquire resources to build a competitive advantage. We are witnessing a third wave of the international expansion of MNEs from emerging markets. The first wave was based on resource and market seeking and asset exploitation in emerging markets (Luo, 2003). The second wave was focused on resource and market seeking in emerging markets and developed economies as well. In the

recent third wave, 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 and strategic assets, and how to theoretically explain the rise of innovative activity of EMNEs and its nature, including differences from 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 (intracorporate knowledge transfer); and the level of locally embedded innovative activities (generating value for the MNE and the local context as well), including formation of local innovative ties (collaborations) and innovation activity developed locally by the subsidiary (internally and independently from the HQ and sister firms).

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 pro-active/entrepreneurial and generate more patents). Their study implies that the differences between them are often blurred, as developed MNEs accounted for a large share of predatory (30%) and dual (40%) subsidiaries, while they accounted for the vast majority of passive subsidiaries in the sample. As economic growth has accelerated in emerging markets and slowed in developed economies, firms everywhere have had to reconsider their international strategies. Developed-country MNEs have had to gear up to exploit new opportunities and resources in emerging markets, and emerging-market firms have had to figure out how to take advantage of opportunities and resources in the rest of the world (Giuliani et al., 2014). Current models of the internationalisation process seem

particularly in need of refinement and extension to incorporate the case of EMNEs (Ramamurti, 2012).

Qiu and Cantwell (2018) find that the possibility to access, accumulate, and transfer knowledge more readily between geographically dispersed facilities, so that MNEs' HQ are able to allocate innovative activities across geographies, may lead to the creation of general-purpose technologies and radical innovation. Further development of these individual foreign subunits, to remain technologically more focused and specialised in specific fields, is associated with a shift of innovations away from the firms' existing primary technology areas, as they are applicable to different activities and they play a connecting role between technologies from different sectors.

Scholars examine whether developing-country MNEs need new theories to explain them. Narula (2012) finds that initial conditions associated with infant EMNEs are different from similar infant developed MNEs. Both MNE types evolve gradually from simple firms (infant MNEs) towards increasing cross-border intensity and complex organisations. The developed-economy MNEs are described in the literature as "mature MNEs" and most EMNEs as infant or "adolescent" MNEs. However, it is apparent that developed-economy MNEs are not all mature. There are many differences and similarities in the behaviour of emerging and developed MNEs when sourcing knowledge from abroad. In many cases, EMNEs grow to mature MNEs with organisational structure, strategy, innovation activities, and complexity similar to developed MNEs. The observable differences between these can potentially deteriorate over time.

On the other hand, Mathews (2006) argues that EMNEs are a new species of MNE that can be understood only with a new theory. Some scholars stress that EMNEs adopt a different perspective on the resources accessed through internationalisation and that this requires a rethink of the criteria typically utilised in the Dunning's dominant OLI theory. Mathews (2002),

in his LLL framework, argues that EMNEs internationalise to acquire capabilities and advantages rather than to exploit pre-existing capabilities—which creates the question of how these firms offset their disadvantages and costs of competing in foreign markets. A related view is presented by Meyer (2015), who shows that OLI typology remains a powerful tool to analyse contemporary business strategies, but suggests refining the definition, as many FDIs are undertaken explicitly with the aim to use assets acquired abroad to enhance the operations of the investor in other markets, and this contribution to EMNEs' capabilities constitutes an important and distinct type of investment decision.

Most of the researchers discuss EMNEs as if they are all the same. However, they are not a homogenous group—the country of origin, the industries in which they operate, the competitive advantages they exploit, the markets they target, and the internationalisation paths they follow vary quite widely (Luo & Tung, 2007). Applying universal rules is delicate and should be based on contingency theory, explaining the EMNEs' motivations, culture, social norms and regulations, size, years of operation, home country, ownership, etc. Emerging-economy MNEs appear to be building upon their home-country-specific advantages and there is only limited evidence that emerging-economy MNEs have developed sustainable FSAs, such as the knowledge-based advantages in systems of innovation, integration, and internal coordination.

# 3.3.2 Location of International Innovation Investment: Emerging vs. Developed Countries (Destination Country)

While the source country of international investment is a significant factor in explaining its motivation, the location of the investment (developed vs. emerging economy) is also an important consideration (Porter, 2000). Knowledge, one of the most valuable resources in business today, is not equally available everywhere. The different geographical allocation of resources creates certain "pockets of expertise" globally (Porter 1990). 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 low costs and labour-seeking motivations. Also, when planning entry into developed countries, EMNEs are more likely to seek complementary strategic assets when they already possess technology-based advantages.

However, Cuervo-Cazurra and Genc (2008) have studied the advantages and disadvantages of EMNEs investing in emerging markets and argue that emerging-country disadvantage can become an advantage when both types of MNE operate in countries with "difficult" governance conditions because emerging-country MNEs are used to operating in such conditions. EMNEs enjoy adversity advantage, their ability to function effectively in the difficult circumstances of emerging markets, where infrastructures are underdeveloped and a range of other "institutional voids" exists (Khanna & Palepu, 2006). 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 staffers (hiring overseas expatriates as well) focused on new technologies and 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.

More broadly, there are firm- and location-specific factors driving MNE managers' decisions about where to locate innovation and R&D. According to B. 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. Push factors are based on the product life-cycle theory (Vernon, 1966), with MNEs exploiting gained advantages (von Zedtwitz & Gassmann, 2002). The location of the

innovation centre may be motivated by the importance and size of the market, so MNEs will push their products into these markets (Pearce & Singh, 1990). Concerning the pull factors, countries that possess a comparative advantage pull MNE R&D investment into the countries with a highly skilled R&D workforce, a high level of scientific achievement and reasonable costs (Håkanson & Nobel, 1993).

Caves (1996) complements and extends our understanding of these phenomena to centripetal and centrifugal factors that influence MNE decisions about where to locate innovation activities. Centripetal factors suggest retaining R&D in HQ to avoid leakage of assets in a foreign subsidiary. Furthermore, in the case that innovation, marketing, and product design are created in HQ, dispersion around foreign subsidiaries would be inefficient. On the other hand, centrifugal factors pull R&D away from the centre to adapt processes and products according to local needs and benefit from knowledge spillovers (Porter & Stern, 2001). Important factors are market size, R&D capability, geographic distance, personnel costs, and FDI incentives. 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 capturing scholars' attention. 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).

According to Kim et al. (2018), innovation outsourcing became an emerging trend to reduce innovation and R&D budgets, relying on external contracting suppliers to be responsible for product development while transforming external suppliers and their supply-chain relationships into a critical source of innovation. These cultivate an increase in excellent, pro-

active joint-learning capability of incremental and radical innovation, instead of a passive, absorptive-learning strategy, and are more innovative to stay ahead of the competition.

Innovation in emerging Europe and its relationship to FDI has attracted a scholarly attention with a focus on its diffusion and other determinants (Holland & Pain, 1998). 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. They conclude that the relatively lower attractiveness of transition economies as a source of knowledge will continue to discourage MNE engagement in deeper innovation cooperation with local partners in the near future.

A firm's international experience has the most substantial influence on location decisions. Firms that innovate in emerging markets seem to require a more extensive level of international experience through international innovation cooperation (Schmiele, 2012). Emerging economies also face many economic and political risks that could unsettle their current growing trajectories. For example, rising labour costs or strengthening currencies may undermine the low-cost advantage that many EMNEs historically enjoyed. Protectionism may also become more frequent in the developed countries, slowing down the internationalisation of EMNEs (Aharoni & Ramamurti, 2008). However, it is possible that the turn towards free markets among emerging countries will not be reversed, and that rapid market growth and their open economy will produce more EMNEs, not just in lower technology or commodity businesses, but also in industries where sophisticated technologies, innovation, and marketing skills are important for attaining sustainable competitive advantage (Aharoni & Ramamurti, 2008).

Demirbag and Glaister (2010) show that firms also see long-term efficiency gains in developing countries and find that wage differences increase a firm's likelihood to offshore its

innovation projects to emerging Asian regions and Eastern Europe over the EU15 countries. The study shows that all considered regions are more attractive in terms of the availability of scientists and engineers than EU15 nations.

## 3.3.3 Motives of International Innovation Investment: Connections to Local

## Economy/Headquarters

To integrate the discussion of the previous two sections, we have created a simple typology of locations of international innovation activity (see Table 3.1) based on the development of the investor's country of origin (developed-country and emerging-economy MNEs) and the development of the location of the subsidiary (developed or emerging economy). 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 subsidiaries (developed–developed), and now focuses on Type 3 (emerging–developed) and partly on Type 2 (developed–emerging), Type 4 (emerging–emerging) subsidiaries are relatively underresearched and their motivations and behaviours are poorly understood.

**Table 3.1**Origin and Location of International Innovation: Typology of Subsidiaries

|                            | Country of innovation investment (location of the subsidia |                            |  |  |  |  |
|----------------------------|--|----------------------------|--|--|--|--|
| Country of origin (parent) | Developed  | Emerging                   |  |  |  |  |
| Developed                  | Type 1: Developed-developed                                | Type 2: Developed–emerging |  |  |  |  |
| Emerging                   | Type 3: Emerging–developed                                 | Type 4: Emerging—emerging  |  |  |  |  |

Source: adapted from Ramamurti and Singh (2009)

One of the main aims of this study is to understand these subsidiaries better and explain how their innovation-investment motivation differs from the other three types of subsidiaries (although this topic is further pursued in depth in Chapter 5). 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 subsidiaries need to be considered in more depth. B. Ambos and Ambos (2011) highlight technology exploration vs. exploitation motives, market vs. technology-driven motives and push/pull factors. 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.

Von Zedtwitz and Gassmann (2002) identify two principal forces of R&D internationalisation—access to local markets and customers (MNEs create development units abroad to adapt product ranges according to markets' and customers' needs) and access to local science and technology (MNEs create research units abroad to capture scarce scientific knowledge). There are thus two associated core motives: (1) the market-driven motive—technological exploitation of FSAs abroad by adopting local circumstances to gain access to a foreign market, and (2) the technology-driven motive—exploration of a firm's technologies through access to overseas knowledge and know-how (Almeida, 1996; Kuemmerle, 1999).

Activities of foreign innovation establishments are usually driven by several motives. According to Håkanson and Nobel (1993), there are five types of activity motives for foreign innovation establishment: 1) market-oriented units; 2) production-support units; 3) politically motivated units; 4) multimotive units set up or retained for a combination of the considerations and motives mentioned above; and 5) knowledge-seeking firms looking for R&D epicentres from the area of their strategic interest to catch up with competitors' innovation levels, broaden their knowledge portfolio, and also to search for the technical diversity of different regions' market needs (Strehl & Ghosh, 2003).

Concerning the dynamics of innovation internationalisation overseas, Florida (1997) confirms evolutionary tendencies during the transition from market driven motives to technology driven ones. Technological learners seek technologies in which they are weak in their home countries but strong in host countries, to offset their technological weakness. Bas and Sierra (2002) try to explain whether MNEs locate their knowledge activities as a consequence of their home-country advantages or according to host-country strengths. Technological creators accumulate strong technological capabilities and participate in new knowledge-generation activities in host countries, thus complementing their multinationals' existing knowledge database (Almeida, 1996).

Past studies analyse empirical evidence on the internationalisation of innovation motives from the perspective of innovation investments among developed countries, or from developed countries to developing countries. Innovation investments from developing countries to developed countries are an increasingly recognised phenomenon in IB literature in recent years (Ciabuschi et al., 2017; Di Minin, 2012; Giuliani et al., 2014). The even-less understood phenomenon is innovation investments by emerging-market firms in other emerging markets (Ramamurti & Singh, 2009).

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 (Meyer,

2015). Meyer's (2015) study mentions a few definitions on which the research is based: to augment FSAs through acquisition or partnering arrangements with local firms (Y. Liu et al., 2011); to achieve specific goals, such as firms acquiring strategic capabilities to offset their competitive weakness and leveraging their unique ownership advantages while making use of institutional incentives and minimising institutional constraints (Rui & Yip, 2008); to acquire strategic assets needed to compete more efficiently against global rivals and to avoid the institutional and market constraints that they face at home (Luo & Tung, 2007); or to augment existing global technological competitive advantages through a feedback of information and by tapping into the knowledge generated by other firms or non-market institutions in host countries (Ivarsson & Jonsson, 2003).

Scholars identify other motivations such as efficiency-seeking (Schmiele, 2012) and cooperation-seeking innovation investments (Demirbag & Glaister, 2010; 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). According to Dunning (1993), an efficiency-seeking motive is seen as gaining from the differences of factor endowments, economic systems, institutional arrangements, and culture. Benefits come from economies of scale and scope. The firm should only engage in creating new collaborations if connections are not within reach of their current network. Diversities of these connections are more important than the size of their network and actors can focus on enriching and preserving existing relationships (H. L. Chen & Huang, 2004).

On the other hand, cooperation-seeking ventures create joint ventures and other intrafirm 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 as value creation, innovation, and knowledge sharing. In some cases, MNEs can expand or develop cooperation networks internationally to fulfil strategic goals of a company (H. L. Chen & Huang, 2004) and allow firms to reach knowledge outside of firms that they would not normally access (Yeoh, 2000).

Acknowledging that there is a diversity of motives behind each subsidiary's innovation, 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 3.2. We aim to explore and extend the cooperation-seeking motive in the empirical analysis. Another aim of this chapter is to explain the motives of Type 4 (emerging–emerging subsidiaries) and how they differ from the other three types of global FDI in innovation (although this is pursued in more depth in Chapter 5). 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 3.2. While some preliminary conceptual structure was imposed on the motives (with Table 3.3 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 innovationinvestment motive and integrate it better with the emerging theory-building effort on knowledge connectivity (U. Andersson et al., 2016; Cano-Kollmann et al., 2016). We proceed with building our theoretical contribution inductively in Section 6 (Discussion) after presenting and analysing the data in Section 5 and explaining our research design and method in Section 4.

**Table 3.2** *Motives for Innovation Investment: Connections to Local Market and Headquarters* 

|                     | Characteristics of subsidiary-innovation behaviour and of the local market |                                     |  |
|---------------------|--|-------------------------------------|--|
| Type of motive      | Connections to local market  | Connections to headquarters         |  |
| Market seeking      | Local adaptation-driven innovation   | HQ-subsidiary knowledge transfer    |  |
| Efficiency seeking  | Low costs of local innovation staff  | Better productivity/cost than in HQ |  |
| Knowledge seeking   | Acquiring local-knowledge assets   | Subsidiary-HQ knowledge transfer    |  |
| Cooperation seeking | High external cooperation with   | High internal cooperation in group  |  |
|                     | locals   |                                     |  |

Source: Developed by the author from the extant literature

Table 3.3

Origin and Location of International Innovation: Typical Main Motives Based on the Extant
Theory

|                            | Country of innovation investment (location of the subsidiary) |  |  |
|----------------------------|---|--|--|
| Country of origin (parent) | Developed   | Emerging   |  |
| Developed                  | Type 1: Developed—developed  Market seeking                   | Type 2: Developed–emerging<br>Efficiency seeking |  |
| Emerging                   | Type 3: Emerging–developed<br>Knowledge seeking               | Type 4: Emerging—emerging ?                      |  |

Source: Based on Ramamurti and Singh (2009) and adapted from the R&D internationalisation literature

# 3.4 Research Design and Method

The why question of motives for international innovation investment is related to the how question of location decisions and knowledge connectivity in relation to the MNEs' HQ, the foreign subsidiaries, and various other actors. While some preliminary conceptual structure was imposed on the motives and connections to the group and local market (Table 3.2), the cooperation-seeking motive and motives of EMNEs' innovation investment in emerging Europe remain underresearched and will be subject to qualitative inquiry.

Similarly, while the previous section has reviewed the known aspects of the theory of subsidiary typology motives (Type 1, 2 and 3) as they relate to foreign subsidiaries, the how

and why questions of EMNEs' innovation investment in emerging Europe and their alignment with the strategic motives are still open to research, and the current knowledge in the field provides only a starting point to an enquiry guided by qualitative research design and openended research questions. International innovation investment of multinationals from emerging countries in emerging locations is a relatively new phenomenon and has not been subjected to extensive academic debate.

### 3.4.1 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, 1994). The case study is a research strategy that focuses on understanding the dynamics present within a single setting. Case studies typically combine data-collection methods such as archives, interviews, questionnaires, and observations. 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 management literature since it can bring more in-depth insights into the complex constructs and contexts studied.

The case-study approach is a very popular and widely used qualitative research method employed in the business disciplines (Eisenhardt & Graebner, 2007), and we employ this approach in our study. Case studies offer the opportunity for a holistic view of a process. As a research endeavour, the case study contributes uniquely to our knowledge of individual, organisational, social, and political phenomena; the distinctive need for case studies arises out of the desire to understand complex social phenomena; in brief, case study allows an investigation to retain the holistic and meaningful characteristics of real-life events (Yin, 1994). While a single case can indicate a general conceptual category or property, a few more can confirm the indication (Glaser & Strauss, 1967). Multiple-case studies offer a potentially

stronger base for theory building (Yin, 1994, 2009), and thus we opt for this method in our study.

Alvesson (2003) argues that interviews, as a means of qualitative research, are valuable as they provide the possibility to describe the ideas, knowledge, and experiences of the interviewees. While recognising that there are several potential risks in using interviews in IB research, Macdonald and Hellgren (2004) also inspire more researchers to use them if appropriate attention is given to addressing interviewees who are higher in the firm's information hierarchy as opposed to just the organisational hierarchy. They also stress that large numbers of participants do not guarantee reliability and validity of the research and that even a relatively smaller number of well-informed and experienced managers (as is the case in our study) can be sufficient to identify meaningful impressions in the studied issue.

Hyett et al. (2014) argue that flexibility in a case study may result in criticisms due to the number of different interpretations. Without a clear understanding and application of the principles and key elements of case-study methodology, there is a risk that the flexibility of the approach will result in circumstantial reporting, and will limit its global application as a valuable, theoretically supported methodology that can be rigorously applied across disciplines and fields (Hyett et al., 2014).

Firstly, as established in the Literature Review section, the issue of EMNEs investing in emerging Europe and the nature of the cooperation-seeking motives have received relatively little attention in the literature. According to Yin (1994), qualitative methods allow researchers to develop theoretical insights where the existing theories are incomplete. This methodology is exploratory in its nature and will allow the participants to respond in their own words, as opposed to giving them fixed responses to choose from as done in quantitative methods.

We aim to 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 does the cooperation-seeking motive of MNE subsidiaries in Europe differ depending on the home country of the investor and the location of the investment (and in particular what are the unique motives of EMNEs investing in innovation in emerging markets in Europe)?

In the first step, we have identified four types of the above-mentioned firms from different locations that are subject to our comparison and conduct innovation in Europe. We used publicly available sources such as business press, trade promotion agencies, and business intelligence websites. 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. Interview-based case studies help researchers to establish a stable relationship with managers (Daniels & Cannice, 2004). The interview is based on a semi-structured questionnaire that was tested in advance in three pilot interviews. Although this research pursues a consistent line of enquiry, it also allows for the actual stream of questions to be fluid rather than rigid (Rubin & Rubin, 2011). Confirmed participants received questionnaires prior to the face-to-face, Skype, or telephone interview. The questionnaire was drafted to collect general information about the MNE and specific subsidiary, their relationship, motives, location strategies, innovative activities, and networks.

To define features of this research, triangulation through different approaches to the same task was used. According to Ghauri (2004), the main advantage is that it can produce a more complete, holistic, and contextual portrait of the object under study. Therefore the

research triangulated acquired information by conducting interviews with (1) European-subsidiary innovation managers, or (2) innovation managers in the HQ; and (3) fact checking the provided information through <a href="www.factiva.com">www.factiva.com</a>, <a

#### 3.4.2 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 3.1 and 3.2) that we sought to further extend through qualitative inquiry. However, researchers have to be careful not misrepresent obtained data to fit their existing research needs.

Punch (2013) argues that, in qualitative research, only general questions are usually set up at the beginning of the study, and until some empirical work is carried out, it is not possible to identify specific and detailed research questions. They will only become apparent as the research unfolds and as a particular focus for the study is developed. In qualitative research methods, the data are usually unstructured at the moment of collection. The instruments used to acquire data have a significant influence on the data collected. If only a few available methods are applied (i.e., interview questions, observations, etc.), there is a risk of not being able to differentiate between fruitful and irrelevant data. Lee and Lings (2008) recommend that it is usually best to place the research in the middle between completely unstructured and structured.

Alvesson (2003) stresses that fieldwork while conducting interviews is necessary, but the complexities and pitfalls involved call for careful, ongoing reflection. There is a strong need to think through the basic theoretical stance on interviews, the possible research tasks that can be expected, and how we relate to empirical material emerging out of interviews—that is, considering a variety of possible meanings in an open and self-critical way (Alvesson, 2003). Based on the discussion above, 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 3.1):

- Developed-country firm investing in innovation in a subsidiary in a developed country,
- Developed-country firm investing in innovation in a subsidiary in an emerging economy,
- Emerging-country firm investing in innovation in a subsidiary in a developed country, and
- Emerging-country firm investing in innovation in a subsidiary in an emerging economy.

In addition to the different locations of home countries and host countries in terms of economic development, we also considered regional and country-of-origin effects and chose firms from triad regions outside of Europe (North America and Asia) and from non-traditional investor countries, including a firm from Australia/New Zealand and from elsewhere outside of Asia.

We also considered industry effects and chose the equipment and machinery manufacturing sector as a single-industry perspective for investigating MNEs' behaviour. We also considered two entry modes: acquisitions and greenfield. Table 3.4 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 roughly 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 3.4**Firm Characteristics and Interview Participants

| Investing<br>Firm | Industry<br>of firm                      | Country of origin   | Country of investment               | Year of entry | Interview participant                                   |
|-------------------|--|---------------------|-------------------------------------|---------------|---|
| Firm 1            | Machinery/ equipment manufacturing       | Developed (ANZ)     | Developed<br>Europe                 | 2014          | R&D manager-HQ<br>Australia/NZ                          |
| Firm 2            | Machinery/ equipment manufacturing       | Developed<br>(USA)  | Developed and<br>emerging<br>Europe | 1990<br>2007  | Subsidiary manager<br>emerging Europe<br>(2 interviews) |
| Firm 3            | Machinery/<br>equipment<br>manufacturing | Emerging (non-Asia) | Developed and emerging Europe       | 1994<br>2006  | R&D manager-HQ<br>emerging non-Asia<br>(2 interviews)   |
| Firm 4            | Machinery/<br>equipment<br>manufacturing | Emerging (Asia)     | Developed and<br>emerging<br>Europe | 2006<br>2009  | Subsidiary manager emerging Europe                      |

# 3.5 Findings

Table 3.5 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 3.1. Table 3.5 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 FDI in innovation, but the cooperation-seeking motive is then analysed in depth, in particular with regard to the two EMNEs that we have interviewed.

**Table 3.5**Findings: Diversity of Regions and Motives

| Region of origin        | Host-country region and main motives of innovation investment |                                |  |  |
|-------------------------|---|--------------------------------|--|--|
| (of investor)           |   |                                |  |  |
|                         | Developed-Europe subsidiary                                   | Emerging Europe subsidiary     |  |  |
| Developed               | Firm 1 (Type 1)   |                                |  |  |
| (Australia/New Zealand) | Subsidiary 1 (Acquisition)                                    |                                |  |  |
|                         | Market seeking  |                                |  |  |
|                         | Cooperation seeking   |                                |  |  |
|                         | Knowledge seeking   |                                |  |  |
|                         | Efficiency seeking  |                                |  |  |
| Developed               | Firm 2 (Type 1)   | Firm 2 (Type 2)                |  |  |
| (USA)                   | Subsidiary 2a (Greenfield)                                    | Subsidiary 2b (Greenfield)     |  |  |
|                         | Market seeking  | Efficiency seeking             |  |  |
|                         | Cooperation seeking   | Cooperation seeking            |  |  |
|                         |   | Knowledge seeking              |  |  |
|                         |   | Market seeking                 |  |  |
| Emerging                | Firm 3 (Type 3)   | Firm 3 (Type 4)                |  |  |
| (non-Asia)              | Subsidiary 3a (Acquisition)                                   | Subsidiary 3b (Greenfield)     |  |  |
|                         | Market seeking (initially)                                    | Market seeking (initially)     |  |  |
|                         | Knowledge seeking (initially)                                 | Efficiency seeking (initially) |  |  |
|                         | Cooperation seeking (later)                                   | Cooperation seeking (later)    |  |  |
| Emerging                | Firm 4 (Type 3)   | Firm 4 (Type 4)                |  |  |
| (Asia)                  | Subsidiary 4a (Greenfield)                                    | Subsidiary 4b (Acquisition)    |  |  |
|                         | Knowledge seeking   | Knowledge seeking              |  |  |
|                         | Market seeking  | Efficiency seeking             |  |  |
|                         | Cooperation seeking (HQ-4a;                                   | Market seeking                 |  |  |
|                         | limited between 4a and 4b)                                    | Cooperation seeking (HQ-4b,    |  |  |

Note: Main motives listed in order of importance.

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 3.3), 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 back 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, see for example 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 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 research and national government funding (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-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 Australasia).

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 (developed–emerging) investment from the USA to emerging Europe (in line with our expectations from the framework presented in Table 3.3), the subsidiary, surprisingly, 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 was 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, with expensive technology, suggesting high internal cooperation in the group (an aspect of cooperation-seeking investment motive according to our Table 3.2). 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 a more developed 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; Wei & Nguyen, 2019).

Firm 3: This Southern Hemisphere multinational from the machinery and equipment manufacturing industry 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 developed Europe (Type 3 subsidiary from our Table 3.1 framework). 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 company has two subsidiaries in Europe, one in Western Europe and one in CEE). The interviewed manager (from the HQ) said about this: "Our local workforce is very skilled and focused."

A large part of the motivation to acquire an innovative firm in developed Europe (Subsidiary 3a) was market seeking—following essential customers in the area (in line with our expectations based on Table 3.3). The greenfield investment in CEE was also driven by the new presence of an important customer in the same country. Both EU subsidiaries facilitated innovation aimed at product adaptation for local European markets (market seeking), which was somewhat contradictory to our initial expectations based on Table 3.3 (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, developed-Europe subsidiary 3b 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). 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 KPI's together so that we try to force them to communicate and help each other to reach those KPI's 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; Ryan et al., 2018).

Firm 4: This machinery manufacturing company from Southeast Asia has over 100 years of history with a very extensive product portfolio and four R&D centres worldwide, including in emerging and developed Europe. Its central innovation hub remains in the HQ.

The knowledge-seeking motive was a dominant factor behind its emerging-market 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 developed 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, 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 from the source country of investment (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 3.2).

Cooperation seeking was one of the motives (although not the dominant one) for the investment, as the acquirer was cognizant 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 of E3 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 Korea. 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 Korea. I think that it is a little bit politically (internally) sensitive."

This quote points to the crucial role of subsidiary power (Mudambi & Navarra, 2004; Mudambi et al., 2014) and local (external) embeddedness and the absorptive capacity of subsidiaries stressed in IB research on emerging markets and EMNEs (Isaac et al., 2019; J. Zeng 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.

#### 3.6 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 (in this case European) 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 cooperative innovation with local stakeholders in the host economy, 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), compared to the more one-sided (from subsidiary to HQ) knowledge transfer typical in the knowledge seeking motive.

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 & Alcacer, 2002; Dunning & Narula, 1995; B. Kogut & Chang, 1991). This research 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 (Bönte & Keilbach, 2005). 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

collaboration-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 (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 cooperation than the concept of embeddedness (Ebers & Maurer, 2014). Enkel et al. (2018) draw on connectedness 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* motives for FDI in innovation) rather than just to social integration mechanisms in collaborations.

The concept of connectedness (Enkel et al., 2018) is subtly different from the concept of embeddedness (Granovetter 1985; Uzzi, 1997) often used in the MNE subsidiary literature (U. Andersson & Forsgren, 1996; Santangelo, 2012; Achcaoucaou et al., 2014). Zukin and DiMaggio (1990) suggested embeddedness takes four forms: cultural, cognitive, political, and structural. The first three domains of embeddedness primarily reflect social constructionist perspectives on embeddedness, whereas structural embeddedness is principally concerned with how the quality and network architecture of material exchange relationships influence economic activity (Uzzi, 1997).

Connectedness, on the other hand, refers to the overall pattern of organizations' social relations, including the relations between members within the organisation *and* social relations with members outside the organisation (Jansen et al. 2006). It facilitates knowledge exchange within and between organizations (Sheremata 2000), allowing individuals with different knowledge and experiences to communicate (systematically) and adopt new ideas (Hansen 2002), combine knowledge and create new knowledge, often as part of explorative innovation. One of our theoretical contributions is that we move beyond the concept of dual embeddedness of MNE subsidiaries (Bresciani & Ferraris, 2016; Ciabuschi et al., 2014; Pu & Soh, 2018), as our cooperation seeking motive implies dual connectedness rather than dual embeddedness.

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.

The motives for the poorly understood Type 4 innovation investments by EMNEs in emerging markets are analysed in more depth in Chapter 5. However, our preliminary findings from our Firm 3 and 4 case studies showed that this type of investment is driven by similar motives as Types 1–3 investments (efficiency seeking, knowledge seeking, market seeking, and cooperation seeking). Comparison of Type 2 (developed–emerging) and Type 4 (emerging–emerging) investments (both interviewees were CEE subsidiary managers) does not show substantial differences in motives (with efficiency seeking being one of the two top motives for both cases and market seeking being towards the bottom of the motives).

The comparison of Type 1 (developed–developed) and Type 3 (emerging–developed) investments (both were acquisitions and both interviewees were R&D/innovation managers

located in a developed country) shows minor differences in terms of ordering of motives (with all cases showing the dominance of the market-seeking motive in the top-two motives). This suggests that studies and theories making statements about different (innovation) motives and behaviour of emerging and developed MNEs need to consider both the home country and the location of the investment as contextual factors. Contextual and firm-specific aspects other than home- and host-country development could have influenced the motives as well.

Our results suggest that treating developed and EMNEs as homogeneous groups may be over simplifying. The IB field can understand the evolution of the capabilities and institutions that are assumed to exist in classical theories, according to Hernandez and Guillén (2018), but they caution that this requires asking different questions and making proper comparisons among firms from different types of institutional environments. There is a diversity within these groups (ANZ MNEs vs. Japanese MNEs vs. U.S. MNEs vs. European MNEs; Asian vs. non-Asian EMNEs, etc.) and broad theory statements about whole groups of MNEs based on development or region of origin (such as developed MNEs and EMNEs or Asian MNEs) may be de-contextualised and lacking richness, accounting for diverse home-country, host-country and other factors that affect multinationals' motives and behaviours.

For example, research on ANZ firms, such as Ang (2007), shows some patterns that do not conform with the regionalisation theory (Rugman & Oh, 2013; Rugman & Verbeke, 2004). Research on Brazilian multinationals' subsidiaries (Borini et al., 2012) finds patterns that in some respects conform with research on developed-country MNEs, such as that the reverse transfer of innovation from subsidiaries to the HQ depends on the strong integration between the parent and its subsidiaries. In other respects, Borini et al. (2012) expand the research on EMNEs (e.g., the stronger impact of communication and socialisation for Brazilian MNEs compared to advanced MNEs).

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. 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 AMNEs 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), indicating a deeper level of cooperation and connectedness. 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 3.1: Over time, MNEs will not only have market-seeking, knowledge-seeking, and efficiency-seeking motives for (increasing) innovation investment abroad, but also 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.

