

Contemporary Issues in International Business



Institutions, Strategy
and Performance

Davide Castellani, Rajneesh Narula,
Quyen T. K. Nguyen, Irina Surdu
and James T. Walker



The Academy of International Business

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Quyen T. K. Nguyen · Irina Surdu
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It is also the only place where the strait-jacketed and turgid writing style preferred by academics can be ignored. As a few of you who will read these acknowledgements with any degree of care will have noted, we have used an exclamation mark! And look, here is another!

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September 2017

Davide Castellani
Rajneesh Narula
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Irina Surdu
James T. Walker

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1

No Longer at Ease in the Old Dispensation: Reappraising the Role of International Business in the World Economy

Davide Castellani, Rajneesh Narula, Quyen T. K. Nguyen,
Irina Surdu and James T. Walker

The Background to This Volume

This volume is derived from the 44th Annual Conference of the Academy of International Business (UK and Ireland Chapter) organised jointly with the 6th Reading Conference, held at the Henley Business School, the University of Reading from 6 April 2017 to 8 April 2017. The conference was composed of engaging panel discussions as well as more thematically designed parallel sessions of conference papers. We have sought to compile a selection of papers from the conference.

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The theme for the conference was *Contemporary Issues in International Business: Are we seeing the tail-end of globalisation?* The panel discussions looked to examine substantive issues relating to this critical question. During the last few years, we have been faced with growing economic uncertainty and socio-economic challenges that suggest we may be seeing the tail end of globalisation. Societies have become intolerant to immigration. Populist movements that emphasise nationalism are gaining influence, which pushes back against global cooperation. By way of examples, we have Brexit and the rise of Donald Trump, with the UK seeking to withdraw from the EU, and the USA looking to renegotiate NAFTA by reversing 23 years of supply chain integration. Our panellists emphasised that the rise of economic nationalism is part of a broader process of polarisation of societal values, which are negatively associated with socio-economic outcomes. Furthermore, it was highlighted that the current trend is partially the result of the breakdown of the so-called Embedded Liberalism Bargain, which (especially in Europe) over the last few decades is compensating the “losers” from globalisation. Paralleled by a reduction in public resources, these trends have led to an increasing demand for protectionism and contributed to the rise of economic nationalism.

Many commentators have asked: How far will this backlash go? Will we return to the days when sovereignty and nationalism ruled the day? Or is this a brief hiccup? We (the editors of this volume) believe that globalisation is an unstoppable force, but it can be slowed down by this need to look inwards and backwards, towards what are often referred to as “the good old days”. Our society has collectively underestimated the costs of rapid change and the fact that there are social, political and economic costs of maintaining the momentum of globalisation. Further, we appear to be more and more inertial in accepting the new realities that come with globalisation: less control over the “domestic” economy, widespread use of international transfer pricing, the free(r) movement of people, growing inequality. These issues are related to and span other fields such as sociology, anthropology, economics and politics.

Mankind has a deep-seated fear of change, and this is exacerbated by rapidly changing societal inequalities. Politicians and civil society wrest with their consciences, and contemplate how to make sense of the new dispensation, yet are sufficiently aware that, to paraphrase T. S. Eliot, we are also “no longer at ease in the old dispensation”.¹

¹Journey of the magi, from *Collected Poems 1909–1962* (Faber, 1974).

As the focus of the conference was on the international business aspect, we asked ourselves: To what extent is the MNE complicit? Indeed, we sell the myth that MNEs promote development. But is this true? Does promoting MNE activity really help reduce poverty and sustain development? Does more internationalisation make for more happiness?

On the one hand, our panellists argued that multinational enterprises invariably contribute to wage and wealth inequality. Rising tides do not raise all ships, and it was for governments to consider regulation as the only practical means to minimise the downside. However, developing country governments are often too weak to regulate. Left to their own devices, MNEs end up increasing the level of inequality, and their efforts in the form of corporate social responsibility programmes are insufficient. On the other hand, it was said that countries such as India were certainly worse off prior to globalisation, and thus, inequality was a small price to pay for sustainable development. The growth of the Indian IT sector, in particular, was directly linked to these large multinational firms. Furthermore, the new world order with the new geographies of production and consumption mainly due to the growth of South–South trade and Southern markets would, on balance, also be the contributing factors towards reducing inequality. The discussion that followed suggested that for poor countries, inequality was a natural and expected outcome, but a growing middle class also signalled that inequality was better than the alternative, which for such countries would mean massive unemployment.

Ultimately, the tensions caused by growing inequalities within and between countries, coupled with a rapidly changing global business environment, beg important questions regarding the role of institutions in affecting international business strategies, particularly in terms of how firms can effectively operate their internal structures while being cognisant of how best to position themselves in different institutional contexts. In a world where globalisation is under fire, and consequently where MNE's margins are potentially under pressure, firms will need to be smarter in the decisions they make, and in how they engage with varied national entities. Beyond the broader context of the panel discussions, this volume seeks to provide a series of important contributions to some of the most current debates in IB. In doing so, the volume aims to provide a richer understanding of MNE activities and how they are being impacted by the complex institutional settings in which they operate. Questions about how MNEs use (and abuse) the concept of CSR across national boundaries; their ability to manage the complexity of remote decision-making to achieve sustainable success between headquarters and subsidiaries; how they are able to absorb, analyse

and respond to institutional shifts and pressures, and the extent to which MNEs are able to exploit their location decisions to optimise performance are all put under the spotlight.

Contributions to This Volume

The chapters in this volume are a selection of 14 out of 197 papers presented in 35 parallel sessions at the 44th Annual Conference of the Academy of International Business (UK and Ireland Chapter) organised jointly with the 6th Reading Conference. They are broad in their coverage, yet collectively demonstrate a certain intellectual continuity, and are organised into relatively homogeneous sections around the themes emerging in the discussion above. In particular, the papers included in this volume address the role of *institutions* in international business *strategy* and their links with the *performance* of firms and countries. Part I delves into the issues of how institutions and business strategies are intertwined, with special emphasis on socially (ir)responsible activities and corporate wrongdoing. Part II instead looks at the links between institutions and the economic performance of both firms and countries, especially in emerging market contexts. Part III investigates MNE subsidiary strategies and their role in host country economic development. Finally, the group of contributions that make up Part IV concentrates on aspects such as the degree and direction of multinationality and its subsequent effects on firm performance.

Institutions and International Business Strategy

Part I begins with a conceptual framework developed by Jöran Wrana and Javier Revilla Diez, on how MNEs may become institutional entrepreneurs in host regions of transition economies through their CSR strategies. Their chapter, titled “*Multinationals, Corporate Social Responsibility and Regional Industrial Change in Transition Economies*” explains how MNEs’ CSR activities, when supported by regional state authorities, can contribute to favourable institutional changes in the transition economies in which they operate. The main argument is that regional state authorities can create institutional pressure on local firms to adopt global CSR certificates leading to improved buyer–supplier relationships between the MNEs and the local firms.

Further, CSR projects in the education sector may link public institutions (such as universities) with MNEs, which can be valuable as a means to promote local CSR projects in certain regions of transition economies. The diffusion of global CSR certificates and continuous development of local CSR projects is expected to trigger institutional change and foster regional upgrading.

In the same vein, Federica Nieri and Elisa Giuliani recognise that MNEs can generate both positive and negative impacts on the host regions they invest in. In the second chapter of this section titled “*International Business and Corporate Wrongdoing: A Review and Research Agenda*”, Nieri and Giuliani study the literature on the relationship between MNEs’ international expansion choices and acts of corporate wrongdoing and corporate social irresponsibility. Following their systematic review of the literature, the authors found that current studies have identified two coexisting conditions that are required to curb MNE involvement in acts of irresponsibility, namely the adoption of explicit CSR policies and increased freedom of the press in the host country. Even so, few studies conceptualise corporate irresponsibility at the international or global level, with most scholars still focusing on national CSR activities. The authors passionately argue against this trend in the IB literature since MNEs operate across many different countries, institutions and cultures.

Following from the previous chapters, the last chapter in this section focuses on how we should measure the involvement of multinational firms in socially responsible activities. In their empirical study titled “*The internationalisation of ventures: The roles of a nation’s institutions and the venture’s value orientation*”, Jie Chen, Kaisu Puumalainen and Sami Saarenketo investigated the factors that influence the likelihood of internationalisation for socially oriented entrepreneurial ventures compared to profit-oriented entrepreneurial ventures. The authors are confident that this distinction is important, as MNEs and smaller ventures alike are evaluated based on their financial performance in conjunction with their broader contribution to society, through their social and environmental impacts. Interestingly, their results show that the socially oriented ventures are, in fact, more likely to become international than profit-oriented ventures. The authors point to the gap between the importance of the phenomenon of the internationalisation of socially oriented ventures and the lack of relevant research on this phenomenon in the IB literature.

Institutions, Emerging Markets and Economic Performance

Part II offers a collection of three chapters which focus significantly on the key external, mainly institutional, factors that may threaten the performance and competitiveness of an international country or region. To kick-start Part II, Luis Dau, Elizabeth Marie Moore and Max Abrahms point to the surprisingly scant empirical or theoretical work on the outcomes of external shocks such as acts of terrorism in their chapter titled “*Global security risks, emerging markets, and firm responses: Assessing the impact of terrorism*”. The authors explain how such external events may have negative ramifications not only on the performance of MNEs operating in the affected areas but also on the economic development and advancement of those areas. Further, they propose that emerging market MNEs may be better equipped to survive and remain profitable after a terrorist event than advanced market MNEs, because the former have more substantive experience of operating amidst contexts characterised by chaos and institutional voids. Using a case example of Grupo Carso headquartered in Mexico, the authors illustrate how an emerging market MNE has developed resiliency strategies in the face of acts of terrorism.

Next, Roseline Wanjiru and Karla Prime focus on institutions as key determinants of economic growth in their chapter titled “*Institutions, economic growth and international competitiveness: A regional study*”. The starting point of their research is that decisions about how resources are allocated may be impacted more by political and economic institutions than by a country’s factor endowments. According to Wanjiru and Prime, institutions matter and more so, they propose that home market institutions have differing effects on the economic performance of the Caribbean region. The authors found that market-legitimising and market-regulating institutions constrained market inefficiencies and positively impacted productivity. In turn, market-stabilising institutions reached a market growth-maximising level beyond which increased bureaucracy reduced the incentive for investment and productivity. These findings suggest that strengthening market-legitimising and market-regulating institutions is important for the developing Caribbean economies to promote economic growth and competitiveness.

In the last chapter in Part II (but most certainly not least), Pavida Pananond and Alvaro Cuervo-Cazurra address a topical debate within both the IB literature and IB practice, which relates to whether and how home-country

governments should support outward foreign direct investment. In a chapter titled “*The Complementarity of Foreign and Domestic Investment by Emerging Market Multinationals*”, the authors examine the impact of outward FDI on domestic investment based on a sample of emerging market firms from Thailand. A key finding of their empirical endeavour is that emerging market firms’ foreign expansion complements rather than substitutes their domestic investment because outward direct investment enables these firms to increase their levels of efficiency and improve their value chain positioning. Hence, Thai MNEs obtained strategic benefits from expanding internationally by taking advantage of economies of scale and regulatory differences among host countries. Domestic investment also increased as foreign investors needed to further expand their domestic capacity to serve the new host markets entered.

Headquarter-Subsidiaries Relations

The papers in this section pay attention to the roles of MNE subsidiaries in host country economic development, the intra-organisational perception gaps in decision-making between headquarters (HQs) and subsidiaries, strategy creativity of MNE subsidiaries and the impact of subsidiary CEO entrepreneurial self-efficacy, and subsidiary combinative capability for knowledge creation as a co-evolutionary development process.

Robert Pearce in his chapter entitled “*The dynamics of differentiation: the resource bases of development and the roles of MNE subsidiaries*” investigates the roles of MNEs in national economic development. The interaction between MNEs and development involves multidimensional and contingent interdependencies. Countries pursue sustainable and deepening national development while MNEs seek to adjust their global competitive networks. For the country, this can build on, and perhaps evolve through, three levels of resources that can generate new competitive possibilities: non-renewable primary resources, standardised but improvable inputs, and creative knowledge and resources. Pearce traces the implications of the ways MNEs’ commitment to an economy can evolve. Two indications are drawn for development policy. Firstly, policy makers should have a clear perspective on the differentiation of the economy’s resource base towards higher value and more internationally competitive capacities. Secondly, in assessing the scope for MNE participation, governments need to fully understand the objectives of the MNEs, and their dynamic impulses.

Shasha Zhao, Marina Papanastassiou, Yiannis Bassiakos, Evis Sinani and Robert Pearce offer a thoughtful contribution to the chapter “*Unfolding the Intra-organisational Perception Gap in Decision-making*”. These relationship between headquarters and subsidiaries in terms of their perceptions of decision-making loci and associated organisational structure. By comparing the responses of parents of Greek MNEs and their subsidiaries, they find evidence in favour of a perception gap in terms of decision-making between headquarters and subsidiaries. They argue that future research needs to carefully consider and account for the perception gap and point out the importance of the role of MNE managers in removing such barriers in order to achieve effective decision-making.

Dónal O’Brien, Pamela Sharkey Scott and Ulf Andersson examine strategy creativity at the subsidiary level in the chapter “*Strategy Creativity in Multinational Subsidiaries*”. They suggest that tensions between the headquarters and subsidiary perspectives demand a greater focus on the micro-foundations of strategy development in multinational subsidiaries. In a time when subsidiaries are coming under increasing pressure to meet the conflicting demands of innovation and integration in complex MNEs, this chapter contributes by uncovering the drivers of strategy creativity in subsidiaries and the mediating effect of an entrepreneurial subsidiary CEO. This chapter focuses on the attributes of the most senior manager in the subsidiary, the subsidiary CEO, and highlights how the entrepreneurial self-efficacy of these managers impacts the propensity for subsidiaries to be creative in their strategic approach.

The chapter “*Subsidiary combinative capability for knowledge creation as a co-evolutionary development process*” by Johanna Clancy, Paul Ryan, Ulf Andersson and Majella Giblin enhances our understanding how the subsidiary develops a knowledge creating role while operating in a dual context of an internal corporate environment and external local network. These scholars discuss the need for the subsidiary to develop a combinative capability of managing relations in both contexts. To explore this combinative capability, they argue for a much-needed co-evolutionary perspective of the subsidiary in its host location and internal context. As such, this chapter adds to theory on subsidiary role evolution. A conceptual framework for future research is developed in the chapter, which uses a co-evolutionary lens. It is advocated that process studies of longitudinal forms should be undertaken in future research, which takes a rich in-depth empirical investigation of dynamic processes over time.

Location Decisions and MNEs Performance

The papers in this section delve into the issues of the degree and direction of multinationality and its effects on performance.

Louis Brennan, Lisa Spencer and Jim Stewart in their paper entitled “*Establishing How MNCs are Defined: A response to the Regional/Global Debate*” take a firm-level perspective and investigate the degree of internationalisation (DOI) of firms over time. Their objective is to assess classification methods that are used to define MNCs and advance the area of research that explores whether firms are more regional or global. Based on a longitudinal data set of a sample of 88 firms from the Fortune 500 for the period 1990–2010, their findings reveal that different models used to measure DOI of firms result in the same firm being classified in different ways as a consequence of different definitions of firm multinationality. The implication is that regionalisation and other classifications of firms are a function of the nature of the classification system.

The chapter on “*Outward FDI from South Korea: The Relationship between investment position and location choice*” by Jae-Yeon Kim, Nigel Driffield and Jim Love takes a country-level perspective to the analysis of the degree and direction of multinationality. In particular, they model the evolution of South Korean outward FDI by extending the Investment Development Cycle perspective to include evolving FDI motivations. They differentiate between two changing paths of outward FDI: (1) FDI to developed countries, with a change from technology-seeking FDI to market-seeking FDI and (2) FDI to developing countries from efficiency-seeking FDI to market-seeking FDI, while accounting for South Korea’s own investment position within the investment cycle. The analysis exploits a long time series of South Korean FDI data from 1980 to 2014.

The chapter “*Does it pay to be international? Evidence from industrial district firms*” by Marco Bettiol, Chiara Burlina, Maria Chiarvesio and Eleonora Di Maria moves our lens towards the relationship between multinationality and performance. In particular, they explore the extent to which the location of manufacturing activities at home or abroad is associated with better (or worse) firm performance. The chapter relates to current research on backshoring to highlight that domestic control of manufacturing activities may be crucial for firm competitiveness. Using a sample of approximately 260 Italian firms located in industrial districts, they show that the international production of components is not associated with higher profitability for high-quality goods (as measured by return on assets), but could be a profitable strategy for low-quality goods.

Finally, Jinlong Gu, Yong Yang and Roger Strange, in their chapter on “*Firm Diversification and Financial Performance: Evidence from Manufacturing Firms Worldwide*”, place the multinational strategy into the broader context of diversification strategies and compare the joint relationships of international and product diversifications with firm performance. Drawing on over 13,000 manufacturing firms in the period of 2004–2013, they find that this joint effect is negative and tends to become stronger for firms in high-tech sectors, relative to firms in low-tech sectors. In addition, they found that this negative effect is weaker for developed country firms, compared to firms in emerging countries.

Part I

Institutions and International Business Strategy

2

Multinationals, Corporate Social Responsibility and Regional Change in Transition Economies

Jöran Wrana and Javier Revilla Diez

Introduction

Based on the theory of nations' economic development stages (Porter, 1990), the global competitiveness report (GCR) presumes that a successful transition from a factor-driven economy towards an efficiency-driven one (from here onwards: transition economies) is made if a country is able to provide a highly educated population, well-functioning labour and financial markets, which enable firms to develop more efficient production processes and higher product quality (Sala-I-Martin et al., 2007: 7). However, contrary to the successful cases of Japan, Taiwan, South Korea and Singapore, many transition economies have experienced a slowdown of growth rates which contributes to the overall conclusion that transition economies have remained somewhat 'stuck' in what is generally referred to as 'the middle-income trap' (Altenburg & Lütkenhorst, 2015). Specifically, transition economies are associated with a slow development of human capital and of new institutions since education systems are

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usually adjusted ex-post to changing skill demands and because firms need time to develop capabilities which enable them to exploit the full potential of technological opportunities (Abramovitz, 1986: 405f.). Hence, it becomes too expensive for such an economy to continue being an attractive destination for labour-intensive and standardised production processes while at the same time lacking the sophisticated skills and technologies necessary to shift into higher value-added stages of global value chains (GVCs) (Rigg, Promphaking, & Le Mare, 2014: 185). Moreover, these transitioning countries lack buyer–supplier relationships between multinational enterprises (MNEs), private domestic firms (from here onwards: local firms) and university–industry linkages (e.g. Ernst, 2002; Intarakumnerd, Chairatana, & Tangchitpiboon, 2002) which are needed to foster industrial upgrading. Also, since most MNEs are concentrated in agglomeration areas (Dicken, 2015: 67f.), only a few regions within an emerging economy are expected to benefit from positive spillover effects by MNEs, and thus, those regions have the most potential to contribute to a country's catching-up process in the long term (Narula & Dunning, 2010: 270). Therefore, economic geographers stress the role of meso-level determinants for economic development. Factors within the institutional environment, such as the degree of enforced market-based institutions, the quality of regional labour markets and varying practices of informal payments and bribes, are considered to play a key role (Coe, Hess, Dicken, & Henderson, 2004; Meyer & Revilla Diez, 2015; Rodríguez-Pose, 2013).