#### 3.7 Conclusions

The empirical part of our study has begun to explore and explain home- and host-country factors, including motivations of MNEs innovating in the context of developed and emerging Europe (including underresearched foreign innovation by EMNEs in CEE). Our findings from cases point to a diversity of subsidiary motives. Many MNEs choose a strategy of locating subsidiaries in both developed and emerging Europe, with different motivations for each subsidiary but substantial local/regional/global connections between them. Interestingly, EMNEs can behave in a way that is different from the stereotypes of "predatory" asset-stripping behaviour, while developed MNEs from Australasia can be knowledge seeking.

We also 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). While the cooperation-seeking motive was present in all our cases, it seemed to be particularly pronounced in European innovation subsidiaries of multinationals from distant Southern Hemisphere countries that are relatively isolated from the world's key triad regions. We will explore innovation by ANZ MNEs in Europe in more depth in Chapter 4, and in Chapter 5, we will focus on EMNEs innovating in emerging markets (a topic that emerged in this chapter as an area for future research requiring more in-depth investigation).

Our research has a number of implications for policymakers, business people, and future research on international innovation. Policymakers in Europe can benefit from a deeper understanding of the motives of investors from non-traditional countries outside of North America that are becoming more prominent in European and world innovation. Understanding the unique drivers of these investments (such as the cooperation-seeking motive) can lead to better policies to attract these investors. Business leaders from these non-traditional source countries can benefit from understanding the experience of early entrants and how they prioritise various motives and locations in Europe.

The managerial relevance of our findings lies in the rationale for innovation investment in CEE (and emerging markets in general). While multinationals from both developed and emerging economies 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 (Cantwell & Mudambi, 2005; Narula, 2014). However, we extend this argument from developed MNEs innovating in emerging markets to EMNEs innovating in emerging markets. Being a first mover in understanding and exploiting this emerging trend of innovation in emerging markets can potentially provide a competitive advantage to both AMNEs and EMNEs. One of the critical lessons learned from our case studies was that without prioritising cooperation seeking and substantial reciprocal knowledge transfer between the emerging-market innovation subsidiary and the HQ (and 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 in Europe can account for the increasing diversity of source and host countries and explain the complementarity of the multiple motives behind different types of investments. In particular, we would like to encourage more research on cooperation-seeking FDI. This could lead us to a deeper understanding of the internal and external cooperation-innovation motives of ANZ, emerging-market, and other innovation investors in developed- and emerging-market contexts. Theoretically, there is an opportunity to link the cooperation-seeking motive to the geographic-relational perspective on the internationalisation of EMNEs (Deng et al., 2020), a microperspective that integrates social and economic insights; emphasises contextuality, path dependence, and practice; and acknowledges that individual action is motivated and constituted by the context of social relations and institutional structures. Future research can also link our study to the literature on boundary spanning in global organisations (Schotter et al., 2017).

The next two chapters explore the cooperation-seeking motive in more depth. Chapter 4 analyses it with respect to ANZ innovation investment in Europe and links in more depth to the concept of knowledge connectivity (U. Andersson et al., 2016, Cano-Kollmann et al., 2016). Chapter 5 analyses the concept of cooperation-seeking FDI in innovation in depth in the context of EMNEs investing in innovation in emerging markets (CEE). The following two chapters also embed the cooperation-seeking motive (and other innovation-investment motives) theoretically in the knowledge-based view of the firm (Grant, 1996a) to account for firm-specific determinants of international innovation.

Chapter 4. Knowledge Flows, Strategic Motives, and Innovation

Performance: Insights from Australian and New Zealand Investment in

**Europe** 

**4.1 Chapter Overview** 

We study the international innovation strategies of ANZ firms in the European context, to explain their investment motives, knowledge flows, and innovation performance. Our thematic analysis of seven case studies suggests that ANZ investors' motives for innovation in Europe are often both market and knowledge seeking and that some are also motivated by diversification and cooperation. While the strategic intent is often for the knowledge to flow in multiple directions among subsidiaries and HQ, distance poses challenges to the efficiency of the process. European subsidiaries are often seen as potentially playing a key role in firms' global innovation systems, particularly with regard to radical innovation. However, because of distance and communication bottlenecks (e.g., time-zone differences), HQ does not always recognise this potential. We develop a model proposing that HQ–subsidiary trust and strategic motives are moderators in the process of international-knowledge connectivity and knowledge

4.2 Introduction

creation.

The internationalisation of innovation and knowledge flows in MNEs are important and evolving areas of management and IB research (Gaur et al., 2019; Papanastassiou et al., 2019). However, scholars have only recently begun to explore the joint influence of strategic orientations (Jean et al., 2018) and international-knowledge connectivity (U. Andersson et al., 2016) on various types of innovation—including radical innovation (Azar & Ciabuschi, 2017)—and its performance implications (Han et al., 2018). Scholars have also begun to discern a trend towards a wider diversity of countries and firms engaged in innovation across borders

81

and its implications for the relationship between strategic motives, knowledge flows, and innovation outcomes (Dachs et al., 2014).

While recent attempts to extend the traditional models of R&D internationalisation have considered R&D investment motives (Di Minin et al., 2012) and knowledge flows between HQ, subsidiary, and host country (Achcaoucaou et al., 2014; Giuliani et al., 2014), they did not consider in depth the contextual factors (such as the roles of various types of distance) potentially impeding knowledge flows in MNEs (Gaur et al., 2019) and did not investigate the link to innovation outcomes in respect to radical innovation (K. Z. Zhou & Li, 2012). Various theoretical approaches have been proposed to underpin the R&D internationalisation models, among which the knowledge-based view (Grant, 1996b) remains underutilised (Papanastassiou et al., 2019) and has recently gained prominence (Vrontis & Christofi, 2019).

The main research questions we ask are as follows:

- 1. Why and how do ANZ MNEs conduct innovation in Europe and how does distance from the EU affect it?
- 2a. How do the innovation motives and knowledge flows of European subsidiaries of ANZ firms align with one another and how do they affect innovation performance (especially radical vs. incremental innovation)?
- 2b. How do they differ from the motives and knowledge flows of European subsidiaries of other MNEs?

Our study's setting is the EU, which remains an attractive destination for international R&D firm investments (EY, 2019; Laurens et al., 2015). Firms from non-traditional investor countries outside of Europe, North America, and Japan are increasingly conducting innovation in the EU (Montout & Sami, 2016). The strategic motivation and innovation behaviour of these new players may not be explained by the existing models of R&D internationalisation developed by scholars who focus on firms from developed countries in the Northern

Hemisphere (B. Ambos & Ambos, 2011; Håkanson & Nobel, 1993). The main aim of this study is to explain the motives for FDI in innovation, innovation outcomes, and knowledge flows of European subsidiaries of ANZ multinationals, and potentially uncover strategic motives, knowledge flows, and processes inconsistent with the current models of R&D and innovation internationalisation.

The national innovation system of New Zealand has been studied before (Crawford et al., 2007) and innovation is promoted as a new motor of economic growth for Australia (Bond-Smith et al., 2016). However, the international innovation activities of ANZ firms remain understudied, especially in the European context. Studies have examined the strategic motives and knowledge flows related to innovation investment in Europe from emerging economies (Di Minin et al., 2012, Giuliani et al., 2014). However, these studies focus on comparing AMNEs and EMNEs rather than examining the potential diversity of motives and behaviours within advanced economies. Some studies have included ANZ firms within the population of advanced-economy firms investing in innovation in Europe (Giuliani et al., 2014). Others have treated ANZ as part of the Asia-Pacific region (Driffield et al., 2014).

There are reasons to treat ANZ firms as a separate group. Because of their relative isolation (distance from major economic centres), location in the Southern Hemisphere, proximity to emerging economies, and large geographic and time-zone distance from Europe, they are a special case to consider as these factors lead to distinct national innovation systems and strategies (B. R. Martin & Johnston, 1999). Other factors characterising these economies are an industrial structure that is biased towards primary industries and the relatively small size of firms and the economy (Crawford et al., 2007). Moreover, the historical ties and the relatively low cultural distance (compared with Asian countries) between ANZ and the UK and Europe are also important. All these differences may affect innovation strategies and behaviour.

Driffield et al. (2014) suggest that firms from the Asia-Pacific region may behave differently from European and North American firms in their global and regional innovation strategies. Asian firms effectively engage in knowledge sourcing in Europe and North America, but little technology sourcing is conducted by Asian firms seeking knowledge within Asia (Driffield et al., 2014). In contrast, European firms tend to effectively source knowledge within Europe and North American firms within North America. The regionalisation literature has not fully considered the distinct characteristics of regions such as Australasia, South America, Africa, and the Middle East. These regions are not defined as part of the "broad" triad (the three major world regions of North America, the EU, and Asia defined by Rugman & Verbeke, 2004) or are included in a region along with very different countries (Driffield et al., 2014).

This chapter defines innovation as the implementation of a new or significantly improved product or process, a new marketing method, or a new organisational method in business practices, workplace organisation, or external relations (OECD & Eurostat, 2005). We acknowledge that some innovation might be disruptive, and consider innovation performance of foreign subsidiaries in terms of both radical and incremental innovation (Silva et al., 2017). The results of the *Community Innovation Survey* of innovation activities of firms in Europe (Table 4.1) reveals that ANZ firms exhibit roughly the same propensity to introduce new products to the market as firms in the other groups (57%). However, they do R&D (54%) and cooperate in innovation projects (40%) more frequently than other firms, particularly with regard to cooperation within the group.

To investigate these research questions, we organise the rest of the chapter as follows. First, we review relevant literature and present our theoretical framework. Then, we specify our method, present the data, analyse the cases, discuss the findings, and develop propositions. Finally, we offer concluding thoughts.

**Table 4.1**Foreign Firms Innovating in the European Union

| Home country/region  |      | USA   | Japan | Emerging |
|--|------|-------|-------|----------|
| Number of firms  | 126  | 5,290 | 778   | 439      |
| Average number of staff                                      | 283  | 400   | 379   | 380      |
| Did the firm introduce an innovation?                        | 57%  | 58%   | 57%   | 57%      |
| Innovation expenditure as % of turnover                      | 4.1% | 6.2%  | 4.1%  | 5%       |
| Did the firm conduct R&D?                                    | 54%  | 48%   | 41%   | 41%      |
| Did the firm receive innovation funding from the government? | 10%  | 12%   | 11%   | 13%      |
| Did the firm engage in innovation cooperation?               | 40%  | 36%   | 31%   | 32%      |
| Cooperation with suppliers in the host country               |      | 17%   | 14%   | 15%      |
| Cooperation with clients in the host country                 | 18%  | 17%   | 10%   | 12%      |
| Cooperation with domestic universities in the host country   |      | 18%   | 10%   | 15%      |
| Internal cooperation in the enterprise group                 |      | 31%   | 27%   | 25%      |
| Turnover from market novelties                               |      | 12%   | 12%   | 10%      |
| Turnover from firm novelties                                 |      | 7%    | 7%    | 8%       |
| Turnover from new products total                             |      | 14%   | 14%   | 13%      |
| Oriented towards international markets                       |      | 73%   | 76%   | 74%      |

*Note*: We only show data for firms from Australia and New Zealand (ANZ), the USA, Japan, and emerging markets. Source: adapted and calculated from Eurostat and *Community Innovation Survey* data for 2008–2010.

#### **4.3 Review of Literature**

Models explaining the internationalisation of R&D and innovation generally first consider motives for locating innovation abroad (Di Minin et al., 2012; von Zedtwitz & Gassmann, 2002). Second, they explain knowledge flows, both within the MNE (in particular between the HQ and the subsidiary) and between the foreign subsidiary and the host economy (Achcaoucaou et al., 2014; Giuliani et al., 2014). We anchor our literature review around these two building blocks. Then, in the theory section, we develop a framework focusing on the underexplored types of innovation motives and knowledge flows. Finally, we extend the extant models' focus on R&D motives and knowledge flows to factors affecting these flows (Gaur et al., 2019) and

to the joint impact of knowledge flows and strategic motives on innovation performance, including radical innovation, embedding our approach in the knowledge-based view of the firm (Grant, 1996b; B. Kogut & Zander, 1993).

#### 4.3.1 Innovation Motives

One of the main aims of this study is to understand the European subsidiaries of ANZ firms and to explain how their innovation-investment motivation and behaviour differ from those of the subsidiaries of MNEs from other countries. The unique characteristics of ANZ firms (including large geographic and time-zone distance between HQ and subsidiary) may shed new light on the role of these characteristics in international innovation processes and outcomes. Studies of developed-country MNEs, such as B. Ambos and Ambos (2011), highlight technology exploration vs. exploitation motives, market vs. technology-driven motives and push vs. pull factors as the main motives for R&D internationalisation.

Von Zedtwitz and Gassmann (2002) identify two principal driving forces of R&D internationalisation:

- 1) Access to local markets: MNEs create development units abroad to adapt their product range according to market and customer needs.
- 2) Access to local knowledge: MNEs create research units abroad to capture scarce technological and other (managerial) knowledge.

There are thus two associated core motives: the market-seeking motive, that is, technological exploitation of FSAs abroad by adapting to local circumstances to gain access to foreign markets, and the knowledge-seeking motive, that is, exploration of firm technologies through access to overseas knowledge and know-how (Kuemmerle, 1999).

The activities of foreign innovation establishments are usually driven by multiple motives (Håkanson & Nobel, 1993). In addition to the market-oriented units, there are also production-support units for foreign innovation, whose primary aim is to support local

production, and politically motivated units, created to underpin the MNE's political position and access to the foreign market (Birkinshaw & Hood, 1998). Knowledge-seeking firms look for R&D epicentres in the area of their strategic interest to catch up with competitors' innovation levels, broaden their knowledge portfolio, and search for the technical diversity of different regional-market needs (Chung & Alcacer, 2002).

Firms have other motives for international (innovation) investments: these include efficiency-seeking, cooperation-seeking, and diversification-seeking motives (Demirbag & Glaister, 2010; Dunning, 1993; Meyer, 2015). Efficiency-seeking investors are predominantly interested in reducing the costs of innovation activities by conducting activities in countries with a lower price/productivity ratio for innovation inputs, particularly human capital (Schmiele, 2012). Cooperation-seeking innovation ventures tap into alliances, networks, 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), in an undertaking that combines elements of the market-based and intra-firm organisation (Mowery et al., 1998). Cooperation refers to a set of interdependent business relationships centred on value creation, innovation, and knowledge sharing. In some cases, MNEs can expand or develop cooperation networks internationally to fulfil their strategic goals (H. L. Chen & Huang, 2004) and reach outside knowledge that they would not normally access (Yeoh, 2000). Another reason for internationalising is to diversify a company's risks through diversificationseeking investments (Deng, 2004; Dunning, 2001). Diversification across unrelated products or geographically unconnected markets may reduce risk and affect the performance of foreign subsidiaries (Jiao et al., 2019). A company may therefore choose to enter other business fields to hedge risks (Cantwell, 2009; Yeung & Liu, 2008). International diversification may offer more benefits than costs and thus improves firm performance (Delios & Beamish, 1999).

### 4.3.2 Knowledge Flows

For MNEs, knowledge is distributed internationally among a network of dispersed subsidiary units. The literature examines the consequences of knowledge creation and transfers within such networks (Gupta & Govindarajan, 2000; Jensen & Szulanski, 2004; Minbaeva et al., 2003; P. Wang et al., 2004). Studies have emphasised how knowledge transfer relates not only to the sending of knowledge from a source to a recipient unit but also to the integration, understanding, and application of knowledge (Cohen & Levinthal, 1990; Hansen, 1999; Szulanski, 1996).

MNE subsidiaries can be classified along two key dimensions (Giuliani et al., 2014):

- (1) the degree to which MNEs transfer knowledge to and/or receive knowledge from their HQ and other subsidiaries (intra-corporate knowledge transfer) and
- (2) the level of locally embedded innovative activities (generated value for the MNE and the local context), including the formation of local innovative ties (collaborations) and innovation activity developed locally by the subsidiary (internally and independently of the HQ and sister firms).

The typology proposed by Giuliani et al. (2014) includes four main types of subsidiaries. Predatory subsidiaries combine bottom-up knowledge transfer (Rasmussen, 1983) and low local embeddedness. Dual subsidiaries combine bottom-up knowledge transfer and high local embeddedness. Locally embedded subsidiaries combine top-down knowledge transfer and high local embeddedness (Almeida & Phene, 2004; Cantwell & Mudambi, 2005). Passive subsidiaries combine top-down knowledge transfer and low local embeddedness.

While this framework is helpful, it focuses on the local embeddedness of innovation activities without considering in-depth internal cooperation and knowledge flows within the MNE group. Moreover, it does not explicitly take into account the possibility of high knowledge flows in both directions (between HQ and the subsidiary/subsidiaries and vice versa). Mudambi

and Navarra (2004) address this issue by identifying four basic knowledge flows within MNEs: (a) flows from the subsidiary to the parent (knowledge transfer that helps HQ exploit local knowledge), (b) flows from the subsidiary to the location (spillovers—flows to local customer, suppliers, universities etc.), (c) flows from the location to the subsidiary (reverse spillovers—subsidiary's learning and knowledge sourcing; Zámborský & Jacobs, 2016), and (d) flows from HQ or another subsidiary (subsidiary exploits home-base knowledge advantage).

# 4.4 Theory

Building on extant models of the internationalisation of innovation, we start with a framework that highlights the main types of motives for innovation investment and the knowledge flows aligned with them (Table 4.2). We characterise subsidiaries' behaviour based on their connections to local markets and groups. Our aim is to extend existing theoretical frameworks (Achcaoucaou et al., 2014; Ghoshal & Bartlett, 1988; Giuliani et al., 2014), root our model within the knowledge-based view (Grant, 1996b), and uncover underexplored factors related to the strategic motives and knowledge flows underlying international innovation investment and performance.

**Table 4.2**Strategic Motives for International innovation Investment

| Strategic orientation/<br>type of motive | Characteristics of typical subsidiary-innovation behaviour and knowledge flows   |  |  |  |
|--|--|--|--|--|
| • •                                      | Connections with the local market  | Connections within the group   |  |  |
| Market seeking                           | Local adaptation-driven innovation   | HQ-subsidiary knowledge transfer   |  |  |
| Knowledge seeking                        | Acquiring local-knowledge assets   | Subsidiary-HQ knowledge transfer   |  |  |
| Cooperation seeking                      | High <i>external cooperation</i> with locals (high local embeddedness—innovative ties/linkages/collaborations with locals)                                 | High <i>internal cooperation</i> in the group (significant knowledge transfer in all directions between HQ/subsidiaries)                       |  |  |
| Diversification seeking                  | Diversification of innovation sourcing from different locations and product ranges, spreading risk in the international portfolio of innovation activities | Innovation diversification in the group between HQ and subsidiaries (knowledge developed both in HQ and subsidiaries, some knowledge transfer) |  |  |

We use four main motives for R&D and FDI in innovation. The market-seeking motive is related to exploiting, sustaining, or protecting market share in the host country (Håkanson & Nobel, 1993). The second is knowledge seeking, which we define as augmenting FSAs by tapping into the knowledge generated by other firms or non-market institutions in host countries (Ivarsson & Jonsson, 2003). Other definitions of this concept include firms acquiring strategic capabilities to offset their competitive weakness (Rui & Yip, 2008) and to acquire the strategic assets needed to compete more efficiently against global rivals and to avoid the institutional and market constraints faced at home (Luo & Tung, 2007).

The third innovation-investment motive is cooperation seeking, which is related to an organisation's capability of external and internal cooperation. External cooperation refers to innovative ties and collaborations with local players, and internal cooperation in the group refers to knowledge transfer in both directions between the HQ and subsidiary/other subsidiaries. Relationships between MNEs and their partners, customers, suppliers, and research institutions are included in the term *relational capital*, which represents goodwill and trust (T. J. Chen et al., 2004). Creating a competitive advantage using a cooperation network requires the development of external links (Lavie, 2006).

Diversification also plays a key role in driving FDI in R&D (Cantwell & Piscitello, 2000; Cantwell & Vertova, 2004; Dunning & Lundan, 2009) and innovation, especially diversification of product and innovation portfolios to contain risk (Luedi, 2008). Firm learning dynamics have been represented through the process of expansion of a firm's technological competencies (including processes such as technical change), and knowledge and skills linkages have also been called technological diversification (Piscitello, 2004). The patterns of MNEs' activities are driven by their technological competencies, but, at the same time, diversification into new markets pushes MNEs to increase the diversification of their

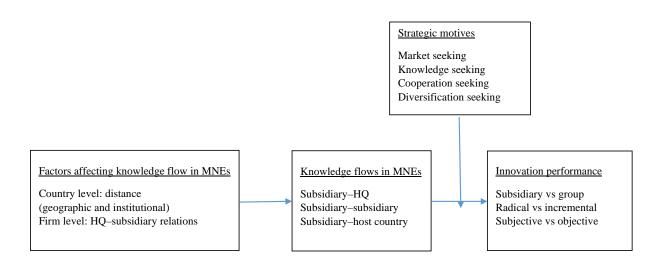
technological competencies, which results in interactions between several dimensions of their technology and product base (R. Chen, 1996).

It is important to note that because of implementation bottlenecks (e.g., communication problems between HQ and subsidiary derived from the large distance between them), theorised alignment of knowledge flows with strategic motives may not actually be in line with the observed reality in organisations (Ciabuschi et al., 2012). Subsidiaries can be organised in complex structures to accelerate knowledge flows within the firm and to use cooperation and diversification to improve innovation performance (Narula, 2014). It is important to consider not only the alignment between knowledge flows and innovation motives, but also the roles of factors affecting knowledge flow in MNEs, including country-level distance factors such as spatial geography and institutional differences, and firm-level factors such as MNE strategy and HQ-subsidiary relationship (Gaur et al., 2019).

Finally, consistent with the knowledge-based theory of organisational capability (Grant, 1996a), strategic innovation motives will affect the relationship between knowledge flows in MNEs and innovation performance, including generation of radical vs. incremental innovations (K. Z. Zhou & Li, 2012). Innovation performance can be defined objectively (e.g., patent citations of the acquirer; Han et al., 2018) or subjectively (e.g., subsidiary manager's perceptions of the extent to which the innovation in the subsidiary had affected its business performance; Ciabuschi et al., 2014). We focus on the subsidiary's innovation performance, especially its role in generating radical innovation that advances the price/performance frontier by much more than the existing rate of progress (Gatignon et al., 2002). To integrate our theoretical discussion, we present a conceptual framework (see Figure 4.1) outlining core concepts and relationships we further investigate, extend, and develop into specific propositions and models.

Figure 4.1

Factors Affecting MNE Knowledge Flows and Innovation Performance



#### 4.5 Method

The why question of motives for international innovation investment is related to the how question of (alignment with) knowledge flows between the foreign subsidiaries, HQ, other subsidiaries, and various other actors, especially in the host country. While some preliminary conceptual structure has been imposed on the motives and their alignment with knowledge flows (Table 4.2), the motives for ANZ innovation investment require additional investigation and will be subject to qualitative inquiry. Similarly, while the previous section has reviewed the known aspects of the theory of knowledge flows in relation to foreign subsidiaries, the how questions of knowledge flows of ANZ multinationals' innovation investment in Europe and their alignment with the strategic motives (and their joint impact on innovation performance) are still open to research. The current knowledge in the field provides only a starting point for an inquiry guided by qualitative research design and open-ended research questions.

### 4.5.1 Qualitative Research

Qualitative research is uniquely suited to "open the black box" of organisational processes, including the how, who, and why of individual and collective coordinated action as it unfolds

over time in a context (Yin, 1994). The case study is a research strategy that focuses on understanding the dynamics present within a single setting. Birkinshaw et al. (2011) and Doz (2011) argue that qualitative research can play a significant role in IB and management literature since it can bring deeper insight into the complex constructs and contexts.

Case studies offer the opportunity for a holistic view of a process (Yin, 1994). While examining a single case can suggest a general conceptual category or property, examining a few more can confirm it (Glaser & Strauss, 1967). Multiple-case studies offer a potentially stronger base for theory building (Yin, 1994). Interviews, as a means of qualitative research, provide the possibility to describe the ideas, knowledge, and experiences of interviewees (Alvesson, 2003). While recognising that there are several potential risks in using interviews in IB research, Macdonald and Hellgren (1999) inspire researchers to use them if they devote appropriate attention to selecting interviewees who are higher in the firm's information hierarchy.

We use Eisenhardt's (1989) process of building theory from case-study research. A multiple-case-study method approach is required to look "under the hood" of new phenomena (Ghauri, 2004), such as the key questions we answer in this study. In the first step, we have identified ANZ firms that conduct innovation in Europe, from publicly available sources such as business press, trade promotion agencies, and business intelligence websites. We have considered different types of participants based on their position, location, and nationality, as these possibly affect their views on innovation:

- Managers of subsidiaries in Europe (usually not nationals of ANZ)
- Global (HQ) innovation and R&D managers (usually Australian or New Zealand nationals)

Identified managers were contacted by telephone, email, or LinkedIn. The interviews were based on a semi-structured guide that was piloted in three interviews. Although this study

pursues a consistent line of inquiry, it also allows for the stream of questions to be fluid rather than rigid (Rubin & Rubin, 2011). Confirmed participants received the questions prior to the interview. We used a triangulation of different approaches to the same task by (1) conducting interviews with European-subsidiary innovation managers; (2) conducting interviews with innovation managers in the HQ; and (3) fact checking the provided information through the EU innovation databases, <a href="https://www.factiva.com">www.factiva.com</a>, and MNEs' official websites. In qualitative research, instruments are typically 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) suggest that having a framework allows researchers to structure their subsequent analysis more easily as they have a good idea of what concepts and categories are likely to be there.

### 4.5.2 Data Collection and Analysis

Based on the discussion above, we identified over 20 ANZ firms and investigated five New Zealand and two Australian firms with innovation-intensive subsidiaries in Europe. The industries range from finance to mechanical engineering, white goods, and precision instruments (Table 4.3). The reason for investigating MNEs from a multiple-industry perspective is that given the nascent nature of the phenomenon (ANZ innovation investment in Europe), it would be impossible to have all cases operate in a single industry. Six of our cases are from similar sectors, machinery, and appliances. We analysed our qualitative data through thematic analysis, a method that searches for themes or patterns, in relation to different epistemological and ontological positions, and identifies, analyses, and reports themes in data (Braun & Clarke, 2006). Coding of themes, a crucial process in many qualitative data-analysis strategies, informed our analysis (Bryman & Bell, 2015).

**Table 4.3**Description of Cases

| Case firm/<br>country of<br>origin | Main industry                                       | Countries of innovation/year of entry in EU      | Other global innovation locations                  | Entry mode in Europe   | Interviewee position and nationality  |
|------------------------------------|---|--|--|--|---|
| NZ1<br>New<br>Zealand              | Electric<br>fences/animal<br>building<br>management | Netherlands<br>(1970s)<br>UK (1963)              | Australia<br>USA                                   | Sales subsidiaries<br>in Europe  | NZ-based R&D<br>manager (NZ<br>national)  |
| NZ2<br>New<br>Zealand              | Sorting equipment                                   | Spain (2014)<br>Italy (formerly)                 | USA<br>Uruguay<br>(marginally)                     | Acquisition in Spain, joint venture in Italy                                     | NZ-based R&D<br>director (NZ<br>national)   |
| NZ3<br>New<br>Zealand              | Oscillators/<br>frequency<br>control<br>solutions   | UK (2007)<br>France (2007)                       | Asia<br>(formerly)                                 | Both EU units acquired   | NZ-based<br>innovation<br>staff/senior<br>engineer (EU<br>national)                       |
| NZ4<br>New<br>Zealand              | Home<br>appliances                                  | Italy (2006)                                     | USA<br>Mexico,<br>Thailand<br>(both<br>marginally) | Italian unit acquired NZ4 later itself acquired by an emerging MNE               | NZ-based<br>innovation staff<br>(Latin American<br>national)                              |
| NZ5<br>New<br>Zealand              | Medical<br>appliances                               | France, UK (2000s) Germany (mainly distribution) | USA  | Sales subsidiaries in Europe   | NZ-based general<br>manager (NZ<br>national)  |
| AU1<br>Australia                   | Medical<br>appliances                               | Sweden<br>(2005)<br>Belgium<br>(2000)            | USA  | Both EU units acquired   | EU-based innovation manager responsible for Europe and USA (EU national)                  |
| AU2<br>Australia                   | Financial<br>services                               | UK<br>(1970s)                                    | Hong Kong<br>USA                                   | The London<br>subsidiary is<br>one of their<br>four global<br>innovation<br>hubs | EU-based senior<br>managing<br>director for<br>Central/Eastern<br>Europe (EU<br>national) |

# **4.6 Cases**

NZ1: This firm is a family business. The majority of its products are exported to the USA, Australia, and Europe. It is a mature business, with its key invention dating back to 1938. Its R&D staff exceeds 100. The firm is a global leader in the innovation and marketing of animal management, security, fuel systems, and contract-manufacturing solutions. The EU has a

secondary role in the firm's global innovation system, as there are different rules for many EU-member states. The company maintains an open-door policy for its employees and supports innovative solutions. The motivation for locating their innovative activities was to create sophisticated products that would be the best in every direction. As the company has created innovative products used by agricultural businesses, it has expanded around the world. It has a strong sales network with a large number of partnerships, some of which have lasted more than 35 years.

NZ2: This company was initially formed in the 1980s to create solutions for handling produce in the fruit industry. It subsequently expanded internationally and is now a global market leader present in over 40 countries. It produces sorters, sorting systems, software, and peripherals. The firm formerly had a joint venture in Italy. After some bad experiences linked to the lack of control over Italian operations, it acquired a Spanish firm, where the firm experienced some difficulties related to cultural differences with Southern Europe. The firm's strategic plan is to grow its Spanish subsidiary from 7% to 20% of R&D and to 40% of global turnover while keeping its innovation HQ in New Zealand.

NZ3: Founded in 1967, this is a global high-technology company that designs and manufactures world-leading frequency control in infrastructure, space satellites, and navigation devices. It has six manufacturing plants, including three joint-venture plants and eight R&D centres. Its core strength is the intellectual knowledge in its R&D centres, located in New Zealand, France, and the UK. Whereas its European subsidiaries operate in low-volume, sophisticated high-tech products for government clients, the New Zealand operations produce high-volume products for the telecommunications industry.

NZ4: This company, which dates back to 1934, engages in the design, manufacture, distribution, and marketing of household appliances in New Zealand, Australia, North America, and Europe. It operates in over 50 countries. In 2012, it was acquired by a major emerging-

market competitor and industry leader. The new owner retained most of NZ4's operations and R&D in NZ. The New Zealand company acquired the Italian unit in 2006, and the combined effort and skills of the two R&D departments led to the development of more advanced and styled products.

NZ5: This major New Zealand corporation is a manufacturer, designer, and marketer of products and systems for use in respiratory/acute care. It sells its products in 120 countries but focuses on the USA as a major source of revenue (it is primarily an export company). It has over 2000 staff in New Zealand, about half of whom are from abroad (often experienced managers). Europe does not play a major role in the firm's global innovation system, while the USA plays an important role. Its manufacturing plants are in New Zealand and Mexico. Product development and clinical research are critical to the firm's success as it continues to expand the range of innovative medical devices. New and improved products and processes, along with the development of new medical applications for new technologies, are critical drivers of its growth.

AU1: Based in Australia, this is a focused, innovative company founded in 1982. It produces technology that improves hearing for a wide range of people. It acquired a Swedish firm in a related line of business in 2005 to expand its range of product offerings and customer base. It also acquired a Belgian firm in 2000, which enabled access to digital design capabilities that complemented the company's existing technology and allowed it to improve the time-to-market of its product plans. Overall, the firm has about 300 R&D staff, and its R&D expenditure has been 12%–16% of its revenue over the past 10 years. Belgium accounts for about 25% of the firm's global R&D, and Europe overall plays a crucial role in its innovation.

AU2: This Australia-based global financial-services provider has offices in 28 countries and four innovation hubs, in Hong Kong, New York, Sydney, and London. Each hub has several centres of excellence specialised in specific product categories, and created knowledge is

transferred to other hubs and subsidiaries within the firm. Its expertise includes finance, research, and retail financial services. The diversity of its operations, combined with a strong capital position and robust risk-management framework, has contributed to almost 50 years of unbroken profitability. London is responsible for 14 of the group's 50 products, comprising about 35%–40% of total innovation and 40% of the profit.

## 4.7 Findings

### 4.7.1 Characteristics of ANZ Firms

The interviewed firms characterised ANZ innovation staff as more open-minded, relaxed, challenging of authority (but following the rules afterwards), and untrusting of unknown people. One of the interviewees (AU2) noted: "They [Australians] prefer to send their own staff overseas. ANZ staff is seen as collaborative, with a global approach." NZ5 noted: "It is not perfect for Europe because we have not made it for Europe; we have made it as perfect as it can be for the world." Another aspect of the ANZ approach is that they are communicative but culturally distant in some cases. For example, an NZ2 interviewee commented on the firm's Southern European subsidiary: "Europeans just did not do what we wanted." Another related comment (NZ4) was that "they [Europeans] have a great experience with the market, but their innovation skills and transformation to the practice skills are a bit limited." ANZ innovation staff often have a stronger focus on theory application than Europeans.

A distinguishing factor is that ANZ firms operate in a small, isolated market. NZ5 noted: "In New Zealand, we are at the bottom of the world. We have this mindset that you can do anything ... you just have to figure it out." NZ firms also find difficulties with the complicated law system and high costs in Europe. In contrast, non-ANZ interviewees noted that ANZ staff had an "island mentality" and were less immersed/interested in developments in the rest of the world than Europeans. In general, transparency (clear rules, no "grey zones"), diversity (immigrant society), the importance of human factors, isolation, and distance from Europe and

other major economic centres (both geographic and time-zone distance), were mentioned as distinguishing characteristics. This is illustrated by the following comment by the AU1 manager: "this is another reason why you need the kind of European arm of the organisation. If you run that from Australia this is extremely difficult, because of the distance and time difference." The findings suggest that both cultural (Peltokorpi & Yamao, 2017) and geographic distance (including time-zone difference) hinder knowledge flows by reducing the quality of communication channels (Gaur et al., 2019).

#### Hence:

Proposition 1: Distance (cultural and geographic including time zones) between an MNE HQ and its foreign subsidiary negatively affects the quality of communication channels and thereby hampers the knowledge flows from the HQ to its subsidiary and vice versa.

#### 4.7.2 Strategic Motives

The companies cited market and knowledge seeking as their motives for innovation. While some saw the market-seeking motive as dominant, in line with the conventional wisdom for advanced MNEs (NZ1, NZ5), most ANZ firms (NZ2, NZ3, NZ4, AU1, AU2) used asset-augmentation strategies akin to those mostly ascribed to EMNEs (Buckley et al., 2016), that is, acquiring troubled European companies with considerable knowledge and experience with potential to grow (if managed properly) and gaining access to the firm's product in the European market.

<sup>&</sup>lt;sup>1</sup> The AU1 participant noted: "Suppose that we would do a project, which happens sometimes whereas you have some people working on it in Australia, some people in Sweden, some people in Belgium, some people in the USA—this is extremely difficult. Because if you want to do a day-to-day coordination with these people, this is even impossible to do that. And to make it efficient ... you need to set it up in such a way that you don't need to have daily interactions with the others."

Developed-country multinationals also use more traditional strategies, such as seeking complementary knowledge (Blanc & Sierra, 1999). Overall, dual subsidiaries with both knowledge- and market-seeking motives prevailed. AU1 said:

HQ needed to have an R&D centre in Europe to be close to their customers, clusters, and universities. We get perspective from the market, proposition validation, competitive analysis, trends, pricing, and legal regulation this way. Acquisition of a company with new knowledge and products that was converted into an R&D centre was a great solution.

NZ4 said: "The acquisition of an Italian firm helped us with product adaptation and brand building and provided us with the platform to achieve strategic growth." The CEO of the firm at the time also stated that the acquisition would provide further geographical diversification for them. Cooperation-seeking motives (Cuervo-Cazurra & Narula, 2015; Reuer & Lahiri, 2014) were also present but were often seen as part of a diversified knowledge- or market-seeking strategy. Access to local clusters, universities, government financing, and opportunities for knowledge transfer and cross-learning within the group were important motives (Arant et al., 2019).

"We preferred global coordination before. In these days of permanent evolution, we have to be really close to customers, universities, and knowledge clusters. We grow through acquisitions, and our main motive is diversification of risks," said AU2. Innovation in Europe is seen as a key aspect of a strategy for diversifying innovation portfolios (Garcia-Vega, 2006; Qiu & Cantwell, 2018). AU2 stressed diversification seeking as the main motive, and NZ3 and NZ4 stressed it as an important motive. A key aspect of this strategy are centres of excellence responsible for a specific product range to diversify access to sources of knowledge around the globe (Cantwell & Janne, 1999). AU2 manager said, "Our understanding of innovation is as follows: acquisition of R&D firms for our purposes, an innovation of our own products and

innovation in acquired firms for their purposes." AU1 said: "We use different development teams for each product category, like Lego boxes. Each box is a basic technology block that can be used by any other subsidiary. This kind of diversified innovation creation is more effective for us." NZ3 and NZ4 managers stressed that acquired firms (subsidiaries) conduct R&D of specialised products and in different locations independently, and then they spread the created information around the MNE. Diversification was seen as geographical diversification ("balancing exposures to ANZ and American markets"), product and segment diversification, and diversification of risk in portfolios of innovation initiatives. See Table 4.4 for a summary of findings in terms of ANZ difference, strategic motives, and knowledge flows (discussed next).

**Table 4.4** *Findings* 

| Case firm | ANZ difference   | Strategic motives  | Knowledge flows  |
|-----------|--|--|--|
| NZ 1      | Family business Inventor ethos "EU market specifics too complicated"                           | Market seeking (growth in the EU market)   | EU mostly does product<br>adaptation; innovation<br>done in NZ; "NZ best<br>place for innovation"  |
| NZ 2      | Transparent (clear rules) Open/flexible attitude Similar to the USA "EU rules too complicated" | Market seeking (be closer to the market that is different) Knowledge seeking (access specialist knowledge in the acquired Spanish & Italian firms) Cooperation seeking (access to EU funding/universities) | Auckland accounts for<br>about 85% of the firm's<br>global R&D Spain 7%<br>of global R&D, goal to<br>hike up to 20%<br>Currently little R&D<br>knowledge sharing<br>between HQ and Spain             |
| NZ 3      | Open-minded<br>Relaxed culture<br>Better focus on theory<br>application                        | Knowledge seeking (acquired firms with considerable knowledge and experience)  Market seeking (EU a new market)  Diversification seeking (new product/customer segments)                                   | NZ has 7 R&D staff, UK 4 R&D staff, France 4 Since EU subsidiaries focus on a different segment than NZ, the knowledge flows between EU and NZ are limited, but there are still cost-sharing effects |

| Case firm | ANZ difference   | Strategic motives   | Knowledge flows   |
|-----------|--|---|---|
| NZ 4      | Open-minded and challenging Low power distance   | Market seeking (main motive—EU a big market) Knowledge seeking (wide and complementary product range) Diversification seeking (balancing exposures to USA/Australian/NZ markets)          | R&D mostly concentrated in Auckland; some projects are run by Italy, but the HQ view is that "their innovation skills are limited"  Some knowledge flows from the EU subsidiary to HQ and from NZ HQ to the EMNE parent in their areas of expertise |
| NZ 5      | Diversity/global view<br>50% of 2,000+ staff are<br>not from NZ<br>Isolation                               | Market seeking (important to understand the customer in Europe to grow)   | Little innovation done in<br>Europe, mostly<br>adaptation<br>Highly skilled EU staff<br>brought to work in NZ<br>HQ   |
| AU 1      | "Very British" Strict on rules "Island mentality" Open-mindedness Time-zone difference Geographic distance | Market seeking (to grow in Europe) Knowledge seeking (know-how in the acquired firms) Cooperation seeking (universities, clusters) Diversification seeking (opening new product segments) | Belgium 25% of global R&D, a lot of interaction between Belgium and HQ, growing interaction with Sweden High interaction between HQ and subsidiaries, especially in the beginning and end of the research process                                   |
| AU 2      | Time-zone difference<br>Culture<br>Isolation<br>Geographic distance<br>Creativity                          | Diversification seeking (of risks) Market seeking (grow in the EU) Knowledge seeking (innovation know-how in the acquired firms) Cooperation seeking (both external and internal)         | Centres of excellence, best practice transfer of knowledge to other subsidiaries, global specialisation, and substantial knowledge transfer.  |

# 4.7.3 Knowledge Flows

The knowledge flows underlying the motives point to a view of innovation as cooperation among a number of stakeholders and knowledge flows in multiple directions (U. Andersson et al., 2016; Parker et al., 2018). The geographic isolation ("We are living on an island") of many of the firms (NZ1, NZ2, NZ5) leads to a high concentration of knowledge in their HQ (Belderbos et al., 2013). However, a large number of them also recognised the drawbacks of this isolation and centralisation, and they considered cooperation and knowledge transfer from the European subsidiaries and partners to the rest of the group (NZ3, NZ4, AU1, AU2). This was often more planned than executed, and created an implementation challenge. NZ2, for

example, planned to increase the share of its European R&D within global R&D from 7% to 20% but admitted that "at the moment, there is little knowledge sharing between the HQ and Spain."

AU1 generated 25% of its global R&D in Belgium and a significant share in Sweden, but there was significant tension between the HQ and the Belgian subsidiary:

Belgium needs more autonomy and wants to conduct more radical innovation; the HQ is a bit afraid and busy with incremental innovation. There is high interaction between subsidiary and HQ at the beginning and end of the research process. During the research, everybody has got clear rules about what to do.

The manager also noted that they needed to build up more trust with the HQ to reduce the negative impact of the high geographic and time-zone distances on communication and knowledge flows. The AU1 manager linked the geographic distance factor to the potentially moderating role of trust in reducing the negative impact of distance on HQ-subsidiary knowledge flows:

The most important factor is trust. Because I'm heading an operation which is on the other side of the world so it's an entire day to travel, currently 10 hours' time difference. If you don't trust someone then it just doesn't work.

Knowledge flows between Belgium and Sweden were also limited despite their relative proximity. AU2, in contrast, generates 35%–40% of its global innovation from London, which is its most important innovation hub. The firm does not have an innovation HQ but has four independent R&D centres, and it lets knowledge flow within the group in many areas, including radical innovation, facilitated by centres of excellence. Most of the projects are created or at least approved by HQ and are executed locally.

ANZ firms need the physical presence of R&D in Europe to be closer to their customers, universities, advisers, innovation experts, and local government organisations. Centres of

excellence with accumulated knowledge, best practice, and global product managers are important for internal knowledge transfer (U. Andersson & Forsgren, 2000; Criscuolo & Narula, 2007). As NZ1 commented:

Today, R&D is coordinated from NZ with the help of regions (adaptation for the market, information from customers, and exchanging of ideas/concepts) and driven by an understanding of the market, product management, marketing, cross-functional cooperation, regulatory standards, procurement and innovative suppliers.

To sum up, the most salient finding of our research related to factors affecting knowledge flows in MNEs was the moderating role of trust in reducing the negative effect of distance on HQ–subsidiary knowledge flows in both directions. Isaac et al. (2019) suggest that the subsidiary's external relational embeddedness, based on trust and adaptation, is positively associated with the foreign subsidiary's local innovations. Subsidiaries with quality relationships, characterised by high trust levels with the external local network, tend to be associated with higher knowledge flows among the network actors and facilitate the emergence of local innovations (Isaac et al., 2019). We argue that a subsidiary's quality relationship and high trust levels with the HQ will improve the quality of communication channels (Aichhorn & Puck, 2017) and reduce the negative impact of (HQ–subsidiary) national distance on knowledge flows in the group (Smaliukienė et al., 2017).

### Hence:

Proposition 2: HQ-subsidiary trust positively affects the quality of communication channels and thereby moderates (reduces) the negative relationship between (geographic and cultural) distance and HQ-subsidiary knowledge flows in both directions.

#### 4.7.4 Innovation Performance

While firms use various metrics to evaluate the success of their innovation strategies (profitability, return on innovation investment, patents generated by subsidiaries and the group), a number of organisations (NZ1, AU1, AU2) mentioned radical innovation as a key issue in measuring and maximising innovation performance (Kristiansen & Ritala, 2018).<sup>2</sup> AU1 emphasised that its Belgian subsidiary is more successful in, and places more emphasis on, radical innovation than the HQ, which creates tension with the HQ. The interviewed manager responsible for the European and American R&D operations noted that the firm needed to persuade the CEO that radically new innovation was crucial: "There is a permanent struggle with the HQ. They want more centralisation, we want autonomy." Currently, innovation is largely managed from Australia and executed regionally, with knowledge flows most intense at the beginning and end of the innovation process. The predominantly market-seeking and knowledge-seeking motives of AU1—with only minor elements of cooperation-seeking and diversification-seeking motives—are restricting its ability to foster knowledge flows between HQ and subsidiaries and enhance the group's overall potential for radical innovation, knowledge creation, and innovation performance (Arant et al., 2019; Castaldi et al., 2015).

All firms found R&D and innovation very important for future performance (Ciabuschi et al., 2014; Figueiredo, 2011; Thakur-Wernz & Samant, 2019). NZ3 noted: "It must be kept at the current level of 10%–15% of the revenue. Product development is very costly and time consuming (design, theory, documentation, prototype testing, HQ approval, trial testing takes 3–4 years)." AU2 said, "The cycle of product innovation is 5–15 years, with changes every year, but when customers refuse it, the R&D hub has to develop a new one (every third project is successful)." AU2 was the only company that had diversification as its main innovation

<sup>&</sup>lt;sup>2</sup> Kristiansen and Ritala (2018) show that process-based innovation performance metrics work better for radical innovation projects than metrics based on expected outcomes.

motive. AU2's manager suggested that its four independent innovation hubs—an organisational structure linked to the diversification-seeking motive—and knowledge flows from its centres of excellence to the group are behind AU2's superior knowledge-creation capability, radical innovations, and innovation performance. According to the manager, the diversity of AU2's innovation operations, combined with a robust risk-management framework, have contributed to over 45 years of profitability.

To integrate the findings related to the impact of knowledge flows on innovation performance, we develop two propositions. The first one establishes a link between a subsidiary's internal and external-knowledge flows and the resulting superior knowledge-creation capability (Arikan, 2009; Smith et al., 2005; Z. Su et al., 2016) and (radical) innovation performance through internal and external-knowledge integration (K. Z. Zhou & Li, 2012). Subsidiaries that are able to develop knowledge-intensive linkages with internal and external actors simultaneously and with increased frequency and improved quality over time achieve relatively higher levels of innovative performance (Figueiredo, 2011). Arant et al. (2019) hypothesise that the greater the number of geographically and cognitively distant linkages a firm has, the higher the probability to generate radical innovations. Building on these arguments, we propose:

Proposition 3: High-quality, frequent MNE subsidiary-knowledge flows (internal within the MNE and external with stakeholders in distant knowledge-rich host economies) have the potential to increase the chance of radical innovation and thus are likely to lead to better innovation performance of the subsidiary.

The final proposition suggests that MNEs with diversification-seeking motives are relatively better positioned to reap the benefits of innovation (especially radical) in their foreign subsidiaries because of their organisational structures and processes, which enhance the value-creating potential of knowledge flows from multiple hubs (Criscuolo & Narula, 2007), through

centres of excellence (Chiesa, 1995), and the organisational capability of knowledge integration (Grant, 1996a; S. S. Zhou et al., 2019). Gupta and Govindarajan (2000) suggest that the motivational disposition of a subsidiary to share its knowledge with other units can be expected to be positively associated with outflows of knowledge from that subsidiary, and the motivational disposition of a subsidiary to seek/accept knowledge from other units can be expected to be positively associated with inflows of knowledge into that subsidiary. Consequently, an organisation's motivational disposition to diversify its innovation sourcing and portfolio through locally embedded, independent, and properly incentivised innovation hubs will positively moderate how an MNE subsidiary's knowledge flows affect its innovation performance. This will occur through extending existing knowledge-creation capability (Smith et al., 2005) to encompass new knowledge (Grant, 1996a) and encouraging (radical) innovation in foreign subsidiaries in knowledge-rich host economies (Arant et al., 2019; K. Z. Zhou & Li, 2012).

### We conclude:

Proposition 4: The motivational disposition of the MNE (HQ and subsidiaries) to strategically diversify its innovation sourcing and portfolio of knowledge creation will moderate (enhance) the positive relationship between an MNE subsidiary's knowledge flows (internal and external) and its innovation performance.

### 4.8 Discussion

ANZ firms' innovation strategies in Europe tend to be less dominated by market-seeking motives than strategies of MNEs from the USA and Japan. ANZ firms often have dual subsidiaries with both market- and knowledge-seeking motives. Cooperation- and diversification-seeking motives are important extra dimensions that characterise their strategies, distinguishing our findings from those of extant literature (see Table 4.5). While R&D internationalisation of non-traditional investor countries such as China have been studied

(Di Minin et al., 2012) in the European context—with findings pointing towards unique motives and their dynamics—our study has dug deeper into the characteristics of these motives and underlying knowledge flows. Building on Achcaoucaou et al. (2014), our framework acknowledges the role of the internal and external cooperation-seeking motive, but extends their embeddedness framework by considering the diversification-seeking motive dual (diversification of innovation sourcing from different locations and R&D diversification within the group). Figures 4.2 and 4.3 integrate our propositions into a model linking knowledge flows in MNEs to innovation performance, outlining the impact of factors affecting knowledge flows (geographic and cultural distance and HQ-subsidiary trust) and pointing to the moderating role of the diversification-seeking motive in the relationship between knowledge flows and innovation performance. The model is rooted in the knowledge-based theory of organisational capability (Grant, 1996a), assuming that knowledge is the principal productive resource of the firm and suggesting that knowledge-creation capability is the key determinant of innovation (Smith et al., 2005) and performance (Z. Su et al., 2016). Furthermore, the model acknowledges that knowledge flow bottlenecks hinder knowledge creation (Gaur et al., 2019) and that increasing (international) knowledge connectivity (U. Andersson et al., 2016) may enable knowledge creation (Nonaka, 1994) and knowledge-creation capability (Arikan, 2009), rather than mere transfer (Cano-Kollmann et al., 2016).

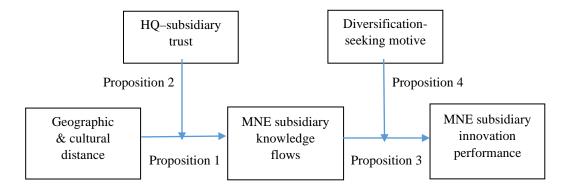
 Table 4.5

 Comparison of Findings for ANZ Firms and Extant Literature

| Home country of innovation investment | Developed (USA, Japan)  Extant literature  | Emerging-market firms  Extant literature  | ANZ firms Our findings  |
|---------------------------------------|--|---|---|
| Strategic motives                     | Market seeking Dominant strategy (Giuliani et al., 2014).  | Knowledge seeking Dominant strategy (Di Minin et al., 2012).  | <b>Dual subsidiary</b> Dominant strategy NZ2, NZ3, NZ4, AU1, AU2  |
|                                       | Dual subsidiary Co-existence of market seeking and knowledge seeking. Some evidence for this (Giuliani, et al. 2014).  | Dual subsidiary Co-existence of market seeking and knowledge seeking. Some evidence (Di Minin et al., 2012; Giuliani et al., 2014).   | Collaboration seeking<br>NZ2, AU1, AU2<br>Diversification seeking<br>NZ3, AU1, AU2  |
|                                       | Knowledge seeking<br>Some evidence for this<br>(Giuliani et al.,<br>2014).   | Market seeking<br>Weak evidence for this<br>(Di Minin et al. 2012)  | Market seeking<br>NZ1, NZ5  |
| Knowledge flows                       | Market seeking Low level of innovative activity at the subsidiary level, mostly adaptation. Strong central coordination. Few formal or informal local collaborations.  Dual subsidiary Subsidiaries' autonomy in decision making. Pro-active and entrepreneurial subsidiaries. Some formal and informal collaborations with host economy stakeholders. | Knowledge seeking Subsidiaries' autonomy in decision making. Pro-active and entrepreneurial subsidiaries. Acquiring local- knowledge assets. No formal or informal local collaborations.  Dual subsidiary Subsidiaries' autonomy in decision making. Pro-active and entrepreneurial subsidiaries. Some formal and informal collaborations with host economy stakeholders. | Cooperation seeking Investing in innovation abroad in order to increase internal knowledge flows in various directions between subsidiaries/HQ and external-knowledge flows via frequent local collaborations. NZ2, AU1, AU2  Diversification seeking Diversified, independent innovation hubs create and source knowledge, and distribute some of it within the group, often through centres of excellence. HQ is both knowledge creator and facilitator of knowledge flows. NZ3, AU1, AU2 |

Figure 4.2

The Model of International-Knowledge Connectivity and Knowledge-Creation Capability



### Figure 4.3

Summary: The Model of International-Knowledge Connectivity and Knowledge-Creation

### **Capability**

#### Theoretical foundations: The knowledge-based theory of organizational capability (Grant, 1996a)

- Rooted in the knowledge-based view of the firm (Grant, 1996b) and the MNE (B. Kogut & Zander, 1993), and the knowledge-based theory of organizational capability (Grant, 1996a).
- Sustaining competitive advantage under conditions of dynamic competition requires continuous innovation which requires flexible knowledge integration (Grant, 1996a, p. 385).
- Knowledge creation (Nonaka, 1994) and knowledge-creation capability (Smith et al., 2005) are key determinants of (radical) innovation (K. Z. Zhou & Li, 2012) and innovation performance.
- International knowledge connectivity (U. Andersson et al., 2016) creates the conditions for softening some of the problems that arise in knowledge flows in MNEs (Gaur et al., 2019).
- Knowledge connectivity is vital to foster the knowledge creation capabilities (Arikan, 2009).

### International knowledge connectivity: How is knowledge carried and interconnected across space?

Proposition 1: Distance (cultural and geographic including time zones) between an MNE HQ and its foreign subsidiary negatively affects the quality of communication channels and thereby hampers the knowledge flows from the HQ to its subsidiary and vice versa.

Proposition 2: HQ-subsidiary trust positively affects the quality of communication channels and thereby moderates (reduces) the negative relationship between (geographic and cultural) distance and HQ-subsidiary knowledge flows in both directions.

Communicating knowledge: the key challenge in the process of international knowledge connectivity

### Knowledge-creation capability: How is (MNE) knowledge (flow) converted to innovation performance?

Proposition 3: High-quality, frequent MNE subsidiary's knowledge flows (internal within the MNE and external with stakeholders in distant knowledge-rich host economies) have a potential to increase the chance of radical innovation and thus are likely to lead to better innovation performance of the subsidiary.

Proposition 4: The motivational disposition of the MNE (HQ and subsidiaries) to strategically diversify their innovation sourcing and portfolio of knowledge creation will moderate (enhance) the positive relationship between an MNE subsidiary's knowledge flows (internal and external) and its innovation performance.

Integrating knowledge: the key challenge in the process of developing knowledge-creation capability

Our study makes two key contributions to the research on R&D and innovation internationalisation. First, by uncovering the moderating role of underexplored diversificationseeking innovation-investment motives in the process of international-knowledge creation, this research provides additional insights to the knowledge-based view (Grant, 1996b). According to the knowledge-based theory of organisational capability, "sustaining competitive advantage under conditions of dynamic competition requires continuous innovation which requires flexible integration through either (a) extending existing capabilities to encompass new knowledge, or (b) reconfiguring existing knowledge within new patterns of integration" (Grant, 1996a, p. 385). Our research implies that extending existing capabilities to encompass new knowledge can be achieved through encouraging radical innovation in foreign subsidiaries with high local embeddedness, and building trust and improving knowledge flows and communication between the HQ and subsidiaries in a diversified innovation portfolio. Our model acknowledges the difficulties in knowledge transfer within firms (Uygur, 2013) and the importance of factors related to the transfer of (tacit) know-how within, versus across, firms (Eapen & Krishnan, 2019). We extend this research by linking MNE subsidiary-knowledge flows (Michailova & Mustaffa, 2012) to knowledge-creation capability (Arikan, 2009) and innovation performance (Han et al., 2018).

Second, this research contributes to the IB and management research on the internationalisation of innovation by extending previous studies that have addressed the dual embeddedness of foreign subsidiaries (Achcaoucaou et al., 2014; Ciabuschi et al., 2014; Meyer et al., 2011). This research develops a framework to link dual embeddedness (connections with the local market and within the group) to strategic motives behind them, and knowledge flows underlying them. By considering the diversification-seeking motive, we also move beyond embeddedness towards a strategic diversification perspective on innovation (Hagedoorn et al., 2018) and knowledge connectedness (Scalera et al., 2018). We respond to the call for deeper

insights into understanding the nuances of knowledge flows in MNEs (Gaur et al., 2019) by adjusting their systematic framework to develop a better understanding of the challenges associated with knowledge transfer in MNEs. While our frameworks and model build on Gaur et al. (2019) in identifying factors affecting knowledge flow in MNEs, we highlight the distinct roles of geographic distance, isolation, time-zone differences, and trust, and link to the concept of "knowledge connectivity" (U. Andersson et al., 2016). Finally, we extend the Gaur et al. (2019) framework to include strategic motives behind knowledge flows and their joint impact on innovation performance including generation of radical innovations, which are increasingly critical to sustainable competitive advantage (Arant et al., 2019).

#### 4.9 Conclusions

This chapter responds to Cano-Kollmann et al.'s (2016) call for studies that improve our understanding of knowledge connectivity including the nuanced conditions that either facilitate or reduce the transfer of knowledge across international innovation networks. We also contribute to the debates on the performance implications of knowledge-creation capabilities (Z. Su et al., 2016) with a focus on the moderating effects of trust and investment motives on the innovation process and its outcomes. Finally, we respond to Estrin and Meyer's (2013) call for studies on industrialised and emerging-economy MNE strategies to consider each country of origin with its unique features, rather than assuming a bimodal separation between emerging and industrialised economies.

Future research on international innovation can account for this diversity and heterogeneity of source countries and explain the complementarity of multiple motives behind different types of innovation investments. We would like to encourage more research on diversification-seeking (Patel et al., 2014; Zámborský & Turner, 2017) and cooperation-seeking innovation strategies (Reuer & Lahiri, 2014; Un & Rodríguez, 2018). This could lead us to a deeper understanding of internal and external innovation cooperation strategies of ANZ and

other investors, as ANZ investors seem to be more prone to diversification and (internal) cooperation than other investors in Europe. Future research could also explore cross-border market and knowledge-cocreation capabilities (Kazadi et al., 2016; Pitelis & Teece, 2010; C. Y. Su et al., 2016).

The tensions between HQ and innovative subsidiaries with regard to radical innovation are also an interesting area for further study. While foreign subsidiaries often have the potential to create more radically new innovation than MNEs' HQ, our findings suggest that the distant HQ is often reluctant to recognise this. It is thus crucial to understand and diagnose this home bias and create innovation management strategies that allow high-performing foreign subsidiaries to take a leadership role in their area of competence without being stifled by tendencies to centralise and control innovation from the HQ (Belderbos et al., 2013). This centralisation may make sense for MNEs from major economic centres (the USA, Europe, and Japan) but may have pitfalls for MNEs from peripheral or emerging markets. While communication barriers related to time-zone differences and distance are here to stay, organisations can create solutions to reduce these obstacles and build trust (Abrams et al., 2003) and global knowledge-sharing systems that improve innovation performance.

The limitations of our research include the small sample and that we did not incorporate a comparison group into the analysis. We also did not delve deeper into the nature of knowledge transferred (Hadjimichael & Tsoukas, 2019) and into risks of external-knowledge sharing (Ritala et al., 2018). Our research has implications for policy and business. Policymakers can benefit from a deeper understanding of the motives of investors from the Asia-Pacific region (Verbeke et al., 2019) and other countries outside of North America and Europe that are becoming more prominent in global innovation. Improving connectivity remains a key challenge for (innovation) policy in New Zealand and other nations (European External Action Service, 2019; Ministry of Business, Innovation and Employment, 2019). Business leaders from

non-traditional investor countries can benefit from understanding the experience of innovative ANZ investors in the EU and how they prioritise various motives including diversification and cooperation. The innovation internationalisation paths of antipodean MNEs often have a different global footprint than those of traditional multinationals, which presents challenges of global coordination and knowledge sharing.

### **Chapter 5. Emerging Multinationals Innovating in Emerging Markets:**

# **Investment Motives and Knowledge-Creation Capabilities**

### **5.1 Chapter Overview**

This chapter focuses on the motives for FDI in innovation and knowledge-creation capabilities of EMNEs innovating in emerging markets. It analyses the motives for the relatively underresearched R&D and innovation investment by non-Chinese EMNEs in CEE and fits them within a broader, knowledge-based perspective of innovation. Building on a detailed dataset based on interviews with managers from 11 EMNEs originating from India, Brazil, Russia, South Africa, Malaysia, and South Korea, this qualitative study develops, through thematic analysis, a process model explaining the relationship between cooperation-seeking innovation-investment motive and knowledge-creation capabilities including knowledge integration, knowledge sharing, and knowledge cocreation.

Moreover, home- and host-country context, including resource munificence and institutions, are considered in the model as moderators of the relationship between innovation-investment motives and knowledge-creation capabilities. This chapter offers a rich account of the CEE context, extending the argument from Chapter 3 that both host- and home-country context play key roles in their relationship with the motives for FDI in innovation. The chapter also extends and builds on Chapter 4's model of international-knowledge connectivity and knowledge-creation capability by elaborating on the specific elements of knowledge-creation capability beyond knowledge flows, namely knowledge-integration, knowledge-sharing, and knowledge-cocreation capabilities. It also clarifies the relationship between the *cooperation-seeking motive* (introduced in Chapter 3) and knowledge-creation capabilities, extending the arguments from Chapter 3. The chapter concludes with a discussion of the complexity of the relationship between investment motives and location-specific advantages.

#### 5.2 Introduction

The international innovation by MNEs in Europe is becoming more diversified in terms of its origins and locations. Firms from non-traditional investor countries outside of Europe and North America are increasingly conducting innovation in Europe. This chapter analyses underresearched motives for investment by emerging multinationals in R&D and innovation-intensive activities in emerging markets. We focus on innovation by non-Chinese EMNEs in CEE, as these are relatively less understood than Chinese MNEs that are extensively researched in terms of their innovation motives (Di Minin et al., 2012) and their FDI motives in general (Buckley et al., 2015; Deng, 2004). We aim to contribute to the debates on the potentially different motives for investment and behaviours of MNEs from emerging and advanced countries (Cuervo-Cazurra and Ramamurti, 2014; Di Minin et al., 2012; Giuliani et al., 2014; Narula, 2012) and how MNEs' locational decisions in terms of innovation in advanced vs. emerging countries differ depending on their country of origin and host country of investment.