However, it remains unclear how economic actors can overcome dysfunctional institutions and which policy tools can be employed (Pike, Rodríguez-Pose, & Tomaney, 2017: 54). In this context, international business (IB) researchers and economic geographers have increasingly discussed the extent to which MNEs operate as institutional entrepreneurs, in particular through their corporate social responsibility (CSR) projects initiated in emerging economies (Cantwell, Dunning, & Lundan, 2010; Lütkenhorst, 2004). Institutional entrepreneurs have been viewed as actors who identify opportunities within their environments and initiate and carry out projects through which they may 'realise interests that they value highly' (DiMaggio, 1988: 14). For instance, Wrana and Revilla Diez (2016) have elaborated on how MNEs in Vietnam have successfully introduced cooperative forms of apprenticeship systems through their CSR projects of partnering public educational organisations (PEOs) which aimed specifically at triggering long-term institutional change in the vocational education sector.

Despite these valuable contributions, the IB literature has only marginally considered the role of regional institutions for explaining when and how firms apply CSR initiatives, whereas economic geographers have so far neglected the potential of CSR to facilitate institutional entrepreneurship. Therefore, this chapter aims to integrate the IB and economic geography disciplines, by

presenting the ‘Corporate Social Responsibility – Regional Industrial Upgrading (CSR-RIU)-model’. More specifically, the model proposed focusses on MNEs as institutional entrepreneurs in their host regions. As detailed in the remainder of this chapter, the CSR-RIU model explains how MNEs’ CSR activities, supported by regional state authorities, may shift regions from disconnected economies towards a regional industrial upgrading system (RIUS), consisting of buyer–supplier relationships between MNEs and local firms as well as learning collaborations between industry actors and PEOs which, in this case, we refer to as university-vocational-college-industry-linkages (UVILs).

The CSR-RIU model focuses on two types of CSR. First, it discusses circumstances under which global CSR certificates spill over from MNEs into the regional economy. In line with previous studies, global CSR certificates are defined as international standards that address environmental protection, working conditions, fair wages and stakeholder engagement (see Husted, Montiel, & Christmann, 2016: 386). Examples of such certificates are ISO 14001, SA 8000 and U.N. Global Compact. Second, the model focuses on MNEs’ local CSR projects particularly in the area of education systems since learning is considered to be the basic requirement for long-term institutional and economic advancement (North, 1998).

This chapter is structured as follows: the next two sections provide a brief literature overview concerning how economic development in emerging economies may be influenced by MNEs and the way in which regional institutions and university–industry linkage (UILs) can become drivers for regional economic development. The fourth section introduces the CSR-RIU model developed by the authors, whereas the last section of this chapter offers a short summary of the concepts proposed and provides some recommendations for future research for scholars interested in how and under which conditions MNEs may become institutional entrepreneurs in host regions of transition economies.

Economic Development in Emerging Economies—An IB Perspective

Successful transition economies such as the late-industrialised Asian economies (i.e. Singapore, Taiwan, South Korea and Hong Kong) have undergone various development stages, starting with inflows of export-oriented and low-technology manufacturing foreign direct investments (FDIs) and gradually progressing towards the development of domestically built industries for cutting-edge technologies which are characterised by research and development

(R&D) intensity and international competitiveness (e.g. Narula & Dunning, 2010). As a result, governments of those emerging economies have increasingly relaxed restrictions against foreign direct investment in the light of the idea that the FDI inflows have the potential to stimulate and accelerate future economic growth (Narula & Driffield, 2012: 1). However, MNEs can generate both positive and negative impacts on the host countries they invest in (notably, Giuliani & Macchi, 2014). Hence, we unpack the factors that may influence whether and how MNEs may contribute to positive economic development in host countries, by identifying the main mediators and channels for economic spillover effects and by specifically discussing the role of CSR as a suitable tool for business-driven development in emerging, or transitioning, economies.

MNEs and Industrial Upgrading in Emerging Economies

MNEs contribute to economic growth by transferring knowledge and new technologies into the host regions of their subsidiaries (Blomström & Kokko, 2001). Local firms are therefore expected to be able to acquire MNEs' knowledge and technologies, by developing vertical linkages with MNEs, attracting skilled employees from MNEs and by imitating products, organisational practices and technologies introduced by foreign investors.

However, some scholars have also noted that spillover effects can be substantially reduced (Aitken & Harrison, 1999), particularly in countries with fragmented economies (Ernst, 2002; Wong, 2001) and significantly large technological gaps between MNEs and local firms (Crespo & Fontoura, 2007). Broadly, the term 'absorptive capacity' is used to describe a firm's 'ability to evaluate and utilise outside knowledge' (Cohen & Levinthal, 1990: 128). Therefore, when the technological gap between the foreign investor and the domestic firm is too large, it may limit the absorptive capacity of the latter. Following this rationale, researchers have emphasised absorptive capacity as a key mediator for the occurrence of positive spillover effects in host countries (Crespo & Fontoura, 2007; Narula & Marin, 2005). In turn, whether or not a firm possesses absorptive capacities will be determined by that firm's degree of R&D activity and its stock of human capital (Narula & Marin, 2005). Since human capital includes not only firm-specific knowledge, but also generic skills about operating a business effectively (Narula & Dunning, 2010), MNEs can contribute generally to the improvement of their host regions' human capital base.

We propose that MNEs can contribute to the improvement of a host region's human capital base through different channels. First, foreign investors may provide training programmes for their employees who can subsequently transfer to local firms and exploit and tailor their knowledge and experiences to the operations and strategies of the local firm (Blomström & Kokko, 2001). Secondly, MNEs may provide training programmes for their suppliers in host countries. Finally, MNEs may also have an influence on the host region's education systems (Blomström & Kokko, 2002; Sauvant, 1999). For instance, MNEs may carry out CSR programmes that embrace scholarships for students, equipment donations or curricular consultations for business schools and universities (Blomström & Kokko, 2002). Furthermore, such initiatives can also be grounded in multi-stakeholder collaborations. One example of multi-stakeholder collaborations is that of state and federal governments in Malaysia, which have provided land and financial support for the establishment of the Penang Skill Development Centre, whereas American MNEs from the electronics industry provided trainers and equipment for comprehensive skill development programmes that embraced formal classroom study and factory training (Sauvant, 1999: 276f.). To summarise this section, we tend to focus more on the positive effects that MNEs may have on the host regions they invest in. In doing so, we argue that MNEs' CSR programmes implemented in collaboration with a host country's PEOs could be considered as a first potential step towards industrial upgrading through investment in the development of human capital.

MNEs, CSR and Development in Emerging Economies

CSR remains somewhat of a fuzzy concept in the literature since, to date, there is 'no strong consensus on a definition of CSR' (McWilliams, Siegel, & Wright, 2006: 8). According to World Business for Sustainable Development (Wbfsd), '*Corporate social responsibility is the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large*' (Watts & Holme, 2000: 3). Based on this definition of CSR, multinational firms are expected to undertake efforts in areas such as improving working conditions and minimising environmental pollution in their production facilities and through participation in local community development projects.

MNEs have been increasingly confronted with high expectations particularly with regard to their adherence to stringent environmental standards as well as social concerns arising from the debates over the positive versus negative effects of globalisation (Jamali, 2010: 182). In countries with high rates of unemployment, underdeveloped infrastructure and under par education systems, MNEs are expected to contribute positively to regional development (Gardberg & Fombrun, 2006: 166). Consequently, MNE subsidiaries have increased their investment in CSR activities to obtain or regain legitimacy in their host regions. In their subsidiaries, MNEs have been found to focus primarily on the enforcement of human rights, appropriate working conditions and on the reduction in their environmental footprints through the implementation of global CSR certificates (Husted et al., 2016), while also showing their intended contribution to society through involvement in local community development projects. For instance, MNEs in Nigeria and South Africa have been found to partially compensate for the failure of governments to advance institutional development, by carrying out local community development projects in the fields of education, social welfare, infrastructure and small business development (Eweje, 2006: 97).

However, other scholars have adopted a different and potentially more sceptic perspective on MNEs and their CSR activities in the foreign markets and regions in which they invest. Generally, it has been argued that codes of conduct are often used in a 'window-dressing' manner (e.g. Giuliani, 2016; Lund-Thomsen & Coe, 2015) and do not, in fact, lead to the enforcement of human rights, nor do MNEs' CSR activities result in the improvement of working conditions for what may be considered as vulnerable workers (Lund-Thomsen & Coe, 2015). Moreover, due to their focus on economic gains, MNEs are expected to focus less of their efforts on outlawing slavery and child work while also neglecting the enforcement of living wages and freedom of association (see Blowfield & Frynas, 2005: 512).

Following the aforementioned example of the Penang Skill Development Centre, forging alliances between different (foreign and local) stakeholders (e.g. governments, foreign firms, non-profit organisations and other key local actors) might be beneficial in positioning CSR to become a more powerful tool generally for sustainable development of institutions in an emerging economy. For example, MNEs can potentially cooperate with international non-profit organisations (also known as NPOs) in order to help local firms in their business development efforts (Lütkenhorst, 2004). Examples of such collaborations exist in business practice. A good example of such collaboration between stakeholders is that of 'UNIDO Business Partnership Programme' which is an organisation that brings together

members of states, the private sector, civil society and other relevant partners to exchange and disseminate knowledge on how to achieve sustainable industrial development in emerging economies.

Economic Development in Emerging Economies—A Geographical Perspective

Economic geographers emphasise regional institutions and UIIs as major determinants for regional economic development (Pike et al., 2017; Rodriguez-Posé, 2013; Schiller & Lee, 2015). We provide a short literature overview on how the interplay between regional institutions and organisations is expected to lead to regional institutional and economic development and specifically how UIIs foster regional economic development.

Institutions, Institutional Change and Regional Economic Development

Generally, the transition from an underdeveloped to a developed economic environment is shaped by knowledge creation and technological development since these are considered to be the key drivers for sustainable economic growth (North, 1998; Rafiqui, 2009). These drivers are largely influenced by institutions, which provide the incentive structures that enable investments in human capital and technology (Rafiqui, 2009: 339). These institutions are defined as the ‘rules of the game’ in a given market (North, 1998: 15) and are comprised not only of the formal rules of a country such as the laws, legislations and intellectual property rights regulations, but also of informal rules such as social norms, trust, codes of conduct and customs (North, 1991: 97). Martin (2000) suggests that it is the relationship between a region’s institutional environment which are the formal and informal ‘rules of the game’ and its institutional arrangements including firms, labour unions and state authorities that has the potential to shape local economic outcomes. What this means is that, new institutions may be implemented by passing new laws at the national level (Faulconbridge & Muzio, 2015); however, their enforcement can still be hampered at the regional level (Martin, 2000; Meyer & Revilla Diez, 2015). Hence, sub-national institutions matter for institutional advancement, that is, associated with economic growth. This can be observed mostly in countries that have experienced fundamental changes in their political, social and economic systems as is the

case of former socialist planned economies such as Russia or Ukraine. In a recent study, most MNEs in Ukraine were found to invest in the capital region of Kyiv because of the better developed intellectual property rights and higher support by regional authorities for FDI investments compared to Eastern regions such as Kharkiv where the institutional legacy of the Soviet past remains present (see Revilla Diez, Schiller, & Zvirgzde, 2016: 649). MNEs were also found to be more willing to set up joint-venture partnerships with domestic firms rather than conducting greenfield investments when investing in regions where state-owned enterprises dominated the local economy as in the case of Vietnam (Meyer & Nguyen, 2005: 85). However, economic geographers have recently begun to discuss whether MNEs have to follow the ‘rules of the game’ or whether they can also actively influence institutions in their host regions (Faulconbridge & Muzio, 2015; Wrana & Revilla Diez, 2016). Hence, scholars argue that MNEs could become institutional entrepreneurs because of their ability to transfer new knowledge and new rules that may be missing from the host regions in which they have invested (Cantwell et al., 2010: 577).

Here also, some scholars argue whether institution-building processes promoted by MNEs always create a ‘shared value’ (Porter & Kramer, 2011). For instance, MNEs may influence institutions in a manner in which they can negatively affect a local firm’s business climate (Schmitz, Dau, Pham, & McCulloch, 2012). Moreover, even well-intended top-down approaches by MNEs such as private labour standards can generate unexpected negative impacts or can be insufficient to enforce human rights (Giuliani, 2016; Lund-Thomsen & Coe, 2015). Having identified these debates in the literature, we argue that the relationship between regional institutions, MNEs and local firms must be theorised more comprehensively in order to understand the circumstances under which MNEs attempt to change institutions and whether institutional entrepreneurship can result in the fulfilment of firm-specific needs while also fostering institutional advancement in these MNEs’ host regions.

University–Industry Linkages and Regional Economic Development

In this section, we highlight that UILs may be a key determinant for a region’s competitiveness in industrialised countries, because of their large potential to create knowledge spillovers into the regional economy (e.g. Varga, 2000). However, such linkages rarely exist in emerging economies

(Intarakumnerd et al., 2002; Schiller & Lee, 2015). For instance, Revilla Diez and Kiese (2006: 1015) demonstrate that firms in Singapore, Bangkok, and Penang mainly cooperate with customers, suppliers and parent companies with respect to the development of technological capabilities (Lall, 1992), whereas local universities and public research institutes play a subordinate role. This is particularly problematic since universities in emerging economies have been found to play a crucial role in regional development, by connecting domestic actors with MNEs and development agencies, which is expected to then contribute to a deeper knowledge transfer and embedding of ideas into the regional institutional environment (Ramachandran & Scott, 2009). Furthermore, since education and learning are the foundations for technological upgrading (see Liefner & Schiller, 2008: 279) and long-term economic and institutional development (North, 1998), universities can indirectly aid MNEs and local firms in their efforts to build up absorptive capacities, by ensuring a continuous supply of well-skilled graduates (Schiller & Revilla Diez, 2007: 30).

In summary, UIIs with focus on learning collaborations can be viewed as promising partners for a long-term and potentially more innovation-orientated cooperation of local actors and MNEs (Schiller & Lee, 2015). But, it still remains unclear under which circumstances MNEs would, in fact, establish such collaborations in emerging economies. Additionally, learning collaborations can be also established with vocational colleges rather than universities since the main goal for firms is to foster the formation of human capital.

The CSR-RIU Model

Our proposed model explains how the relationships between the stakeholders discussed in previous sections (MNEs, local firms, PEOs) may potentially, over time, result in regional industrial upgrading in transitioning economies. The ‘Corporate Social Responsibility – Regional Industrial Upgrading’ (CSR-RIU) model considers an actor-centred perspective on regional economic and institutional change in countries which are shifting from a factor-driven economy towards an efficiency-driven one (see Fig. 2.1). The key argument of the CSR-RIU concept is that local CSR projects in the education sector can lead to the institutionalisation of UVILs, whereas the diffusion of global CSR certificates facilitates buyer–supplier relationships between MNEs and local firms in transition economies. Four phases can therefore be identified in the model. In the first phase, countries

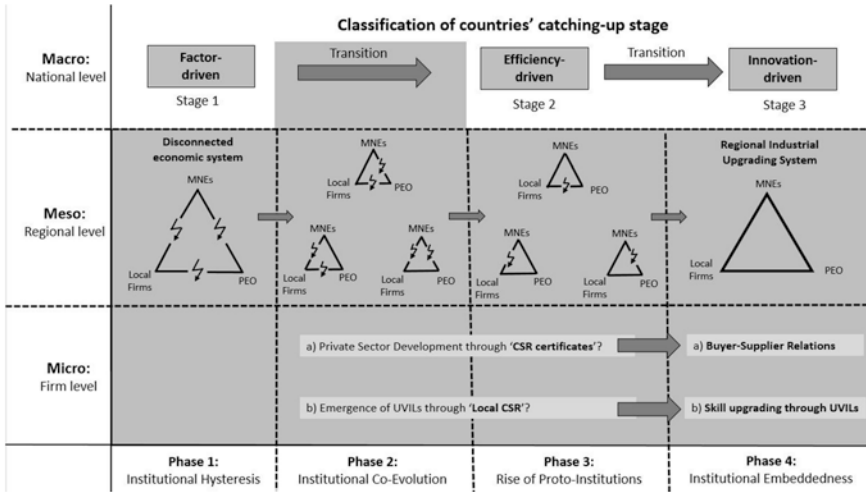


Fig. 2.1 CSR—Regional Industrial Upgrading (CSR-RIU)-model. *Source* Authors' conceptual propositions based on studies by Amin and Thrift (1995), Blomström and Kokko (2001), Campbell (2004), Cantwell et al. (2010), DiMaggio (1988), Lawrence et al. (2002), Rodriguez-Pose (2013), Sala-I-Martin et al. (2007)

are characterised by a fragmented economic structure, i.e. export-orientated MNEs possess a low territorial embeddedness in their host regions, and private domestic firms are excluded from GVCs due to their weak productivity levels (Ernst, 2002; Wong, 2001). Processes of institutional hysteresis are persistent, in that existing institutions shape current economic activities that influence subsequent institutional forms (Setterfield, 1993: 760). Hence, no actions by MNEs, local firms and regional authorities are taken unless problems or conflicts arise which require strategic responses (phase two). For instance, rising wages and shortages of skilled labour may lead to MNEs relocating to other lower-cost regions whereas missing buyer–supplier relationships can significantly hamper technological upgrading efforts by local firms. Taken together, MNEs' relocating their production activities elsewhere and local firms being unable to upgrade technologically can endanger a region's economic development. As a result, regional authorities are incentivised to welcome local CSR projects and the diffusion of global CSR certificates because they have the potential to foster regional industrial upgrading. The emergence of local CSR projects and global CSR certificates represents an institutional co-evolution since they occur parallel to the existing system (Cantwell et al., 2010). Next, in the third phase, the repetition of practices, technologies and rules outside of the pilot project by third parties can be

viewed as the rise of a proto-institution (Lawrence, Hardy, & Phillips, 2002: 286). This marks a turning point for the relationships between CSR and RIU, because it means that endogenous actors have started to dissociate with the prevailing rules. Specifically, the repetition of global CSR certificates and local CSR projects in the education sector signals to co-located firms that these proto-institutions contain elements which may be superior to existing institutions, thereby potentially generating future competitive advantages for those actors who adopt them (see Fig. 2.1).

In the final phase, institutional embeddedness, UVILs and buyer–supplier relationships are prompted by a large number of MNEs which results in what can be referred to as a regional ‘institutional thickness’ (Amin & Thrift, 1995). Regional institutional thickness is considered to be beneficial and necessary for long-term regional development. It may be worth emphasising here that, although this stage-based depiction of the model may lead to the CSR-RIU model being characterised as somewhat linear and potentially deterministic, the four phases discussed above can occur simultaneously and represent a continuum of institution-building processes instead of a dichotomous separation which allows regions to somehow move from one phase onto another.