The main aim of this study is to identify and explain how knowledge-creation capabilities (Smith et al., 2005) such as knowledge integration (Grant, 1996b), cocreation (C. Y. Su et al., 2016), and knowledge sharing (Noorderhaven & Harzing, 1999), and location decisions about investment in international innovation, differ for multinationals from emerging markets innovating in CEE; why and how EMNEs are conducting innovation in emerging markets; and to uncover motives that would be not consistent with the current theory that mainly focuses on developed MNEs' innovation and EMNEs' innovation in developed countries. The research contributes to the debate on locational motivations and knowledge flows of EMNEs innovating in emerging markets, attempting to enhance IB theory to explain EMNEs' internationalisation of innovation in emerging markets, and offers implications for policymakers, business people, and future research on international innovation (Belderbos et

al., 2013; Castellani & Lavoratori, 2019; Meyer et al., 2011; Narula, 2003; Santangelo et al., 2016).

This chapter asks "Why and how do EMNEs conduct innovation in emerging Europe?" and "How do innovation motives and organisational capabilities (knowledge creation, cocreation, integration, and sharing) of EMNE subsidiaries in emerging Europe differ or align with each other and affect innovation performance?" The study uses a multiple-case-study method approach. Interviews were conducted mainly with R&D managers and subsidiary managers based on a semi-structured questionnaire. To ensure productive, robust, and comprehensive understanding, the study triangulates acquired information by conducting interviews with different managers, and checking MNEs' official websites and independent secondary sources of information. The qualitative data was analysed through thematic analysis.

On a broad level, our theory builds on the distinction between location advantages (both of the home and the host country), non-transferable (or location bound) FSAs, and internationally transferable (or non-location bound) FSAs (Verbeke, 2013) including standalone FSAs, routines, and recombination capabilities. Location advantages, in general, can be classified according to motives for a firm to conduct economic activity in that location (Dunning, 1993; Dunning & Lundan, 2009). The most commonly mentioned are natural-resource-seeking, market-seeking, strategic resource-seeking, and efficiency-seeking motives (Verbeke 2013), although there are other classifications and there is a need to rethink FDI motives (Cuervo-Cazurra & Narula, 2015; Deng, 2004) and their links to corporate capabilities (Jiang et al., 2020).

However, while the Verbeke (2013) conceptual framework is appropriate for AMNEs, multinationals from emerging markets often struggle with firm-specific and location disadvantages rather than advantages (of their home country) and develop strategies to transform disadvantages into advantages (Cuervo-Cazurra & Genc, 2008). Extant research has

highlighted firm-specific disadvantages of EMNEs: smaller size, less cutting-edge technology, resources that are less sophisticated, and capabilities that are less developed (Dawar & Frost, 1999; Wells, 1983). Additionally, negative perceptions of the country of origin may create a disadvantageous image among customers (Bilkey & Ness, 1982), and challenging home-country institutional environments may also be a disadvantage (Khanna & Palepu, 1997). In our research, we consider the role of location advantages and disadvantages relevant to EMNEs' motivations for decisions to invest in innovation in emerging markets. Both motivations and the underlying country-of-origin factors affecting international innovation strategies of EMNEs in emerging markets are poorly understood.

The motives for international innovation investment, in general, are typically linked to market seeking and strategic resource-seeking motives, sometimes with an element of efficiency-seeking motive. Håkanson and Nobel (1993), in a pioneering study of Swedish multinationals, recognise five types of activity motives for foreign R&D establishment: 1) market-oriented units; 2) production-support units for foreign R&D units; 3) politically motivated units; 4) multimotive units, which can be set up or retained based on combinations of the considerations and motives mentioned above; 5) knowledge-seeking firms will look for R&D epicentres in areas of their strategic interest to catch up with their competitors' innovation levels, broaden their knowledge portfolios and also search for technical diversity in different regional-market needs.

Other scholars focusing on developed-country multinationals have identified market-driven and technology-driven motives (von Zedtwitz & Gassmann, 2002) and technology exploration vs. exploitation motives and push/pull factors (B. Ambos & Ambos, 2011). Di Minin et al. (2012), in a study of Chinese investment in R&D in Europe, find that there are essential 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 economic markets to acquire resources to build a competitive advantage.

Giuliani et al. (2014), in another study focusing on emerging vs. advanced MNE investment in Europe, have created a typology of MNE subsidiaries based on the following dimensions: (1) the degree to which MNEs transfer and/or receive knowledge to/from their headquarters and to/from other subsidiaries (intra-corporate knowledge transfer); (2) the level of locally embedded innovative activities (generating value for the MNE and the local context as well), including formation of local innovative ties (collaborations) and innovation activity developed locally by the subsidiary (internally and independently from the HQ and sister firms).

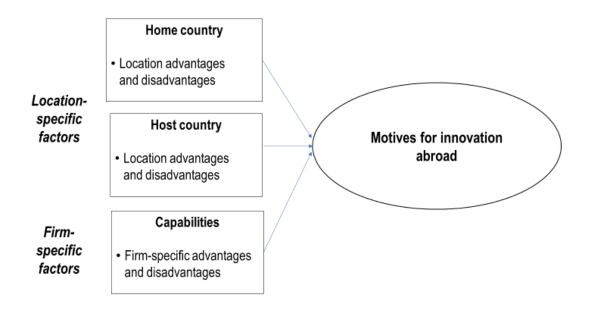
They find that EMNEs and developed MNEs often undertake different strategies for tapping into local knowledge and for transferring it within the company (e.g., EMNEs tend to be more pro-active/entrepreneurial and generate more patents). Their study implies that the differences between EMNEs and developed MNEs are often blurred. While developed MNEs accounted for the vast majority of passive subsidiaries in the sample, they also accounted for a substantial share of predatory (30%) and dual (40%) subsidiaries.

However, in both Di Minin et al. (2012) and Giuliani et al. (2014), it is not clear how their findings about differences in innovation strategies and motives of EMNEs and developed MNEs are driven by the home-country characteristics of the multinationals and location advantages of both home and host countries. Can findings from Chinese multinationals be applied to Indian and other emerging-market multinationals? What is the role of the location advantages and disadvantages of emerging markets (both as home and host countries) in affecting motives for locating innovation-intensive activities abroad? The extant conceptual frameworks such as that of Hobdari et al. (2017) have focused on the home-country context including resource munificence and institutions as factors that influence strategies of EMNEs (including motives, locations, and partnerships) both directly and through mediating effects of

business ecosystems. Our initial framework, presented in the Figure 5.1 below, acknowledges both home- and host-country location advantages and disadvantages and is more explicit about the role of FSAs (B. Ambos & Ambos, 2011) or possible disadvantages. We also focus on a specific subset of FSAs, knowledge-creation capabilities, guided by the knowledge-based theory of organisational capability (Grant, 1996a). As shown in Chapter 4, knowledge-creation capability can be understood as a strategic fit between motives for innovation abroad and an MNE subsidiary's knowledge flows. This argument is further extended in this chapter.

Figure 5.1

A Framework for Understanding EMNEs Innovating in Emerging Markets



#### **5.3 Literature Review and Theory**

This chapter analyses motives for investment by emerging multinationals in R&D and innovation-intensive activities in emerging markets. We focus on innovation by non-Chinese EMNEs in CEE. We aim to contribute to the debates on the potentially different motives for investment and behaviours of MNEs from emerging and advanced countries (Cuervo-Cazurra & Ramamurti, 2014; Di Minin et al., 2012; Giuliani et al., 2014; Narula, 2012) and how MNEs'

locational decisions in terms of innovation in advanced vs. emerging countries differ depending on their country of origin. We also ground our study in the knowledge-based theory of organisational capability (Grant, 1996a) and focus on knowledge-creation capability (Smith et al., 2005) as a key FSA relevant to explaining international innovation motives. There is a gap in the research on EMNEs in terms of absence of an integrated model explaining their knowledge-creation capabilities and how they depend on factors such as strategic motives and home and host-country context (Elia & Santangelo, 2017; Ma & Liu, 2019; Pereira et al., 2019; Wu et al., 2019).

The growing number of multinationals from emerging markets serves as a valuable opportunity for probing the impact of an MNEs' home country on its international strategy and behaviour (Luo & Tung, 2007, 2018; Ramamurti, 2009). This growth has led to an increasing interest in these firms in extant research (Aulakh, 2007; Cuervo-Cazurra, 2012; Cuervo-Cazurra & Ramamurti, 2014; Gammeltoft et al., 2010; Ramamurti & Singh, 2009). There is also an increasing number of studies that suggest studying EMNEs as a potentially different kind of multinational (Aharoni, 2014; Cuervo-Cazurra, 2012; Ramamurti, 2012) compared to Western MNEs. According to Ramamurti (2012), EMNEs could be classified based on their field of operation, time, and stage of internationalisation.

In the last decade, literature has concentrated on home-country characteristics and their impact on innovation and international investment (Cuervo-Cazurra & Genc, 2011; García-Canal & Guillén, 2008; Govindarajan & Ramamurti, 2011; Un, 2011). According to Dunning (1998), capabilities, resources, and internalisation methods have received more attention in the literature compared to home-country advantages and disadvantages (Dunning, 1998). We use a knowledge-based theory of the firm (Grant, 1996b) and of the organisational capability (Grant, 1996a), which are viewed as a subset of the resource-based view of the firm (Barney, 2001) and of the theory of organisational capabilities (D. J. Collis, 1994). The knowledge-based view

focuses on the mechanisms through which knowledge is integrated within firms and the role of firm networks, in order to create the capability to explore firms' potential for establishing a competitive advantage in the market (Grant, 1996a, 1996b).

MNEs from emerging economies, many of which suffer from scarce resources, are likely to put an even greater emphasis on knowledge management, and utilising knowledge as an important asset might be their primary chance to achieve sustainable competitive advantage (Michailova & Sidorova, 2010). Meyer and Xin (2018) find that, during their internationalisation process, EMNEs struggle with the shortage of internationally experienced human capital and often face substantive gaps in financial and technological resources (Cuervo-Cazurra & Ramamurti, 2014; Mathews, 2006). MNEs operating in markets richly equipped with resources and with an efficient market background are better able to secure the strategic resources they need to implement strategies and generate competitive advantage (Khanna & Palepu, 1997; Kim et al., 2018).

EMNEs accounted in 2015 for 25% of world outward-FDI flows and 20% of the largest firms in the Fortune Global 2000. EMNEs from Russia, Brazil, and India adopted the principle of jugaad innovation, which means, according to Radjou et al. (2012), seeking opportunity in adversity, do more with less, think and act flexibly, keep it simple, include the margin, and follow your heart. Interesting examples include Russia's Gazprom in energy, Brazil's Embraer in regional jets, and Mexico's Cemex in cement. These firms have not only survived a battle against AMNEs for home markets but also expanded internationally, through FDI and exports, to become regular MNEs (Ramamurti, 2009).

Cuervo-Cazurra et al. (2018) propose two complementary types of influence over how a firm's home country influences its internationalisation, with eight drivers—first, a firm's international trade (comparative advantage, comparative disadvantage, country-of-origin advantage, and country-of-origin liability) and second, a firm's FDI (institutional learning,

competitive learning, institutional escape, and competitive escape) which are related to emerging-market multinationals' internationalisation. In the home country, EMNEs interact with each other and these patterns of interactions influence their strategies (linking institutions, resources, and strategies) of internationalisation as they share resources, coordinate actions, learn, and not just compete with each other. Their outward investments abroad reflect the competition and collaboration in their home-country business ecosystem (Hobdari et al., 2017).

Low- and mid-level skilled human resources may be already available in many emerging economies, but for implementation of aspiring international strategy, experienced people with international leadership roles in newly established subsidiaries are needed (Meyer & Xin, 2018; Tung, 2007). Senior managers with international experience are scarce in countries with only a short history of international investment, so EMNEs are overcoming weak home-country resources by establishing subsidiaries overseas (Meyer & Thaijongrak, 2013) either by organisational learning, as highlighted by Mathew's (2006) LLL framework, or by acquiring companies to strengthen their own capabilities (Deng, 2009; Luo & Tung, 2007; Mathews, 2006; Rui & Yip, 2008).

Giuliani et al. (2014) propose a typology that includes four main types of MNE subsidiaries. Predatory subsidiaries combine bottom-up knowledge transfer (Rasmussen, 1983) and low local embeddedness. In this type of subsidiary, innovation activity is mainly at the subsidiary level (learning by hiring local, skilled human resources, or by imitation), and the subsidiary maintains very limited local innovative ties. Knowledge is transferred to the HQ and other affiliates. Dual subsidiaries combine bottom-up knowledge transfer with high local embeddedness. This type of subsidiary contributes both to corporate knowledge and to the local context via the formation of innovative networks with local actors (Giuliani et al., 2014).

Locally embedded subsidiaries combine top-down knowledge transfer and high local embeddedness (Almeida & Phene, 2004; Cantwell & Mudambi, 2005; Kuemmerle, 1999). In

this case, the subsidiary is firmly embedded in local innovative networks and, at the same time, relies on knowledge transferred from its HQ. Passive subsidiaries combine top-down knowledge transfer and low local embeddedness. Subsidiaries rely almost exclusively on knowledge generated at the corporate level. Giuliani et al. (2014) find that EMNEs and AMNEs often undertake different strategies for tapping into local knowledge and for transferring it within the company (e.g., EMNEs tend to be more pro-active/entrepreneurial and generate more patents). Their results suggest possible win—win situations for both the developed host country and EMNEs. Their study also implies that the differences between EMNEs and developed MNEs are often blurred, as developed MNEs accounted for a large share of predatory and dual subsidiaries and accounted for the vast majority of passive subsidiaries in the sample.

### 5.3.1 Strategic Motives for Innovation Investment Abroad

Both intra-corporate knowledge flows and internal and external cooperation-seeking motives (introduced in Chapters 3 and 4) affect overall knowledge-creation capability by boosting its key components: knowledge-sharing capability and knowledge-cocreation capability. The context affects which of the motives and components of knowledge-creation capabilities are more critical. We focus on the cooperation-seeking motive and knowledge cocreation in an emerging-emerging type of investment context as it is more relevant in these cases where EMNEs are more prone to seek collaborations in new geographies. Based on the abovementioned debates and preceding thesis chapters, this study defines the following main innovation motives: market seeking, knowledge seeking, and efficiency seeking (building on the extant literature).

Additionally, the less obvious motives, such as diversification and cooperation seeking, are included as well (based on our findings from the previous chapters). The diversification-seeking motive for innovation abroad is defined as diversification of innovation sourcing from different locations and product ranges, and spreading risk in the international portfolio of

innovation activities (Buckley et al., 2007; Deng, 2004; Ingršt & Zámborský, 2020; Mazón et al., 2017). The cooperation-seeking motive for innovation abroad is linked to building external connectedness with stakeholders in host countries and internal connectedness in the group (Enkel et al., 2018). It is 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 main aim of the study is to explain the motives and knowledge-creation capabilities of Type 4 (emerging–emerging innovation investments) and how they differ from the other three types of international FDI in innovation. We contribute by linking to the underexplored cooperation-seeking motive and explaining the role of EMNEs investing in emerging-country contexts that may be unique and allow us to uncover the nuances and elements of their knowledge-cocreation capabilities, which have not been theorised sufficiently for EMNEs (Abosag & Brennan, 2017).

Innovation, differentiated from other subsidiaries in an advanced country, may be strategic for the MNE, thus representing a source of sustainable competitive advantage for other MNE subsidiaries, since local innovation is linked to cost advantages and differentiation of products, marketing, and processes (Hoskisson et al., 2000). M. Zeng and Williamson (2007) first coined the concept of the cost innovation by using an emerging country's (case of China) cost advantage in radically new ways to offer efficient innovation by identifying three vectors of cost innovation: 1) offering customers high-quality technology at low cost, 2) presenting customers with an unmatched choice of standardised/mass-market segments products, and 3) offering specialty products at dramatically lower prices, turning them into volume businesses.

Luo (2003) finds that market-seeking subsidiaries in an emerging market generally do better in terms of market share and productivity if they earn more funds from parent companies, are backed by HQ adaptation to operations in the host country, and are less strictly governed

by their head office or connection to networks for distribution and promotion of domestic products (Buckley et al., 2007). A number of authors suggest that EMNEs are driven by asset seeking rather than asset exploiting while internationalising in foreign markets (Luo & Tung, 2007).

Due to the fragmented domestic capital market and structural conditions, EMNEs are also motivated by diversification seeking (Buckley et al., 2007; Deng, 2004). The existence of the diversification-seeking motive of EMNEs is favoured not only by empowering public policy on technology and know-how in management but also by the risk of resource spread, particularly physical capital (Buckley et al., 2007). EMNEs increase their potential for new knowledge by diversifying their company resources and locations, and, therefore, the knowledge approach is not universal for the overall company, but implemented in each process and customised to each international investment (Mazón et al., 2017).

The primary goal of knowledge-seeking acquisitions by EMNEs abroad is to develop and integrate their technology and resources in their domestic market (Child & Rodrigues, 2005). EMNEs aim to accelerate their technology pool in two stages: the stage of knowledge seeking and the stage of knowledge integration (V. Z. Chen et al., 2012). EMNEs are likely to adopt knowledge-seeking motivations by reaping the benefits of foreign-market conditions to improve ownership-specific advantages through the development of capabilities (Jindra et al., 2009).

#### 5.3.2 Knowledge-Creation Capabilities

We define knowledge management as the management of knowledge processes, such as knowledge creation, sharing, transfer, diffusion, integration, and utilisation. Ownership of specific advantages drives MNEs' involvement in international expansion. Firms with specific advantages locate their production abroad where the host country has certain location-specific

advantages, and to internalise their value-adding business activities where (structural and/or transactional) market imperfection exists (Buckley & Casson, 1976; Hymer, 1976).

FSAs are one of the major factors being used to explain the decision process of MNEs' entry-mode selection (Teece, 1983). The results suggest that an MNE with higher FSAs prefers the wholly owned mode rather than the international joint venture. Phased acquisitions, that is, trajectories where an incumbent initially takes an equity stake in a start-up and subsequently acquires it, have been suggested as a viable strategy to address these challenges (Faems & Madhok, 2019).

According to Argote and Ingram (2000), knowledge transfer and knowledge creation are the most important processes that allow a firm to turn its acquired external knowledge into a competitive advantage. Knowledge transfer and creation represent significant success factors for knowledge-based acquisitions, whose motivation is to acquire new knowledge and to create new innovation (Argote and Ingram, 2000). Within the firm, knowledge is stored and transferred more efficiently on an internal basis than through the external market (B. Kogut, 2000; B. Kogut & Zander, 1992). The stock of knowledge developed by a firm acts as its principal source of competitive advantage and the efficiency by which firm knowledge is created and transferred internally (Gupta & Govindarajan, 2000; B. Kogut, 2000; B. Kogut & Zander, 1992; Kostova, 1999). For the MNE, knowledge is distributed internationally among a network of dispersed subsidiary units. Literature examines the consequences of knowledge creation and transfers within such networks (Jensen & Szulanski, 2004; Minbaeva et al., 2003; P. Wang et al., 2004). This literature has emphasised how knowledge transfer relates not only to the sending of knowledge from a source to a recipient unit but also its integration, understanding, and application (Cohen & Levinthal, 1990; Hansen, 1999; Szulanski, 1996).

J. Liu (2019) recognises two different patterns of learning process for innovations, namely the glider model and the helicopter models; the pioneer EMNEs' long-term learning

process for innovation is like the slow take-off of a glider with the aid of imitating foreign technology (the wind) but with no in-house R&D capacity (the engine); and the latecomer EMNEs' learning process is like a quick take-off of a helicopter with in-house R&D capacity (the engine) gained in a short period of time. A possible source of competitive advantage of MNEs is the capacity of their subsidiaries to generate knowledge based on the resources and opportunities within their host-country environments (Frost, 2001). The MNEs have gradually morphed from "system integrators" (Teece, 1986, 2006) within the firm, sector, region, or nation, to become "orchestrators" of the more comprehensive global value-creation process as MNEs package extant industrial and design know-how into attractive new products (Pitelis & Teece, 2010).

The subsidiary has an important role to absorb knowledge through its business linkages with local partners, which represent an extensive source of knowledge acquired and enable it to contribute to the MNE's overall performance (M. Andersson, 2003). Subsidiaries are not only knowledge receivers from HQ, having the competence-exploiting role (Cantwell & Mudambi, 2005), but as knowledge creators with an integrated network (Di Minin & Zhang, 2010) with a competence-creating role (Cantwell & Mudambi, 2005). A subsidiary's knowledge-creation role evolves according to changes in both its degree of external network (customers, suppliers, service, companies, universities, science centres, policymakers, etc.) embeddedness—knowledge assimilation and learning from the host-country environment, and its degree of intra-corporate embeddedness—and reverse knowledge transfer to HQ and other subsidiaries (Achcaoucaou et al., 2014).

Ciabuschi et al. (2011) argue that HQ involvement in knowledge-creation processes becomes a significant issue and find that a typical assumption in IB theory is that the HQ, based on its own knowledge, makes rational choices about its own involvement; however, HQ involvement in subsidiary innovation can be assumed to be less rational, in the sense that it

reflects not HQ knowledge, but the normative expectations associated with the role of HQ as top manager. Ciabuschi et al. (2011) contrast different perspectives in order to better understand HQ behaviour and its potential value-adding role and distinguish three knowledge situations where HQ 1) actually possesses specific knowledge of crucial importance for a particular innovation process; or 2) does not possess such knowledge, but still has a fair understanding of what kind of knowledge is required; or 3) (the least desirable position) it not only lacks relevant knowledge but does not know what knowledge is required. On the other hand, Borini et al. (2012) show, in their case of Brazilian MNEs, that the reverse transfer of innovation relies on the strategic orientation of the foreign subsidiary's R&D function, such as strong integration (communication) between the parent company and its subsidiaries; the entrepreneurial orientation of the corporation; the subsidiary's period of existence; and, though marginally, its entry mode through greenfield investments.

In summary, this chapter focuses on two research questions addressing the research gap (the absence of an integrated model of knowledge-creation capabilities of EMNEs and their relationship to international innovation motives and home- and host-country context):

RQ1: Why and how do EMNEs conduct innovation in emerging Europe?

RQ2: How do innovation motives align with organisational knowledge-creation capabilities (knowledge sharing, cocreation, and integration) of EMNE subsidiaries innovating in emerging Europe?

**5.3.2.1 Knowledge-Integration Capabilities.** The strategically most important resource of the firm is knowledge, and if knowledge resides in a specialised form among individual organisational members, then the essence of organisational capability is the integration of individuals' specialised knowledge (Grant, 1996b). The key to sustainable advantage is not proprietary knowledge itself, but the technological capabilities which permit the generation of new knowledge as knowledge integration are more critical than knowledge

itself. The firm's advantage depends on how productive it is in utilising the knowledge that is stored within the organisation, including mechanisms of creation and integration. Organisational capability increases with the span of knowledge integrated and with continuous innovation that extends existing capabilities or reconfigures existing knowledge (Grant, 1996b).

Subsidiaries' generative capabilities help create new knowledge, and sourcing capabilities, along with embeddedness, ensure that knowledge acquisition happens at the subsidiary level, while integrative capabilities transform created knowledge into subsidiary innovation (Michailova & Zhan, 2015). Sharing knowledge across borders has proven to be especially relevant to MNEs, as foreign subsidiaries have become active players in these knowledge flows. However, the network effects of interacting with multiple agents on the evolution of the R&D role played by subsidiaries are still undeveloped (Achcaoucaou et al., 2014). When the innovation results of a subsidiary are unique and valuable for HQ and other units in the MNE group, a subsidiary can reach a significant position within the network (Bouquet & Birkinshaw, 2008) and enhance its influence status compared to the parent company (Forsgren & Johanson, 2007), which may be used when bargaining with HQ.

Effectively using and integrating knowledge within MNE units is significant for succeeding in innovation processes and a competitive environment and for evolving scale and quality of subsidiary innovation, but it is reasonable that combinative capability is more complicated for managers to implement as it requires cooperation on intersubsidiary, subsidiary–subsidiary and HQ–subsidiary levels. B. Kogut and Zander (1992) find that some knowledge is tacit, and can be transferred through intensive personal relationships between managers that they may use as bargaining power within the firm. However, one can also argue that managers control an enormous amount of MNEs' knowledge assets, especially when it comes to tacit knowledge.

5.3.2.2 Knowledge-Sharing Capabilities. Replicating is the transfer of knowledge created at home to a foreign subsidiary, and, vice versa, scouting is the transfer of knowledge from subsidiary locations to HQ; both are strategies that occur when the knowledge originates at a single location, either the home or host location. When knowledge is generated at two or more locations simultaneously, connecting and integrating strategies are chosen (Li & Bathelt, 2019). Connecting and integrating differ when knowledge is not locally bounded and MNEs can create complementary technologies in different geographies and integrate them to develop new products and solutions. When knowledge is contextual and cannot be easily transferred, MNEs can adopt a connecting strategy by offering a package of multiple local-knowledge bodies to their customers (Li & Bathelt, 2019).

Organisational innovation attributes within MNEs investigate creation, adoption, and diffusion of the knowledge (Ghoshal & Bartlett, 1988). Subsidiaries develop or/and adapt new processes, products, knowledge, or systems through their resources, which they call creation. The subsidiary may be requested to adopt knowledge created by HQ, central innovation department or other subsidiary, or, on the other hand, they may be required to diffuse local subsidiary innovations to HQ or other affiliates. Ghoshal and Bartlett (1988) find positive effects on intra- and intercommunication on subsidiary innovative capability, and that autonomy and local resources effects influence integration and organisational communication.

On the other hand, Mudambi and Navarra (2004) identify four basic knowledge flows within MNEs—(a) flows from subsidiary to parent (knowledge transfer that helps HQ to exploit local knowledge), (b) flows from subsidiary to location (spillovers—flows to local customer, suppliers, universities, etc.), (c) flows from location to subsidiary (reverse spillovers—subsidiary's learning, knowledge exploitation), and (d) flows from HQ or other subsidiary (subsidiary exploits home/base knowledge advantage). Mudambi and Navarra (2004) define the latter as the traditional, most crucial flow. However, research should concentrate more on

the subsidiary to HQ flow, as the importance of a high number of R&D strategically independent units spread around the globe is crucial to MNEs' success in today's innovation race. Gupta and Govindarajan (2000) find that knowledge flows from subsidiaries to HQ, and vice versa, depends on the motivation of the subsidiary and its managers to create and diffuse knowledge within MNE, which means that the motivation system for unit managers needs to be designed accordingly.

5.3.2.3 Knowledge Cocreation Capabilities. The interaction and relationship management between company and customer can be seen by applying the concept of dialogue in value cocreation. According to Doroshenko et al. (2014), the process of innovation is especially crucial because the interaction between firms and their users improves the propensity of clients to innovate and enhances the quality of service provided. Investments in knowledge-management practices play a crucial role in extracting value from external knowledge for process innovation. In line with Ashok et al. (2014), Doroshenko et al. (2014) confirm that continuous communication and knowledge exchange enhance value cocreation between current customers and the service provider based on the endogenous familiarity of end-users. Ashok et al. (2014) demonstrate that benefits from collaboration are not automatic, as the firm's commitment of internal resources fully mediates the impact of the intensity of end-user collaboration and the breadth of external collaboration on process innovation—internal resources become critical to make effective use of the knowledge residing both internally and externally.

Dual embeddedness of subsidiaries' R&D roles (increased embeddedness of internal and external networks) enhances their subsequent contribution to MNEs' competitive advantage for both subsidiary managers and HQ as subsidiary managers may upgrade their R&D role within the firm by developing internal and external innovative ties to shape its 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) show that subsidiaries' relational embeddedness with the external local network, such as relations with customers, suppliers, distributors, and universities, is positively associated with local innovation, which is transformed into global innovation, especially when innovation is developed in the subsidiaries' functional areas with previous reverse knowledge transfers. According to London and Hart (2004), it is vital for subsidiary survival that the strategy gets embedded in the local external network, due to the challenges of emerging markets, as soon as the subsidiary starts operating in an emerging market.

Wan et al. (2019) investigate how non-traditional organisational processes, such as searching innovation ideas using customer-oriented processes, selecting by pragmatic decision making, and implementing through flexible product-development processes, can foster cost innovation of Chinese MNEs and find that the adoption of new or unconventional organisational processes facilitates the realisation of various kinds of cost innovation. Phene and Almeida (2008) identify subsidiary innovative-capabilities factors connected with the use and absorption of the knowledge–absorptive capacity. Authors split these into two separate categories of sourcing and combinative capabilities, where the sourcing capability flows from innovation and R&D activities that allow for the use of external knowledge, while the latter is the capability of managers to integrate and combine acquired knowledge (Cohen & Levinthal, 1990).

Knowledge absorbed from outside resources must be combined with current subsidiary knowledge and knowledge from other resources or/and carrying out new combinations of knowledge (B. Kogut & Zander, 1993; Schumpeter, 1934). MNEs use innovation and knowledge seeking (firms search similar innovation activities from customers, suppliers, and scientists and engineers from universities and industry, to combine them with their own research) as a base to reduce their future R&D expenditures (Chung & Yeaple, 2008). This

occurs through external sources as spillovers, alliances, and acquisitions, as they save costs internally when sourcing outside the firm and combine those findings with their own innovations.

When focusing on the subsidiary itself, which is surrounded by other host- or home-country firms, HQ, and other affiliates, one can ask the question, "What factors influence subsidiary effectiveness in innovation?" Almeida and Phene (2004) report that technological richness, connections to host-country firms, and technological diversity within the host country, have a positive impact on innovations. As already mentioned, the technological capabilities of HQ increase MNEs' absorptive capacity to seek knowledge in host countries. Song and Shin (2008) find the paradox that, on the other hand, MNEs with a high density of technological capability (technological leaders) will probably establish their independent innovation system and routines which compel their effort to search new capabilities and decrease their motivation to source innovation from host countries.

5.3.3 Emerging MNEs Innovating in (Central and Eastern) Europe: The Role of Context International innovation in Europe is becoming more diversified in terms of its origin and location. Firms from non-traditional investor countries outside of Europe and North America are increasingly conducting innovation in Europe (Dachs et al., 2014). Multinationals from emerging economies, such as India, China, Mexico, South Africa, and Brazil, are becoming noticeable players in European innovation as well. The bulk of their investments are still in the old EU-member countries in Western Europe; however, they have also started to locate R&D and innovation activities in Eastern European member states of the EU, such as the Czech Republic, Slovakia, Slovenia, Lithuania, Romania, Poland, and Hungary. These new locations differ considerably from old EU-member states in some important features such as market size, GDP per capita, institutional legacy, and growth expectations, as well as aggregate R&D intensity (Günther et al., 2009).

According to Bieliński et al. (2019), Chinese FDI patterns have been found to be consistent with current IB theory; however, Chinese investments in CEE countries are additionally driven by specific motives different than those in other regions, such as the access to the EU common market. The countries that attract most of the Chinese FDI are Poland, the Czech Republic, Slovakia, Lithuania, and Hungary. Bieliński et al.'s (2019) data analysis has revealed that non-EU CEE countries attract proportionally more Chinese FDI than those that have easier access to EU funds. In terms of contractual projects, the most appealing destinations are Albania, Bosnia and Herzegovina, Montenegro, Macedonia, and Serbia.

There are still several unanswered issues in CEE business research, such as institutional environments, differences in local and foreign firms' investment goals and strategies, and benefits of the mosaic-type internationalisation, as better understanding of CEE will come from exploring its rich contexts that allow for testing the often presumed global applicability of theories whose replication has been limited to very similar environments (Jaklič et al., 2018). Encouraging openness in replication and in context diversity of scientific inquiry is likely to yield insights and opportunities to improve theory development (Jaklič et al., 2018).