Following the logic of the CSR-RIU model, we expect that MNEs might become successful institutional entrepreneurs particularly in transition and efficiency-driven economies such as China, Vietnam or Indonesia. We make this assumption for two main reasons. First, these economies have been heavily reliant on labour-intensive manufacturing sectors and extractive industries which have been the main drivers for economic growth, but which have also been the main contributors to environmental pollution and exploitation of vulnerable unskilled labour (World Economic Forum, 2013: 71f.). Hence, MNEs may respond to such institutional weaknesses by implementing global CSR certificates that eventually spill over into the regional economy. Secondly, national education systems, particularly in the area of technical vocational training, have not developed sufficiently to keep up with the rapid economic development, thereby creating a shortage of skilled workers in labour markets (Altenburg & Lütkenhorst, 2015; Pilz & Li, 2014). MNEs could fill in this institutional void with CSR projects at partnering PEOs with the latter generally focusing on enabling graduates to acquire sophisticated technical knowledge and soft skills. Having provided a broad overview of what we mean by the CSR-RIU model, the next sections will explain how specifically MNEs and regional institutions can influence the diffusion of global CSR certificates into the regional economy by better explaining the proposed relationship between local CSR projects, institutional entrepreneurship and the formation of UVILs.

Global CSR Certificates and Regional Institutional Change

Previous studies have suggested that vertical linkages between MNEs and local firms have the potential to boost regional economic development (e.g. Coe et al., 2004; Humphrey & Schmitz, 2002). However, such linkages are also difficult to establish because local firms have to satisfy certain international environmental and social standards before they can enter GVCs (e.g. Nadvi, 2008). According to DiMaggio and Powell (1983), organisations therefore adopt certain environmental and social practices due to institutional pressure, which results in institutional isomorphism. Institutional isomorphism can lead to a convergence of business practices among firms for various reasons. For instance, ‘coercive’ isomorphism occurs if firms implement new business practices as a result of their dependence on powerful institutional actors. In turn, ‘mimetic’ pressure refers to when firms imitate the behaviours of other firms as a result of uncertainty. Finally, ‘normative’ pressure results from the formation of new rules and work practices developed through the collective actions of certain actors.

The idea of institutional isomorphism has already been applied to the diffusion of global CSR certificates (notably, Braun, 2005; Husted et al., 2016). In this context, MNEs can be viewed as institutional entrepreneurs for the spread of these standards since they remain the key drivers of globalisation. For instance, global buyers increasingly place coercive pressure on suppliers throughout their GVCs to fulfil environmental standards (Nadvi, 2008). Mimetic pressure as a result of institutional uncertainty in the local market has also been identified as a key determinant for the spread of ISO 14001 in emerging economies such as Mexico, leading to the development of frameworks that companies can follow to set in place effective environmental management systems (see Husted et al., 2016).

Since the first phase of the CSR-RIU model suggests a fragmented regional economy, at this stage local firms do not face institutional pressures to conform to international environmental and working standards, causing institutional hysteresis. We argue that this might change if MNEs transfer global CSR certificates to their host regions, because regional stakeholders already accept the fact that local firms are inferior compared to MNEs with respect to environmental and social standards (Gardberg & Fombrun, 2006). This institutional co-evolution may, in turn, create normative pressures on local firms to adopt international environmental and working standards, thereby contributing to the rise of proto-institutions (phase three), which in the end may result in the institutional embeddedness of global CSR certificates in the regional economy (phase four).

We explain that regional authorities may actively support the institutionalisation of global CSR certificates for two main reasons. First, authorities in regions with a large proportion of investments via FDI may favour the diffusion of global CSR certificates because they can become successful means to raise local firms' awareness of their negative externalities, as, for instance, the effects of their operations on environmental pollution. For instance, the implementation of ISO 14001 requires firms to define appropriate environmental policies, training and documentation system and a delineation of responsibilities (Braun, 2005: 11) that are monitored through independent third-party audits (Nadvi & Wältring, 2004: 77). For this reason, regional authorities perceive that these new institutions and enforcement mechanisms are superior compared to existing national environmental and social regulations. Therefore, they may place institutional pressures on local firms to adopt global CSR certificates. In doing so, regional authorities can create coercive pressures, by implementing the new standards into regional regulations, or they can arrange unforeseen inspections on local firms that have not complied with global CSR certificates (Fikru, 2014; 289).

Second, regional authorities seek to insure the economic prosperity of a region. Hence, regional authorities may provide support for local firms to adopt global CSR certificates because a successful implementation enables them to become members of GVCs (Nadvi, 2008), thereby contributing to an increased likelihood of embeddedness of MNEs with their host regions through vertical linkages with local suppliers (Phelps, Mackinnon, Stone, & Braidford, 2003). Since local firms in transition economies tend to possess relatively weaker levels of productivity and often lack financial resources, technological knowledge and CSR (Altenburg & Lütkenhorst, 2015; Ernst, 2002; Lütkenhorst, 2004), they require the active support that regional authorities can provide. For instance, the costs for implementing ISO 14001 range from US\$40,000 to US\$150,000, depending on the extent to which a firm has successfully implemented a quality management system beforehand (Braun, 2005: 19). Thus, regional authorities can foster institutional reforms that improve the business climate while providing financial incentives for local firms seeking to adopt global CSR certificates.

The Formation of UVILs: Institutional Entrepreneurship Through Local CSR

In phase one of the CSR-RIU model, UVILs are marginally established because MNEs and local firms mainly operate in labour-intensive sectors and have little demand for skilled labour and research collaborations with

universities. Hence, there is no need for firms to trigger an institutional change unless new challenges arise that threaten their economic performance. These challenges may have an endogenous source such as the competition for scarce resources (North, 1998) in that rising wages may threaten MNEs that would have to increase their productivity to remain competitive. However, these challenges can be addressed without there being need for institutional change (Campbell, 2004: 175), i.e. through firm-specific skill-upgrading programmes. The reason for this being that, since MNEs in transition economies struggle with a skill mismatch, they mainly face intensified competition for rarely available human resources. Hence, they may become more interested in projects that improve their position to access rare resources (Campbell, 2004: 176). Local CSR projects at PEOs can help firms improve their access to skilled labour while introducing new institutional elements into the education system. These local CSR programmes reflect a process of institutional co-evolution (phase two in the proposed CSR-RIU model).

During the second phase, MNEs may become suitable institutional entrepreneurs, because they contain much more experience with a greater number of formal and informal rules due to their interactions with different institutional environments (Cantwell et al., 2010: 572). Hence, they can transfer missing elements to host regions, thereby potentially contributing to sustainable institutional change. As a result, studies have examined the extent to which MNEs can upgrade education programmes through CSR programmes of partnering universities, thereby enlarging a region's human capital base (Blomström & Kokko, 2002; Sauvant, 1999). Findings show that not all MNEs can become institutional entrepreneurs in their host regions nor do all MNEs intend to do so. Some firms may favour the relocation of their production sites to lower-cost areas, whereas others are not perceived as 'natives' by local stakeholders (Cantwell et al., 2010: 576f.), which is a necessary precondition in order to ensure the success of development projects in emerging economies (Shirley, 2008: 633). To this, it has been argued those MNEs with high levels of local embeddedness (e.g. Coe et al., 2004) or which have undertaken investments due to market—or strategic asset-seeker motives (Dunning & Lundan, 2008) tend to become interested in institution-building processes.

In turn, local firms may also use local CSR programmes as a reaction to MNEs' institution-building processes. For instance, since MNEs are perceived to provide better working conditions for their employees (Gardberg & Fombrun, 2006), local firms are under pressure to develop adaption strategies to avoid loss of highly qualified labour. Hence, they may start to

imitate practices from co-located MNEs (Husted et al., 2016) such as the realisation of UVILs with nearby PEOs in order to ensure their own access to skilled graduates. Similar to global CSR certificates, the formation of UVILs by local firms as a response to MNEs' institution-building activities could be interpreted as a proto-institution as proposed in the third phase of the CSR-RIU model. If new forms of UVILs, introduced through local CSR programmes by MNEs, are interpreted as best practice examples, regional authorities can create normative and coercive pressures on other local firms to realise similar projects which then reflect the regional institutional embeddedness of UVILs (phase four).

We summarised two main problems associated with MNEs' efforts to change regional institutions through local CSR projects. First, institutions tend to be persistent and are difficult to change (Campbell, 2004; Martin, 2000). Therefore, a 'conjunctural moment of instability' (Faulconbridge & Muzio, 2015: 1196) can be perceived as a beneficial condition. In these moments of instability, endogenous actors such as political decision-makers may realise that the existing institutional system is inadequate to overcome an event as, for instance, the economic crisis, which could make them more open to implementing alternative institutional rules (Faulconbridge & Muzio, 2015: 1198). Following this logic, political authorities may subsequently encourage both MNEs and local firms to foster the formation of UVILs because such partnerships may help firms simultaneously overcome labour shortages and institutionalising new technologies, skills and training collaborations.

Second, the sustainability of newly implemented practices in a region's institutional environment becomes questionable if MNEs merely follow a top-down approach as implied in the 'export' of vocational training systems (Pilz & Li, 2014) and do not translate institutions to a host region's specific local contexts (Campbell, 2004). Hence, programmes that aim at changing regional institutions should be based on networks between MNEs, local firms, regional authorities and PEOs. In this way, the interests of more stakeholders are considered rather than merely supporting one-time MNE efforts to impose their own practices to local environments.

Conclusion and Outlook

Transition economies often become 'stuck' in the middle-income trap. IB researchers have thus far emphasised the missing vertical linkages between MNEs and local firms and the absence of UILs (which may contribute to

the formation of technological capabilities) as hampering factors for a successful transition. Complementarily, economic geographers emphasise that high concentrations of MNEs in a few agglomeration areas of transition economies cause rapid economic development in these regions that creates new challenges for local institutional actors. We discussed how national institutions such as education systems cannot keep up with the changing skill demands that come from different industries, thereby causing a shortage of well-qualified workers on regional labour markets. Consequently, studies concerning CSR activities by MNEs that have the potential to address weaknesses in host regional institutional environments have become topical.

This chapter contributes to this debate by combining insights from the IB and economic geography literature. We design a conceptual model that seeks to unpack the ‘catching-up processes’ of institutions in emerging economies. The CSR-RIU model describes how global CSR certificates and local CSR projects in the education sector can help transition economies to develop a RIUS, that is, characterised by buyer–supplier relationships between MNEs and local firms as well as by skill-upgrading collaborations between firms and PEOs. Firstly, the model examines when and how global CSR certificates become institutionalised in the regional economy, by discussing to what extent MNEs and regional authorities can create institutional pressure on local firms to adopt global CSR certificates. Secondly, the CSR-RIU model presents arguments over the circumstances in which MNEs carry out local CSR projects of partnering PEOs in order to attract skilled graduates and to trigger an institutional change in the education system of their local economies.

The CSR-RIU model is far from being without limitations, and more work is required from researchers interested in this topic. On the one hand, it does not address issues concerning growing regional disparities and inequality within an emerging economy. Instead, it only provides directions on how CSR activities can help countries establish regions that enable them to make a successful transition from a factor-driven economy to an efficiency-driven economy. On the other hand, by assuming that political decision-making power has been delegated to the regional level, the model emphasises the importance of regional state authorities for the emergence of a RIUS. Hence, the model marginally captures power asymmetries and contradictory interests between the central government and regional state authorities that may have a significant influence on development of institutions at the national as well as regional levels. We propose that future researchers interested broadly in the (positive or negative) effect of MNEs’

activities in their host regions should focus on providing empirical evidence on the extent that the CSR-RIU model is suitable for transition processes, thereby developing recommendations for practitioners as well as political decision-makers. We propose that a case study approach may be particularly appropriate here as researchers may focus their attention on comparing and contrasting specific economies such as China, Vietnam or Indonesia which continue to face environmental pollution, labour exploitation and skill mismatch challenges. It may be of both theoretical and practical importance to uncover when and how MNEs could contribute to filling out these institutional voids through their CSR initiatives.

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3

International Business and Corporate Wrongdoing: A Review and Research Agenda

Federica Nieri and Elisa Giuliani

Introduction

It is not uncommon for multinational companies (MNCs) to be accused of corporate wrongdoing related to their international operations. A few of the most well-known cases in the past half of a century are worth citing. At the end of the 1970s, Nestlè was involved in what is known as the ‘infant formula scandal’, as it was aggressively marketing the use of milk powder in developing countries where mothers were not adequately informed about the hazardous consequences of mixing the milk powder in contaminated water to feed newborn babies (*The New York Times*, 1981). In 1984, the Indian subsidiary of Union Carbide Limited, a US chemical company (now part of Dow Chemicals), was involved in a major accident in Bhopal, involving the leaking of a poisonous gas that led to the deaths of over 15,000 individuals and had severe effects on subsequent generations of local residents (*The New York Times*, 1985). Later on, around the 1990s, Shell Oil was accused of complicity with the Nigerian government and military in violating human rights and, in particular, of the systematic killing and

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torture of local residents and workers protesting about the environmental impacts of Shell Oil's subsidiary on the local indigenous communities (*The New York Times*, 1995). In June 1996, an issue of *Life Magazine* included an article on Nike's child labour in Pakistan, accompanied by a picture showing 12-year-old boy stitching Nike soccer balls (*Life Magazine*, 1996). More recently, reporting of corporate scandals has intensified. Two of the most prominent examples include: British Petroleum's Deepwater Horizon oil rig in the Gulf of Mexico, which was responsible, in 2010, for what is considered the largest oil spill in American history that caused the death of 11 workers and resulted in over 4 million barrels of oil being released into the Gulf (*The Guardian*, 2010), and Volkswagen's violation in 2015 of the US Clean Air Act (*BBC News*, 2015).

These and other eminent cases of MNCs' wrongdoing have not gone unobserved and have prompted management scholars to investigate their causes and consequences. Interest in this topic began as far back as the 1970s (e.g. Armstrong, 1977; Staw & Sz wajkowski, 1975) and has surged recently (Fiaschi, Giuliani, & Nieri, 2017; Keig, Brouthers, & Marshall, 2015; Palmer, 2012; Shi, Connelly, & Sanders, 2016; Whiteman & Cooper, 2016, among others), due to closer stakeholder monitoring of the impact of business activities on society and the, consequent, growing evidence of corporate scandals (Riera & Iborra, 2017).

Corporate wrongdoing—irrespective of its various definitions¹—is not necessarily the result of accidents or unintended events. It is often the outcome of a rent-seeking and resources-appropriation strategy (Fiaschi et al., 2017; Surroca, Tribo, & Zhara, 2013, among others). For instance, wrongdoing in the form of labour rights violations (e.g. child labour, labour discrimination, union busting) and human trafficking may allow for production efficiency gains; the abuse of local indigenous communities' rights to land is often the result of MNCs' seeking access to mines or exploitation of other natural resources, while damage to local communities' health may be due to poor maintenance of production plants or failure to invest in cleaner and more environmentally sustainable production processes (Giuliani & Macchi, 2014). Extant research generally suggests that corporate wrongdoing does not necessarily occur as a result of deviant cost–benefit calculators and evil managers and CEOs, but rather it is the outcome of decisions taken by boundedly rational individuals, working in complex environments, subject to multiple influences, which results in their involvement in wrongful conduct being normalised and even appraised, rather than viewed as an abnormal phenomenon (Earle, Spicer, & Sabirianova Peter, 2010; Palmer, 2012). These considerations are likely to be particularly

relevant in the context of international business (IB) research because MNCs operate across different institutional environments and, often, are subject to diverse and conflicting social expectations (Kostova, Roth, & Dacin, 2008), which can lead to some of them becoming involved in controversies over wrongful conduct. Particularly, a greater discrepancy between local habits and cultural values and global ethical standards can provide leeway for wrongful conduct since local managers may be ill-equipped to deal with these tensions (Donaldson, 1996). In other cases, MNCs may invest in host countries to exploit these discrepancies between the home market and host market and take advantage of a host country's weaker institutional conditions which include lower protection of labour rights and/or looser environmental regulation.

In this chapter, we draw attention to the fact that IB research on MNCs' wrongdoing remains scarce which may be because IB scholars are interested more in 'why MNCs exist, how they grow and how they are managed' (Delios, 2017: 391), and implicitly in the *gains* associated with international expansion for either the MNC or other constituents in the home and host countries (see Perri & Peruffo, 2016 for a review). However, what do we know regarding the negative repercussions caused intentionally or unintentionally by MNCs' pursuit of financial and productivity gains abroad? We find that such questions need to be addressed and that developing an IB research agenda around the topic of corporate wrongdoing is timely and important. As a first step in this direction, in this chapter we provide a brief review of some of the most relevant management literature on corporate wrongdoing, summarising the key concepts and measures of this notion. Next, we focus on the existing, yet limited IB literature on corporate wrongdoing. We provide an agenda for further research by focusing on the relationship between corporate wrongdoing and mainstream IB topics such as the existence and performance of MNCs.

Corporate Wrongdoing in Management Research

A Brief Overview of the Literature

Prompted by a series of corporate scandals, in the 1970s, management scholars started to question the capacity of private companies to be the fundamental engines of capitalism and raised concerns about the legitimacy of the capitalistic system itself. Initially, the focus was on conceptualising and

understanding the concept of corporate wrongdoing (often referred to as corporate irresponsibility) and examining the antecedents to firms' involvement in wrongful conduct (e.g. Armstrong, 1977; Szwajkowski, 1985). Over time, to gain a more in-depth understanding of the circumstances that make firms more or less likely to be involved in wrongdoing, scholars have considered several dimensions. For instance, some studies analyse the characteristics of the firm's environment, such as firm's industry (e.g. Staw & Szwajkowski, 1975), institutional characteristics of the firm's country of operation (e.g. Fiaschi et al., 2017; Keig et al., 2015; Surroca et al., 2013), national cultural factors (e.g. Martin, Cullen, & Johnson, 2007), and legal and regulatory enforcement (e.g. Chirayath, Eslinger, & De Zolt, 2002). Other studies focus more on examining the role played by stakeholder pressures (e.g. Armstrong, 1977; Surroca et al., 2013) or the effect of firm's history of corporate wrongdoing (e.g. Baucus & Near, 1991). The antecedents associated with wrongdoing are often focused on very specific factors, generally firm-level characteristics such as firm size (e.g. Baucus & Near, 1991), characteristics of top management teams (TMTs) (e.g. Chiu & Sharfman, 2016), past firm performance (e.g. Mishina, Dykes, Block, & Pollock, 2010) and governance structures (e.g. Jonsson, Greve, & Fujiwara-Greve, 2009).

The consequences of corporate wrongdoing, in terms of firms' financial performance (e.g. Baucus & Baucus, 1997), market reactions (e.g. Muller & Kraussl, 2011) or customers' reactions (e.g. Grappi, Romani, & Bagozzi, 2013), have also been investigated. With regard to the outcomes of wrongdoing, academic focus remains on the extent to which companies are able to restore their legitimacy following a controversy over wrongful conduct (e.g. Pfarrer, Decelles, Smith, & Taylor, 2008), and the negative legitimacy spillovers experienced by firms considered similar (for instance, in terms of industry) to the wrongdoers (notably Zavyalova, Pfarrer, Reger, & Shapiro, 2012). Although parallel literature studies existed on wrongdoing and the sister concept of corporate social responsibility (CSR) and CSiR (Fiaschi, Giuliani, & Nieri, 2015; Marano & Kostova, 2016, among others), it is only recently that scholars have started to investigate the relationship between these concepts (for an overview, see Riera & Iborra, 2017). Interestingly, some works conceptualise CSR and CSiR as 'opposite ends of a continuum' (see Gilbert, Rasche, & Waddock, 2011; McWilliams & Siegel, 2001), while others consider them as separate concepts based on the evidence that firms can do good and harm simultaneously (e.g. Fiaschi et al., 2017; Kang, Germann, & Grewal, 2016; Strike, Gao, & Bansal, 2006).

Corporate Wrongdoing: Definitions and Measurement Issues

In referring to corporate wrongdoing, scholars sometimes exploit the notion of CSiR. A pioneering article on CSiR by Armstrong (1977: 185) defines a socially irresponsible act as 'a decision to accept an alternative that is thought by the decision maker to be inferior to another alternative when the effects upon all parties are considered. Generally this involves a gain by one party at the expense of the total system'. However, later studies propose other definitions of corporate wrongdoing/CSiR. For instance, Kotchen and Moon (2012: 2) define CSiR as 'a set of actions that increase externalised costs and/or promote distributional conflicts', and therefore, firms are irresponsible if their business practices are in conflict with social values and goods (Kang et al., 2016). Other scholars define CSiR more loosely, as a set of corporate actions that cause harm or disadvantage an identifiable set of stakeholders (e.g. community, employees, consumers) (Strike et al., 2006), or simply as 'bad deeds' (Muller & Kraussl, 2011). Armstrong and Green (2013: 1927) offer a broad definition of CSiR as 'unethical procedures' that increase managers' personal wealth at the expense of the firm, while Herzig and Moon (2013) refer to failure to meet the expectations of society and consider CSiR as a socially constructed concept (Lange & Washburn, 2012).

Other studies use somewhat broader and perhaps less subjective definitions that are attached to certain well-defined social codes, standards or legal frameworks. For instance, corporate misconduct has been defined as 'the organisational pursuit of any action considered illegitimate from an ethical, regulatory, or legal standpoint' (Harris & Bromiley, 2007: 351), but also as occurring when 'firm behaviours ... place a firm's stakeholders at risk and violate stakeholders' expectations of societal norms and general standards of conduct' (Zavyalova et al., 2012: 1080). These definitions are largely in line with the concept of organisational misbehaviour as 'any intentional action by members of organisations that violates (a) shared organisational norms and expectations, and/or (b) core societal values, mores and standards of proper conduct' (Vardi & Wiener, 1996: 153). From a sociological perspective—which focuses on the notion of deviant organisational practices—'organisations become deviant in two ways. One way is the adoption of organisational goals that are deviant from societal norms or laws. The other way is the organisationally approved use of means that deviate from societal norms or laws to achieve societally legitimate organisational goals' (Chirayath et al., 2002: 136 citing Sherman, 1987).

Another perspective, which emphasises the legal aspects of corporate wrongdoing, is adopted by corporate illegality and crime studies, which define corporate misconduct as the violation of administrative and civil law, and the violation of criminal law (Baucus, 1994). More recently, CSiR has been related to infringements of human rights (Fiaschi et al., 2017; Giuliani, Macchi, & Fiaschi, 2013; Whiteman & Cooper, 2016) under the 1948 Universal Declaration of Human Rights (UNDHR) definition of human rights as inalienable fundamental rights to which a person is inherently entitled simply because she or he is a human being (Ruggie, 2008). We argue later in this chapter that a legality lens of wrongdoing is likely to be relevant in the context of IB (see Giuliani & Macchi, 2014; Giuliani, Santangelo, & Wettstein, 2016), given the increased attention paid by stakeholders to the impact of business activities on universally defined human rights (Kolk & van Tulder, 2010). This is in line with the provisions in the 2011 UN Guiding Principles on business and human rights and the 2015 UN Sustainable Development Goals, which are two international initiatives aimed at promoting responsibility among firms to respect the human rights framework, by doing no harm through their operations in different markets.

In empirical studies of corporate wrongdoing, the heterogeneity in definitions of corporate misconduct is reflected in the variety of measures used. Some studies employ aggregate measures that rely on Environmental, Social and Governance (ESG) ratings, such as those provided by MSCI (former Kinder, Lydenberg, Domini, KLD) or private ESG companies such as Asset 4 (Thomson Reuters), RepRisk or Sustainalytics (e.g. Chiu & Sharfman, 2016; Kang et al., 2016; Keig et al., 2015; Muller & Kraussl, 2011; Strike et al., 2006). Other studies rely on evidence of corporate scandals or allegations of business-related human rights abuses, using press analysis or other authoritative public sources (e.g. Fiaschi et al., 2017; Jonsson et al., 2009), or consider firms' involvement in illegal behaviour, defined on the basis of a firm's home country regulations and laws (e.g. Mishina et al., 2010; Shi et al., 2016). While these approaches aim to measure overall organisational wrongdoing, other contributions focus on and measure specific instances of companies' wrongful conduct. For example, Earle et al. (2010) investigate the effect of violations against employees such as wage arrears, while Zavyalova et al. (2012) focus on the number of products recalled because of their potential danger to customers. Others such as Chatterji and Toffel (2010) examine environmental crimes related to toxic emissions.

To summarise, the growing evidence of business-related misdeeds has increased the interest of management scholars in corporate wrongdoing. However, this has been accompanied by a proliferation of definitions, constructs and measures, which are not necessarily coherent and suggest the need for a more systematic research agenda in this area.

IB Research and MNCs' Wrongdoing

We have discussed how companies' wrongful conduct has attracted the attention of general management scholars for some decades. Traditionally, IB scholarship has overlooked this topic, with most research focused on, for instance, the positive impacts of internationalisation on MNCs' performance or the home and host countries entered by MNCs. Although concerns about the impact of MNCs' operations on various social issues, such as loss of employment opportunities and weak labour rights in host countries, are discussed in Vernon (1977), until recently, the potential 'dark side' of MNCs has been largely ignored.

Table 3.1 presents a summary of studies on IB topics that are related to acts of corporate wrongdoing. One of the notable empirical papers on wrongdoing in an IB context was Strike et al.'s (2006) which analyses the relationship between CSiR, CSR and internationalisation strategies for a sample of US firms from 1993 to 2003 (see Table 3.1 section (a) for more details). The authors use KLD data to measure the adoption of CSR policies and involvement in CSiR events (based on KLD 'concerns' data). They find that international diversification, which is defined as the number of different geographic locations in which the firm operates, is accompanied by increased adoption of CSR policies and CSiR. This result for CSiR is in line with the pollution haven hypothesis (notably, Mani & Wheeler, 1998) and is explained by MNCs' incapacity to monitor their subsidiaries since they are operating in institutionally weak host countries. As they put it: 'MNCs may act irresponsibly, not out of malice or ill will, but because they have to stretch their resources and capabilities in order to coordinate and monitor subsidiaries' (Strike et al., 2006: 852).

In another notable study linking corporate wrongdoing concepts and IB, Spencer and Gomez (2011) draw on neo-institutional theory and, in particular, the isomorphic pressure firms face to gain legitimacy in international markets (see DiMaggio & Powell, 1983), to analyse the impact of the MNCs' home country institutional quality (in relation to corrupt practices) on the pressure faced by MNC subsidiaries to engage in corrupt practices in host countries. Their analysis is based on a sample of Eastern European firms and a sample of firms from Ghana (for more details, see Table 3.1 section (b)). The authors rely on Transparency International's 2010 Corruption Perception Index (CPI) to measure the level of corruption in each country and find a positive relationship between the level of corrupt practices in the MNC's home country and the pressure its subsidiaries face to engage in corrupt practices in host countries. They find that this relationship is moderated

Table 3.1 IB-related research on MNCs' wrongdoing

Author(s) (year)	Wrongdoing Data	Country (Cohort)	Key findings
a. Strike et al. (2006)	MSCI KLD 'concerns'	US (1993–2003)	<ul style="list-style-type: none"> • Positive relationship between the level of international diversification and both the CSR and the CSIR activities of a firm • Positive relationship between the level of corrupt practices in the MNCs' home country and the involvement in such practices in their host countries • When MNCs do not have local partners, firms from less corrupt home countries reported less pressure to engage in corrupt practices locally • MNCs transfer their socially irresponsible practices from its headquarters to its overseas subsidiaries; especially, when subsidiaries are apparently unconnected to the headquarters, the institutional environment in the home country demands compliance, while the institutional environment in the host country is weak
b. Spencer and Gomez (2011)	Business Environment and Enterprise Performance Survey; authors own data	Eastern Europe (1999–2000); Ghana (2004–2005; 2007)	
c. Surroca et al. (2013)	Sustainalytics ESG data	Global (2003–2007)	

(continued)

Table 3.1 (continued)

Author(s) (year)	Wrongdoing Data	Country (Cohort)	Key findings
d. Keig et al. (2015)	MSCI KLD 'concerns'	Global (n.a)	<ul style="list-style-type: none"> • MNCs' portfolio of locations characterised by higher levels of corruption in formal and/or informal institutions is associated with higher levels of CSIR • The informal dimension is more explicative than the formal one for the involvement in CSIR • The vertical pay gap between the CEO's compensation and the average compensation of the non-CEO TMT is positively associated with securities class action lawsuits • This relationship is moderated positively by firms' unrelated diversification • MNCs which have adopted CSR policies display a decreasing involvement in CSIR, the more they invest in countries characterised by strong speech and press freedoms
e. Shi et al. (2016)	Security fraud from Institutional Shareholder Services Securities Class Action Services and Securities Class Action Clearinghouse	US (1996–2012)	
f. Fiaschi et al. (2017)	Business and Human Rights Resource Centre and Sustainalytics ESG data	Mexico/Brasil (2003–2012)	

by the MNCs' mode of operation strategy, i.e. where the MNCs have no local partners, firms from less corrupt home countries report less local pressure to engage in corrupt practices.

In a relatively more recent study, Surroca and colleagues (2013) also draw on neo-institutional theory (DiMaggio & Powell, 1983) and the pollution haven hypothesis, to investigate the diffusion of socially irresponsible practices from headquarters to subsidiaries, and the effects of the home country and host country institutional environment. Their analysis of a sample of 110 MNCs and 269 publicly listed subsidiaries using EGS data provided by Sustainalytics (Table 3.1 section (c)) suggests that stakeholder pressure in the MNCs' home country leads to the transfer of socially irresponsible practices from headquarters to subsidiaries. Their results are particularly significant for interlocked-minority subsidiaries, because their irresponsible conduct and subsequent reputational damage may be less likely to have spillover effects on headquarters.

Further, Keig et al.'s (2015) analysis is grounded on the economic paradigm of institutional theory and, in particular, on the distinction between formal and informal institutions proposed by North (1990). Using a sample of MNCs selected from KLD global universe, they find that firms' involvement in CSiR is affected by high levels of corruption in both the formal and informal institutions of host countries, whereas the informal dimension has incremental explanatory power compared to the formal dimension for predicting MNCs' involvement in CSiR (Table 3.1 section (d)).

Shi et al. (2016) focus on the effect of CEO pay on corporate wrongdoing. The authors use a sample of all the firms listed in the S&P 1500 between 1996 and 2012 and examine their security frauds (Table 3.1 section (e)). They find that the relative executive compensation (i.e. the vertical pay gap between the CEO's pay and the average non-CEO top executive salary) is positively associated with the likelihood of a securities class action lawsuit. Their results also confirm that this relationship is stronger for firms with high unrelated diversification (i.e. the firm is involved in many different businesses) where internal competition among managers is more likely.

Finally, Fiaschi et al. (2017) propose to extend past work on CSiR by analysing the antecedents to involvement in human rights controversies, for a sample of large Brazilian and Mexican public companies (based on Business and Human Rights Resource Centre and Sustainalytics' controversy reports), observed during 2003 to 2012 (see Table 3.1 section (f)). Drawing on neo-institutional theory and its extensions in the context of

MNCs (see Kostova et al., 2008; Kostova & Roth, 2002), Fiaschi et al. (2017) suggest that the relationship between CSiR and their internationalisation strategies needs to be investigated alongside the adoption of explicit CSR policies. They maintain that among firms that have adopted a CSR policy, and the more their foreign direct investments are in countries characterised by strong speech and press freedoms, such that any evidence of wrongdoing is scrutinised and shared by relevant constituencies such as investors, suppliers, governments and consumers, there is decreasing involvement in CSiR. This paper contributes to the literature on CSiR and IB by highlighting that two coexisting conditions are required to curb CSiR: adoption of explicit CSR policies and high levels of speech and press freedom in the host country which allow the media and other reporting agencies to inform the relevant constituencies of the firms' involvement in irresponsible events.

This chapter makes an initial step to explicitly address the gap in our understanding with regard to the effect of internationalisation-related activities on acts of corporate wrongdoing otherwise referred to acts of irresponsibility. Our review suggests that studies of firms' involvement in wrongful conduct in the context of IB-relevant research tend, so far, to focus on internationalisation strategies and wrongdoing (Shi et al., 2016; Strike et al., 2006), or on home and host countries' institutional pressures and wrongdoing (Fiaschi et al., 2017; Keig et al., 2015; Spencer & Gomez, 2011; Surroca et al., 2013). Some studies also examine the effect of intra-firm drivers such as CSR policies (Fiaschi et al., 2017; Strike et al., 2006; Surroca et al., 2013) and CEO compensation (Shi et al., 2016). Overall, existing studies suggest that MNCs may be involved in wrongful conduct because of their inability to manage their international operations. At the same time, involvement in wrongdoing may be related to the institutional conditions in the host countries, i.e. in countries characterised by weak institutions, where the risk of de-legitimisation associated with involvement in wrongful conduct is lower compared to countries characterised by strong institutions, and this may constitute an incentive to practise such bad behaviour.

Despite these important contributions, extant research on the relationships between corporate wrongdoing and IB decisions remains scattered, as these studies appear to exploit the IB context without originating a new field of IB research (or at least, debates with regard to a new sub-field of IB). In our view, it is important to formulate a novel research agenda on corporate wrongdoing in IB. We propose such an agenda below.

Unaddressed Questions and Future Research Directions

Given the growing scale of global business operations, there is a need to consider corporate wrongdoing from an IB perspective. The upsurge in global governance and development agendas that transcend national boundaries and the failure of individual state capacity to legislate and ensure the rule of law, especially in developing countries (Scherer & Palazzo, 2008), call for a new theoretical lens through which corporate wrongdoing can be conceptualised and understood at the international/global level rather than merely a national level. Investigating wrongdoing from the point of view of national legislation or country-specific ethical principles is of little value when firms operate across different countries, institutions and cultures. While understanding how managers can navigate these differences and maintain their core ethical values unaltered is an old issue in management and business ethics (c.f. Donaldson & Dunfee, 1994), more work is needed.

One area where some scholarly advancements would be desirable is related to the conceptualisation and operationalisation of the concept of corporate wrongdoing for IB research. As suggested by Giuliani et al. (2013), the concept of CSiR has been a black box for too many years, accompanied by too many inconsistent definitions, ill-suited to addressing issues of wrongdoing on an international scale. To this, Giuliani et al. (2013) propose the formulation and adoption of an international law outlook at irresponsible or wrongful business conducts. More specifically, the authors propose a normative framework, based on the 1948 UNDHR and international human rights treaties (e.g. the International Bill of Human Rights), which would be superior to other conceptualisations, including the notion of 'hypernorms' proposed by Donaldson and Dunfee (1994). Conceptualising wrongdoing using the UNDHR as a reference point is potentially preferable than adopting other ad hoc or country-specific concepts and norms because it would be based on a clear-cut, internationally agreed normative framework, which is tighter and provides international companies with less leeway and discretion (see also Giuliani et al., 2016). Future IB research could study the advantages as well as the disadvantages of considering international corporate wrongdoing as an infringement of universal human rights.

As research on an IB-relevant conceptualisation of wrongdoing progresses, questions can be expected to arise in relation to methodological issues linked to observing or measuring the phenomenon. Several scholars are questioning the reliability of the existing and widely used ESG measures of corporate

social performance and/or wrongdoing (e.g. Chatterji, Durand, Levine, & Touboul, 2016; Fiaschi, Giuliani, & Salvati, 2016). Thus, the field is in need of novel and reliable, codified and accessible datasets of IB-related evidence of human rights infringements (or otherwise defined evidence of wrongdoing). The time is ripe, also, for an in-depth discussion of the most appropriate methods for observing and analysing this phenomenon on a global scale and the difficulties that might arise in relation to the collection of sensitive information on human rights in conflict-driven and/or underdeveloped countries (Giuliani & Macchi, 2014).

In our view, addressing these fundamental issues would be just the starting point of a new research agenda, which we believe should include three immediate areas of enquiry. One would be the link between internationalisation strategies and wrongdoing. For instance, is there strong evidence showing that companies that are more internationalised are more subject to involvement in controversy or to enactment of wrongful conduct? Further, is this relationship moderated by firm characteristics? Some earlier research uses a neo-institutional and pollution havens theoretical lens to explain the relationship between internationalisation and wrongdoing and argues that MNCs either invest in institutionally weak countries to gain from these contexts (e.g. in terms of easier access to natural resources, slacker regulations, cheap labour) or enact wrongful conduct because it is difficult to maintain international standards in local conditions and normative frameworks that are too distant—either culturally or institutionally. We would ask whether there might be other theoretical interpretations, which consider, for instance, MNC-level strategies, internal resources and intra-firm governance models as important dimensions that may influence the relationship between degree of internationalisation and the likelihood of wrongdoing/irresponsible behaviour. In this vein, interesting questions could be raised also around the numerous intra-firm factors that may contribute to organisational wrongdoing including the cultural, ethical orientations, experience and international diversity of CEOs, TMTs and/or corporate boards. While a full review of relevant theories is beyond the scope of this chapter, we believe that research in this area would benefit from incorporating insights from the behavioural theory of the firm (Cyert & March, 1963) and by considering MNCs and their managers as boundedly rational actors (see Simon, 1955). We would moreover suggest that one single theory will be insufficient to explain the complexity of the instances that lead to wrongdoing, and that an interdisciplinary approach is probably more desirable and more likely to lead to novel theoretical frameworks in this area.

A second area of enquiry that may be of interest to IB scholars relates to the consequences of past wrongful conduct for current internationalisation strategies. For instance, are firms with a history of wrongful conduct more liable to repeat this behaviour when they internationalise? How does such a legacy influence their mode of entry, the countries in which they decide to invest, or even the decision to divest? Further, how (if at all) does the impact of wrongdoing on internationalisation subsequently affect an MNCs' long-term survival or performance? These research questions have natural links to some well-worn IB concepts, such as the liability of origin or foreignness (notably, Zaheer, 1995) and the construct of organisational legitimacy (see Kostova & Zaheer, 1999) which is one of the pillars of neo-institutional theory. MNCs' wrongdoing can also be studied by drawing on the springboard perspective which focuses on the internationalisation process of emerging country MNCs (Luo & Tung, 2007) since wrongdoing could be detrimental to these MNCs' use of internationalisation as a springboard to acquiring critical resources abroad.

Finally, there is an immediate third strand of IB-relevant enquiry related to the impacts that MNCs generate in their home and host countries (Meyer, 2004). Most previous research focuses on the potential economic impacts of MNCs, often related to productivity, wage and export spillovers (Castellani & Zanfei, 2007; Lall & Narula, 2004; Perri & Peruffo, 2016). However, these accounts fail to factor in negative externalities—as economists describe non-market-mediated negative consequences of business operations—which might emerge following a company's wrongful conduct. These could include human rights retrogressions among given constituencies in both the home and host countries (for an overview, see Giuliani & Macchi, 2014). Hence, we would question the utility of the existing IB theoretical lenses to assess and understand such impacts. These issues might refer also to the connection between global business and inequality, and the relationship between MNCs' operations and global justice—two open and highly controversial areas of current academic and policy debate.