The motivation of these EMNEs in European emerging countries may not be readily explained by the existing models of innovation internationalisation developed by scholars focused on Northern Hemisphere firms and developed-country innovation locations. The proposed research is organised around a typology of international innovation investment based on the country of origin (developed vs. emerging) and the location of innovation (developed vs. emerging). In particular, the combination where both the home and the host country of the multinational firm is an emerging economy is underresearched (Ramamurti & Singh, 2009).

5.3.4 Theories Other Than the Knowledge-Based View (LLL Model, Springboard Theory)

The latest literature on EMNEs has moved to a controversy about whether we need new conceptual theories for them due to the growing amount of empirical evidence (Ramamurti,

2012), resulting in three different approaches. The first approach, supported, for example, by Luo and Tung (2007) and Mathews (2006), indicates the need for new theoretical concepts for EMNEs, suggesting that they follow a different and much more rapid internationalisation that has not been seen by existing MNEs before, with aggressive, risk-taking and asset-accumulating expansion. Specifically, in his LLL model, Mathews (2002) suggests that new MNEs are internationalising to gain skills and benefits rather than exploit pre-existing capabilities. Luo and Tung (2007), in their "springboard model" of EMNE internationalisation, show similar views, arguing that EMNEs are internationalising in order to gain new advantages rather than using initial advantages as a springboard for internationalisation.

In comparison, the second school of thought suggests that within the context of current IB concepts, the emergence of new MNEs can be clarified (Narula, 2010). Dunning (2006) and Narula (2010) clarify how the OLI model can be applied to explain the rise of the evolving MNEs. Narula (2010, 2012) explores how the asset-augmenting international activities of EMNEs can yield benefits only when these companies already have some unique ownership advantages that can then be merged with the newly gained assets. When these young, developing-country MNEs mature, they will eventually act like developed-country MNEs whose activities are covered by existing IB theories and hypotheses (Dunning, 2006).

Between the previous schools of thought is the third one, which indicates that EMNEs can be studied by extending current IB hypotheses (Cuervo-Cazurra, 2012; Ramamurti, 2009, 2012) and suggests that emerging countries' exceptional circumstances and the early stage of internationalisation may offer new opportunities to expand well-known conceptual principles. Ramamurti and Singh (2009) recognise several internationalisation strategies of EMNEs: local optimiser (optimising processes for the distinctive conditions of the home market), low-cost partner (firms that lower the costs, improve quality, mobilise talent and promote innovation), global consolidator (firms that build global scale in mature mid-tech industries, such as personal

computers and beverages), or global first mover (which involves an EMNE operating at the global technology frontier, surprise attack with low costs and global reach).

EMNEs may serve as a starting point for expanding existing theories because their emerging country of origin characteristics vary (Cuervo-Cazurra, 2012). The position of this thesis is between the first and third school. We agree with the argument that the distinctiveness of EMNEs makes it difficult to generalise. The purpose of this chapter is to explain why and how EMNEs are conducting innovation in emerging markets and uncover motives that would be not consistent with the current theory that mainly focuses on developed MNEs' innovation and EMNEs' innovation in developed countries. Emerging economies differ from developed countries in their institutional framework and other characteristics affecting their national innovation systems (Furman & Hayes, 2004; Gong & Keller; 2003).

Firstly, we contribute to the debate on the potentially different motives of emerging and developed MNEs (Di Minin et al., 2012; Narula, 2012); secondly, we focus on knowledge creation, innovation subsidiary motivation, knowledge flows, and connections to global headquarters and local economy (Giuliani et al., 2014); and thirdly, we link to the debate on whether IB literature needs new theory to explain EMNEs' internationalisation of innovation (Mathews, 2002; Narula, 2010; Ramamurti, 2009), with the extension of theory to emerging-market conditions as a destination country.

Di Minin et al. (2012) concentrate on Chinese MNEs' R&D investment behaviour in Europe but did not consider emerging firms' innovation investment in emerging Europe and did not study non-Chinese and non-Asian emerging firms' innovation. Giuliani et al. (2014) find that the knowledge flows of EMNEs and developed MNEs exhibit significant differences based on types of subsidiary (typology based on intra-corporate knowledge transfer and the embeddedness of local innovative activities). While this chapter shares a lot of common ground with their study and we agree with its multifaceted treatment of developed MNEs vs. EMNEs

based on subsidiary global-local connections and knowledge-seeking and market-seeking motives (von Zedtwitz & Gassmann, 2002), this thesis and chapter also explore other motivations such as efficiency-seeking (Schmiele, 2012) and cooperation-seeking innovation investments (Mowery et al., 1998), and aims to incorporate them into the study. No recent studies have focused on underresearched phenomena of EMNEs investing in innovation in CEE, and how the context influences knowledge-creation capabilities and innovation motives.

## 5.4 Method

In this chapter, we explain possible different motivations for EMNEs' FDI in innovation and knowledge-creation capabilities in European emerging markets (CEE), as EMNEs, in some cases, in contrast with their developed counterparts, possibly follow a different path of their international grow abroad. There are several theoretical concepts investigating EMNEs' motivation, mainly focusing on EMNEs' innovation investment in developed markets, (Cuervo-Cazurra, 2012; Dunning, 2006; Luo & Tung, 2002, 2007; Mathews, 2002, 2006; Narula, 2010; Ramamurti, 2009, 2012), but robust and full-scope theory explaining EMNEs' innovation investment in emerging markets is missing. Specific conditions of emerging markets and different timings of EMNEs' internationalisation and circumstances of development could lead this thesis research to extend current theoretical concepts.

## 5.4.1 Multiple-Case-Study Method

This chapter builds on 3 years of intensive data collection and research on EMNEs' innovation behaviour. Informed by the reviewed theory and literature, we aim to examine location decisions, knowledge integration, and creation and cocreation capabilities in the context of EMNEs' innovation activities in CEE. To investigate the research questions, this study employs exploratory qualitative methodology (Miles & Huberman, 1994), founded in a multiple-case-study approach (Yin, 1994). A detailed understanding of the mechanisms and nuances of knowledge creation and international investment motivations can be achieved by theorising

from case studies (Eisenhardt, 1989). The international innovation activities of EMNEs in emerging Europe are a new, underresearched phenomenon, and multiple-case studies are appropriate for exploratory study (Ghauri, 2004). The researcher is able to develop a deeper relationship with managers while conducting interviews (Daniels & Cannice, 2004). A multiple-case-study method enables the researcher to conduct a more thorough investigation of the processes than would have been possible if other methods were used (Yin, 1990), since it empowers us to recognise the interactions between single units and the content of those interactions (Edmondson & McManus, 2007; Eisenhardt & Graebner, 2007).

## 5.4.2 Case Selection

Based on Eisenhardt (1989) and Eisenhardt and Graebner (2007), we aim to build theory from case studies. In our sample, we chose cases which were adequately representative of EMNEs from different continents and industries. This diversity of cases was a part of the design, to achieve different samples that enabled us to develop fruitful theory; and we sought to examine a substantial number of cases and a variety of sectors to be convinced that the findings would have some universal applicability (Strauss & Corbin, 1990). We combined a variety of sources of information, including databases (<a href="http://www.fdiintelligence.com">http://www.fdiintelligence.com</a>), companies' internet sites, newspapers, company presentations, academic work, internet resources, and personal interviews, to ensure research validity (Jick, 1979). The resulting sample includes firms from India, Malaysia, Brazil, Russia, South Africa, and Korea, in industries as diverse as pharmaceuticals, IT, machinery, FMCG, and raw materials.

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-country context. We used the following criteria to select firms for our research: 1) the subsidiary had to be dominantly owned by HQ; 2) subsidiary had to be involved in innovation activities; 3) subsidiary had to be located in emerging Europe (CEE); 4) HQ had to be located in an emerging country, but not in China;

5) investigated firm had to be large, well-established multinational enterprise. An additional criterion was that the company had to be interested in participating in the research. After formulating the research questions, we conducted several pilot interviews to trial our interview questions and interviewer's probes. We then adopted the rationale of theoretical testing and preselected cases, which differ by sector, home and host country, unit capacity, and entry mode, in order to ensure that each case acts as a "distinct experiment" and provides evidence from different viewpoints (Creswell, 1998; Eisenhardt, 1989).

## 5.4.3 Data Collection

The study relied on both primary and secondary sources with a focus on primary sources. Indepth interviews, using semi-structured guidelines, were conducted in 2017–2018 with second-round 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). Pilot (testing) interviews were conducted in 2015 for Phase 1 of the research. Interviews were carried out mostly with highly knowledgeable executive managers in subsidiaries, such as the country manager, head engineering manager, process innovation division lead, project manager for scientific R&D projects, head of innovation, director of business development, R&D director, and head of operations. Research shows that such informants provide highly accurate information (Kumar et al., 1993).

The secondary data covered media documentation, field observations, company websites, and materials supplied by the participants. To enhance the robustness of the research, all the interviews were conducted face to face, by Skype or telephone, taking between 45 to 90 minutes. Interview notes were written during the interview and were rewritten immediately after each interview, usually within 24 hours. Interviews were also audio-recorded and fully transcribed by a professional company for further analysis. Potential participants were first contacted in writing, where they were acquainted with the focus of our research and necessary

information about themes of the research. A good relationship was set up as interview-based case studies enable academics to establish a closer relationship with interviewees (Daniels & Cannice, 2004). More detailed information about interview content was delivered to participants prior to the interview if they have asked for it.

We commenced the interviews with questions about company history, the informant's name, their position in the business, and how long they had worked with the company. We motivated informants to provide further and more detailed information in the case that their descriptions were brief or novel perspectives emerged (J. A. Martin & Eisenhardt, 2010). In many cases, we had to ask additional questions on the same theme to get a proper and rigorous answer to fully understand the discussed phenomenon. When conceptual saturation was achieved, data gathering ended (Strauss, 1987). The triangulation of the collected data 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).

During the interviews, first, we asked questions about the background, business, and innovation strategy of the companies. Then we questioned the managers about location decisions, market-entry modes, knowledge creation, and motives for their internationalisation. We used open-ended questions and inspired them with questions such as how they conduct their innovation activities, why they innovate abroad, and how they proceed with knowledge creation. These questions were directed at innovation managers who had day-to-day experience with the issues mentioned in our research. We used interview techniques such as non-directive questioning and activity monitoring that provide informants with accurate information (Huber & Power, 1985). Specific relevant evidence (e.g., dates, incidents, managers involved, subjects discussed) and open story details (e.g., motivations; knowledge orchestration) were gathered through this interview process. Finally, we also collected detailed archival and observational data to complement and triangulate our interview results.

## 5.4.4 Data Analysis

The collected data was examined by the thematic-analysis approach (Braun & Clarke 2006), using an iterative number of steps in order to identify the topics so that the empirical evidence would enable the creation of an empirical model. Our empirical sample consisted of six Indian firms, one Brazilian, one South Korean, one South African, one Malaysian, and one Russian firm. This allowed us to tease out potential differences between the international innovation motives of Indian and other non-Chinese emerging-market firms. We had six firms that invested in innovation in the Czech Republic (three from India and one each from South Africa, Malaysia, and South Korea), one invested in Lithuania (from India), one in Serbia (from Russia), one in Russia (from India), one in Poland (from India), and one in Slovakia (from Brazil). With the location of the innovation constant (for the Czech Republic), we could distinguish between the location advantages of the host country and the location advantages and disadvantages of the home country. Our sample also consisted of firm groups from the same industry, allowing us to analyse industry effects (three Indian firms were from the pharmaceutical industry, three Indian firms are from the IT services industry, and two non-Indian firms are from machinery manufacturing).

We analysed data in several different steps. First, we read transcribed interviews several times, while marking down phrases and interesting notes, so that empirically grounded theory concepts could be developed from data analysis (Lub, 2015). Then we engaged in coding of phrases, themes, and words, and created first-order indicators, second-order indicators, and theoretical concepts which we investigated and compared with existing literature to identify theoretical themes (Reissner, 2005; Silverman, 2006) such as integrating second-order concepts to three theoretical themes: 1) knowledge-integration capability, 2) knowledge-sharing capability, and 3) knowledge-cocreation capability. The analysis resulted in a theoretical map of themes and concepts. The unique context of the themes was refined and linked to the study's

actual story and current theory and literature (Ghauri, 2004). Table 5.1 provides an overview of the studied organisations including their home country, host country of their innovation investment in Europe, industry, and interviewee position and location. The next section presents case narratives, followed by findings and analysis.

**Table 5.1**Overview of Analysed Firms and Interviewed Participants

| Firm | Home country | Host countries                   | Industry        | Interviewee(s) location  |  |
|------|--------------|----------------------------------|-----------------|--|--|
| E1   | India        | Lithuania                        | IT services     | Country manager—Lithuania (subsidiary)                             |  |
| E2   | Malaysia     | Czech<br>Republic                | E-commerce      | General manager—Czech<br>Republic (subsidiary)                     |  |
| E3   | South Korea  | Czech<br>Republic                | Machinery       | Process innovation division<br>lead—Czech Republic<br>(subsidiary) |  |
| E4   | Russia       | Serbia                           | Oil & gas       | Research and development manager—Serbia (subsidiary)               |  |
| E5   | South Africa | Czech<br>Republic<br>Netherlands | FMCGs           | Head of innovation—<br>Netherlands (HQ)                            |  |
| E6   | Brazil       | Slovakia,<br>China               | Machinery       | Research and development director—Brazil (HQ)—2 interviews         |  |
| E7   | India        | Poland<br>Czech<br>Republic      | Pharmaceuticals | Director of business<br>development—Czech<br>Republic (subsidiary) |  |
| E8   | India        | Czech<br>Republic                | Pharmaceuticals | Research and development manager—India (HQ)                        |  |
| E9   | India        | Russia                           | Pharmaceuticals | Business development lead—<br>Russia (subsidiary)                  |  |
| E10  | India        | Poland                           | IT services     | Deputy general manager—<br>Poland (subsidiary)                     |  |
| E11  | India        | Czech<br>Republic<br>Slovakia    | E-commerce      | Head of operations—Czech<br>Republic (subsidiary)                  |  |

# **5.5 Case Descriptions**

## **E1:**

IT firm serving customers mainly in the financial sector, established in 2005 and headquartered in India. One of its think-tanks is located in Stockholm, Sweden. The experienced management team from Sweden is part of the group's top management, taking an active part in shaping the

organisation's growth. The R&D centre is based in Vilnius, Lithuania. It is the first-level support centre for their customers in Eurasia, handling requirements across vast geographies from the Nordic countries to central Asia.

The firm invented a system that helps to search, find, transfer, and safely store all the data of banks and financial institutions. The system regularly updates at least every year to ensure it has every modern technological innovation implemented and to be on par with other companies. The firm has two main goals in the field of innovation, development, and overall growth. The first is to improve their current service-delivery platform from which they provide their service to banks and financial institutions across Scandinavia and Europe.

Another aim is to improve its software's ability to manage different currencies, languages, and time zones within the service provided. The firm focuses on reducing IT operation costs while maintaining technology-infrastructure independence. The company's European innovation centre is in charge of technology innovation. The company also ensures that its employees work in different countries, so they may better understand other cultures.

The city of Vilnius, Lithuania, was chosen for the subsidiary location because it is an excellent geographical connection point between Western Europe, Eastern Europe, and Asia. Therefore, it will also work as a base to expand further into CEE. Other reasons to locate knowledge-sensitive activities are access to highly skilled people and reasonable costs.

## **E2:**

Company based in Malaysia with HQ in Kuala Lumpur, founded in 2014. Their service of providing internet and TV services focuses on emerging markets (markets which are extraordinarily diverse in terms of their language, cultures, customs, content, and regulations), mainly in Asia and Africa, where their biggest global competitors are not operating. The company's policy is to adapt itself to local markets and develop services on multiple platforms that adapt to local customs and culture (think global and act local). The company offers services

that go to millions of people, and mostly different requirements—that is, how they go to market, the levels of localisation required, and compliance with censorship regimes, so each territory is run as a standalone business.

During its existence, the company has built several strategic partnerships (including with telecommunications providers), which have allowed it to grow and spread at a rapid rate. The company is firmly based on technological innovation, speed, and adaptation. It has had to overcome many obstacles that similar Western companies have never experienced (slow internet connections, missing standard-payment instruments such as credit/debit cards or money transfers, and they even made their advantage from it). There are four R&D centres: Malaysia, Australia, South Africa, and the Czech Republic, which are focused on integration with telecommunication operators, creating and maintaining numerous payment systems, developing software solutions, and interfaces for all platforms. The location in the Czech Republic was chosen for its long tradition in technical disciplines and its well-educated computer engineers. Its location in central Europe and the popularity of Prague makes it easier to convince experts from around the world to come and work with them. The development centre (Prague is one of two main development centres with the goal to become the main one) is supposed to have up to 100 employees.

#### E3:

This firm was founded in 1896 and is based in South Korea. These days, the company conducts innovation in almost 40 countries around the globe. This MNE innovates especially in energy (those technologies that are not dependent on fossil fuels remove harmful substances from exhaust gases and maximise energy efficiency), water plants (the firm is one of the few companies to offer their custom technologies for all three desalination processes), castings, forgings, and chemical-process equipment (the company delivers huge machines and large chemical machines). They operate an innovation centre in the Czech Republic, and it is part of

the campus, where production and R&D are in one place, together with an employee training centre. The company collaborates with other local and international academic institutions, consultants, and other organisations as part of its R&D. The main objective of its R&D is to create and implement water-management systems that are using the needs of a new solution on the water market. The company concentrates on creating technologies that will produce cleaner energy.

Innovative activities in the Czech Republic mainly concentrate on machinery innovation. The company takes advantage of the long-term experience of local employees in this segment. The firm has been developing innovations in nuclear technology, disposal of radioactive waste, and the remediation of nuclear facilities. E3 also develops and improves various technologies through the operation of pilot projects and testing. These are mainly desalination technologies, which include heat and membrane processes. Managers of the company believe that, thanks to this, E3 can become a market leader in compact equipment in the world.

#### E4:

The company, specialising in raw materials, is based in Moscow, Russia, with active subsidiaries in Latin America, Europe, Asia, and Africa. The development of this global energy company, as a supplier of energy resources, is associated with a permanent solution of strategic, technological, economic, and other tasks that require the search, acquisition, and application of new knowledge, continuous improvement of activity, and efficiency of innovation activities. In the development and implementation of new technologies, the firm adheres to a pragmatic approach: the technologies available on the market should become a tool for increasing the company's efficiency. At the same time, the company independently develops the technology market, encouraging partners to create new solutions and acting as the first buyer.

The company is working out a new (for the company) mechanism of scientific and technical cooperation. The purpose of this is to obtain new knowledge or know-how based on coordinated efforts of various industrial and scientific-research teams.

The firm has established a subsidiary in Serbia through the acquisition process. The main motivations were skilled and reasonable labour costs, stimulating tax policy offered to investors, as well as a legislative framework that is consistent with the regulations of the EU. There are 300 research associate experts and specialists who develop domestic and international patents. In 2016, the concept of the production management process was developed, taking into account "Industry 4.0" innovative solutions. The company started creating "digital duplicates" of production facilities. Pilot projects were implemented for predictive equipment management (reliability management) along with projects using engineering data in a 3D environment.

#### E5:

The company operates in Africa, North America, Europe, Latin America, Australia, and Asia, and is headquartered in South Africa, producing and marketing FMCGs.

In 2015, the firm was, according to Forbes magazine, in the top 100 in "The World's Most Innovative Companies" ranking.

The global innovation system is valid for all its brands. So, the subsidiary's innovation activities are closely linked to it and following it, in most cases. Another innovative activity rests on using platform SAP, which combines advanced-process management and embracing emerging IT tools. The company can access data at a more business-critical speed and distinguish better data fits, meaning information on current products and products or transactions from previous periods is instantly identifiable.

Innovation activities in CEE are focused on the development of new ranges of products.

The firm focuses on creating new brands and strengthens the existing ones by developing healthy products for its customers. It is also developing new ways to revive established brands.

The company has a strong position in the CEE market—newly acquired markets in Europe should serve as an accelerator for the company's growth. The objective of acquiring the CEE business was to gain an overseas foundation for growth, which, in particular, will enable the construction of a network for firm growth across all of Europe and shows strong compatibility in terms of brand development and management at scale. With the ambition of becoming a global player, it continues to seek new possible acquisitions around the globe.

#### **E6:**

A machinery firm based in Brazil, with its subsidiaries in five continents. In Europe specifically, it has subsidiaries in Italy and Slovakia. Innovative initiatives concentrate on new solutions for untapped markets. Ideas with the potential to be received by the market are accelerated through this platform with the hope that they will offer customers new possible applications. The firm has set an innovation compass that has four aims—energy efficiency, use of natural refrigerants, miniaturisation, and cost reduction.

Its investments into R&D are quite high as it has invested about 3% of its annual revenues each year into funding R&D. The company has been doing that for more than 3 decades. Around 1,700 patents worldwide have been acquired by the work of over 600 professionals throughout their cutting-edge laboratories. The firm operates 47 laboratories and, on top of that, tries to maintain strategic partnerships with universities and several research institutes. A newly established transformation team is working together with the R&D department to support the company's innovation performance. During their existence, the teams have managed to shorten the time between the creation and production of a new idea from 35 to only 16 months. One of the reasons to invest in the Italian factory was the fact that the company set itself a goal to raise production and develop a strategic base in Europe. Increasing production here could then help meet a demand that is increasing in Europe. On the other hand, the main reason to establish a greenfield subsidiary in Slovakia was the proximity of their

customer in the country. An assumption can be made from available information that the company, together with its subsidiaries, efficiently innovates as one—mutually sharing values and combining given resources to achieve technological superiority with the emphasis on sustainability.

The firm claims to have innovation at the centre of its strategy, focusing not only on the technological side of new invention pushing the boundaries of its primary field but also focusing on new business models, services, and processes.

#### E7:

Headquartered in India, with subsidiaries in North America, Asia, and Europe. The company puts emphasis on developing generic pharmaceutical products which will be, in the future, developed in a safer, more productive, and quicker way. The firm is also known for its high innovation efforts.

Motivation to establish innovation activities in CEE was mainly knowledge seeking, which is essential for locating activities in specific countries. There are a lot of great experts at reasonable costs, qualified medical doctors, and vital hospital infrastructure in the region, which are being sought by the company and are an essential part of innovation. Additionally, it conducts clinical studies in CEE in countries such as Poland, the Czech Republic, Romania, Estonia, and Lithuania. Approximately 8–10 new methods or procedures are being developed every month in its subsidiaries and are transferred to HQ in India, to share these new methods within the organisation for implementation.

Innovation results are published on the intranet so that every employee can use them. The knowledge spreads not only within the organisation and its subsidiaries but also to other stakeholders all over the world. E7's aim is to excel in the field of clinical research, enhance quality, ensure the scientific validity of all research projects, and shape the future direction of the clinical research.

## E8:

The pharmaceutical and biotechnology company based in India has innovation subsidiaries in the Netherlands and the Czech Republic, and is one of the world's most significant vaccine manufacturers. The firm has a team of highly qualified and motivated professionals, and national and international consultants, who form its core R&D group. Innovation efforts are focused on developing products that will meet the specific needs of different segments of the global population as well as on improving the methods of product delivery.

The firm is actively associated with reputable international agencies, universities, research institutions, and several other internationally recognised organisations. E8 performs high-quality pre-clinical and clinical research, in compliance with international standards and guidelines, on all its products before it markets them worldwide. After licensure, diligent pharmacovigilance is maintained as per international norms.

The entry mode to the Czech Republic was through acquisition. It provides a substantial manufacturing base in Europe, with access to strategic European markets, technology, expertise, and sustainable production capacity. The global innovation system is dependent on the manufacturing of new products, and the subsidiary's innovation activities aim towards increasing production. The company has established the most modern laboratories with high-tech machinery and computerised equipment for production and testing.

The firm also has high requirements for quality. Its quality-control laboratories are equipped with a wide array of sophisticated analytical equipment; it values the ethical principle to replace, reduce, or refine animal testing and hence is actively involved in reducing animal suffering and the development of possible alternatives to in vivo testing of its products. The technical team has developed systems to ensure that quality is built into the process, leading to the consistency of output.

## E9:

Company based in India, and operates in more than 100 countries, particularly in the USA, UK, Russia, Germany, and Brazil. The company entered the New York Stock Exchange at the beginning of the 21st century. This strategic operation aimed to raise funds and get resources to expand in European and other markets through the R&D of new products, which could improve the health of people all over the world.

The success and growth of the company are complemented through the acquisition of facilities, both national and international. The company has managed to serve technically demanding markets of Europe and North America via their portfolio. One of its first international cooperations was formed through the acquisition of a Russian pharmaceutical producer in the 1990s. Company research concentrates specifically on the field of generic products, which are essential, especially for cost-sensitive emerging countries' markets. The elements involved in development include innovation in the laboratory, developing the compound, and sending products to the market. Following these steps, the company can create brand-new products. The company considers R&D as extremely important. Without it, there would be no success. Their R&D centres have over 70 laboratories, where 800 researcher scientists work on different projects. These R&D centres are also in the UK, Netherlands, and the USA. In the last 5 years, it has created almost 100 patents. Researchers also look for patents which are near to expiry so that they can develop similar generic products.

The firm declares that its success comes from intellectual capital, so it protects its innovation activities by patents, for example, agreements on trade-related aspects of intellectual-property rights. This protection stimulates the quality and innovation of the products. Building a reliable brand name maintains the firm's place in the market and raises the awareness of the clients about the quality of its products. The new product goes through the process of testing to prove its quality, by the company itself, its subsidiaries, or its partners.

## E10:

Company based in India, also operating in the CEE region, specifically in Poland, with its business focused on the IT sector. Poland is one of Europe's fastest growing IT markets, riding on the back of active economic recovery and increased consumer spending. Poland's IT sector growth is primarily due to substantial foreign investment and it is now receiving EU funding towards the upgrading of IT infrastructure and smart government systems which also motivates HQ to operate in this market. Poland has always been a strategic location for the company in Europe, so it opened a global delivery centre in Krakow to serve several of its customers. Poland operations primarily revolve around providing multilingual global technical support to clients.

Given the different nature of innovation activities from traditional production activities, more emphasis is invested on the loyalty, motivation, and morale of employees as the firm's business becomes more knowledge based. In this regard, the firm has a policy of "employees first, customers second." The initiative tends to make a result-oriented investment in employees by creating the mechanism and culture in which employee empowerment and development are highly valued, and employees become willing to practise corporate values and unleash their potential in reaching customer satisfaction with unique, innovative, and sophisticated services.

## E11:

Company based in India, also operating in e-commerce in almost 30 countries around the world. Different locations require a specific approach for innovation. Every country and, in some cases, city has a different match depending on the catering traditions and culture of the country. During the innovation creation, the company evaluates the opinions and ideas of its platform users, which they post online in feedback. The firm entered the Czech market through acquisition mode and is developing further based on its experience from abroad. In the Czech Republic, people were already used to using some online applications which provided same kind of service, so, after the acquisition, it was easier for local customers to adapt to the

company's product. It was important to cooperate with restaurants to get the exact information.

Communication with customers was required to perfect their business solutions.

All the firm's employees are divided into teams which are authorised to find out information to conduct research. Communication is from leading executives to managers of the teams and vice versa. In the case the newly created project is successful, the firm transfers it and incorporates it in other markets as well. Expanding to other countries around the world, making innovations based on the needs of customers of each country, and also on the main goals of the firm, are key to global success. The Czech Republic is running several pilot innovation projects for the whole group. A global innovation system is expanding to new countries to acquire other companies that provide the same or similar service. Internal cooperation is between all the teams within the firm, communication between managers and teams, with reasonable control from HQ.

## **5.6 Findings and Discussion**

Our case descriptions offer several preliminary insights. First, two of our cases (E5 and E6) are large multinationals originating from emerging economies but which have later undergone mergers with or acquisitions (of their CEE assets) by developed-country multinationals. We point to the limitations of the ownership classification in advanced and EMNEs and show how the complexity of ownership and ownership changes in large multinationals affect location decisions about innovation.

On a more granular level, we analyse the dual locations in "advanced" and "emerging" Europe, as many of our firms have located their innovative subsidiaries in both Western and CEE (building on Chapter 3). We explain how CEE members of the EU, such as Slovakia and Lithuania, are attempting to move up the value chain to attract the location of R&D and innovation departments by MNEs. We show that subsidiary initiative often plays a significant role in these decisions and that they are not necessarily made "rationally" at the top level in the

HQ but with a substantial contribution (or predominantly) by subsidiary managers (Ciabuschi et al., 2011).

Based on analysed interview data, we start by focusing on disentangling the relationships between the nature of the motives for innovation, the impact of home-country characteristics, in particular location advantages and disadvantages of home countries (India, South Korea, and Russia) and host countries (Czech Republic, Russia, and Poland). To tease out the unique role of the home country, we will focus on location advantages and disadvantages of home countries (India vs. Brazil, Russia, South Africa, South Korea, and Malaysia) and location advantages and disadvantages of host countries, including Serbia and Russia (non-EU countries) and the Czech Republic, Slovakia, Poland, and Lithuania (EU host countries) in innovation. Then we proceed with an in-depth focus on the role of knowledge-creation capabilities, grounding our study in the knowledge-based view of the firm and of organisational capability (Grant, 1996a, 1996b).

The analysis of Indian multinationals innovating in CEE (E1 and E7–11) will allow us to tease out potential roles of home-country location (dis)advantages relative to host-country (dis)advantages in affecting the motives for innovation investment. Host-country location factors may have a more considerable impact on motives than home-country factors (Ingršt et al., 2015). We also analyse potential commonalities in innovation motives of multinationals from the same country (India) compared to research on Chinese MNEs investing in R&D in Europe (Di Minin et al., 2012). One notable difference is that while the five Chinese cases of investment in R&D in Europe analysed in Di Minin et al. (2012) were located in Western Europe, our Indian cases are firms innovating in CEE, with possibly unique motivations and locational strategies for that. We start by analysing the roles of home- and host-country characteristics (in particular location advantages and disadvantages) and their links to (or impact on) innovation motives and then proceed to in-depth analysis of knowledge-creation

capabilities and their alignment with strategic motives (and orientations) of EMNE investors in CEE.

# 5.6.1 Characteristics of Emerging MNEs: Home-Country Location (Dis-)Advantages

EMNEs' innovation efforts lie within the technological frontier and focus more on the adaptation of technologies, process innovation, and organisational innovation, using frugal approaches to meet the local needs of affordability and access and global needs in certain specific areas (software services, generic pharmaceuticals) that are also driven by low cost. As E8 said, "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." Start-ups are slowly changing the situation, but the most successful and visible Indian start-ups so far are, again, adaptive rather than disruptive (Krishnan & Prashantham, 2019). In terms of R&D investments, pharmaceuticals (E7, E8 and E9) and transportation quickly emerged as India's most innovative industries, together accounting for close to half of the industrial R&D investments (Krishnan, 2010).

The most R&D-intensive industry in India is the pharmaceutical industry (NSTMIS, 2013). Indian pharma companies are leaders in the world generic pharmaceutical industry and have a history of developing new, low-cost processes for drugs going off patent that enables them to be globally competitive. However, their efforts in creating new products have been notably less successful. E7 said in this respect: "They have probably one of the best laboratories in clinical trials outside of really big pharma, skilled scientists, great machinery, but the problem is that they don't know how to market innovation of new products."