Note

1. Scholars have described corporate wrongdoing also as corporate misconduct, corporate social irresponsibility (CSiR), deviant organisational practices, corporate illegality, crime and fraud. For simplicity, here we use the term corporate wrongdoing or wrongful conduct to refer to the general phenomenon and use the original terminologies used by different authors when we refer to specific studies.

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4

The Internationalisation of Ventures: The Roles of a Nation's Institutions and the Venture's Value Orientation

Jie Chen, Kaisu Puumalainen and Sami Saarenketo

Introduction

Given the increased complexity of a firm's business environment brought about by factors such as the liberalisation of markets and globalisation (Aulakh & Kotabe, 2008; Kiss, Danis, & Cavusgil, 2012; Stiglitz, 2000, 2004), scholars have questioned whether the international business (IB) theories developed to understand the behaviour of developed market firms remain valid in a broader range of contexts, i.e. emerging market contexts (see Estrin, Mickiewicz, & Stephan, 2013; Kiss et al., 2012; Zahra, Newey, & Li, 2014). Relatively newer studies propose that differences in the institutional contexts of countries and their potential effects on the international decisions of firms should be more explicitly considered in IB research. What is more, firms are increasingly evaluated not only based on their financial performance but also with regard to their broader contribution to society,

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through their social and environmental impacts in the different host regions. For example, firms that create vast financial wealth while at the same time contributing to social and environmental damage such as unemployment, disposition to crimes, civil disorder, environmental pollution and waste of non-renewable resources are more exposed to reputational damage (Teegen, Doh, & Vachani, 2004). In line with efforts to develop new criteria to measure the performance of firms, value creation in firms has changed accordingly as the focus is shifting more towards the creation of blend of economic, social (societal) and environmental values (Emerson, 2003), instead of an almost exclusive focus on the creation and measurement of economic value. In this context, it could be argued that the diversification of organisational value creation has blurred the boundaries imposed by the post-war organisation ontology and has endowed entrepreneurial ventures with different value orientations, ranging from profit-oriented to socially oriented ventures (Peredo & McLean, 2006; Zahra et al., 2014). In this chapter, we specifically discuss how changes in the global business environment have made it necessary for IB research to consider, not only the diversity of home and host institutional contexts but also the different types of organisational value creation.

Within the entrepreneurship literature, a commonly accepted framework generalises the entrepreneurial process of new venture formation as the discovery, evaluation and exploitation of entrepreneurial opportunities (for a detailed discussion of the framework, see Shane & Venkataraman, 2000). Further, an updated version of the entrepreneurship framework—the Comparative Discovery, Evaluation and Exploitation (CDEE) framework—was proposed by Baker, Gedajlovic, and Lubatkin (2005) who extended the framework to account for a venture's international context and enriched the framework with issues central to comparative international entrepreneurship. A core assumption of the new CDEE framework is that the character of business opportunities and those of the individuals who discover, evaluate and exploit such opportunities are strongly influenced by a nation's institutional context. Within the CDEE framework, the first stage of the entrepreneurial process is the *Discovery* stage. The associated “who” and “what” elements in the *Discovery* stage are explained by examining how a nation divides and stratifies its labour force. The division and stratification of labour can be measured by individual-level predictors such as gender, age, education and experience of the entrepreneur (Estrin et al., 2013; Aidis, Estrin, & Mickiewicz, 2012; Van Stel, Storey, & Thurik, 2007). The second stage is the *Evaluation* stage. In this stage, how entrepreneurial opportunities are evaluated by individuals is explained by examining how the national institutional structure shapes the entrepreneur's opportunity cost

assessment (Baker et al., 2005; Busenitz, Gomez, & Spencer, 2000; Zahra, Korri, & Yu, 2005; Estrin et al., 2013; Aidis et al., 2012; Autio & Acs, 2010). The third stage is the *Exploitation* stage. In this stage, it focuses on how resource availability and specificity influence exploitation of opportunities. The *Exploitation* stage is examined in a corporate context and thus can be influenced by firm-level predictors (Baker et al., 2005) such as entrepreneurial orientation (Hansen, Deitz, Tokman, Marino, & Weaver, 2011; Slevin & Terjesen, 2011) and firm innovativeness (Boter & Holmquist, 1996). Hence, in this study also, we examine how a series of national-level, firm-level and individual-level predictors influence the likelihood of venture internationalisation (Fig. 4.1).

Our study analyses 10,920 individual ventures across 54 countries. As discussed later in this chapter, we found that it is more common for ventures from emerging economies and the least-developed economies to internationalise their operations early and also that an increasing number of ventures have developed sustainable and responsible business practices in their respective host market environments. Further, ventures from nations with better-developed formal institutions, higher power distance and individualistic and feminine cultures are more likely to become international. Socially oriented ventures, early-stage ventures, male entrepreneurs and opportunity-driven entrepreneurs are also more likely to establish themselves internationally. These findings (and others) enhance our theoretical understanding of venture internationalisation and provide a general guideline to predict the likelihood of internationalisation for these ventures.

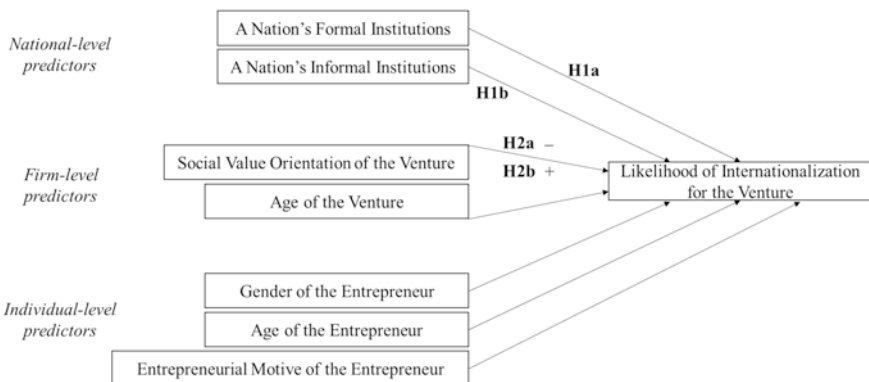


Fig. 4.1 Conceptual framework on the effect of institutions and a venture's value orientation on venture internationalisation

Theoretical Framework and Hypothesis Development

A Nation's Formal and Informal Institutions and the Likelihood of Venture Internationalisation

A nation's institutional environment is composed of formal and informal institutions that exert normative pressure on firms (North, 1990; Scott, 1995, 2005). Organisational legitimacy is associated with evaluations given to firms by social actors, who compare the organisation's practices with the existing norms with other organisations that have become legitimised within a given country (Scott, 1983, 1995). However, organisational legitimacy in an international context may be more difficult to attain, since the organisation is likely to have to manage institutional pressures from both the home country and the host country (Zahra et al., 2005). From an institutional legitimacy perspective, the internationalisation process can be regarded as the process by which the organisation gains legitimacy from the relevant social actors and conforms to the relevant institutional norms. Notwithstanding the importance of the potential impact of host country institutions on the international entrepreneurial process in a venture, especially on the venture's market selection and entry mode choices (Aspelund & Moen, 2005; Lopez, Kundu, & Ciravegna, 2009; Stray, Bridgewater, & Murray, 2001), this chapter focuses on the impact of home country institutions on the international entrepreneurial process with regard to the internationalisation decision.

Institutions are traditionally divided into formal and informal institutions, with formal institutions referring to the objective constraints and incentives, and informal institutions consisting of the slowly changing, culturally transmitted and socially constructed informal rules and procedures that regulate and constrain individual and organisational actions (North, 1990; Scott, 1995, 2005). Both the formal and informal institutional environments have been found to have a significant effect on the international entrepreneurial process (most notably, Zahra et al., 2005). On the one hand, better-developed home country formal institutions reduce the venture's transaction costs by limiting opportunistic behaviour and uncertainty in market transactions (Wan & Hoskisson, 2003). Better-developed home country formal institutions also produce strong national economies that

can provide more tangible and intangible resource support for the ventures to develop strategic resources and skills, and thus competitive advantages that enable their foreign operations (Kirca et al., 2011). We propose that better-developed home country formal institutions support the internationalisation of ventures, including the internationalisation of socially oriented ventures.

Hypothesis 1a: *The level of development of formal institutions in the home country is positively related to the likelihood of venture internationalisation.*

In turn, the impact of a home country's informal institutions on the international entrepreneurial process has been discussed to a lesser degree. Yet, the impact of a nation's informal institutions on entrepreneurial activities in general has been shown in sources such as the Global Entrepreneurship Monitor (GEM). It can be argued that some national cultures (generally in the Western world) encourage entrepreneurship by encouraging individuals to start their own businesses, while other national cultures (e.g. Eastern European countries) tend to discourage entrepreneurship, represented by the "fear of failure" that may hold back individuals who recognise relevant opportunities (Bosma & Levie, 2010). Current empirical studies on the effect of culture on internationalisation choices of entrepreneurs used Hofstede's cultural dimensions (see Hofstede, 1980, 1991) and compared Hofstede's cultural dimensions between the national average value and the average value for a group of entrepreneurs (e.g. Del Junco & Brás-dos-Santos, 2009; Gupta & Fernandez, 2009). For example, the entrepreneurs show a lower Power Distance Index (PDI) than the national average, which implies a stronger desire for independence, which is one of the main reasons why entrepreneurs tend to start their businesses. Further, entrepreneurs also showed a lower Masculinity Index (MAI) than the national average. The low MAI implies that entrepreneurs are more likely to resolve conflicts through compromise and negotiation and to develop human relationships and networks, which are key competitive advantages to enable venture internationalisation (Coviello & Munro, 1995, 1997). Hence, we also test the following assumption on our sample of ventures.

Hypothesis 1b: *A home country's informal institutions have a significant impact on predicting the likelihood of venture internationalisation.*

The Venture's Value Orientation and Its Likelihood of Internationalisation

The academic discussion on value creation in organisations has changed in recent years as the focus has shifted to the creation of not only economic value but also social (societal) value and environmental value (Emerson, 2003). This shift corresponds to the notion of the triple bottom line (Norman & MacDonald, 2004) as the standard through which to evaluate the performance of ventures and the development of global sustainable well-being (Stiglitz, 2010). Entrepreneurial ventures are traditionally regarded as belonging to the private sector in line with the post-war organisation ontology, and they are also regarded as being primarily profit oriented (Casson, 1982). However, there is an emerging group of entrepreneurial ventures in which entrepreneurial activities focus on blended value creation (Emerson, 2003) and contribute to the overall well-being of society (or that of a community) (Zahra, Gedajlovic, Neubaum, & Shulman, 2009). The diversification of what is perceived as organisational value creation has endowed entrepreneurial ventures with different value orientations, from profit-oriented to socially oriented (Peredo & McLean, 2006). Those ventures have been referred to as socially oriented ventures or social ventures (e.g. Munoz, 2010; Zahra et al., 2014). We refer to value (other than that of a financial reward for the entrepreneur) including non-economic gains for the society and the community and non-economic gains for the environment (Patzelt & Shepherd, 2011) as “non-economic” value. Depending on their value orientations, we propose that ventures can display both economic value creation and non-economic value creation in different proportions, ranging from the exclusive focus on the creation of economic value to focus on the creation of non-economic value.

While our previous assumptions with regard to the effect of formal and informal institutions on venture internationalisation have been tested in a few studies in the past, data on the relationship between venture value orientation and the likelihood of internationalisation are, in fact, missing from the extant IB/entrepreneurship literature. As mentioned earlier in this chapter, the internationalisation of socially oriented ventures may experience different effects from formal and informal institutions when compared to the internationalisation of profit-oriented ventures (Zahra, Rawhouser, Bhawe, & Neubaum, 2008). Institutional failure and institutional voids are common, especially in countries with higher levels of social problems and unsatisfied social demands (Lepoutre, Justo, Terjesen, & Bosma, 2013). Ready markets to which successful social entrepreneurship experience can be simply copied rarely exist (Zahra et al., 2008). One of the major challenges

for the success of socially oriented ventures depends on the entrepreneur's capability of mobilising financial and human resources and rapidly learning about the local market, in particular the potential social problems in a certain country. Hence, extant studies have proposed that those entrepreneurs who have obtained the required local knowledge and have succeeded in combining existing resources to solve social problems (e.g. the examples of Social Bricoleurs in Zahra et al., 2009) are expected to find it difficult to replicate their successful experience in a different location due to the tacit knowledge associated with these social venture types. Given the potential difficulties in translating their knowledge resources and capabilities to different locations, socially oriented ventures may, indeed, have limited capabilities of expanding their operations internationally.

However, in this chapter, we propose that it may be beneficial to consider the nature of social entrepreneurial opportunities. Some entrepreneurial opportunities aiming at social change (e.g. to fill the global poverty gap) or at environmental sustainability (e.g. to fight against climate change and energy depletion) are inherently of global nature (Zahra et al., 2008, 2014). Socially oriented ventures in which those social entrepreneurial opportunities are exploited will naturally involve international activities, even at the early stage. For example, some locally scattered social problems (e.g. air pollution and water degradation) can be solved by the same socially innovative product or service (Zahra et al., 2014). Similar to the internationalisation of profit-oriented ventures, the internationalisation of socially oriented ventures that tackle those locally scattered social problems can leverage the advantages of social innovation and diversify into international markets (e.g. the examples of Social Constructionists in Zahra et al., 2009). The internationalisation of profit-oriented ventures is typically driven by profit or a new growth opportunity (Sapienza, Autio, George, & Zahra, 2006). As such, profit-oriented ventures may also quit international markets and thus de-internationalise when the profit or the initial growth opportunities no longer exist. Unlike profit-oriented ventures, socially oriented ventures created by entrepreneurs, who are motivated to develop new and more effective social systems, are not primarily profit-driven and can alternatively diversify into international markets that suffer from deeper social problems. These host markets are also less attractive in terms of potential profits and/or growth opportunities and are likely to remain unattractive to the more profit-oriented ventures. Hence, we propose that a venture's value orientation has a significant effect on venture internationalisation as follows:

Hypothesis 2: *Socially oriented ventures are more likely to be international than profit-oriented ventures.*

Methodology

Data

To test our hypotheses, our data set covers home countries with different degrees of institutional development and also includes firm-level data for the internationalisation and the value orientation of the entrepreneurial venture. We included individual-level data for the gender, the age and the entrepreneurial motives of the entrepreneur. Thus, we merged a data set of firm-level and individual-level data collected by GEM with a special focus on social entrepreneurship with a variety of publicly available national-level indicators to measure formal and informal institutions.

Firm-level and individual-level data were adapted from the GEM Adult Population Survey (APS) data set collected in the year 2009. The GEM APS is a large population-representative survey with at least 2000 randomly chosen individuals interviewed in each of the 54 countries. A special data-collection protocol was used to avoid selectivity bias, standardise the procedures and assure comparability across countries (Lepoutre et al., 2013). The GEM APS 2009 data set is a unique data set for this study, since it is the only available international comparative data set that (1) contains information on the individual venture's value orientation and (2) includes large representative samples of randomly chosen individuals in 54 countries with diverse formal and informal institutional environments. Thus, the GEM APS 2009 data set was chosen for this study and we identified 24,483 practising individual entrepreneurs from 54 countries (Table 4.1) from the data set. After taking account of the missing values in our data, 10,920 individual entrepreneurs from 54 countries were selected and used in the final regression model.

Table 4.1 Home countries included in the data set

Home country (<i>N</i> = 54)	Algeria, Argentina, Belgium, Bosnia and Herzegovina, Brazil, Chile, China, Colombia, Croatia, Denmark, Dominican Republic, Ecuador, Finland, France, Germany, Greece, Guatemala, Hong Kong, Hungary, Iceland, Iran, Israel, Italy, Jamaica, Japan, Jordan, Korea (Rep.), Latvia, Lebanon, Malaysia, Morocco, The Netherlands, Norway, Panama, Peru, Romania, Russia, Saudi Arabia, Serbia, Slovenia, South Africa, Spain, Switzerland, Syria, Tonga, Tunisia, Uganda, UK, United Arab Emirates, USA, Uruguay, Venezuela, West Bank and Gaza Strip, and Yemen
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Dependent Variable: International Ventures vs. Domestic Ventures

The GEM APS 2009 data set included an ordinal variable for the proportion of customers who normally live outside the home country. We noted the controversy surrounding how to measure degree of internationalisation (c.f. Knight, 1997; Sullivan, 1994). Notably, Knight (1997) differentiated international ventures from domestic ventures by using a boundary of 25% of the sales in foreign markets within three years as his definition for born globals. Due to the limitations of the GEM APS 2009 data set, the unit of measurement is the number of customers in this study, instead of the amount of sales (as per Knight, 1997). If a venture has 25% or more of its customers outside its home country, it is defined as an international venture; otherwise, it is defined as a domestic venture. A binary variable “INT” was created, with a value of “one” when the venture was an international venture and a value of “zero” when we came across a domestic venture.

Independent Variables: Formal and Informal Institutions

We measured a nation's formal institutions from the perspective of national economy development, human development and governance. The measure used for national economy development was the Gross National Income (GNI) per capita adjusted in US dollars for the year 2009, and the data were collected from the World Bank database. The measure used for human development was the Human Development Index (HDI) for the year 2009, and the data were collected from the United Nations Development Programme database. The measures used for governance were adopted from the Worldwide Governance Indicators (WGIs) developed by the World Bank Group. Three relevant dimensions out of the total of six WGI dimensions were selected, and the scores for the year 2009 were used. The three relevant measures selected were government effectiveness (GE), regulatory quality (RQ) and the rule of law (RL).

Furthermore, we measured a nation's informal institutions by adopting Hofstede's cultural dimensions (Hofstede, 1980, 1991). Four out of the six of Hofstede's cultural dimensions were selected, namely Power Distance Index (PDI), Individualism Index (IDV), Masculinity Index (MAS) and Uncertainty Avoidance Index (UAI).

Table 4.2 Correlations table

	GNI	HDI	GE	RQ	RL	PDI	IDV	MAS	UAI	VO	VA	SEX	AGE	EM
GNI	1.000													
HDI	0.875	1.000												
GE	0.842	0.852	1.000											
RQ	0.757	0.795	0.917	1.000										
RL	0.836	0.869	0.973	0.942	1.000									
PDI	-0.700	-0.685	-0.719	-0.662	-0.716	1.000								
IDV	0.720	0.676	0.698	0.682	0.744	-0.818	1.000							
MAS	-0.150	-0.172	-0.225	-0.215	-0.249	0.064	0.038	1.000						
UAI	-0.053	0.047	-0.141	-0.030	-0.062	0.293	-0.325	-0.314	1.000					
VO	-0.092	-0.089	-0.115	-0.093	-0.107	0.094	-0.076	0.038	0.030	1.000				
VA	0.117	0.126	0.103	0.101	0.110	-0.075	0.075	-0.013	0.038	0.018	1.000			
SEX	0.021	0.036	0.028	0.022	0.042	-0.008	0.040	-0.026	0.025	0.023	0.071	1.000		
AGE	0.230	0.259	0.246	0.228	0.246	-0.224	0.206	-0.007	-0.030	-0.031	0.297	0.032	1.000	
EM	-0.234	-0.196	-0.203	-0.216	-0.219	0.152	-0.226	0.096	-0.007	-0.001	0.011	-0.048	0.011	1.000

The five national-level measures for formal institutions correlated with each other strongly (the Pearson correlation coefficients range from 0.757 to 0.973, as shown in Table 4.2), thus implying problems of multicollinearity. Hence, a principal component score of the five national-level measures for formal institutions was used instead. In the principal component analysis of the five national-level measures, a single component emerged, with an eigenvalue of 4.47, explaining 89.4% of the variance. The component loadings were in excess of 0.828. The principal component score of the five national-level measures for formal institutions was used as a continuous independent variable “INS” in the regression model, replacing the previous five continuous variables “GNI”, “HDI”, “GE”, “RQ” and “RL”.

Venture Value Orientation: Socially Oriented vs. Profit-Oriented

The GEM 2009 data set included questions on the organisational goals of firms with regard to generating economic value, social value and environmental value. Entrepreneurs were asked to allocate a total of 100 points across these three categories. There has been a long-standing debate regarding what constitutes the borderline between socially oriented ventures and profit-oriented ventures (see Austin, Stevenson, & Wei-Skillern, 2006 for a detailed discussion). A commonly accepted criterion for differentiating socially oriented ventures from profit-oriented ventures is still missing in the literature (Arend, 2013). In our research, we set a “50/50 percent” boundary for the economic value–non-economic value created within a venture (Lyon & Sepulveda, 2009). If a venture aims to create more non-economic value (the total of social value and environmental value) than economic value as its organisational goal, it is defined as socially oriented; otherwise, it is defined as profit oriented. A binary variable “VO” was created, with a value of “one” when the venture was profit oriented and a value of “zero” when the venture was defined as socially oriented.

Control Variables

The effects of the age of the venture (variable “VA”) and the gender (variable “SEX”), the age (variable “AGE”) and the motives of the entrepreneur (variable “EM”) were controlled for in this paper. The control variables “VA”, “SEX” and “EM” are binary, and the control variable “AGE” is continuous. Our definitions of the control variables are presented in Table 4.3.

Table 4.3 Descriptive statistics and measurement of variables

Variable	Definition	Mean	SD
<i>National-level measures</i>			
GNI	Gross National Income per capital adjusted in US dollars, year 2009	23616.96	18059.95
HDI	Human Development Index, year 2009	0.81	0.08
GE	Worldwide Governance Indicators: government effectiveness, year 2009	0.70	0.82
RQ	Worldwide Governance Indicators: regulatory quality, year 2009	0.68	0.92
RL	Worldwide Governance Indicators: the rule of law, year 2009	0.62	0.99
INS	The principal component score of the five national-level measures for formal institutions GNI, HDI, GE, RQ and RL	0.00	1.00
PDI	Hofstede's cultural dimensions: power distance	56.90	18.80
IDV	Hofstede's cultural dimensions: individualism versus collectivism	48.86	25.42
MAS	Hofstede's cultural dimensions: masculinity versus femininity	51.23	17.64
UAI	Hofstede's cultural dimensions: uncertainty avoidance	64.54	23.57
<i>Firm-level measures</i>			
INT ^a	The internationalisation of the venture: 1 = international, 0 = domestic	0.10	0.30
VO	The value orientation of the venture: 1 = profit-oriented, 0 = socially oriented	0.79	0.41
VA	The age of the venture: 1 = established, 0 = early stage	0.69	0.46
<i>Individual-level measures</i>			
SEX	The gender of the entrepreneur: 1 = male, 0 = female	0.62	0.49
AGE	The age of the entrepreneur (in years)	43.04	12.44
EM ^b	The entrepreneurial motive of the entrepreneur: 1 = necessity-driven, 0 = opportunity-driven	0.39	0.49

^aDependent variable

^bDue to the complexity embedded in the entrepreneurs who are driven by a mixed motive (Williams, 2009), the paper only differentiated between solo opportunity-driven entrepreneurs and solo necessity-driven entrepreneurs

Model

Four binary logistic regression models were designed, testing the effects between the national-level, firm-level and individual-level predictors and the venture's likelihood of internationalisation. The binary variable "INT" was the dependent variable in the four models, indicating whether the venture was international or domestic. The continuous variable "AGE" and the binary variables "VA", "SEX" and "EM" were selected as control variables and were loaded in Model M1. The continuous variable "INS"—with the value of the principal component score for the five measures for formal institutions "GNI", "HDI", "GE", "RQ" and "RL"—was selected as an independent variable measuring a nation's formal institutions. The four measures adopted from Hofstede's cultural dimensions "PDI", "IDV", "MAS" and "UAI" were selected as four independent variables measuring informal institutions. The five independent variables that measure formal and informal institutions were loaded in Model M2. "VO" was loaded in Model M3. Finally, the five independent variables that measure a nation's formal and informal institutions, the independent variable "VO" and the four control variables were all loaded in Model M4. The descriptive statistics of the variables in the regression model M4 are shown in Table 4.3.

Results

The results from the binary logistic regressions are shown in Table 4.4. The significance of the chi-square test in the four regression models was lower than 0.001, showing that the models were a significant fit for the data. We found that the control variables "VA", "SEX" and "EM" were significant in determining the venture's likelihood of internationalisation. Early-stage ventures are more likely to be international than established ventures are. Male entrepreneurs are more likely to establish international ventures than female entrepreneurs are. Opportunity-driven entrepreneurs are more likely to establish international ventures than necessity-driven entrepreneurs are. Perhaps surprisingly, the control variable "AGE" was not statistically significant in determining the venture's likelihood of internationalisation. We found that ventures from home countries with better-developed formal institutions were more likely to be international (Model M4). We found that ventures from the countries that displayed higher

Table 4.4 Binary logistic regression results. *Source* Authors' own

International [§]	M1	M2	M3	M4
	B	B	B	B
INS		0.247*** (0.058)		0.227*** (0.058)
PDI		0.011** (0.003)		0.011** (0.003)
IDV		0.008** (0.003)		0.009** (0.003)
MAS		-0.006** (0.002)		-0.006** (0.002)
UAI		0.000 (0.002)		0.001 (0.002)
Socially oriented (VO) ^a			0.367*** (0.070)	0.261*** (0.073)
Early stage (VA) ^b	0.067 (0.067)	0.169* (0.070)	0.050 (0.068)	0.156* (0.071)
Male (SEX) ^c	0.187** (0.064)	0.206** (0.067)	0.178** (0.065)	0.188** (0.068)
AGE	0.003 (0.003)	-0.004 (0.003)	0.003 (0.003)	-0.004 (0.003)
Opportunity-driven (EM) ^d	0.546*** (0.066)	0.377*** (0.073)	0.524*** (0.067)	0.352*** (0.074)
<i>Constant</i>	-2.679*** (0.135)	-2.969*** (0.329)	-2.743*** (0.137)	-3.138*** (0.337)
<i>Model fit</i>				
<i>N</i>	13,044	11,446	12,467	10,920
Deviance (-2 log likelihood)	1433.560	5492.210	2047.626	5739.830
χ^2	85.349***	156.549***	101.985***	158.644***
df	4	9	5	10
Nagelkerke pseudo R^2	0.014	0.028	0.017	0.030

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

[§]The reference group is to be domestic

^aThe category of profit-oriented ventures is set to zero because it is redundant

^bThe category of established ventures is set to zero because it is redundant

^cThe category of female entrepreneurs is set to zero because it is redundant

^dThe category of necessity-driven entrepreneurs is set to zero because it is redundant
Standard errors in parentheses

power distance and higher individualistic and feminine cultures were also more likely to be international (Model M4). Hence, Hypotheses 1a and 1b are supported. In addition, we found that socially oriented ventures were

more likely to be international than profit-oriented ventures, thus supporting Hypothesis 2.

Discussion

In this chapter, we provided some initial empirical evidence that ventures from home countries with better-developed formal institutions are shown to be more likely to be international. Also in this chapter, we have shown that socially oriented ventures are more likely to be international than profit-oriented ventures are. We discuss our findings on the role of formal and informal institutions and a venture's value orientation on that venture's likelihood of internationalisation.

Formal Institutions and Venture Internationalisation

Indeed, there have been debates regarding the impact that home country formal institutions have on the behaviour of ventures, such as their internationalisation choices (such as Marano, Arregle, Hitt, & Spadafora, 2016; Stephan, Uhlaner, & Stride, 2015). On the one hand, the institutional-support perspective suggests that better-developed home country formal institutions have a supportive impact on the internationalisation of ventures, since better-developed home country formal institutions can provide stronger resource support and potentially reduce the uncertainty associated with increased market transactions (Kirca et al., 2011). On the other hand, the institutional-void perspective suggests that better-developed home country formal institutions have a constraining impact on the internationalisation of ventures. Less-developed home country formal institutions could therefore stimulate the ventures to develop coping skills that they can deploy and thus enable themselves to fill the institutional voids in the host country and internationalise their operations (Luo & Tung, 2007). The findings in this chapter, however, have confirmed an institutional-support perspective.

Informal Institutions and Venture Internationalisation

In this chapter, we also found that ventures from the home countries that display higher power distance are shown to be more likely to become internationally diverse. Although higher power distance in the home country implies that people have less desire for independence and thus are less likely

to be involved in entrepreneurial activities (Hofstede, 1980), higher power distance can also make individuals (including entrepreneurs) less risk-averse (Hofstede, 1991) when dealing with relatively more uncertain and risky environments in international markets, which, in turn, increases the likelihood of venture internationalisation. Furthermore, ventures from home countries with higher individualistic cultures are shown to be more likely to be international meaning perhaps that individual entrepreneurs have more incentive and freedom to plan and organise their own work and thus are also more willing to explore opportunities beyond the relatively taken for granted, stronger and cohesive networks in the home country.

Further, ventures from countries with higher feminine cultures are shown to be more likely to be international. One explanation for the significant effect of femininity is that conflict resolution is often achieved via compromise and negotiation, which enables entrepreneurs to develop the necessary capabilities to build valuable business relationships and networks. Hence, we propose that knowing how to build networks provides a competitive advantage for entrepreneurs to successfully internationalise their ventures (Coviello & Munro, 1995, 1997).

Social Value Orientation and Venture Internationalisation

Studies on the internationalisation of socially oriented ventures have long been ignored in the IB literature when compared to a large number of studies on the internationalisation of profit-oriented ventures. There is a gap between the propensity of the phenomenon of the internationalisation of socially oriented ventures and the lack of relevant research on the phenomenon in the IB literature. The findings in this chapter will hopefully prompt more research on the internationalisation of socially oriented ventures to fill this gap. More empirical evidence is needed to compare the internationalisation of socially oriented ventures and the internationalisation of profit-oriented ventures to achieve a better theoretical understanding regarding the internationalisation of socially oriented ventures.

Also interesting are the findings related to our control variables. For instance, early-stage ventures are shown to be more likely to be international than established ventures. Some entrepreneurial ventures indeed can achieve internationalisation at the early stage. This said, key firm-level information is missing from the GEM data, such as: When did the venture initially achieve the internationalisation? What are the international markets of the venture

and when and how did the venture enter each of the international markets? We expect future studies to control for more factors that may influence the likelihood of internationalisation for ventures.

What we also confirmed in our study is that gender is related to a venture's likelihood of internationalisation. Female entrepreneurs are shown to be less likely to internationalise the operations of their ventures than male entrepreneurs are. Most interestingly perhaps, opportunity-driven entrepreneurs are shown to be more likely to establish international ventures than necessity-driven entrepreneurs are. This direct relationship between the entrepreneurial motives of the entrepreneur and the venture's likelihood of internationalisation is reported in the literature for the first time. There may be a more nuanced explanation for the key role of individual-level motivations. We propose that necessity-driven entrepreneurs, who start their businesses because they feel that they have no other choice with regard to employment, usually suffer from a lack of financial resources and they struggle for survival. It is commonplace for necessity-driven entrepreneurs not to have any extra financial resources to enable them to explore opportunities beyond their own communities (or further beyond their national borders), thus limiting their likelihood of internationalising their ventures.

Conclusions

We tested the effects of national-level, firm-level and individual-level predictors on venture internationalisation based on a data set covering 10,920 individual ventures across 54 countries. This study distinguishes itself from other research on venture internationalisation because it examines specifically a topical issue in IB at present: Does it pay-off to be socially oriented? (Emerson, 2003) If so, what are the organisational outcomes of being more socially oriented rather than focusing merely on economic gains? Our propositions regarding the important role of value orientation were confirmed as a venture's social value orientation was found to be positively related to the internationalisation of that venture.

We expect our study to be of interest to both academics and policymakers. Specifically, policymakers can also learn that ventures of different types differ in terms of the likelihood of internationalisation and need different types of policies to support their development and, if applicable, to support their internationalisation. Academics interested in the area of venture internationalisation may consider looking at not only whether these entrepreneurs are investing internationally, but also whether they are investing in

multiple countries at the same time, how rapidly they enter a market and whether subsequent investment after initial internationalisation is dependent on factors such as a venture's value orientation. In this case, it may be worth considering which countries these firms enter and whether these local environments champion firms with a predominantly social value orientation compared to profit-oriented entrepreneurial ventures. We hope scholars will become increasingly interested in the behaviour of socially oriented ventures.

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Part II

**Institutions, Emerging Markets and Economic
Performance**

5

Global Security Risks, Emerging Markets and Firm Responses: Assessing the Impact of Terrorism

Luis Alfonso Dau, Elizabeth M. Moore
and Max Abrahms

Introduction

Despite the best efforts of states and international organisations, events such as acts of terrorism continue to occur (Lutz & Lutz, 2008; Institute for Economics and Peace, 2014). Such external events have negative ramifications on the economic development and advancement of affected areas by impacting the performance of MNEs and other firms operating there. In an effort to mitigate the negative effects of acts of terrorism, both policymakers and academics have increasingly been devoting time and research to identify different resilience and counterterrorism mechanisms of firms and markets (Art & Richardson, 2007; Chen & Siems, 2004; Miller, 2008). Surprisingly, however, there has been limited attention paid by scholars to the intersection of firms and terrorism (Czinkota, Knight, Liesch, & Steen, 2010). Furthermore,

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there continues to be a void in understanding the toolkits available to firms to bolster their financial resilience. Given the international diffusion of mass-casualty terrorist attacks, and hence, the topical nature of this phenomenon, we propose that it is important that scholars and policymakers develop a firmer understanding of how firms can develop their counterterrorism resilience.

In this chapter, we highlight that business is a primary target of terrorists (Sandler & Lapan, 1988). Extant literature has already discussed how acts of terrorism aim to cripple society and cause severe disruptions in business and economic operations (Clarke, 2015; Tilly, 2004). Specifically, the strategic management literature suggests that when firms experience pressure and changes in their external environment they must maintain a minimum level of efficiency to survive and remain profitable (Dau, Moore, & Soto, 2016a; Husted & Allen, 2006; Peng, Wang, & Jiang, 2008). However, limited attention has been devoted towards an understanding of how firms can respond specifically to external pressures such as acts of terrorism (Czinkota et al., 2010; Frey, 2009). We therefore pose a number of key questions, such as: Are there strategic decisions that firms can make to mitigate the damage caused in the wake of a terrorist act? How can firms augment their financial resilience when faced with acts of terrorism? Moreover, what impact (if any) does the type of markets firms operate in have on the relationship between firms and their financial resilience to terrorism? Concerning our last question, prior studies have noted that both regime type and market type tend to have an effect on firm performance (Dau & Wesley, 2016; Hennart, 2012). Further, the resilience and counterterrorism literature have also assessed which types of governments are most effective at responding to acts of terrorism (Abrahms, 2007) and some found that non-democracies may potentially respond swifter and more effectively to acts of terrorism compared with democratic states (e.g. Crenshaw, 1983; Pape, 2005; Piazza, 2006). This means that it may be useful to also capture in our studies how firms from different national and institutional contexts may be better at maintaining efficiency levels to survive and even thrive following critical events such as a terrorist attack.

To this end, we propose that emerging market multinational enterprises (EMNEs) may be better equipped to survive and remain profitable after a terrorist attack than developed or advanced market multinational enterprises (AMNEs), because the former have more substantive prior market experiential knowledge concerning how to operate amidst contexts characterised by chaos and institutional voids (Dau, Moore, & Bradley, 2015; Dau et al., 2016; Ayyagari, Dau, & Spencer, 2015). This phenomenon can already be seen through firms such as CEMEX, Tata Group and Grupo Argos. Moreover, we explain that EMNEs are also better equipped to survive and remain profitable

after a terrorist attack than domestic firms from the same home country, since terrorism creates an opportunity to internationalise and diversify that EMNEs are more capable of seizing. To illustrate the aforementioned propositions, we utilise Grupo Carso from Mexico as a case study of an EMNE that has responded remarkably well to acts of terrorism. Despite being a single-country case study, this chapter builds on both the firm performance and EMNE literature. It contributes to the literature on EMNEs by suggesting that some EMNEs may have prior market experiential knowledge that allows them to respond better to terrorist activities than other firms. As such, we argue that EMNEs have specific toolkits that allow them to respond effectively to market disruptions, like those that follow in the wake of acts of terrorism. Moreover, it adds to the literature on firm performance by examining how terrorist activity impacts the knowledge, competition and opportunities of firms—an intersection that is, perhaps surprisingly, scarce in prior studies. We suggest that terrorism represents an external environmental pressure that forces firms to leverage their existing knowledge bases and increase their competitiveness to survive. More so than other external environmental pressures, terrorist activity creates a vacuum of power in the impacted area(s). Thus, for firms to survive, they are encouraged to increase competition and seek opportunities abroad, while simultaneously navigating through the market disruptions created.

By looking at the intersection of EMNEs and terrorism events, this chapter aims to provide a starting point for a research program that can be expanded upon in future scholarship. The remainder of this chapter is structured as follows. Section one will provide a brief overview of firm performance, terrorism and EMNEs. Section two will outline the logic concerning the proposed relationships between firm performance, terrorism and EMNEs. Section three will utilise Grupo Carso from Mexico as a case study to provide evidence to support our propositions. Finally, Section four provides a discussion and some conclusions.

Firm Performance, Terrorism and EMNEs

Firm Performance

Previous studies have already demonstrated that firm performance is predicated on the market, competition and opportunities available to the firm (e.g. Dau, 2011, 2013; Loecker & Goldberg, 2014; Miller, Washburn, & Glick, 2013). Each of these components impacts the ability of the firm to

survive and increase its profitability. To survive, a firm must therefore be able to accrue key resources such as experiential market knowledge and translate that knowledge into strategic decisions (Johanson & Vahlne, 1977; Kaplan, Schenkel, von Krogh, & Weber, 2001; Wales, Parida, & Patel, 2013). Based on the knowledge acquired through experience, a firm must understand how to effectively respond to both internal and external pressures in order to maintain a minimum level of efficiency (Kaplan et al., 2001). Firms are expected to absorb knowledge from their home environments, which they can subsequently leverage as a competitive advantage either domestically or internationally where they compete against other foreign entrants as well as local competitors (Bruhn & McKenzie, 2013; Conner & Prahalad, 1996). Amidst globalisation, there is an increase in the rate and volume of people, products and capital flowing across borders (Austin, McKinney, & Kick, 2012; Mahtaney, 2013; Stohl, 2004). Competition with both foreign entrants and other local companies forces firms to learn new strategies, new methods of operation, new innovation techniques and new governance structures (Fosu, 2013; Ocampo, 2011). As such, if a firm cannot adapt and learn from other local firms and or foreign entrants, it may not survive.