However, some local EMNEs such as e-commerce firms are already developing innovation that is at the cutting edge worldwide (Yip & McKern, 2016). 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 headquarters

(80%), 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.

Some of the prominent components of this growth have been IT and software services, telecom services, financial services, and health care services (Government of India, 2016), which was confirmed by interviewed managers of E1, E7, E8, E9, E10, and E11. Even when technology is available, weak protection of intellectual-property rights often obstructs sharing knowledge across these enterprises (Schotter & Teagarden, 2014), which may motivate them to obtain and upgrade knowledge abroad.

We draw a link between both the EMNE home-country context, which forces it to be relatively more cooperative and engage in knowledge cocreation, and the CEE host-country context, which encourages more cooperation rather than purely knowledge or purely market-seeking strategies by EMNEs (Narula & Zanfei, 2005). So, the home- and host-country contexts can be possibly seen as "boundary conditions" for specific knowledge-creation capabilities or their alignment with (specific) innovation-investment motives.

Both intra-corporate knowledge flows and internal and external cooperation-seeking motives affect overall knowledge-creation capability by boosting its key components: knowledge-sharing capability and knowledge-cocreation capability. We focus on the cooperation-seeking motive and knowledge cocreation in an emerging–emerging type of investment context as it is more relevant in these cases where EMNEs are more documented as looking for cooperation in other regions (Alcacer et al., 2016).

## 5.6.2 Characteristics of CEE: Host-Country Location (Dis-)Advantages

The reason why some subsidiaries achieve advanced innovation performance compared to others operating in a similar environment can be explained by the frequency, depth, and quality of their linkages to local cooperation (Achcaoucaou et al., 2014). Other factors are relevant too,

as a source of competitiveness, including network ties and a subsidiary's understanding of how to benefit from the country's science and knowledge base through a certain degree of embeddedness (Achcaoucaou et al., 2014). E2 said:

In Prague, we have data that shows us we have a lot of great talent in Eastern Europe. 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 is really good.

In other words, the stronger the linkages that a subsidiary builds with its partners within the network, the higher will be its propensity to share knowledge (Michailova & Minbaeva, 2012).

According to Govindarajan and Ramamurti (2011), when located in emerging markets, these local innovations by the subsidiary have the potential to be applied by other units of the MNE. E11 confirmed,

We are still a start-up company innovating on a daily bases with long and short-term strategies. We try to come up with the innovation, which is basically almost every time based on what we feel the market is looking for and is going to be adopted worldwide. The innovation we usually first try on a few smaller markets—testing markets, based on the feedback we improve them a spread to other locations.

Emerging markets have been singled out as promising locations for the emergence of innovations—especially so-called frugal innovations—that can be replicated across the MNE (Krishna et al., 2012).

S. Chen and Lin (2018) find that colocation by itself is insufficient to achieve successful offshore outsourcing of innovation, but requires the presence of high interorganisational physical distance combined with low intra-organisational psychic distance; and they highlight the need to jointly consider intra- and interorganisational distances and both physical and

psychic dimensions of distance in offshore outsourcing of innovation. We contribute to the understanding of the concept of knowledge-creation capability by showing that EMNEs' motives to invest in innovation in emerging markets, particularly in CEE, are often driven by cooperation-seeking motives that help EMNEs build knowledge-cocreation capabilities, which work in tandem with knowledge-sharing capabilities (and together with knowledge integration) to improve overall knowledge-creation capabilities. The following sections elaborate on this point, by first clarifying the role of strategic motives for EMNEs to innovate in emerging markets such as CEE, and then focusing in depth on the related knowledge-creation capabilities.

## 5.6.3 Strategic Motives for Innovation Investment Abroad

Interviewed managers cited market seeking and knowledge seeking as the most important motives for their international innovation investment in CEE. The cooperation-seeking motive was also important, followed by diversification seeking and efficiency seeking (see Table 5.2). Market-seeking motives and asset exploitation for EMNEs in emerging markets point to the potential applicability of the current theory developed for explaining FDI of developed MNEs (Gammeltoft, 2008; Luo, 2003; Rugman, 2009). E1 said, "R&D centre in Europe was set up due to the need for geographical proximity to the customer."

5.6.3.1 Market-Seeking Motive. Interviewed managers consider market seeking as dominant while internationalising in the CEE region. EMNEs are instantly searching for new market possibilities and to gain profit in new territories. E10 said in this respect, "Subsidiary in Poland was set up as a greenfield. However, this was based on the request from the customer. The customer approached our company saying—I would start cooperation with you if you set up a branch in Poland." Casson and Wadeson (2018) highlight that EMNEs have one motivation for both knowledge- and market-seeking investment as total costs used are split between them—if company from abroad is acquired, the purchased knowledge can be used in home or another market where the MNE is active, as advised by E9, "Indian market is mostly

driven by what the consumer demands and needs are. Usually, what happens in lead markets is important for us; we will pick up what ideas they will want to take forward."

This creates for them some kind of economic certainty based on which they can engage other motivations as well, as concluded by E11:

When we were in beginning expansion mode, we were entering markets and building subsidiaries from scratch and at some point, we went also for acquisitions to get the user base much quicker. We usually look at the adaptation of new innovation or existing product from somewhere else to get quickly to the market.

E5 added, "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." This conforms with Laurens et al. (2015), who argue that technology-based motives remain the most important driver but the gap with market-based considerations has narrowed.

E6 experienced market-entry motivation to go to Slovakia based on its customer's business requirement as follows:

Headquarters decided to follow our customer who asked us to open manufacturing in Slovakia, so we build a plant there, it was a greenfield. We started to collaborate with the customer while they went away after a while, but we keep our business on track even without them.

E7 expressed pure market-seeking motivation "The most important motive is to support our business activities in Poland."

Table 5.2

Innovation Motives by Frequency (Out of 11 Emerging–Emerging Cases)

| Innovation Motive | Primary | Secondary | Other | Total |
|-------------------|---------|-----------|-------|-------|
| Market seeking    | 7       | 1         | 0     | 8     |
| Knowledge         | 4       | 4         | 0     | 8     |
| Cooperation       | 0       | 2         | 5     | 7     |
| Diversification   | 1       | 1         | 2     | 4     |
| Efficiency        | 0       | 2         | 2     | 4     |

5.6.3.2 Knowledge-Seeking Motive. The knowledge-seeking motive was a bit less popular than market seeking, as while it was mentioned by eight companies, only four of the interviewed EMNEs managers in CEE cited it as a primary motive out of the interviewed. E1 said, "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." MNEs seeking knowledge are searching for innovation hubs in their areas of operation to enlarge their knowledge base and level of innovation, and meet the needs of the local market (Strehl & Ghosh, 2003). "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," said E5.

MNEs use similar knowledge-intensification actions to their customers, suppliers, and other stakeholders, and incorporate them with their current knowledge bag to reduce the cost of their future innovation (Chung & Yeaple, 2008). E3 mentioned, "Headquarters are looking for companies to be acquired that complement their business. That brings specific skills, knowledge and products to their group portfolio." Further, with today's economic growth of emerging markets, it is also increasing the number of international locations participating purposely on the global innovation system (Awate & Mudambi, 2018). As E11 noted:

I think that the Czech subsidiary is a very good example of the innovation which could come from a small country and could be adopted worldwide, especially with specific daily lunch menu culture. This product was specifically created for the Czech Republic, where people are used to having daily lunch in the restaurants, which includes sharing daily menus. Once it was rolled up in the Czech Republic, we decided to go worldwide. This way, [while] originally [created] for the Czech market, we have created several times innovation which was adopted by other markets.

5.6.3.3 Diversification-Seeking Motive. Delios and Beamish (1999) find that diversification across regions brings more opportunities and benefits than difficulties and increases firm performance. EMNEs are motivated to internationalise and gain their skills and knowledge from abroad by learning together with their partners to diversify their portfolio of knowledge (Cyrino et al., 2017). E2, E4, and E5 mentioned diversification-seeking motives while making the decision where to locate their knowledge-creating subsidiaries. E4's reason was spreading its activities in different regions based on the nature of its raw-material scope of business: "Headquarters decided to acquire our subsidiary to get connection to our knowledge and flexibility and as they wanted to spread activities in different strategic geographies." E2 and E5 wanted to tap into the skills and knowledge base in different regions around the globe. E5 said:

Main innovation centres (technology, packaging, marketing, procurement) for the group are in London, U.K. and Zug, Switzerland. We take the opportunity of our worldwide presence, we use and learn from diversity and differences in each location—Europe, the Americas, Africa, Australia, Asia.

The findings link to arguments in the literature suggesting that firms from developed countries maximise their performance when they operate across a moderate number of developed regions and a strictly limited number of emerging regions (Qian et al., 2010). This

explains why internationalisation by most international firms is regional rather than global (Qian et al., 2008). E5, with innovation centres in the UK, Switzerland, and the Czech Republic, and E2 with innovation centres in Australia, Malaysia, South Africa, and the Czech Republic, provide an illustration of this theory, which is now being challenged with some new findings for EMNEs, such as that the relationship between firm internationalisation and performance is *s*-shaped, and that R&D intensity and learning capability significantly strengthen the impact of internationalisation on firm performance (Tsai, 2014).

**5.6.3.4 Efficiency-Seeking Motive**. One of the reasons EMNEs are entering foreign markets is to increase their efficiency of knowledge creation (Varela et al., 2014), as E2 reported:

We realised the cost in Melbourne was much higher than Kuala Lumpur, so we thought "You know, let's go into Prague, the cost is not as cheap as KL, but not as expensive as Melbourne." Lower cost of skilled people is also one of the motives to be in the Czech Republic.

Interestingly, some MNEs (in our sample, E6 and E7) are using the CEE region as a gateway to enter the EU (Polish Press Agency, 2016) and to get access to the common EU market (Bieliński et al., 2019). E7 stated:

Poland was HQ's attempt to break in the European market, it did not go very well. So, we are still more focused on CEE, as the costs are reasonable. We purchased subsidiary in Bulgaria and to equal our presence in Europe, but you have to understand that in our business, for an Indian company, it's very difficult, especially now.

E6 followed their customer abroad (to Slovakia) to increase and enhance production and sales with a new production facility (Álavarez-Gil et al., 2003). Despite the customer's decision to terminate their presence in Slovakia later on, the E6 respondent disclosed, "We continue manufacturing in Slovakia because labour costs, suppliers and vendors are pretty good. People

are skilled, very, very skilled. Western Europe is extremely expensive. Eastern Europe is cheaper and people are very skilled."

Montout and Sami (2016) find that MNEs, in some cases, prefer to locate their knowledge-creation activities in locations with ample skilled labour and, as confirmed by most interviewed managers, lower workforce costs make the CEE location even more attractive, as uncovered by E10:

Motivation to be in Poland is customer proximity, skills and language capabilities and labour costs are important factors as well (we are talking about huge numbers here). Plus, factors such as economic and political stability. But then it's labour costs that also need to be factored in and it's very reasonable. We are talking about big figures in terms of headcounts, it is 1300 people.

5.6.3.5 Cooperation-Seeking Motive. In recent years, in which the sense of knowledge-creating economic activities has changed swiftly, we have witnessed a rapid increase in firm cooperation in different international coalitions and networks (Gulati & Zajac, 2000). In a world where the knowledge-based approach receives more and more interest, MNEs are seeking benefits from external collaborations in public or private spheres (Adler, 2001). Most of the interviewed managers from our sample confirmed the existence of cooperation-seeking motivations while seeking knowledge in the CEE region. Some of those who had entered a new market shortly before our interview mentioned that even while they were not cooperating with other stakeholders at that moment, they were willing to do so in the near future. As E2 said:

We don't do any collaboration or cooperation yet. That's something I wish to do in the near future. We are only I 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, Czech Republic.

Firms from our sample, specifically E1, E4, E5, E8, and E9, emphasised the importance of cooperation with customers, consumers, distributors, public and private agencies, universities, knowledge orchestration silos within their network, distributors, and other companies. Some of them mentioned a fear of knowledge leakage, based on a mistrust of risky external cooperation, and the potential loss of their competitive technology advantage (Narula, 2004; Teirlinck & Spithoven, 2012), as confirmed by E3:

Innovation is a mixture of local requirements and requirements of our Korean partners from HQ. It 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 have to be careful whom and what we are saying as we do not want to expose sensitive information to our competitors.

At the point when mutual trust is established between partners, the relationship can be converted in their cooperation, based on the exchange of information and knowledge adaptation (Isaac et al., 2019).

### 5.6.4 Knowledge-Creation Capability

Home- and host-country contextual characteristics (including location advantages and disadvantages) are important factors to consider in terms of relationship with and impact on innovation-investment motives. However, to answer our research questions more thoroughly, in particular the second research question about the alignment of innovation motives with organisational knowledge-creation capabilities, we need to consider a broader set of factors including firm-specific ones (in line with our initial tentative conceptual framework). Our research design is grounded in the inductive, exploratory method, and hence while we focused on concepts such as international innovation-investment motives and knowledge-creation capabilities which we specified in the research questions, we also kept an open mind for

emergent concepts and themes that we could derive from first-order indicators. Table 5.3 highlights the indicative keywords most frequently mentioned in interviews.

Knowledge creation was the most frequently mentioned phrase (partly influenced by our questions targeted at exploring and expanding our understanding of this concept). Motives were also mentioned frequently, including cooperation seeking, and we have discussed the motives in the previous section. Knowledge-integration, knowledge-sharing, and knowledgecocreation capabilities were the final theoretical themes (linked to the RQ2) that we derived after coding and aggregating interview quotes into first-order indicators and six second-order concepts (based on frequently mentioned phrases), including: (1) ways, quality, and speed of external market-knowledge acquisition; (2) international-knowledge coordination, orchestration, and implementation; (3) intra-corporate knowledge flows, decisions, and factors; (4) scale and aims of innovation projects; (5) internal and external cooperation seeking; and (6) customer-needs orientation, customisation, and marketing decisions. Figure 5.2 summarises relationships between first-order indicators, second-order concepts and theoretical themes, and the following sections discuss them in depth.

Table 5.3

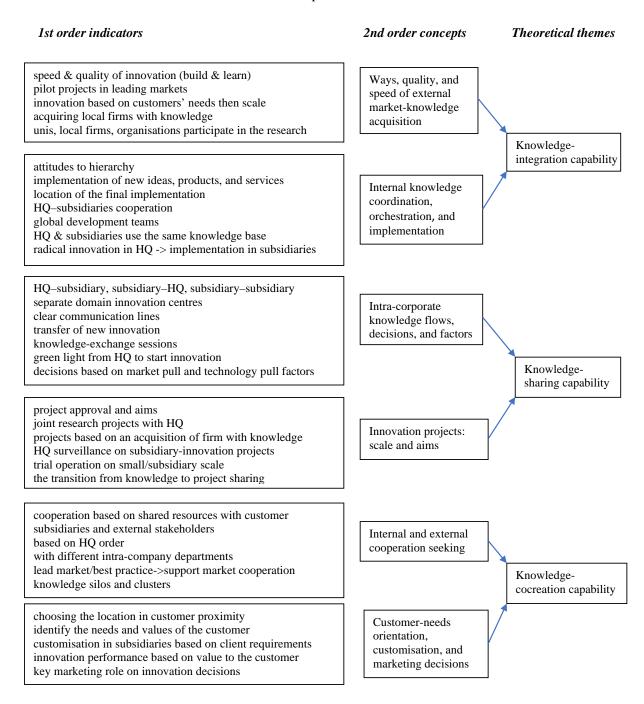
Indicative Keywords and Phrases That Informed Thematic Analysis of Interview Data

| Indicative keyword/phrase   | Frequency | Share |
|-----------------------------|-----------|-------|
| (Knowledge) creation        | 81        | 22%   |
| (Innovation) project        | 45        | 12%   |
| (Innovation) motive         | 39        | 11%   |
| Product (innovation)        | 38        | 10%   |
| Cooperation (seeking)       | 27        | 7%    |
| (Knowledge) integration     | 23        | 6%    |
| Customer (orientation)      | 22        | 6%    |
| (Knowledge) flows           | 21        | 6%    |
| Cocreation (capability)     | 12        | 3%    |
| (Organisational) capability | 12        | 3%    |
| Marketing (capability)      | 12        | 3%    |
| (Knowledge) sharing         | 10        | 3%    |
| (Innovation) performance    | 9         | 2%    |
| (Organisational) hierarchy  | 7         | 2%    |
| Diversification (seeking)   | 5         | 1%    |
| Process (innovation)        | 5         | 1%    |
| Total                       | 368       | 100%  |

*Note:* The terms in parentheses were implied, the frequency count is based on the words not in the parentheses.

Figure 5.2

First-Order Indicators, Second-Order Concepts, and Final Theoretical Themes



# 5.6.5 Knowledge-Integration Capability

# 5.6.5.1 External Market-Knowledge Acquisition: Ways, Quality and Speed. HQ

involvement, driven by subsidiary internal embeddedness, enhances the innovation impact of the subsidiary, which in turn influences innovation importance at the corporate level (Ciabuschi et al., 2011). E9 confirmed:

Global office acts mostly in terms of product innovation, they will really innovate an idea which they think that it's in global need and want it in the market. Headquarter will innovate it and then spread to other locations. Or vice versa, where in the lead market is some kind of request for an innovative solution, so headquarter will also take up some of the requests and work on such kind of innovation.

### E2 commented on a related matter:

We do innovation in very quick interaction where we build, we learn and then we measure. From the point where we have validated the solution, we decided we are going to move forward, then we scale, we start going big on the idea of innovation together with our subsidiaries.

Felin and Zenger (2014) find that individuals or organisations with relevant knowledge may be unknown to the firm, and thus mechanisms for self-selection or self-identification are critical. E2 respondent added more in this regard:

Innovation for us is when we don't know the problem and we don't know the solution. How we develop or how we go from unknown problems to unknown solutions? Because often we don't know what solution we need to build because problems are very unclear. And in emerging markets like where we started, there are a lot of problems that are unknown. We do a lead start-up of development or innovation. So, the cycle is we initially visualise. We have a plan or a blueprint of what we want to do, and we use that like a lead canvas kind of approach for that where we identify who are the customers and what are the values to this customer. And then we look at what is the problem in providing this value to this customer and how we can solve it and innovate.

### E2 also mentioned.

You are not going too fast until you crash. We have to go as fast as we can innovate, and overthinking could be very costly. It is just about having a good feeling, validate

the problem and solution very quickly, come up with a viable product, validate the value and keep moving forward that way.

MNEs' growth is not only about the geographical spread but also about the accumulation and growth of the knowledge base as firms need multiple technological competences because products, processes, and services increasingly require a greater of proficiency in different areas (Mudambi et al., 2018). Market-driven exchange relationships often provide weaker incentives for sharing knowledge compared to hierarchically governed exchange relationships (Felin & Zenger, 2014). E4 commented in this respect,

HQs give us the order to try to realise cooperation with other entities and to be engaged in developing or appliance of technologies, new knowledge within our scope of work.

Normally decisions are disputed from top level management to the lowest possible position.

Subsidiaries will not be able to increase their impact through initiatives unless they receive the attention of HQ. Also, subsidiary initiatives have a direct impact on subsidiary autonomy, but these initiatives also evoke monitoring at the headquarters, which in turn reduces the autonomy of the subsidiary (T. C. Ambos et al., 2010). E7 said, about this:

Company is run by one man sitting on the top of the pyramid who decides everything.

The company needs to empower people who are capable of making those decisions as they still refer to their superiors as Sir. Unless your master is completely on board with you, you do not facilitate innovation. They are still very much based on intuition.

From the previous two statements, it is quite apparent that in the cases of E7 and E4, the approach of HQ towards subsidiaries is "directive." On the other hand, the manager of E3 expressed the independent role of "his" subsidiary as follows,

It is quite difficult for me to judge benefits or barriers in the Czech Republic because we are the subsidiary with the know-how. No one should try to transfer development or research [from the Czech Republic] to Korea. 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 Korea. I think that it is a little bit politically (internally) sensitive. We don't cooperate with other European subsidiaries.

E9 answered differently, "Global office acts mostly in terms of product innovation. They will really innovate an idea which they think that it's in global need and want it in the market. HQ will innovate it and then spread to other locations." E10 respondent noted on a related topic,

Our innovation is in the architecture space, it's about designing IT infrastructure to address demands from the business. Employees are encouraged to look for continuous improvement innovation initiatives and these are later reviewed by higher management. Adding value is one of the principles of how we make sure that our employees continue to be innovative across all geographies. It's a continuous improvement kind of innovation initiative. All projects are reviewed by higher management for approval. It is extensively promoted within the organisation and it's also one of the key performance indicators that could actually contribute to the bonus each employee would receive at the end of the financial year.

Managing multinational operations is often required to balance competing goals between subsidiary-level responsiveness and central global-competitiveness coordination, which involves coordinating decision making with relevant data, building consensus among key managers, and carefully managing relative power among them (Doz & Prahalad, 1984). E5 commented on this matter as follows:

Different culture, geography, point of view, experience and markets are drivers of our diversified thinking. Basically, we do innovation offshoring everywhere, as each country

has an opportunity and is motivated to become a leading market for any project that is then spread around the world.

Reasonably harmonious subsidiary–HQ relationships were found in the cases of E5, E9, E10, and E11.

**5.6.5.2** Internal Knowledge Orchestration: Coordination and Implementation. The integration of knowledge is connected, based on communication and socialisation, to information shared between the HQ and the subsidiaries and vice versa (Nohria & Ghoshal, 1997). E1 mentioned,

Our business development units understand and specify the needs of the market. R&D and innovation create solutions and based on these marketing and sale departments highlight the business, sales, and marketing strategy. Once the innovation project is finished, it is transferred to Bangalore headquarters for implementation.

# E4 added, in this respect:

We have a very flexible, defined, and useful way of sharing knowledge, technologies, and information. As well as reporting procedures and protocols as in developed-country companies. We use the same knowledge base, technology, experience, and organisational structure. There is no difference in organisational structure between us and our developed-country competitors.

Similarly, E5 explained how more experienced and settled subsidiaries help others:

We had strategy just with knowledge sharing a few years ago, now we also share projects between subsidiaries and HQ, including sharing knowledge between subsidiaries directly and concerning product development for other countries—for example—there is a need to launch new test or sort of product modification in certain market. Our subsidiary may help them with recipes, manufacturing processes, marketing and launch a new product under a new name somewhere.

Grant (1996b) shows the importance of the integration of individuals' specialised knowledge, linking to what 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." This also links to what Bouquet and Birkinshaw (2008) find, namely that unique subsidiary-innovation results lead to its prominent position within the firm and that also means subsidiary generative capability or vice versa. According to Michailova and Zhan (2015), integrative capability can channel created knowledge to the subsidiary, and E6 confirmed in this respect that even more important than knowledge itself is its utilisation and integration and how it is stored within the firm:

Most of the radical innovation is done in headquarters. Then these results go to subsidiaries for implementation and modifications as they have teams there that organise all product documentation and drawings. All liability and approval tests that support the project are done in subsidiaries. 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. There are several production plants and their managers are sharing, exchanging information, and learning from each other on similar projects. And we also have projects that would benefit all the sites where they are able to see the same problem. This is happening a lot, mainly related to manufacturing improvements.

In the case of E6, we found a specific situation with a contradictory point of view between the subsidiary implementing innovation and HQ, where subsidiary managers play a critical role in helping establish the linkages and pipelines (Gaur et al., 2007):

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. And on the other hand, if you do not have a novel product, next year you are not going to have the market. The solution is that you consider in the project that some loses are going to happen when implementing the project. You also need to involve people from manufacturing to motivate them and make them part of the project, because you are going to directly affect their KPIs. If you negotiate correctly with them, they can plan during the phase of implementation lower KPIs. There is a lot of uncertainties if you implement something that is not going well for the first time than it is a big problem for production and innovation as well. Headquarters have to give always green light to subsidiaries if they decide about some project. If you ask me about manufacturing, then it's a bit different because their machines and equipment there is most of the knowledge in the site and when they need to modify something all the knowledge comes from the guys that are there. (E6)

The E6 interviewee explained different subsidiary competence in radical and manufacturing innovation; subsidiary managers, thus, act as boundary spanners, enabling subsidiaries to pursue innovation (Kostova et al., 2016). E5 explained actual subsidiary-innovation-implementation involvement based on HQ approval as follows:

Although being a part of worldwide conglomerate seems to be very useful, in some cases as flexibility, very specific/creative ideas and projects may be more difficult to get approved by the headquarters. 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.

As found by Zhong and Wonham (1990), subsidiaries enforce a corresponding local control requirement but must refer to the high-level entity (HQ) to coordinate commands. On the other hand, E8 showed strict hierarchy rules:

Generally, the innovation activities are highly guarded by high management. Innovation is managed by a strict hierarchy; one person who is knowledgeable enough and often do work in the area for a long time will manage the project. With respect to management, business management in Europe is at least 15 years ahead of India. Innovation is managed realistically in HQ or subsidiaries and the information is conveyed to employees in a hierarchy manner and authority to have data restricted for various levels.

This is consistent with Mintzberg's (1983) perspective—a hierarchically unbalanced, strictly formal relationship between subsidiary and HQ, regulating activities according to HQ's expectations.

# 5.6.6 Knowledge-Sharing Capability

**5.6.6.1** Facilitating Intra-Corporate Knowledge Flows: Decisions and Factors. HQ of the companies from our sample have a different point of view on subsidiary independence in knowledge creation and decisions on innovation projects and the related knowledge flows. E7 said,

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.

Similarly, E8 added, "There is strong knowledge transfer to an acquired European subsidiary." This aligns with the suggestion that MNEs in the past concentrated most of the innovation projects in HQ, with a gradual change in subsidiary roles away from replicating and supporting market expansion or lowering the costs to more cross-MNE knowledge transfer and knowledge creation, based on HQ needs (Bartlett & Ghoshal, 1986). 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 which is happening in some of the markets, then we definitely talk about it and send a memo to the entire team or organisation. As innovation headquarters are in India, there is not much R&D we do in Russia. Mostly getting closer to the consumer, product modification, adaptation and ensuring that product is available to them at the right time and place. We are present in almost all of the emerging markets, including European emerging markets. As India and Russia are different, that becomes a challenge in understanding this gashing right inside of the right innovation.

On the other hand, many subsidiaries of MNEs from our sample act as independent innovators, developers, and researchers (Rugman & Verbeke, 2001). E2 respondent said:

Now we have four innovation centres: Melbourne, Kuala Lumpur, Prague, and Cape Town—we have divided these centres into four separate domains and they innovate within that domain. So, 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.

E1 added, regarding their innovation and local market adaptation (Criscuolo & Narula, 2007), "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." The company also has knowledge creation with company-wide value (Frost & Zhou, 2005), "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," according to E3.

5.6.6.2 Managing Innovation Projects: Scale and Aims. K. Z. Zhou and Li (2012) find in their sample of emerging (Chinese) MNEs that a firm with an extensive knowledge ground is more competent in creating radical innovation via internal knowledge sharing and, in contrast to a firm with an in-depth knowledge base through acquiring another firm to their portfolio. The E4 manager confirmed this, "Maybe this is one of the reasons and advantages they have in mind during acquisition that they needed technology centre and petroleum industry in Serbia should be involved in that kind of projects, innovation, technology collecting and exchanging." Similarly, E3 added:

Concerning the motivation reasons, I would say [they] are slightly different than what you can see in other Korean companies as Samsung, etc.—what they try to develop is for a specific market. As local people here can adjust products better than expats from Korea. In our case, it's the reverse situation because we are owners of the know-how, so HQ bought us with this knowledge or because of this knowledge [as they acquired companies with long-term created knowledge].

Subsidiary manager of E3 said, "We are coordinating the research here. We get certain specific tasks from HQ showing up super critical issues. We have a joint research programme of our subsidiary with Korea. It's jointly financed and tasks are defined by the group." This is in line with McCosh et al. (1998)—coordination of innovation is a fundamental factor ensuring united and connected work of all actors cooperating on multiple projects within MNEs, as confirmed E5, "There is regular interaction (conference calls, meetings, email communications) between HQ and subsidiaries and there are no perspective regulations concerning innovation activities once the project is approved from the central office to subsidiaries." E9 concluded on the issue of HQ–subsidiary cooperation:

Global office acts mostly in terms of product innovation, they will really innovate an idea which they think that it's in global need and want it in the market. HQ will innovate

it and then spread it to other locations. Or vice versa, where in the lead market is some kind of request for an innovative solution, so HQ will also take up some of the requests and work on such kind of innovation.

Many of the interviewed managers mentioned the HQ role in innovation processes. For example, E4 highlighted the role of HQ management,

Normally decisions are disputed from top level management to the lowest possible position—to the people that are going to execute these strategic issues in real situations, real cases. There are criteria that the organisational board in headquarters applies and makes the priorities. And after that, they are passing them down, to the operational level.

On the other hand, E5 emphasised reciprocal HQ-subsidiary cooperation, as follows: "Subsidiaries receive feedback on innovation projects from headquarters and vice versa. It is very pragmatic, practical, not dogmatic, with local flexibility and global overview." E11 added, "The main reason which is driving the innovation outside of India to subsidiaries is local approach and knowledge." C. S. Kogut et al. (2019) find that decisions can be centralised only when knowledge can be codified and transferred; otherwise, decision making must reside where the knowledge is. Statements of managers in our sample are inconsistent with the abovementioned arguments, as some of the managers tended to maintain decision-making power. Finally, regarding the issue of HQ, the innovation manager of E6 said: "R&D activity and HQ is in Brazil where a range of four hundred engineers work in the innovation and R&D area. All the other subsidiaries have R&D office to support their product development, production processes and other."

### 5.6.7 Knowledge-Cocreation Capability

**5.6.7.1 Exploring Internal and External Cooperation**. Managing knowledge processing in value cocreation among multiple ecosystem actors is a key requirement for

process innovation (Eriksson et al., 2016), as E1 said: "Cooperation with our customers is based on sharing resources on marketing, sales, training and technical knowledge. There are strong technological synergies and interactions with customer's regional innovation centre to utilise our expertise and knowledge." As found by Ahuja and Katila (2001), MNEs have to look outside their boundaries (partners, customers, suppliers) for knowledge sources that are needed to spark radical innovation. E5 mentioned innovation outsourcing,

We outsource the knowledge in 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.

E8 commented regarding the combination of internal/external stakeholders and knowledge-silos project,

For lifetime pharmaceutical research we are using silos. Silos that are created with scientists, universities, and industry itself. They are really connected only to industry collaboration. And industry—academy collaborations are really poor. I am working on the idea to change the way how silos are organised and managed and do it with a more orchestrated manner, as we have to feed the knowledge silos properly with information from different areas, including from scientists and students.

Strong interaction between MNEs and stakeholders improves the quality of innovation performance (Ashok et al., 2014; Doroshenko et al., 2014).

Regarding external cocreation, managers mentioned cooperation with universities, external agencies, customers, suppliers, and end-users. For example, E3 noted,

We have research capabilities and we 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 finding of Arant et al. (2019), namely that cooperations between universities and MNEs are the critical and necessary drivers of radical innovation. E4 added concerning their 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 institutions from Europe and the US.

Strong ties and joint research with universities were mentioned by several companies from our sample. For example, E6 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 cooperations facilitate access to firm/university external knowledge and complementary resources and enhance knowledge diffusion through collaboration (Guimón, 2013). E10 added, "Definitely we work together with universities and other organisations, but this is also from a recruitment perspective. In order to get skilled resources, we make sure that our brand is recognised by students." E8 concluded, regarding this issue: "Location of our headquarters is rich in government institutions, universities or research organisations, it is a knowledge cluster." E7 said: "We target people who are at the top tier of their particular area and we let them develop out business for us, including creating consumer network."

On the other hand, E7 and E11 advised no cooperation with host-country universities as their innovation is concentrated in home-country HQ. E7 said: "Connection with universities and local scientists is not really that strong." E11 respondent noted: "We are not cooperating with universities in the Czech Republic in terms of innovation, because the main portion is coming from India." E2 has four innovation centres spread around different continents:

We don't have an innovation headquarters, but we have four separate development centres that focus on different areas of innovation. Every region is empowered to innovate and build what they think is right. From a collaborative point of view, we have weekly global lead meetups, where everybody shares the idea and tries to challenge each other on why this is great or not.

In this case (E2), MNEs face increasing demands in managing the complexity of different interactions, as they have to deal with multiple embeddedness across different geographies through effective organisation of their networks—different innovation HQ locations and subsidiaries, with their modification roles as well (Meyer et al., 2011). This shows in the case of E6:

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 headquarters and improvements independently in the plant.

Several company managers from our sample mentioned the process of knowledge cocreation via a "leading market" where the attitude of individuals to incorporating innovation is crucial. Nahapiet and Ghoshal (1998) find that an atmosphere of cooperation opens access among group members and creates individual motivation to exchange knowledge with other

group members. Innovation is created and tested in the so-called leading market and once proven it is spread to other locations, as confirmed by E5:

The principle is probably that the projects are developed by subsidiaries in each country where we are present and if it is successful and running smoothly the become co called "lead market" in a specific project and cooperate with other countries which would like to adapt the project as first so-called "market support." If it works, they pass all knowledge, ideas, and principles of the project to other countries around the world. We are very satisfied with this system. Innovation is created by the category strategy team based on the internal and external inputs. Results are validated on a small scale on the local level. Based on the results, successful projects are passed for regional and later on, in some cases, to global HQ for approval. After implementation and experience form real life, there are interactions to "perfect results" of the project.

U. Andersson et al. (2005) propose that innovatory activities of business actors depend on their embeddedness in the surrounding network, where interaction promotes mutual learning through knowledge exchange and development. E10 said regarding this issue:

Whenever things can be done better, it's about some best practices or identifying some gaps. And when it comes to creating knowledge, because the IT outsourcing is knowledge, it is purely knowledge driven. Each time we observe new situations, this is being described and a solution is looked up whether this is a trend or is it one off situation. We use local knowledge and innovation ties with our partners. The solution is searched and documented and usually, it's being shared across a given engagement. The next step would be to introduce this innovation across the delivery centre and share it across the entire organisation. There are the tool and forum for knowledge managers to discuss certain aspects. This works the same way for all geographies.

# 5.6.7.2 Embracing Customer Orientation: Customer Needs, Customisation, and Marketing. The cocreation process involves managing cocreation with several different stakeholders during the innovation process (Kazadi et al., 2016), such as marketing, sales, procurement, R&D, and other company departments are involved. E1 mentioned, in this matter: "We use the business development team for global innovation, integration and interaction. We have regular phone call meetings where is represented each subsidiary and HQ by one dedicated person." The MNE is developing its dynamic capabilities, such as integration, building internal and external competences to follow customers' changing demands (Teece, 2007). E3 said, in this respect:

Decisions concerning innovation projects come from the company management, sales and marketing people who identify market demand. Then the technical people identify where are our weaknesses in performance and reliability. Based on this, the management decides what should be the research target.

### E6 manager concluded, on this topic:

Marketing and sales are involved from the very beginning, so you can purify the project and see which one is most important among all the others. But the really important are market pull and technology push factors where we develop not only based on the market opportunities, but we innovate internally related to technology that has the potential to come to the market with a really strong product. These two mainstreams balance a bit of being able to bring something different and more innovative. Having those features, then we can look forward to the market. That is internal technology development that jolts those kinds of research lines, so the balance on that is really important. Procurement is more of a support area, so once we know what we need to do, then we contact the vendors and say, "Can you develop this for me? Can you bring this thing to a new development? Can you support my huge project?" Many contribute to the

development and company is driven by timelines, so racing new products to the market as soon as possible is mandatory; that is the main driver.

Dobrzykowski et al. (2012) find that positive relationships between supplier and customer collaboration/integration, and procurement capability, are positively associated with firm performance. In the case of E10, where most of the innovation is done centrally in HQ based on subsidiaries' contributions, the manager informed:

We have the central team in India who will be coordinating and collecting all the ideas in a virtual place where people can meet and those could be used in other geographies. We don't distinguish whether the idea was created in Poland or somewhere else, it's all being shared across geographies.

However, Ciabuschi et al. (2012) show that HQ are able to set up innovation strategic processes on a subsidiary level; this involvement may obstruct overall subsidiary-innovation performance.

Company E3 concentrates on innovation based on customer relationships, interaction, and requirements: "Our innovation is capable of making exactly what the customers ask for. We are supported by our innovation competence and ability to develop products based on business needs worldwide." E9 respondent commented on a related issue:

In Russia, we are innovating in terms of 'striking the right kinds of deals' with our partners, so we get the medicines available to the patients. It's more kind of marketing innovation. We work with all major distributors, hospitals, doctors, and patients. We try to maintain regular contact with all these stakeholders (pharmacists, doctors, patients).

This aligns with findings of O'Hern and Rindfleisch (2008), who advise that customers are central, vital participants and active cocreators of the products they use, capable of creating new products with little help from MNEs.

# 5.7 Conceptual and Theoretical Development

The preceding sections have given some preliminary answers to the first research question of this chapter, namely: Why and how do emerging MNEs conduct innovation in emerging Europe? The second, theoretically driven research question, asked: How do innovation motives align with organisational knowledge-creation capabilities (knowledge sharing, cocreation, and integration) of emerging MNE subsidiaries innovating in emerging Europe? In this section, we will answer this second research question by integrating insights and discussion from an earlier section (Strategic Motives for International innovation Investment Abroad) and sections that focused on organisational knowledge-creation capabilities. As a result, this section aims to contribute to the knowledge-based theory of organisational capability (Grant, 1996a), to our understanding of the concept of knowledge-creation capability (Arikan, 2009; Smith et al., 2005), and to extend the model of international-knowledge connectivity and knowledge-creation capability presented in Chapter 4.

# 5.7.1 Knowledge-Creation Capability: Contributions to Understanding the Concept

Chapter 4 and the model of international-knowledge connectivity and knowledge-creation capability explained and defined knowledge-creation capability as "how MNE knowledge flow is converted to innovation performance," and offered two specific propositions. One proposition of that model linked MNE subsidiary-knowledge flows to MNE subsidiary-innovation performance, and the other proposition pointed to the moderating role of motives in that relationship. In the analysis and discussion in the preceding sections, we have unpacked knowledge-creation capability into its three core elements (knowledge-integration, knowledge-sharing, and knowledge-cocreation capabilities) to provide greater detail than Chapter 4. However, the concept of knowledge flows from Chapter 4 is still present here, as intra-corporate knowledge flows, decisions, and factors are one of the second-order concepts resulting in the

theoretical theme of knowledge-sharing capability, which is increasingly more important for innovation performance than mere knowledge transfer (Cano-Kollmann et al., 2016).

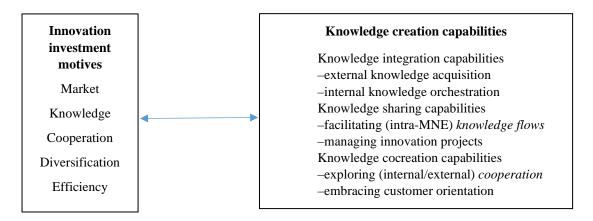
Moreover, this chapter acknowledges but expands the well-known concept of knowledge integration, which is a key element of Grant's (1996a) knowledge-based theory of organisational capability and the critical challenge in the process of developing knowledge-creation capability according to the model introduced in Chapter 4. We move beyond external market-knowledge acquisition versus the internal knowledge-sharing paradigm of Zhu and Li (2012) by discovering that *international-knowledge orchestration* (including orchestration of knowledge silos emphasised by E8) is an important element of knowledge-integration capability and that this drives knowledge-creation capability. Innovation orchestration capability has been conceptualised before (Ritala et al., 2009), with a focus on defining the organisational and individual level determinants, but there remains an opportunity to develop this concept further and link it to international and country-level factors, not only organisational-level factors (Nambisan & Sawhney, 2011) such as company life-cycle stage (Carnes et al., 2017).

One of the initial attempts in this respect was J. Liu (2018), with a Ph.D. thesis on knowledge orchestration and digital innovation networks in the Chinese context. Ness (2017) introduces a concept of polyphonic orchestration with a focus on theoretical contribution to understanding leadership as a relational and dialogical practice but does not root the orchestration of knowledge processes for innovation in the KBV or capability theories (Pitt & Clarke, 1999). Haider and Mariotti (2016) focus on the orchestration of alliance portfolios, including the role of alliance-portfolio capability, but again do not draw strong links to the KBV and internationalisation of innovation streams of literature in which this chapter is grounded and to which it aims to contribute. This chapter contributes to the KBV and knowledge-based theory of organisational capability (Grant, 1996a) by incorporating the concept of *internal* 

knowledge orchestration into it and linking it to knowledge integration and knowledge-creation capability (Arikan, 2009; Z. Su et al., 2016). Next, we will discuss the relationship between international innovation motives and knowledge-creation capabilities. Figure 5.3 provides a starting point and Figure 5.4 more details.

Figure 5.3

International Innovation Motives and Knowledge-Creation Capabilities

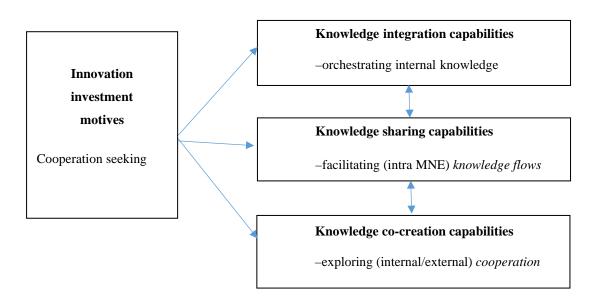


The alignment of strategic motives for international innovation abroad and knowledge-creation capabilities are captured in the relationship between our second-order concept termed "internal and external cooperation seeking" with the theoretical theme of knowledge-cocreation capability and its role in building up overall knowledge-creation capability. We have discussed in depth various aspects of internal and external cooperation seeking (motive) in the preceding sections, including cooperation based on shared resources with the customer, with subsidiaries and external stakeholders, and with different intra-company departments, and the role of knowledge silos and clusters. In line with our model of international knowledge connectivity and knowledge-creation capability from Chapter 4, it is hence evident that the cooperation-seeking motive can play a moderating role in the impact of knowledge flows (and knowledge-sharing capability) on effective knowledge-creation capability (that can ultimately lead to innovation performance).

While we have not incorporated innovation performance explicitly into this chapter's discussion, the findings and discussion in the preceding section indicate that there is an alignment between the cooperation-seeking motive and knowledge-creation capabilities and that this happens through the virtuous relationship between knowledge-integration capabilities (especially orchestrating internal knowledge), knowledge-sharing capabilities (especially facilitating internal and external-knowledge flows), and knowledge-cocreation capabilities (especially exploring internal and external cooperation; Kazadi et al., 2016; C. Y. Su et al., 2016). Figure 5.4 provides a summary of these arguments. The model departs from some of the current literature (e.g., Hobdari et al., 2017) and our initial expectations that organisational capabilities drive FDI motives; in our specific case of a cooperation-seeking innovation motive, the analysis implies that the strategic orientation underlying this motive drives specific, interrelated knowledge-creation capabilities (orchestrating internal knowledge, facilitating knowledge flows, and exploring internal and external cooperation). We build on and extend the arguments of Mu et al. (2017), who suggest that networking capabilities moderate the relationship between strategic orientations and new product development performance.

Figure 5.4

Cooperation Seeking, Knowledge Integration, Sharing & Cocreation Capabilities



### 5.7.2 Innovation Motives, Location-Specific Factors and Knowledge-Creation Capability

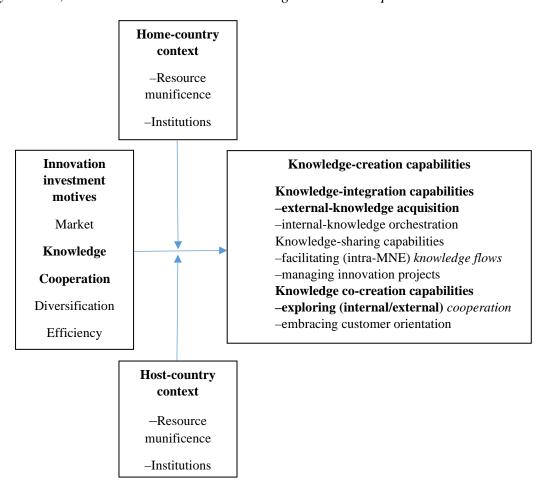
Finally, it is also essential to consider the role of home- and host-country context (in our case, emerging economies and particularly the CEE context). Our initial conceptual framework from Figure 5.1, based on the extant literature (Cuervo-Cazurra & Genc, 2008; Hobdari et al., 2017; Verbeke, 2013), implies that international-investment motives are influenced by FSAs (and disadvantages) including organisational capabilities and both home- and host-country location advantages and disadvantages. Our revised conceptual framework from Figure 5.3, based on our data analysis and theoretical development in this section, suggests that innovation-investment motives and a specific class of organisational capabilities (i.e., knowledge-creation capabilities) are interrelated and that the causality may run both ways and be more complex than what is suggested in some of the extant models. Figure 5.4 zoomed in on a specific motive, the cooperation-seeking motive, and showed how it is related to specific aspects of knowledge-creation capabilities (orchestrating internal knowledge, facilitating knowledge sharing, and exploring cooperation and cocreation).

Hobdari et al. (2017) suggest that home- and host-country factors (of emerging economies) such as resource munificence and institutions may affect FSAs or capabilities and these can, in turn, affect motives. A different view, with which we are more aligned based on our findings and discussion, is that home- and host-country factors are boundary conditions or moderators that affect firm-strategic choices (Lu et al., 2014), in our case the relationship between strategic motives and organisational capabilities. In particular, our findings, discussion, and conceptual development point to the potential moderating role of home- and host-country factors in the relationship between cooperation-seeking innovation motive and knowledge cocreation (via exploring internal/external cooperation). There is also a possible alignment between the knowledge-seeking motive and knowledge integration (via external-knowledge acquisition).

In general, we believe that home- and host-country factors such as institutions or resource munificence are not direct effects but are more likely to be moderators or boundary conditions in the central relationship between firm-specific factors (Marano et al., 2016; Rhee & Cheng, 2002) and performance. Figure 5.5 sums up the argument. Consistent with Marano et al. (2016), the model implies that home-country context (such as institutional quality) moderates the relationship between firm-specific factors (in Marano et al.'s study it was between the internationalisation and performance; in our case between investment motives and knowledge-creation capabilities). This extends the theorisation of Hobdari et al. (2017) about strategic motives being driven by home-country institutions, by suggesting that both home- and host-country contexts are moderators in the relationship between FDI motives and capabilities.

Figure 5.5

Home/Host-Country Context, Investment Motives and Knowledge-Creation Capabilities



### **5.8 Conclusions**

Subsidiary roles in transition economies are important for our understanding of economic development and corporate strategies in both emerging markets (Dymitrowski & Ratajczak-Mrozek, 2019; Jindra et al., 2009; Uhlenbruck, 2004) and developed countries (Lunnan et al., 2019). We have an increasingly solid awareness of how the roles of subsidiaries in the MNE network evolve, with many subsidiaries acquiring strategic independence in core activities such as R&D (T. C. Ambos et al., 2006; Mudambi & Navarra, 2004). This chapter contributes to our understanding of how subsidiary autonomy and initiative (including the capacity to innovate) evolve in the context of the regional division of responsibilities between different subsidiaries in advanced and emerging Europe, contributing to the calls for a dynamic research agenda on managing the MNE subsidiary (Meyer et al., 2020).

We show how emerging multinationals' perspectives on making strategic decisions about subsidiary roles and autonomy are often unique, industry dependent, and driven by their knowledge about and evidence of subsidiaries' innovative capacity (S. L. Wang et al., 2014). While operations of emerging multinationals in emerging markets are increasingly gaining the attention of scholars (Luo & Zhang, 2016; Ramamurti & Singh, 2009), motives for investment by emerging multinationals in R&D and innovation (Lynch & Jin, 2016) in emerging markets and CEE, in particular, are still underresearched and poorly understood (Dymitrowski & Ratajczak-Mrozek, 2019). Our study is one of the first in this area.

### 5.8.1 Future Research Directions

In terms of implications for future research, our study encourages more attention to the intersection of the literature on the characteristics of the home country of multinationals and the innovation-locational strategy of emerging multinationals in emerging markets. The role of home- and host-country location advantages and disadvantages, in particular, is vital in our understanding of emerging multinationals and their innovation and locational strategies. Our

study focuses on the underresearched non-Chinese EMNEs investment in innovation in CEE. As a future research direction, we would suggest exploring the link between knowledge management and organisational-performance outcomes, including innovation performance. The extant research has addressed this issue (Kiessling et al., 2009) but not with a focus on EMNEs.

Microfoundations and individual level issues related to innovation management and knowledge sharing in MNEs is another fruitful area for future research (Foss & Pedersen, 2019). The existing studies on this topic have explored the role of global mobility of professionals and the transfer of tacit knowledge in multinational service firms (Guo et al., 2018) and the moderating role of employee retention and HR-management practices in improving innovation performance through knowledge acquisition (Papa et al., 2018). Future research in this area could focus on the roles of boundary spanners (Fleming & Waguespack, 2007; Paraponaris et al., 2015; Schotter & Beamish, 2011; Soriano & Hawkins, 2012; Zhao & Anand, 2013) and biculturals (Brannen & Thomas, 2010; Furusawa & Brewster, 2015) in knowledge management for innovation in EMNEs.

Future research may also explore the benefits and specifics of conducting innovation in emerging Europe, compared to MNEs' home region or other areas, and the costs/barriers to innovation outside of the home region. The future research on EMNEs' innovation in emerging markets can account for this increasing diversity of source and host countries and explain the complementarity of multiple motives behind different types of investments.

# 5.8.2 Limitations and Policy and Managerial Implications

Possible limitations of this study are based on its design. The potential change in ownership structure or withdrawal by the participating firms from the research during or after the period of the study is a limitation that cannot be predicted. Also, it is difficult for qualitative research to provide statistically generalisable results. However, this is not the aim of this study.

This research possibly offers a number of implications for policymakers, business people, and future research on international innovation. Policymakers in Europe can benefit from a deeper understanding of the motives of investors from the above-mentioned regions that are becoming more prominent in European and world innovation. Understanding the unique drivers of these investments can lead to better policies to attract these investors. Business leaders from these non-traditional innovation-source countries can benefit from understanding the experience of early entrants and how they prioritise various motives and locations in Europe. Policymakers and business leaders from CEE markets are keen on bringing more innovative work there, and understanding motives, behaviours, and contingencies behind successful trailblazers of this trend is valuable.

# **5.9 Chapter Summary**

International innovation conducted by EMNEs is an important and emerging trend (Wu & Park, 2019), and it is underresearched when it comes to innovation by EMNEs in emerging markets. Most of the current attention in the research on knowledge and innovation in EMNEs (Lynch & Jin, 2016) is devoted to knowledge sourcing by EMNEs from advanced-market subsidiaries (Ciabuschi et al., 2017). This chapter opens a new direction for exploring innovation investment within emerging markets (Jha et al., 2019; Khan et al., 2019). The conceptual framework of this study points to the least understood and least common type of EMNE innovation investment: that in other emerging markets. The empirical part of this research has explored and explained the motivations of MNEs innovating in the context of developed and emerging Europe.

The frameworks and models presented in this chapter highlight the role of the cooperation-seeking motive (first uncovered and conceptualised in Chapter 3) in the process of building knowledge-creation capability. The chapter has inductively derived the nature of this relationship with a discussion of orchestrating internal knowledge, facilitating knowledge flows, and exploring internal and external cooperation. The final integrative framework of the

chapter also emphasises the moderating roles of home- and host-country context in the relationship between international innovation-investment motives and knowledge-creation capabilities. An inclusion of location-specific factors is essential in understanding knowledge flows in MNEs (Gaur et al., 2019) and can extend our understanding of knowledge-creation capability (Smith et al., 2005), which is, in most studies, conceptualised without cross-border considerations.

After summarising the main insights from this chapter, the next chapter summarises the contributions of each of the main chapters (3–5), develops an integrative framework synthesising insights and models from all chapters, provides managerial implications, highlights limitations and details fruitful directions for future research on the internationalisation of innovation.

# **Chapter 6. Conclusions**

# **6.1 Chapter Overview**

The purpose of Chapter 6 is to summarise the key contributions and implications of this thesis in explaining the role of motives for international innovation investment in the process of innovation internationalisation. The thesis contributes to research in the field of IB by showing how location-specific factors (including home–host country distance and home- and host-country context) and firm-specific determinants of international innovation (including knowledge-creation capabilities and motives for FDI in innovation) interact in the process of knowledge creation leading to innovation performance. The final integrative process model presented in this chapter illustrates the interactions of these mechanisms, synthesising the contributions, models, and frameworks from each of Chapters 2–5. Chapter 6 concludes with practical implications for managers, research limitations, and directions for future research.

### **6.2 Introduction**

Motives for international innovation are crucial for explaining innovation internationalisation. Presented as a series of three journal- and book-chapter-oriented academic papers (Chapters 3 to 5), preceded by an overarching theoretical framework and method chapter, this thesis aims to explain how investment motives, knowledge flows, and location decisions about investment in international innovation differ for multinationals from emerging and developed countries. This question is important because, despite EMNEs being increasingly important in global innovation and knowledge creation (von Zedtwitz & Gassmann, 2016), little research has addressed the interaction of location-specific and firm-specific determinants of international innovation with in-depth consideration and extension of the conceptualisation of FDI (innovation) motives (Cuervo-Cazurra & Narula, 2015), and embedding them theoretically in

the knowledge-based view and knowledge-based theory of organisational capability (Grant, 1996a, 1996b).

### **6.3 Research Contributions**

In three journal- and book-chapter-oriented papers (Chapters 3 to 5), this thesis has addressed the research questions and sub-questions developed in Chapter 1 (and in each of the individual Chapters 3 to 5) and extended the initial theoretical framework developed in Chapter 2. Findings of one chapter partially inform the next, so, for example, the concept of the cooperation-seeking motive developed in Chapter 3 is later used and analysed in more depth in Chapters 4 and 5, and the role of innovation motives in the process of developing international-knowledge-creation capability is first theorised in Chapter 4 and then extended and applied to the context of EMNEs innovating in emerging markets, in Chapter 5. The following section summarises the main contributions and findings and relates them to the initial theoretical framework in Chapter 2 and to the overarching research questions of this thesis.

# 6.3.1 Chapter Contributions

Before embedding international innovation-investment motives theoretically in the knowledge-based theory of organisational capability (Grant, 1996a), in Chapter 4, and analysing them in depth in the least researched context and underresearched type of innovation investment by EMNEs in emerging markets (Chapter 5), the thesis has had to set the stage. Building on and extending Ramamurti and Singh's (2009) typology of cross-border FDI to innovation investment, it has first answered a thesis research sub-question: "How do motives for multinationals' location decisions about investment in innovation abroad depend on their home and host country?"

In seeking to answer this research sub-question (the main research question of Chapter 3), Chapter 3 contributes to research into motives for FDI in innovation and location choices for FDI in innovation by (1) identifying a research gap in studying a largely ignored,

underresearched Type 4 innovation investment by EMNEs innovating in emerging markets of CEE; and (2) conceptually developing a new type of motive for FDI in innovation, namely the cooperation-seeking motive, that this thesis defines as FDI in innovation motivated by building *internal connectedness* within the group (between HQ and subsidiaries and among subsidiaries) and *external connectedness* with stakeholders in host economies (including universities, clusters, and firms).

While cooperation in innovation processes has been studied before, both for internal cooperation (Bartlett & Ghoshal, 1986; Mowery et al., 1998) and external cooperation (Arant et al., 2019), studies analysing the influence of both internal and external relationships of foreign subsidiaries on innovation processes are still relatively rare (Gołębiowski & Lewandowska, 2015). Moreover, while the extant research has emphasised the distinction between location of innovation and R&D FDI in emerging and developed countries (Demirbag & Glaister, 2010; Schmiele, 2012) and the potential distinctiveness of innovation by EMNEs (Ciabuschi et al., 2017; Govindarajan & Ramamurti, 2011; Lynch & Jin, 2016), the role of a *combination* of developed vs. emerging home and host countries (Ramamurti & Singh, 2009) and particularly the emerging–emerging type of *innovation* investment has been largely ignored in the models of and research on the internationalisation of innovation (Di Minin et al., 2012; Giuliani et al., 2012).

Chapter 3 concludes with a proposition suggesting that 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. This suggests that location choices for FDI in innovation are driven by more than market-, knowledge-, and efficiency-seeking motivations stressed in the extant literature dating back to Dunning (1993). Chapter 3

offers a preliminary analysis of the differences of innovation motives based on the home–host combinations, with four same-industry case studies representing each quadrant of the Chapter 3 framework, and this is analysed in more depth in Chapters 4 and 5.

Chapter 4 asks why and how ANZ MNEs conduct innovation in Europe and how distance from the EU affects it. It builds on Chapter 3 in terms of considering the impact of both home- and host-country context on innovation processes but focuses on the role of *distance* (in particular geographic distance) that is a distinguishing aspect of ANZ location and of ANZ investments in distant Europe. The chapter builds on the concept of the cooperation-seeking motive developed in Chapter 3 and incorporates it into the analysis. It also considers the diversification-seeking motive, which has been mentioned by some authors in the FDI motives literature (Deng, 2009) and merger & acquisition (M&A) literature (Rabier, 2017), but has never been fully incorporated into the internationalisation of innovation research and models (Papanastassiou et al., 2019; Vrontis & Christofi, 2019).

Chapter 4 also extends the focus of Chapter 3 from motives and home- and host-country context to the role of knowledge flows in MNEs (Gaur et al., 2019), and the impact on innovation performance, by asking a sub-question of "How do the innovation motives and knowledge flows of European subsidiaries of ANZ firms align with one another and how do they affect innovation performance (especially radical vs. incremental innovation)?" The chapter contributes theoretically to the knowledge-based theory of organisational capability (Grant, 1996a) by recognising more explicitly the role of radical innovation in knowledge integration (K. Z. Zhou & Li, 2012). It also contributes by incorporating the role of home-host country distance (geographical and cultural) into the factors potentially impeding knowledge flows in MNEs (Gaur et al., 2019), and linking this to the emerging theory-building effort in the field of international knowledge connectivity (U. Andersson et al., 2016; Cano-Kollmann et al., 2016; Sinkovics et al., 2019).

Chapter 4 concludes with a model of international-knowledge connectivity and knowledge-creation capability that contributes to the knowledge-based theory of organisational capability (Grant, 1996a) by creating four original propositions developed inductively from the data, and showing that extending existing capabilities to encompass new knowledge can be achieved through encouraging radical innovation in foreign subsidiaries with high local embeddedness and connectedness, and building trust and improving knowledge flows and communication between the HQ and subsidiaries in a diversified innovation portfolio.

Chapter 5 asks why and how EMNEs conduct innovation in emerging Europe and how innovation motives align with organisational knowledge-creation capabilities (knowledge sharing, cocreation, and integration) of EMNE subsidiaries in emerging Europe. It builds on the previous two chapters by incorporating cooperation-seeking and diversification-seeking motives into the analysis, considering home- and host-country location-specific determinants of international innovation, and grounding the study in the knowledge-based theory of organisational capability (Grant, 1996a). The chapter contributes theoretically by developing a process model linking innovation-investment motives and knowledge-creation capability (Arikan, 2009; Z. Su et al., 2016), incorporating home-country context (Hobdari et al., 2017) and host-country context (including resource munificence and institutions) into it. It also contributes by developing a process model focusing on the interaction between cooperation-seeking innovation motive and specific aspects of knowledge-creation capability, namely orchestrating internal knowledge (Pitelis & Teece, 2010; Ritala et al., 2009), facilitating (intra-MNE) knowledge flows (Gaur et a., 2019), and exploring (internal and external) cooperation through knowledge cocreation (Kazadi et al., 2016).

The chapter uncovers how EMNEs' perspectives on making strategic decisions about subsidiary roles are often unique and driven by their knowledge about and evidence of subsidiaries' innovative capability (S. L. Wang et al., 2014). It contributes to the relatively

scarce research on motives for investment by EMNEs in R&D and innovation (Lynch & Jin, 2016) in emerging markets, with CEE still being poorly understood in this respect (Dymitrowski & Ratajczak-Mrozek, 2019). Table 6.1 integrates the significant findings of Chapters 3–5 and answers questions about differences in innovation-investment motives based on the home–host typology. It extends Figure 3.5 from Chapter 3 by incorporating the diversification-seeking motive uncovered in Chapter 4 and incorporating the in-depth findings from Chapter 5 on Type 4 emerging–emerging FDI in innovation.

Table 6.1

Origin and Location of International Innovation: Motives Based on Findings of This Thesis

|                   | Country of <b>innovation</b> investment (location of subsidiary) |                                |  |  |  |  |
|-------------------|--|--------------------------------|--|--|--|--|
| Country of origin | Developed  | Emerging                       |  |  |  |  |
| (parent)          |  |                                |  |  |  |  |
| Developed         | Type 1: Developed-developed                                      | Type 2: Developed–emerging     |  |  |  |  |
|                   | 7 cases analysed in Ch. 3 & 4                                    | 1 case analysed in Ch. 3       |  |  |  |  |
|                   | Market seeking—primary   | Efficiency seeking—primary     |  |  |  |  |
|                   | Dual (market+knowledge)—primary                                  | Cooperation seeking—secondary  |  |  |  |  |
|                   | Cooperation seeking—secondary                                    | Knowledge seeking—other        |  |  |  |  |
|                   | Diversification seeking—secondary                                | Market seeking—other           |  |  |  |  |
| Emerging          | Type 3: Emerging–developed                                       | Type 4: Emerging–emerging      |  |  |  |  |
|                   | 2 cases analysed in Ch. 3  | 11 cases analysed in Ch. 3 & 5 |  |  |  |  |
|                   | Knowledge seeking—primary  | Market—primary                 |  |  |  |  |
|                   | Dual (market+knowledge)—primary                                  | Knowledge—primary              |  |  |  |  |
|                   |  | Cooperation—secondary          |  |  |  |  |
|                   |  | Diversification—other          |  |  |  |  |
|                   |  | Efficiency—other               |  |  |  |  |

Source: Adapted from Ramamurti and Singh (2009). *Note*: aspects suggested by other extant literature (e.g., Di Minin et al., 2012) in italics; modified or new aspects discovered by this thesis in bold. Motives are denoted with "primary" if they are typically in the top-two motives in the cases studied, as "secondary" if they were mentioned by managers as relevant, "other" if present at all.

## 6.3.2 Final Integrative Framework

The following figure (Figure 6.1) integrates conceptual figures from all the chapters into one comprehensive framework of determinants of international innovation. The framework and all the chapters of this thesis recognise both location-specific and firm-specific factors affecting MNE innovation and strategy (B. Ambos & Ambos, 2011; Verbeke, 2013). However, according to the model of international-knowledge connectivity and knowledge-creation capability from Chapter 4, and Figure 6.1 below, motives are not only *affected by* FSAs (including knowledge-creation capability) but are related to them in more complex ways (for example, knowledge-cocreation capability is related to the cooperation-seeking motive through the capability of exploring and seeking internal/external cooperation).