Finally, firm profitability will only increase when firms seize new opportunities (Barney, 1996; Schilling & Steensma, 2002), which can arise internally or externally (Alvarez & Busenitz, 2007; Dau, 2015, 2016). A firm can create new opportunities by innovating products or altering methods of production (Andersson, 2011; Wiklund & Shepherd, 2003). Alternatively, external opportunities arise from new market conditions or through internationalisation processes (Eisenhardt & Schoonhoven, 1996; Patel & Fiet, 2011). Naturally, firms that become more capable to continuously seize new opportunities are expected to be more profitable than firms that do not.

Terrorism

By definition, acts of terrorism are intended to disrupt normalcy and cause fractures in the day-to-day life of individuals as well as firms in order to gain political objectives and advances (McCauley & Moskalenko, 2008; Clarke, 2015; Abrahms, 2008). In order for such an event to be classed as an act of terrorism, there must be evidence of intention to coerce, intimidate or convey an intimidating message (Prabha, 2016; Ruby, 2002). Further, the action must exceed the context of legitimate warfare activities (Blomberg, Hess, & Tan, 2011; LaFree, 2010). Commonly, terrorists carry out these goals through the use of violence against the state or against individuals

(Finlan, 2003). Within the literature, three main types of terrorism have been identified: demonstrative, destructive and suicide (Cronin, 2002, 2003). Demonstrative terrorism is generally used to gain publicity for recruiting, to air grievances, and to accrue external sympathy (Crenshaw, 1981). Destructive terrorism is used to coerce opponents and mobilise support for their cause (Denzin, 2007). Suicide terrorism is aimed at extreme shock and showing complete devotion of the cause (Pape, 2005). In the latter case, the insurgent actors act in accordance with their beliefs that no other avenue for expression against the oppressive forces that they are fighting would be adequate (Hoffman, 2006; Peleg, Regens, Gunter, & Jaffe, 2011). Events of terrorism therefore range from individual shooters to suicide bombers to massive organised campaigns aimed at creating chaos and splintering societies (see Kapitan, 2003; McCauley & Moskalenko, 2008; Miller, 2008).

Despite the efficacy of terrorism (Abrahms, 2006, 2012, 2013), which falls outside the scope of this particular examination, terrorism results in the following: increased uncertainty, a lack of security, a limit in overhead social structures and a drop in inward foreign direct investment (FDI) and foreign aid (Blomberg et al., 2011; Gaibullov & Sandler, 2009). Further, it is important to note that entrepreneurs and corporations are common specific targets of the violence carried out by terrorists due to the incentives they offer and the space they occupy within local communities (Abrahms, 2007, 2008; Savun & Phillips, 2009). Notably, scholars have recognised that 'Terrorists hope that economic costs, when combined with human losses from economically damaging attacks, will pressure besieged governments to concede to their political demands' (Gaibullov & Sandler, 2011: 335).

Hence, successful attacks of terrorism may indicate a loss of legitimacy for the state and an exposure of limitations in the capability and institutions of the national government (Kehayan & Napoli, 2005; Meierrieks & Gries, 2013; Piazza, 2006). As a result of these limitations, resiliency becomes particularly important (Carp, 2010; Davis, 2014). Resiliency entails both the prevention of future terrorist attacks and the rebuilding process after the attack takes place (Berke & Campanella, 2006; Hartman & Winsler, 2006; Kuiper, 2012). Resiliency structures are put in place to minimise damage created by the violence. These structures and actions range from the individual to the community, to the firm and also to state levels. Given the increase in terrorist attacks across the world, it is imperative that both scholars and practitioners understand the different mechanisms that actors across these different levels can use to increase resiliency in the face of such violent events.

Theoretical Justification for Examining the Intersection Between EMNEs and Terrorism

There has been an increasing dialogue on EMNEs and the potentially unique toolkits that they have at their disposal to strategise (Buckley & Tian, 2017; Hennart, 2012; Ramamurti & Singh, 2009). Literature suggests that multinational companies from emerging markets are in possession of different sets of experiential market knowledge, and thus respond to market competition and business opportunities in divergent ways than AMNEs (Dau, Moore, & Soto, 2016b; Gaffney, Cooper, Kedia, & Clampit, 2013; Ramamurti, 2004). In response to globalisation, firms from emerging markets not only have to survive within their local markets, but also feel pressure to expand abroad (Ramamurti & Singh, 2009). As such, scholars have sought to understand what competitive advantages EMNEs have, and how their home country environments make them distinctive and equip them with survival mechanisms in light of globalisation. Furthermore, an increase in acts of terrorism has also been associated with globalisation and considered as a drawback of the free movement of goods and individuals. Empirical evidence also suggests that acts of terrorism take place globally meaning that they may take place in both emerging markets as well as advanced economy markets. Thus, we propose that it would be timely and important to understand the different ways in which EMNEs, in particular, tend to respond to acts of terrorism and the consequences of such events on EMNEs' performance.

EMNES and Firm Performance in Dangerous Locations

Firm performance is primarily associated with a firm's ability to acquire knowledge, respond to competition and take advantage of internal and external opportunities (Buckley & Tian, 2017; Miller et al., 2013). Globalisation has been associated with both positive and negative effects for businesses (Burgoon, 2012; Keohane & Nye, 2000). Political and societal violence pose, at present, large threats to business performance. Such violence destabilises political, economic and social institutions (Lutz & Lutz, 2008). As of late, terrorism has become one of the largest sources of political and societal violence, which has led us to argue that the effect of acts of terrorism on businesses from emerging markets is worthy of empirical investigation. Despite the best efforts of policymakers and governments

to respond to different forms of violence and promote resilience, they still plague countries all over the world (Art & Richardson, 2007; LaFree & Dugan, 2009; Miller, 2008). As previously noted, violence such as terrorism causes drastic disruptions to normalcy (Crenshaw, 1983; Kapitan, 2003). Further, terrorists asymmetrically target firms since they represent a vital economic lifeline for societies (Frey, 2009; Herzenstein, Horsky, & Posavac, 2015; Sandler & Lapan, 1988). One explanation for this is that terrorists are expected to achieve their political and social goals by attacking firms as a form of 'economic strangulation' (Abrahms, 2006, 2008) as 'economic strangulation' caused by acts of terrorism, pressures politicians and governments to respond to, and work with, terrorist groups.

Most importantly perhaps is the observation that, when a terrorist attack occurs, there is an immediate power vacuum (Chenoweth, 2010; Crenshaw, 1983). Even in countries that have strong existing institutions, events associated with terrorism can have lasting impacts. Take the example of the attacks against the USA on 11 September 2001. Regardless of the institutions, strength and reputation of the country prior to the attacks, the political attitude and cognitive atmosphere within and surrounding the country changed following the attacks (Denzin, 2007; Drakos, 2004; Rapoport, 2001). Trust and security were compromised, despite these events occurring in a developed country (Abrahms, 2011; Cronin, 2003). The events interrupted the lives and routines of individuals and thus also impacted firm on behaviour and business performance. Therefore, after an act of terrorism unfolds, a country (whether developed or emerging) becomes vulnerable (Crenshaw, 1983; Cronin, 2003).

Extant literature suggests that EMNEs have unique toolkits that other multinational companies do not possess (Kapur & Ramamurti, 2001; Ramamurti & Singh, 2009). Specifically, emerging markets are characterised by low levels of transparency and trust in governments, less codified formal institutions and weaker enforcement mechanisms (Aizenman, 2003; Sanfilippo, 2015). As such, they are not only viewed as suitable targets for acts of terrorism but also when terrorism does strike, the impact may be exacerbated since emerging countries had already suffered from institutional voids. Conversely, advanced markets typically experience highly formalised institutions, high levels of transparency and increased levels of trust in the government (Darity & Davis, 2005). Given the increased potential for institutional destabilisation within emerging markets particularly following extreme destabilising events such as events of terrorism, we propose that scholars should examine how firms from emerging countries respond to terrorism.

We propose that experience of navigating institutional voids may provide a competitive advantage to EMNEs when faced with the aftermath of events of terrorism. Scholars have already demonstrated that, unlike their counterparts, EMNEs have accrued experiential knowledge from operating in less stable and less institutionalised markets (notably, Buckley & Tian, 2017; Luo & Wang, 2012). Thus, prior to a terrorist act, EMNEs already have a greater level of internal knowledge on how to respond to external uncertainty, chaos and disruptions (Aizenman, 2003; Gaffney et al., 2013). This may mean that, when a terrorist act occurs, an EMNE has a knowledge-based advantage due to their prior market experience of operating in a relatively volatile environment. That is not to say that all EMNEs will survive and thrive following a terrorist attack, or that firms from advanced markets will not, but rather that EMNEs may have a better chance at maintaining a minimum level of efficiency to survive in uncertain and volatile environmental conditions.

Moreover, we argue that this prior experiential market knowledge can be used by EMNEs to seize opportunities for internationalisation, giving them an advantage over domestic firms from the same home country. Unlike local firms from emerging markets, EMNEs already have the knowledge and capability to operate abroad in both developed and other emerging host markets (Ramamurti, 2004; Ramamurti & Singh, 2009). The power vacuum and uncertainty brought on by terrorism create both competition and opportunities for internationalisation. Terrorism exposes the failures of the sovereignty of the government, thus inviting foreign entrants into the market. This creates competition and forces EMNEs and local firms to rise to the increased competition (Dau, 2012, 2017). Unlike local firms, however, EMNEs already have the capability and knowledge necessary to expand internationally and insure their growth and survival when the home environment is uncertain. International expansion is therefore a strategy to disperse risk (Papanastassiou, 1999). Extant organisational literature posits that decentralisation is also a form of resilience (Tommasi & Weinschelbaum, 2007). We extend this logic to propose that the more geographically diverse a firm is, the more likely that firm is to survive terrorist threats. Thus, the increased pressure from terrorist activity, coupled with the unique market experiential knowledge that EMNEs have acquired, leads to the following assertion.

Proposition *EMNEs have unique toolkits that allow them to leverage knowledge and seize opportunities after a terrorist event to maintain viable levels of performance, thereby increasing their likelihood of survival.*

Contextual Evidence from Mexico

The Terrorism Threat

As previously mentioned, acts of terrorism have taken place in countries all over the globe. We have chosen to focus on Mexico, which is one of the countries that has experienced extreme pressure from both domestic and international terrorists as terrorism has hit several Mexican cities. Since 1970, Mexico has experienced over 500 terrorist attacks resulting in between 60,000 and 100,000 deaths (START, 2015). Moreover, the attacks have intensified since 1990. Prior to 1990, the average Global Terrorism Index (GTI) score for Mexico was 31.47 (Berkebile, 2017). Since 1990, however, the average GTI score has jumped dramatically to 112.43, making Mexico one of the largest victims of terrorism globally. In 1997 alone there were 95 incidents of terrorism, claiming roughly 300 casualties (START, 2015). Moreover, four of the most notable incidents of terrorism in Mexico have occurred since 2008: the Morelia grenade attacks, the Ciudad Juarez rehab centre attack, the Puebla oil pipeline explosion attack and the Monterrey casino attack (Campbell & Hansen, 2014).

The Mexican government has tried to build resilience by fomenting partnerships with the USA and implementing stricter regulations against terrorism (Longmire & Longmire, 2008; Williams, 2012). The United States' Department of Homeland Security has attempted to initiate policy aimed at identifying and suppressing the prevalence of narco-terrorism within Mexico (Campbell & Hansen, 2014). Further, it has tried to isolate the Hezbollah network that extends from South America into Mexico and the USA. In an attempt to reduce terrorism, the Mexican Senate introduced and approved a reform to the terrorism laws within the country (Open Security, 2014). The bill outlines punishment of 15–40 years in prison for any action that seeks to generate fear among the Mexican population. Despite the intentions of the law, countless Mexicans still live in a constant state of terror.

Additionally, scholars suggest that ISIS will likely increase their operations in Mexico in order to use the state as a launch pad into both North and South America (Campbell & Hansen, 2014; Flanigan, 2012). As such, it is critical that both policymakers and managers adjust their strategic responses to the increasing threat of terrorism. Below we introduce briefly the example of Grupo Carso, a large EMNE that has recognised the need to respond swiftly and effectively to acts of terrorism to avoid destabilising the

company, which could have led to negative performance outcomes for the entire group.

Firm Responses and Performance: The Case of Grupo Carso

Grupo Carso is one of the largest EMNEs from Mexico. It has a market valuation of \$10.5 billion US dollars and is diversified into several industries ranging from industrial, to retail, to infrastructure, to energy, to automotive, to housing. Carlos Slim, who is currently ranked as the seventh richest man in the world, founded Grupo Carso more than 30 years ago in 1980. It is made up of three major divisions: Grupo Condumex, Grupo Sanborns and Carso Infraestructura y Construccion. The three divisions operate in four continents (North America, South America, Europe and Asia) and 30 plus countries (Grupo Carso, 2016).

The main headquarters of Grupo Carso is in Mexico City (Grupo Carso, 2016). According to the Global Terrorism Database, Mexico City is one of the most impacted cities within Mexico. Two of the most notable attacks directly on Mexico City came on 31 January 2013 and 31 October 2016 (START, 2015). Between these two attacks, many individuals were affected. In the two months prior to both attacks, stock prices in Grupo Carso dropped to very low levels to around five dollars a share (Grupo Carso, 2016). Following the attacks, however, stock prices rebounded and continued to rise steadily. The same effect was seen following the 2016 terrorism events. Conversely, the overall Mexican economy did not experience the same rebound (Nayyar, 2011). From 2012 to the end of 2013, the gross domestic product growth rate in Mexico experienced a low of -1.2% (World Bank, 2016). Moreover, it dropped 0.5 percentage points between 2015 and to the beginning of 2016. Additionally, when acts of terrorism peaked in Mexico in 1995, the country's growth rate hits its record low of -6.20% (World Bank, 2016).

Grupo Carso has publicly noted previous responses to terrorism. The company noted that after the attack against the USA in 2001, sales were impacted. Some of their sales dropped by as much as 14%, specifically within their Grupo Sanborns division (Grupo Carso, 2001). Moreover, the net loss following the attacks reached 13.6 million USD (Grupo Carso, 2001). In response to the severe losses, Grupo Carso announced a restructuring plan to diversify sales abroad, improve productivity and restructure

operations and management to reduce liabilities and risk for shareholders. Within this plan, the primary focus was to first invest more money abroad immediately following the attacks. After a terrorist attack, a domestic economy is often strangled and disrupted. The company effectively sent money abroad, and as a result, they reduced the risk of their money being lost or negatively impacted by the destabilised economic institutional framework. A second focus of the plan was to restructure internally. By flattening out the governance structure of the company, they were able to diversify the risk. This strategy built resilience within the company since it mitigated the potential for a terrorist attack to undermine the firm entirely. By investing more financial resources abroad and restructuring internally, the company was able to rebound by the beginning of 2002. Although the attacks of 2001 were detrimental, it allowed the company to acquire and internalise knowledge on how to respond to such events and remain profitable in the face of extreme external environmental shocks such as terrorism. We argue that there is much to learn from their example particularly with regard to the strategic decisions that firms make in response to environmental shocks and the role of home market institutions and institutional development in providing them with the necessary resources and knowledge capabilities to respond effectively.

Discussion and Conclusion

The purpose of this chapter is to discuss a very topical and important business issue that sits at the intersection between terrorism, firm performance and the strategies of EMNEs. This chapter examines EMNEs with regard to their domestic and international responses to the pressures experienced from terrorism. As such, it adds to the growing conversation on EMNEs and how they may use their unique resources and capabilities to strategise and sustain their growth and performance. We assert that EMNEs have an advantageous starting point for surviving and remaining profitable in the wake of a terrorist attack, stemming from the prior market experiential knowledge and capabilities they accrue from their home environments. Further, we argue that EMNEs are more likely to outperform domestic firms, given their ability to seize international opportunities forced from terrorism.

This chapter hopes to also add some insights into the burgeoning field of resilience. At present, there is still too limited empirical as well as theoretical research on the interplay between acts of terrorism and firm performance. This chapter builds upon the limited existing research program and

thus invites future scholars to extend our earlier proposition. The case example provided of Grupo Carso supports our proposition that EMNEs have unique toolkits that allow them to leverage knowledge and seize opportunities after a terrorist event to maintain viable levels of performance, thereby increasing their likelihood of survival.

By examining the relationship between terrorism and EMNEs, this chapter offers several important theoretical contributions. The Literature on firm performance indicates that profitability and survival are contingent upon a firm's ability to absorb and leverage experiential market knowledge, increase competitiveness and seize opportunities. We extend this discussion by parsing out the ways that terrorists, as foreign entrants, impact these three elements that comprise firm performance. We argue that when market-disrupting events take place, firms may need to accrue the knowledge necessary to adapt to the disruption and uncertainty created in that market to increase or maintain their competitiveness. Moreover, we argue that extreme events such as acts of terrorism force firms to exploit the opportunity to grow and internationalise into more stable markets. In this context, we argued that EMNEs have a distinct advantage of possessing prior knowledge of operating in uncertain institutional environments and may be less disturbed by external destabilising events. Given the characteristics inherent within an EMNE's home country conditions, these firms already have some knowledge and capabilities with regard to operating amidst disruptions and uncertainty, as well as internationalising in order to escape such disruptions and uncertainty. Thus, we also contribute to the literature on EMNEs by investigating their strategies responses to more specific external events other than those related to the market in which the firm operates and or its competitors.

The ideas expressed and contextual evidence provided in this chapter have the potential to provide some insight not only for academics interested in conceptualising the effect of acts of terrorism but also for practitioners and policymakers. As terrorism continues to threaten the security and stability of markets across the world, it is imperative that managers and CEOs understand how terrorism challenges profitability and how to build financial resilience to recover from terrorist activities. This preliminary study suggests that EMNEs have knowledge and capabilities to operate in uncertain environments prior to a terrorist attack. Moreover, it suggests that there is a benefit to internationalising in the face of terrorism. Practitioners would benefit from leveraging knowledge from EMNEs and absorbing their resilience strategies to survive potential post-terrorist attacks. For example, through the case study, it became evident that restructuring quickly and

diversifying is a beneficial tool that EMNEs can employ. Further, this chapter highlighted that EMNEs have adapted this tool in a timely manner primarily because they have become accustomed to operating within destabilised institutional environments in their home markets. As such, MNEs would benefit from understanding and employing this restructuring and diversifying technique if and when such cases of extreme environmental uncertainty occur.

This chapter also posits that EMNEs build resilience to terrorism by investing more resources abroad, since their home market lacks in economic and political stability even prior to the events of terrorism taking place. Other MNEs could consider this strategy to pre-emptively augment resilience to terrorism and other forms of violence that may destabilise institutions. Additionally, this research offers important insights for policymakers. Terrorists attempt to induce financial strangulation by attacking firms to achieve their political goals. Policymakers and government officials could mitigate the potential success of terrorists by understanding how to augment the financial resilience strategies of firms.

Despite the insights of this chapter, it is critical to recognise that this research program is novel and can be expanded upon in future research. As such, this chapter serves as a launching point for further theoretical and empirical analyses. It would be advantageous to complement this case study with an examination of multinational companies from other market types to examine the generalisability of the ideas put forward. For example, future scholars could examine multinational firms from different advanced and emerging markets to assess the diverse ways in which firm performance is impacted following events of terrorism. Moreover, the research program could be expanded by both interview-based studies and large-scale statistical analyses. Future scholarship on financial resilience would benefit from firm-specific insights stemming from conversations with managers and CEOs as their perceptions may reveal more about why some firms are more resilient than others. Additionally, it would be beneficial to trace extensive patterns of EMNE performance in relation to terrorist activity.