The framework presented in Figure 6.1 thus extends the initial framework presented at the start of Chapter 5, where we assume, based on our interpretation of the extant literature, that firm-specific advantages (B. Ambos & Ambos, 2011) and disadvantages (Cuervo-Cazurra & Genc, 2008) will affect motives for innovation abroad. The relationship between FSAs and motives is in fact possibly more complex, with motives being both affected by FSAs and FSAs being affected by the motives (as recognised in Chapter 5), and both jointly contributing to the impact of FSAs (in our case knowledge-creation capability) on performance (as explained in Chapter 4). Motives are distinct from capabilities in the frameworks of this thesis (including the concluding one), but they do (can) align with capabilities (better or worse) and together they constitute strategy (effective or less effective). For example, effective alignment of the cooperation-seeking motive with knowledge-cocreation capabilities through exploring (internal/external) cooperation is a strategic choice with likely positive results; similarly, as explained in Chapter 4, the diversification-seeking investment motive can positively moderate the impact of subsidiary knowledge flows on its innovation performance.

In addition to explaining the complexity of the impact of knowledge-creation capabilities and motives for FDI in innovation on innovation performance, Figure 6.1 integrates the findings from all chapters about location-specific determinants of international innovation. Specifically, it shows that (1) motives for FDI in innovation are aligned with home–host typology of countries (based on Chapter 3 framework and findings); (2) home–host country distance affects knowledge-creation capabilities including knowledge-sharing capabilities (Chapter 5) and knowledge flows (Chapter 4); and (3) home- and host-country context (including institutions) affect home–host distance and moderate the impact of the motives for FDI in innovation on knowledge-creation capabilities (Chapter 5).

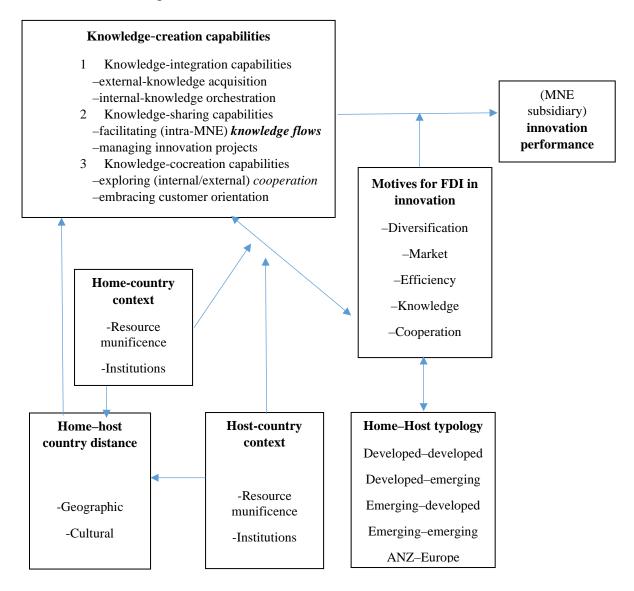
The contribution of this framework lies in stressing that FDI (innovation) motives are not only driven by location advantages and other host-country (location) factors as posited by Dunning's OLI and a significant body of literature based on this theory (e.g., Dikova et al., 2019), but should be viewed as *strategic* motives or strategic orientations (Achcaoucaou et al., 2014; Jean et al., 2018; Y. Liu et al., 2011) that are part of a company's strategy and firm-specific decisions and choices that influence knowledge-creation capability, transforming knowledge flows into innovation performance.

Theoretically positioning motives for international innovation in the knowledge-based view of the firm (Grant, 1996b) allows us to account for MNE strategy, knowledge-transfer context, and the knowledge flows in MNEs in one integrated framework consistent with Gaur et al.'s (2019) model. However, the integrative framework presented in Figure 6.1 extends this model by embedding it more deeply in the knowledge-based theory of organisational capability (Grant, 1996a), and incorporating a deeper and more comprehensive conceptualisation of MNEs' innovation-internationalisation motives, including diversification-seeking (Deng, 2004) and cooperation-seeking motives, rooted in the emerging theory of knowledge connectedness (Cano-Kollmann et al., 2016; Scalera et al., 2018; Turkina & Van Assche, 2018).

Figure 6.1

Integrative Theoretical Framework of the Thesis: Determinants of International Innovation

Firm-specific determinants of international innovation



Location-specific determinants of international innovation

## 6.3.3 Overall Thesis Contributions

This thesis addresses the research gap in current IB research on FDI motives that was perhaps too rigid in emphasising a few motives based on a narrow interpretation of the Dunning (1993) OLI paradigm (Cuervo-Cazurra & Narula, 2015). By focusing on the motives for FDI in *innovation* and theoretically grounding them in the knowledge-based theory of organisational capability (Grant, 1996a), this thesis has answered Cuervo-Cazurra and Narula's (2015) call to develop new types of FDI motives by conceptualising and exploring, what this thesis calls, the *cooperation-seeking motive* for FDI in innovation and exploring the underresearched diversification-seeking innovation-investment motive in unique contexts of ANZ investment in Europe and EMNE innovation investment in CEE.

Instead of viewing motives as equivalent to or primarily driven by host-country location advantages, this thesis acknowledges both home-country effects on internationalisation motives (Hobdari et al., 2017) and host-country effects, and calls for an attention to particular dimensions of home-host typology, such as investment by EMNEs in emerging markets (Cuervo-Cazurra & Genc, 2008; Ramamurti & Singh, 2009) and the role of home-host country distance along particular dimensions including geography and culture, studied in Chapter 4. More broadly, while this thesis is primarily positioned in the IB literature on FDI motives (Cuervo-Cazurra & Narula, 2015) and on internationalisation of innovation (Papanastassiou et al., 2019), it reaches out theoretically to the knowledge-based view from strategic management and its knowledge-based theory of organisational capability (Grant, 1996a) to explain subsidiary-knowledge flows (Gaur et al., 2019) and innovation processes. Managing knowledge for innovation in MNEs (and particularly in EMNEs) is a rising research stream in IB research, and requires theoretical conversations and synthesis across IB, strategic-management, and knowledge-management fields (U. Andersson et al., 2016; Garg & Zhao, 2018; Guo et al.,

2018). This thesis contributes to this conversation with a number of novel frameworks and concepts.

# **6.4 Managerial Implications**

The purpose of this thesis is to provide a detailed explanation and expand our understanding of international innovation strategies of firms from New Zealand, Australia, and emerging markets in the European context, with a focus on their investment motives and how home- and host-country factors affect them. The relevance and inconsistency between theory and practice is a paramount concern in the IB field, where managers and researchers are encapsulated in different realities—either day-to-day business or science (Delios, 2017). Findings from this research allow managerial implications and recommendations on innovation transfer decisions abroad to be drawn, such as available motives and relationship to overall innovation results.

This thesis has several implications for managers, business people, and policymakers engaged in international innovation. Businesspeople around the world can benefit from a deeper understanding of the motives of investors from non-traditional countries, such as New Zealand, Australia, and emerging countries outside of China that are becoming more prominent in European and world innovation. Understanding the unique drivers of these investments (such as the cooperation-seeking and diversification-seeking motives) can lead to better policies to attract these investors. Business leaders from these non-traditional source countries can benefit from understanding the experience of early entrants and how they prioritise various motives and locations in Europe.

Managers from EMNEs in Australia, and New Zealand can understand how and why their forerunners internationalised their innovation in Europe and learn how they treated differences in emerging vs. developed Europe as a destination country of innovation investment. Their previous experience could possibly encourage other managers to successfully conduct innovation in the CEE region, and, more specifically, how subsidiaries transfer

knowledge and cooperate with HQ, other subsidiaries, and stakeholders in Europe, why and how they conduct innovation in emerging markets, and what the role of the interactions between their innovation, marketing, and procurement departments is in their global innovation strategy.

Managers form distant territories, such as ANZ, may learn how to circumvent possible concerns in creating innovation laboratories on the opposite side of the world. All others can learn from this thesis how to approach innovation strategy outside their HQ, and, more specifically, explore the benefits and specifics of conducting innovation in emerging Europe compared to MNEs' home region or other areas and what the costs/barriers are to innovation outside of the home region.

One of the essential issues learned from this research is that, in terms of cooperation-seeking investment and reciprocal knowledge transfer between the emerging-market innovation subsidiary and the HQ, there could be substantial obstacles to elevating the emerging-market innovation subsidiary's status to higher importance within the group. In the case of ANZ investors in the EU, the key learning is how they prioritise various motives, including cooperation and diversification, with the diversification-seeking strategic motive being of particular importance for the region, which is becoming increasingly over-exposed to China and Asian markets in general.

## **6.5 Research Limitations**

The research in this thesis is largely exploratory, as there is a lack of studies into innovation-investment motives by EMNEs in emerging markets and on innovation by ANZ MNEs in Europe. The thesis has used case studies to achieve greater contextualisation, limiting its generalizability (McGrath, 1981), but has also aimed to generate some propositions and inductive models to provide guidance for future research with quantitative research methods. The tension between the largely exploratory research design and small samples and the post-positivistic outlook of some of the final products of the analysis is one of the drawbacks of this

study. Different chapters approach this dilemma with slightly modified methodological approaches, with Chapter 5 offering more contextualisation (given the most nascent nature of the phenomenon of EMNE innovation in emerging markets) than Chapter 4 that is aimed at a more post-positivist (empiricist) contribution in terms of testable propositions (as requested by reviewers from *Journal of Management and Organisation* where the chapter was published). Moreover, contextualisation of the insights from all of the chapters could be deepened by indepth follow-up studies on MNEs from one home (e.g., Malaysia) or host country (e.g., Serbia). These studies could provide a richer account of the role of context and its relationship to innovation motives and processes. One of the limitations of the thesis (and of the broader literature on EMNEs and emerging markets) is that statements are made about (firms from whole groups of) emerging economies without emphasising the diversity within them.

Another limitation of the thesis is that it mostly has not taken an individual-level perspective so as not to mix levels of analysis too much; the study is mostly positioned at the intersection of the firm- and country-level factors. However, personal-level perspectives are also important in international innovation strategy and could be incorporated into follow-up research on related topics in international-knowledge management (Guo et al., 2018; Papa et al., 2018). Limitations acknowledged in each of the chapters apply as well, such as the need to decompose and understand in depth the nature of the knowledge transferred in MNEs (Eapen & Krishnan, 2019; Hadjimichael & Tsoukas, 2019), acknowledging risks of external-knowledge sharing (Ritala et al., 2018), reverse knowledge-transfer barriers (Ciabuschi et al., 2017), and the need for studying the dynamics of R&D and innovation motives over time through longitudinal study design and analysis (Achcaoucaou et al., 2014).

#### **6.6 Future Research**

This thesis has studied international innovation-investment motives and processes in a specific host-country context of Europe, with a focus on MNEs from ANZ and non-Chinese emerging

markets. The propositions developed in Chapters 3 and 4 (and the model of international-knowledge connectivity and knowledge-creation capability from Chapter 4 and the frameworks from Chapter 5) suggest multiple avenues for future research. Single-industry studies in different contexts over more extended time periods also offer a fruitful direction for examining whether the propositions of Chapter 4 are generalisable to other contexts, for example.

There are several other avenues for future research. First, the collaboration-seeking innovation motive could be developed in more depth and linked to specific types of interorganisational collaboration, including alliances and networks, and potentially embedded within other streams of capability research such as dynamic capabilities (Petricevic & Verbeke, 2019). There is also an opportunity to explore and extend the motive on a personal level of analysis, for example, by examining how collaborators network in their quest for innovation through dual networking (Ter Wal et al., 2019) and explore in depth how firms identify cooperation for innovation (Fritsch et al., 2019).

Second, future research could distinguish between entry modes of motives for FDI in innovation and consider, in depth, motives for acquisitions driven by innovation and new product and service development (Rabier, 2017). There is a rich literature on strategic assetseeking FDI through M&As (Zheng et al., 2016) that could benefit from deeper incorporation of the cooperation- and diversification-seeking innovation-investment motives, as strategic assets are deeply connected to knowledge (Winter, 1998). There is also an opportunity to integrate and extend some of the insights from this thesis into the literature on country-specific determinants of cross-border M&As by making it more linked to the R&D and internationalisation of innovation literature (Vrontis & Christofi, 2019).

Third, there is an opportunity to extend and test the model developed in Chapter 4 in exploring the links between knowledge management and organisational-performance outcomes in other emerging economies (Kiessling et al., 2009). In particular, the literature on managing

MNE subsidiaries (Meyer et al., 2020) and the study of autonomy delegation to foreign subsidiaries, and related, enabling mechanisms for EMNEs (S. L. Wang et al., 2014), could further benefit from studying the underresearched Type 4 innovation investment by EMNEs in emerging markets, identified in Chapter 3 and explored in depth in Chapter 5, rather than just in the over-studied advanced-economy contexts (Ciabuschi et al., 2017). There is also an opportunity to explore the possibility of radical innovation being created through knowledge-search processes (Kneeland et al., 2020) in emerging markets.

Fourth, CEE still offers an exciting and unique context of studying international innovation in a region spanning boundaries between emerging and developed countries. The new paradigm of *doing business with CEE* (Rašković et al., 2020) instead of the old paradigm of doing business in CEE (driven by luring inward FDI) is very much in line with the spirit of the cooperation-seeking innovation motive emphasised in this thesis and could inspire other researchers to contribute to this research stream. While CEE has recently fallen out of fashion somewhat in the emerging markets studies, it could still provide fruitful avenues for theorising in IB (Jaklič et al., 2019), perhaps by focusing on interactions and differences (comparisons) between CEE and other emerging markets (Rašković et al., 2019).

Finally, there is an opportunity to extend research in this thesis by connecting it to the knowledge management literature on boundary spanning in global organisations (Y. Liu & Meyer, 2018; Schotter et al., 2017). Potential links include the role of international joint-ventures as boundary spanners and conduits of technological knowledge transfer in emerging markets (Khan et al., 2015), HR issues such as the role of inpatriates (Reiche, 211) and diasporas (Chand & Tung, 2011). Overall, as this thesis has hopefully shown, international innovation motives are a vibrant and relevant topic in IB and offer scope for future research.

**Appendices** 

**Appendix A: Interview Questions** 

**Research project:** 

International innovation in Europe: diversity of origin, location, and motives

**Interview Questions for participants** 

(1) Please, tell me about the innovation activities of your company and how do you define

innovation?

(2) What motivates your company to conduct innovation abroad?

(3) How and why do you choose new locations for innovation?

(4) Why do you innovate in emerging (or developed) markets? What do you find different

comparing the regions?

(5) What kind of innovation do you conduct abroad, how and why?

(6) Please, comment on knowledge flows from subsidiary to the headquarters, regional

headquarters and other subsidiaries and vice versa?

(7) What forms of market-entry modes (greenfield, mergers and acquisitions, third party

outsourcing, etc.) does your company use and why?

(8) How does your subsidiary cooperate with other stakeholders (internal and external) in

Europe in innovation?

(9) How do you manage innovation in terms of decision-making processes and managerial

responsibilities?

(10)How are the interactions and transfers of knowledge between your firm's

innovation, marketing, sales and procurement departments (in the group and

subsidiaries)?

210

# **Interview Questions - Interviewer Probes**

# Project Title: International innovation in Europe: diversity of origin, location and motives

# **Interview Questions – Interviewer Probes (will not be passed to participants)**

- (1) What is the share of your subsidiary on global sales R&D of the group? What is its strategic importance for the group?
- (2) Where is your innovation headquarters? Please comment on global coordination of innovation and local initiatives.
- (3) What are the benefits and costs/barriers of conducting innovation in Europe compared with your firm's home region?
- (4) What is the impact of innovation and knowledge management in your subsidiary on the performance of the subsidiary and of the group?
- (5) What is the rough percentage of global vs. local innovation? What is the role of your subsidiary in the group?
- (6) What is specific to your region in the way they conduct innovation and which distinguishes them from firms from other regions?
- (7) What metrics do you use to measure the innovation performance? Which are the concrete results of innovation?
- (8) What type of new knowledge is transferred?
- (9) How are international innovation processes created? Which processes are transferred?
- (10) How do you use information acquired through innovation processes?

# **Appendix B: Ethics Approval Documents**

Office of the Vice-Chancellor Office of Research Strategy and Integrity (ORSI) The University of Auckland Private Bag 92019 Auckland, New Zealand Level 11, 49 Symonds Street Telephone: 64 9 373 7599

Extension: 83711

humanethics@auckland.ac.nz

# UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE (UAHPEC)

06-Sep-2019

## **MEMORANDUM TO:**

Dr Peter Zamborsky

Management & Intl Business

Re: Application for Ethics Approval (Our Ref. 023532): Approved with comment

The Committee considered your application for ethics approval for your study entitled: International innovation in Europe: diversity of origin, location and motives.

We are pleased to inform you that ethics approval has been granted for a period of three years with the following comment(s) or required minor change(s):

Please ensure you check your public documents carefully for spelling errors prior to use.

The expiry date for this approval is 06-Sep-2022.

Completion of the project: In order that up-to-date records are maintained, you must notify the Committee once your project is completed.

Amendments to the project: Should you need to make any changes to the project, please complete an Amendment Request form giving full details along with revised documentation. If the project changes significantly, you are required to submit a new application to UAHPEC for approval.

Funded projects: If you received funding for this project, please provide the approval letter to your local Faculty Research Project Coordinator (RPC) or Research Project Manager (RPM) so that the approval can be notified via a Service Request to the Research Operations Centre (ROC) for activation of the grant.

The Chair and the members of UAHPEC would be happy to discuss general matters relating to ethics approvals if you wish to do so. please contact the UAHPEC Ethics Administrators at humanethics@auckland.ac.nz in the first instance.

Additional information:

Do not forget to complete the 'approval wording' on the PISs, CFs and/or advertisements and emails, giving the dates of approval and the reference number. This needs to be completed before you use the documents or send them out to your participants.

Please quote Protocol number 023532 on all communication with the UAHPEC regarding this application.

(This is a computer generated letter. No signature required.)

**UAHPEC Administrators** 

University of Auckland Human Participants Ethics Committee

c.c. Head of Department / School, Management & Intl Business

Dr Peter Zamborsky

## **Consent Form CEO**

## **CONSENT FORM – CHIEF EXECUTIVE OFFICER (CEO)**

#### THIS CONSENT FORM WILL BE HELD FOR A PERIOD OF 6 YEARS

Project Title: International innovation in Europe: diversity of origin, location and motives

#### Name of researcher:

Mr Igor Ingrst, University of Auckland Business School, PhD candidate (email: i.ingrst@auckland.ac.nz; +64 9 373 7999)

#### **Supervisor:**

Dr. Peter Zamborsky, email: p.zamborsky@auckland.ac.nz, telephone: +64 9 923 9819

#### **Co-Supervisor:**

Dr. Maureen Benson-Rea, email: m.benson-rea@auckland.ac.nz, telephone: +64 9 923 7356

I have read the Participant Information Sheet, and I have understood the nature of the research and why our organisation has been selected. I have had the opportunity to ask questions and have them answered to my satisfaction.

- I agree that our organisation will take part in this research.
- Our participation is voluntary.
- I understand that managers from our organisation will be interviewed by a researcher for 60–90 minutes.
- I understand that the researcher will have access to data provided.
- I agree / do not agree to participate in my own interview separate from any employees (please choose one).
- I understand that interviews will be recorded and that I have the right to have the recorder turned off at any time without give a reason
- I understand that recordings will be transcribed by a researcher or by professional transcription company with who will be signed a confidentiality agreement. Data will be stored in a secure manner on the University of Auckland servers
- I understand that I am free to withdraw my participation and my organisation participation at any time without giving a reason, and that data collection will be stopped from the time of organizational withdrawal and already contributed data can be kept, up to one week after my or other participants interview/s.
- I understand that if individual participants who have already contributed data then that data you can keep, you stop collecting from the time of organisational withdrawal.
- I understand that data will be kept for six years, after which time any data will be destroyed.
- I understand that all information provided is confidential.
- I give my assurance that participation, or non-participation of nominated managers, will not affect their employment status, the participant's relationship with the organisation or access to its services.
- I am authorised to speak on this matter with respect to my company

| - I wish to red | ceive a summary | of findings, | which can b | oe emailed | to me a | t this email | address: |
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| Signature       |                 | Date         | <u> </u>    |            |         |              |          |

## **Consent Form – Manager**

#### **CONSENT FORM - MANAGER**

#### THIS CONSENT FORM WILL BE HELD FOR A PERIOD OF 6 YEARS

#### Project Title: International innovation in Europe: diversity of origin, location and motives

Name of researcher:

Mr Igor Ingrst, University of Auckland Business School, PhD candidate (email: i.ingrst@auckland.ac.nz; +64 9 373 7999)

Supervisor:

Dr. Peter Zamborsky, email: p.zamborsky@auckland.ac.nz, telephone: +64 9 923 9819

Co-Supervisor:

Dr. Maureen Benson-Rea, email: m.benson-rea@auckland.ac.nz, telephone: +64 9 923 7356

I have read the Participant Information Sheet, and I have understood the nature of the research and why I have been selected. I have had the opportunity to ask questions and have them answered to my satisfaction.

- I agree to take part in this research.
- My participation is voluntary.
- I understand that I will be interviewed by a researcher for 60–90 minutes.
- I understand that the researcher will have access to data provided.
- I understand that interviews will be recorded and that I have the right to have the recorder turned off at any time without give a reason.
- I understand that recordings will be transcribed by researcher or by professional transcription company with who will be signed confidentiality agreement. Data will be stored in a secure manner on the University of Auckland servers
- I understand that I am free to withdraw participation at any time without giving a reason, and that
  data collection will be stopped from the time of organizational withdrawal and already
  contributed data can be kept, up to one week after my interview.
- I understand that data will be kept for six years, after which time any data will be destroyed.
- I understand that all information provided is confidential.
- I understand that the CEO has provided assurance that my participation, or non-participation will not affect my employment status, my relationship with the organisation or access to its services.
- I am authorised to speak on this matter with respect to my company

| - | I wish to | receive | a summary | of findings | , which | can be | emailed | to m | ne at this | email | address: |
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| Name      |   |     |
|-----------|---|-----|
|           |   |     |
|           |   |     |
| Signature | D | ate |

## **Participant Information Sheet – CEO**

## **PARTICIPANT INFORMATION SHEET (CEO)**

Project Title: International innovation in Europe: diversity of origin, location and motives

# Name of researcher:

Mr Igor Ingrst, University of Auckland Business School, PhD candidate (email: i.ingrst@auckland.ac.nz; +64 9 373 7999)

#### **Supervisor:**

Dr. Peter Zamborsky, email: p.zamborsky@auckland.ac.nz, telephone: +64 9 923 9819

#### **Co-Supervisor:**

Dr. Maureen Benson-Rea, email: m.benson-rea@auckland.ac.nz, telephone: +64 9 923 7356

#### Researcher introduction

My name is Igor Ingrst, a PhD candidate in the Department of Management and International Business at the University of Auckland, New Zealand. I have almost 15 years of experience as sales and procurement director in multinational company in Europe and several years as a Coach and Lecturer at the Faculty of Economics and Administration of the Masaryk University in Brno, Czech Republic.

#### **Aims and Rationale**

This research project aims to explore the role of European subsidiaries of non-European multinational companies in their global innovation system. I am particularly interested in the motivation of multinationals to conduct research & development, design and other innovative and knowledge-intensive processes in Europe. This project is part of my PhD study research.

#### **Duration**

48 months

#### **INVITATION TO PARTICIPATE:**

A member of your staff has been identified for participation in the research to investigate how European subsidiaries of companies contribute to their innovation strategy and performance. That person was identified as someone with expert knowledge who could provide valuable insight for this study. Participation of your firm is voluntary, and you may decline this invitation to participate without penalty. I seek your permission for your staff member to be invited to be involved in the research. I would kindly request your assurance that the person's participation (or not) will not affect their employment status, their relationship with the organisation or access to services. I would kindly like to invite you, as the CEO to participate in the research and conduct separate interview with you as well.

#### **Project procedures**

If you choose to participate, I would like to interview your staff member or you (interviewee) for 60 – 90 minutes on the experiences and views on international aspects of your innovation strategy, in particular on the role of your European subsidiaries in global innovation.

Interviews will be audio-recorded to ensure an accurate record of the interviewee's comments, and a third party (professional company) who will sign a confidentiality agreement will transcribe the recordings. Interviewees have the option of not being audio-recorded, and even if they agree to being recorded, the interviewees may choose to have the recorder turned off at any time. Interviews will be conducted in person / over Skype / telephone. I would welcome any suggestions you may have how to expand this research and will follow this up with you by email after the interviews.

#### **Benefits**

The results of my research and understanding of the drivers of international innovation might be of some interest to you, and you can learn from the analysis carried out by the investigator.

#### Risks

Although I will not use your names in reporting the results, there is a very small risk that the names could be inferred from the data reported in the final publication, however I will make every effort to secure sensitivity of any data provided.

#### Data Storage, Retention, Destruction and Future use

The interviewee's comments will be considered and summarised within the research findings. Data will be evaluated qualitatively to identify common and distinct features of international innovation strategy. Short excerpts may be used without attribution to highlight points within academic papers and other published work such as PhD thesis, conference papers, case studies and policy reports.

Pseudonyms will be used in file names to ensure full confidentiality for participants, such as when the audio is sent to a third party for transcription. The data will be stored for six years in a secure manner on University of Auckland secure servers or locked in University of Auckland cabinets, after which the computer files will be erased and the paper transcripts shredded. The audio-recordings and transcripts will be stored separately.

#### **Right to Withdraw from Participation**

Interviewees have the right to withdraw from the research without giving a reason at any time before or during the interviews. Data gathered during the interviews may be withdrawn up to seven days after the interviews.

#### Confidentiality

The preservation of confidentiality is paramount. The interviewee's comments will not be attributed to them by name. The interviewee's comments will not be shared with people inside your company or with 3rd parties, except my supervisors from the University of Auckland. Pseudonyms will be used to identify people in research reports to maintain confidentiality, so if the information interviewee provides is published or reported, this will be done in the way that does not identify interviewee as its source. Notwithstanding the steps being taken to protect confidentiality, a participant could be identifiable from the data reported.

A copy of the research findings will be made available to you, if you wish, please, indicate where to send them.

## **CONTACT DETAILS AND APPROVAL:**

Researcher:

Igor Ingrst (email: i.ingrst@auckland.ac.nz; +64 9 373 7999)

Supervisor:

Dr. Peter Zamborsky (email: p.zamborsky@auckland.ac.nz; telephone: +64 9 923 9819)

Co-Supervisor:

Dr. Maureen Benson-Rea (email: m.benson-rea@auckland.ac.nz; telephone: +64 9 923 7356)

Head of Department:

Prof. Kenneth Husted (email: k.husted@auckland.ac.nz; telephone +64 9 923 6829)

For any queries regarding ethical concerns you may contact the Chair, The University of Auckland Human Participants Ethics Committee, Office of Research Strategy and Integrity, The University of Auckland, Private Bag 92019, Auckland 1142. Telephone 09 373–7599 ext. 83711. Email: humanethics@auckland.ac.nz

## **Participant information sheet – manager**

## PARTICIPANT INFORMATION SHEET (Participant/Manager)

Project Title: International innovation in Europe: diversity of origin, location and motives

#### Name of researcher:

Mr Igor Ingrst, University of Auckland Business School, PhD candidate (email: i.ingrst@auckland.ac.nz; +64 9 373 7999)

#### **Supervisor:**

Dr. Peter Zamborsky, email: p.zamborsky@auckland.ac.nz, telephone: +64 9 923 9819

#### **Co-Supervisor:**

Dr. Maureen Benson-Rea, email: m.benson-rea@auckland.ac.nz, telephone: +64 9 923 7356

#### **Researcher introduction**

My name is Igor Ingrst, a PhD candidate in the Department of Management and International Business at the University of Auckland, New Zealand. I have almost 15 years of experience as sales and procurement director in multinational company in Europe and several years as a Coach and Lecturer at the Faculty of Economics and Administration of the Masaryk University in Brno, Czech Republic.

#### **Aims and Rationale**

This research project aims to explore the role of European subsidiaries of non-European multinational companies in their global innovation system. I am particularly interested in the motivation of multinationals to conduct research & development, design and other innovative and knowledge-intensive processes in Europe. This project is part of my PhD study research.

## **Duration**

36 months

# **INVITATION TO PARTICIPATE:**

You are invited to participate in the research to investigating how European subsidiaries of companies contribute to their innovation strategy and performance. You have been identified as someone with expert knowledge who could provide valuable insight for this study. Participation of your firm is voluntary, and you may decline this invitation to participate without penalty.

# **Project procedures**

If you choose to participate, I would like to interview you for 60-90 minutes on your experiences and views on international aspects of your innovation strategy, in particular on the role of your European subsidiaries in global innovation. I would like to assure you that based on approval from your CEO for this project, your participation (or not) will not affect your employment status, relationship with the organisation or access to services.

If you would kindly agree, Interviews will be audio-recorded to ensure an accurate record of your comments, and a third party (professional company) who will sign a confidentiality agreement will transcribe the recordings. You have the option of not being audio-recorded, and even if you agree to being recorded, you may choose to have the recorder turned off at any time. Interviews will be conducted in person / over Skype / telephone. I would welcome any suggestions you may have how to expand this research and will follow this up with you by email after the interview.

#### **Benefits**

The results of my research and understanding of the drivers of international innovation might be of some interest to you/your company and you can learn from the analysis carried out by the investigator.

#### Risks

Although I will not use your names in reporting the results, there is a very small risk that the names could be inferred from the data reported in the final publication, however I will make every effort to secure sensitivity of any data provided.

#### Data Storage, Retention, Destruction and Future use

Your comments will be considered and summarised within the research findings. Data will be evaluated qualitatively to identify common and distinct features of an international innovation strategy. Short excerpts may be used without attribution to highlight points within academic papers and other published work such as PhD thesis, conference papers, case studies and policy reports.

Pseudonyms will be used in file names to ensure your full confidentiality, such as when the audio is sent to a third party for transcription. The data will be stored for six years in a secure manner on University of Auckland secure servers or locked in University of Auckland cabinets, after which the computer files will be erased and the paper transcripts shredded. The audio-recording and transcripts will be stored separately.

## **Right to Withdraw from Participation**

You have the right to withdraw from the research without giving a reason at any time before or during the interview. Data gathered during the interview may be withdrawn up to seven days after the interview.

#### Confidentiality

The preservation of confidentiality is paramount. Your comments will not be attributed to you by name. Your comments will not be shared with people inside your company or with 3rd parties, except my supervisors from the University of Auckland. Pseudonyms will be used to identify people in research reports to maintain confidentiality, so if the information you provide is published or reported, this will be done in the way that does not identify you as its source. Notwithstanding the steps being taken to protect confidentiality, a participant could be identifiable from the data reported.

A copy of the research findings will be made available to you, if you wish, please, indicate where to send them.

## **CONTACT DETAILS AND APPROVAL:**

Researcher:

Igor Ingrst (email: i.ingrst@auckland.ac.nz; +64 9 373 7999)

Supervisor:

Dr. Peter Zamborsky (email: p.zamborsky@auckland.ac.nz; telephone: +64 9 923 9819)

Co-Supervisor:

Dr. Maureen Benson-Rea (email: m.benson-rea@auckland.ac.nz; telephone: +64 9 923 7356)

Head of Department:

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