As terrorist threats continue to exacerbate, resilience efforts have increased. Both practitioners and academic scholars are seeking to understand how to bolster counterterrorism efforts and augment resilience. Even though businesses are one of the primary targets of terrorists, there is limited scholarship on this topic. Our chapter serves as a preliminary study aimed at understanding the divergent ways in which EMNEs respond to and survive terrorist attacks in a globalised world. Finally, such a debate allows us to emphasise the importance of having organisational resilience in the

strategy ‘toolkits’ of MNEs, particularly for firms operating in highly uncertain, volatile environments, given that more resilient MNEs may, indeed, be the higher performers in the long term.

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6

Institutions, Economic Growth and International Competitiveness: A Regional Study

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Introduction

Changes to the global economic and financial markets pose significant challenges as well as opportunities for firms engaged in international business. Multinational firms (MNEs) are expected to make new foreign market entry decisions based on determinants such as host market growth rates, local demand conditions as well as the institutional profiles of potential host market environments (e.g. Castro-Gonzales, Pena-Vinces, & Guillen, 2016; Delgado, Ketels, Porter, & Stern, 2012; Fagerberg, Srholec, & Knell, 2007; Moser, Kuklinski, & Srivastava, 2017). Institutional uncertainties prevailing in many emerging markets may therefore challenge the competitiveness of foreign investors (Castro-Gonzales et al., 2016; Fagerberg et al., 2007). For instance, the rise of new (and increasingly international) players from emerging economies paralleled by the growing need for MNEs to locate investment in a diversity of host regions to sustain growth has the potential to inform differing levels of international competitiveness and economic performance across regions.

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Extant literature on the international competitiveness of MNEs has highlighted the role of both micro- and macrolevel factors on the outcomes of becoming internationally diversified. Among notable studies, Porter (1998) investigated the nature of international competition and sources of competitive advantage where he identified four key determinants of national competitiveness, namely (i) factor conditions; (ii) demand conditions; (iii) supporting and related industries; and (iv) firm strategy, structure and rivalry. This concept is further updated in a framework comprising three broad, interrelated drivers of foundational competitiveness, namely (i) social infrastructure and political institutions; (ii) monetary and fiscal policy; and (iii) the microeconomic environment (Porter, 1998; see also Delgado et al., 2012; Porter, Delgado, Ketels, & Stern, 2008). We base our arguments on these insights as well as the relatively more recent studies drawing on Porter and colleagues concerning the factors associated with international competitiveness (see Castro-Gonzales et al., 2016; Delgado et al., 2012). We contribute to this growing stream of literature by offering a more detailed understanding of the potentially unique conditions that exist in different host market regions and locations and the role of specific institutions on international competitiveness.

Furthermore, existing studies have focused predominantly on international competitiveness of Asian emerging markets such as China and or India, or larger Latin American economies such as Brazil, Chile and Colombia. This chapter draws attention to the importance of also studying the international competitiveness of smaller developing economies. We therefore focus our empirical efforts on the context of the developing economies of the Caribbean. The few studies we found which examined the Caribbean region's growth and competitiveness focused on specific sectors and topics like agriculture (Roberts & Langham, 2001) and tourism (Bolaky, 2011) or exchange-rate volatility (Kandil, 2015). Among these limited studies, none have examined Caribbean competitiveness in terms of institutional quality or growth, despite the acknowledged negative impacts of policy uncertainty on growth and investment. Except for Belize (located in Central America), Guyana and Suriname (located in South America), the Caribbean economies are small island-states with an average landmass of 404,850 km² (World Bank, 2017). These smaller economies share several similarities including size and colonial heritage, being endowed with natural resources (bauxite, gold, oil and natural gas) and good weather throughout the year. The Caribbean region benefits from geographic proximity, and good transport links to the developed North American markets and substantial trade and travel connections with Europe, which is also their main

export destination. Caribbean economies are predominantly commodity exporters and service-based economies focused on tourism and financial services. Twenty Caribbean economies comprise the Caribbean Community (CARICOM), a regional grouping pursuing economic integration, joint foreign policy and security coordination and social development (CARICOM, 2017; Elliott, 2007). Hence, this chapter examines the role that the institutional environment plays in the increased future competitiveness and economic performance of Caribbean economies.

This chapter provides an overview of economic performance and foreign investment in the Caribbean region and reviews key literature on the effects of institutions on economic growth. Next, we outline the methodology and data collection process. In our analysis, we test for the relationships between institutional quality and economic growth. We also investigate the hierarchical impact that specific categories of institutions play on the performance of selected Caribbean economies. Finally, we provide a discussion of results and some conclusions.

Institutions, Competitiveness and Economic Performance: Definition of Concepts

Extant literature on the national and international competitiveness of nations assumes the existence of particular institutional frameworks driving economic performance. However, the institutional landscape of most developing economies is heterogeneous (Delgado et al., 2012) which, in turn, means that the persistence and quality of institutions even within what may be considered as similar developing economies may differ significantly. In discussing growth, scholars emphasise the efficient distribution of available resources to support national and international competitiveness (Delgado et al., 2012). Neoclassical perspectives support the existence of a positive and significant relationship between factor endowments such as land, capital (human, physical and financial) and entrepreneurship as proximate causes of competitiveness and economic growth. Accordingly, poorer developing economies may appear to be precluded from economic growth as they generally lack the capital needed to effectively exploit allocation opportunities. Indeed, Latin American and Caribbean economies lag behind others on the productivity frontier (Castro-Gonzales et al., 2016; Fagerberg et al., 2007), and this may be the result of a combination of factors, including factor endowments or their geography.

We propose that although a country's factor endowments may explain decisions regarding different types of investment, they cannot fully explain the choice for the distribution of those resources (Engerman & Sokoloff, 2002). The political and economic institutions of an economy may impact decisions concerning how resources are allocated and the motivations behind such allocation choices more. A system of well-defined and enforced institutions can be expected to enable trade and productive behaviour and ensure that economic activity will be conducted in an environment of higher overall security and returns on investments and reduced transaction costs (Acemoglu, Ticchi, & Vindigni, 2011; Acemoglu & Robinson, 2012; North, 1992; Rodrik, 2005; Williamson, 1998). We discuss the main types of institutions and how they may have an impact on economic performance.

Political Institutions

Political institutions determine the form and character of economic institutions and define how power in any society is obtained, used and controlled (Engerman & Sokoloff, 2005). These types of institutions are expected to reflect the power relationships among key institutional actors such as governments and policymakers. Due to the importance of the power relationships between key institutional actors, the investment choices made by different economies reflect differences in their political institutions and differences in the distribution of political power inherited from their colonial histories (Acemoglu & Robinson, 2008). Most important perhaps is that political institutions that include 'many' individuals in the governance process prevent abuse of the economic system (Acemoglu et al., 2011); it is argued that sustained long-run economic growth requires 'open access' far-reaching political institutions that widen participation (Acemoglu & Robinson, 2012) and decrease the likelihood of individual interests being prioritised (thus reducing risks of what we refer to as 'corruption').

Hence, a key characteristic of a secure political system is one that is 'credibly committed' to preserving markets, through limiting political discretion over the economy and where the limits are self-enforcing (North, 1992; Williamson, 1998). Functional markets require institutions to govern political decision-making, form the basis for a rule of law, control corruption and political choices. A well-developed economic system therefore benefits from secure political foundations limiting the state's ability to confiscate wealth (Rodrik, 2005; Weingast, 1995). Therefore, economic growth is supported by economic institutions when political institutions create effective

constraints on executives, preventing them from monopolising the market through rent seeking (Farhadi, Islam, & Moslehi, 2015). The emergence of our second type of institutions—economic institutions—is consequently not an automatic process, but rather an endogenous process dependent on the evolution of political power through political institutions.

Economic Institutions

Economic institutions perform key roles in enabling the effective functioning of markets. A taxonomy of four key economic institutions developed by Rodrik, Subramanian, and Trebbi (2004) categorises institutions into either (i) market-creating; (ii) market-regulating; (iii) market-stabilising; or (iv) market-legitimising institutions. This taxonomy provides a useful tool to examine the channels through which different types of institutions can impact economic performance and thereby international competitiveness. (see also Rodrik, 2005). For instance, ‘market-creating’ institutions enable economic agents within an economy to interact, transact and produce goods and services in the knowledge that economic profits from such activities are within their control (Das & Quirk, 2016; North, 1992; Rodrik, 2005). These institutions protect rights and enforce contracts; in their absence, markets either perform poorly or fail to exist.

Studies investigating market-creating institutions utilise different indicators as proxies. Rodrik et al. (2004) used the ‘rule of law’, while Acemoglu and Johnson (2005) used ‘executive constraints’ as a proxy for property rights enforcing institutions and ‘legal formalism’ for contracting institutions in order to separately estimate their effects on long-run growth. Ideal proxies should capture the cost of enforcing private contracts as well as identify those institutions that define the relationship between the state and its subjects and provide the legal framework for the enforcement of private contracts.

Second, ‘market-regulating’ institutions comprise the structures and arrangements that impose rules on markets to sustain long-run economic growth, while constraining market failures (Das & Quirk, 2016; Rodrik, 2005). Examples include regulatory agencies dealing with employment, financial services, telecommunication and transportation. Bhattacharyya (2009) used the Economic Freedom of the World (EFW) composite index of regulation in the credit market, labour market and business in general as a proxy of market-regulating institutions, based on the assumption that they most closely reflect regulatory institutions. In turn, ‘market-stabilising’

institutions enable markets to build resilience against shocks, reduce inflationary pressure, minimise macroeconomic volatility and avert financial crises. These include institutions that regulate central banks, exchange-rate regimes, budgetary and fiscal rules and other regulations to minimise inflationary pressure and volatility in the long run (Bhattacharyya, 2009). Institutions that impose fiscal constraints on the setting of interest rates or taxation on savings reduce uncertainty and encourage investment.

Finally, 'market-legitimising' institutions are designed to minimise idiosyncratic risk to economic growth and employment, reducing the potential for market coordination failure among different factions within an economy. Democracy is used as a proxy for market-legitimising institutions based on the argument that a positive relationship exists between the effectiveness of democratic institutions and the quality of social insurance (Rodrik, 2005). Studies by Barro (1996), Tavares and Wacziarg (2001), Acemoglu, Johnson, Robinson, and Yared (2005), Bhattacharyya (2009) use data from Polity IV democracy index as proxies for market-legitimising institutions as these measure the effectiveness of democratic institutions.

Market-creating, market-legitimising, market-regulating and market-stabilising are expected to work effectively to align the interests of individual economic actors with those of the society to enhance or foster higher levels of productivity and output. Indeed, this taxonomy provides a useful tool to examine the channels through which different types of institutions can impact economic performance and thereby international competitiveness. However, this taxonomy as used in previous studies does not capture the relative importance of each category of institutions as, we argue, some institutions matter more than others.

Institutions and International Competitiveness

Extant studies on international competitiveness have identified the role of macroeconomic factors such as the labour participation rates, access to capital and levels of technology in creating opportunities for a developing country to mobilise working-age populations and therefore increase productivity (Porter et al., 2008). Delgado et al. (2012) define competitiveness in terms of expected levels of output per working-age individual, supported by the overall quality of an economy as a place to do business. From this perspective, macroeconomic conditions such as national institutional structures set the framework of opportunities for productivity. More specifically, the

quality of political institutions such as the rule of law and economic institutions that relate to business and labour regulation can enhance or inhibit productivity and consequently international competitiveness.

Empirical evidence, thus far, provides support for the relationship between the quality of market-creating and market-legitimising institutions (such as the presence of property rights, the quality of governance and the impact of corruption) and productivity levels (notable studies include Porter et al., 2008; Delgado et al., 2012). Market-stabilising institutions that determine and control inflation levels are expected to contribute to the overall institutional infrastructure, also enabling productive economic activities. Similarly, market-regulating institutions can either encourage or hinder anti-competitive behaviour among firms, i.e. too little regulation may encourage anti-competitive behaviour while too much leads to red tape which subsequently leads to increased transaction costs. Institutions therefore set the conditions under which these macroeconomic factors can be exploited for the purpose of increasing productivity and competitiveness within a region.

Institutions and Economic Growth

Previous studies on institutions and economic growth provide strong evidence indicating that institutions which control the enforcement of property rights are particularly relevant in explaining economic growth (see Auerbach & Azariadis, 2015; Barro, 1996; Rodrik et al., 2004). Some studies explain that factor endowments are very likely to affect long-term economic outcomes through the economic institutions that determine their allocation (Acemoglu & Johnson, 2005; Easterly & Levine, 2003). For instance, where property rights are well enforced and secure, individual actors operating in the economy feel safe from expropriation of their resources (Auerbach & Azariadis, 2015). Conversely, rent-seeking activities or redistributive activities that take up resources can reduce innovation over time and as a result, hinder the rate of economic performance (Easterly & Levine, 2003).

Notably, Acemoglu and Johnson (2005) distinguish between contracting institutions and property rights institutions at the macrolevel, noting that while contracting institutions regulate transactions between private parties, property rights institutions are intimately linked to the distribution of political power in a society as they regulate the relationship between ordinary citizens and the politicians or the elite with access to political power (Chong & Calderon, 2000; Klomp & de Haan, 2009). When property rights are weak,

they fail to constrain those who control the power in the state. This problem cannot be circumvented through writing alternative contracts between private parties to prevent future expropriation, as the state has a monopoly of legitimate violence which it uses to maintain and exercise power (Narayan, Narayan, & Smyth, 2011). A relatively early study in this area investigated fifty-five countries between 1972 and 1995 and found that even though developing countries took longer to achieve institutional development, their economic institutions had a greater influence on economic growth. At the same time, economic growth had a positive relationship with improvements in institutional quality (see Chong & Calderon, 2000). Subsequent studies have focused on different countries and regions including Farás and Mihov (2013), Flachaire, García-Peñalosa, and Konte (2014), Klomp and de Haan (2009), Haggard and Tiede (2010), Narayan et al. (2011), and Nawaz (2015). These above-mentioned studies proposed positive and significant relationships between political institutions development and economic growth.

Other studies—although fewer at this point—questioned the nature of the relationship between institutions and economic growth and deemed it as more complex. Studies such as Commander and Nikoloski (2011) and Dias and Tebaldi (2012) find only limited evidence of a robust link between political institutions and economic growth. In the light of these contradictory examples of studies, this chapter empirically examines which institutions tend to be linked to growth and international competitiveness in the Caribbean region.

Reviewing Economic Performance and Foreign Investment in the Caribbean Region: Rationale for This Study

Economic performance and FDI flows to the Caribbean economies vary across individual countries. On average, FDI accounts for ten percent of the total GDP for small-island economies (UNCTAD, 2017). Prior to the 2008 recession, the fastest growing CARICOM economies (Trinidad & Tobago, Belize, Suriname, Antigua & Barbuda and St. Kitts & Nevis) grew at rates above three percent annually between 2000 and 2009 while moderate rates of above two percent were recorded for St. Lucia, Dominica, Bermuda and Grenada. The Bahamas, Barbados and Guyana grew on average at one percent. Slow growth was recorded for the Cayman Islands, Haiti

Table 6.1 CARICOM Member states' annual GDP growth (%) between 1990 and 2015. *Source* Authors' estimates, data from World Bank (2017)

Country name	1990–1999	2000–2009	2010–2015
Antigua and Barbuda	3.31	3.30	0.43
The Bahamas	1.64	1.00	−0.10
Barbados	0.47	1.42	0.19
Belize	5.77	4.94	2.57
Bermuda	1.89	2.71	−1.37
Cayman Islands	5.31	0.00	0.00
Dominica	2.28	2.51	1.74
Grenada	3.51	2.18	1.77
Guyana	4.79	1.97	4.10
Haiti	2.53	0.77	1.92
Jamaica	2.16	0.93	−0.10
St. Kitts and Nevis	4.06	3.22	2.18
St. Lucia	5.51	2.53	0.61
St. Vincent and the Grenadines	3.40	3.45	0.85
Suriname	0.69	4.47	3.46
Trinidad and Tobago	3.95	6.52	1.61

and Jamaica at under one percent average annual growth rates (World Bank, 2017)—see Table 6.1. Caribbean economies remain highly vulnerable to global shocks as a result of their reliance on global commodity trades and tourism. Commodity exporters such as Guyana, Jamaica and Trinidad and Tobago depend on revenues from oil and gas, minerals and agricultural goods. Commodity exporters initially benefitted from rising global commodity prices (pre-recession) while service-dependent economies such as the Bahamas and Barbados received declining tourism numbers post-recession (De Groot & Pérez Ludeña, 2014). What is more, the Caribbean region's geographic location exposes individual countries (e.g. Haiti and Grenada) to external shocks from natural disasters.

From 1990 to 2010, the top Caribbean destinations for FDI were the British Virgin Islands and the Cayman Islands which acted as offshore financial centres therefore attracting FDI (UNCTAD, 2017). However, the performance of these two states is not typical of the region, and both states are not full Members of the CARICOM. A more representative performance of FDI flows to this region is summarised in the graph below outlining the top five host countries (Fig. 6.1).

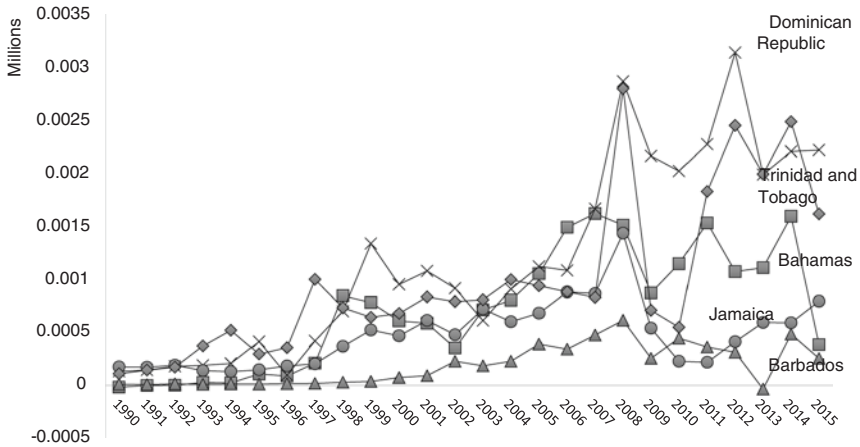


Fig. 6.1 Foreign direct investment inflows to the top five host countries of the Caribbean (1990–2014 Annual, US\$ Millions). *Source* Compiled using data from UNCTAD (2017)

Post-recession, FDI inflows to the Caribbean (excluding offshore financial centres) have declined by nine percent. The largest FDI recipients in 2015 were Dominican Republic (US\$2221 million), Trinidad and Tobago (US\$1619 million), Jamaica (US\$794 million), Bahamas (US\$385 million) and Barbados (US\$254 million) (UNCTAD, 2017). Individual economies have undertaken a range of reforms to enhance their attractiveness to foreign investors and offered investors incentives and concessions such as subsidised rates, tax breaks or reduced regulatory burdens (Phelps, Stillwell, & Wanjiru, 2009), whereas the actual results on economic growth in the region are mixed. Reforms adopted in Bahamas and Barbados have resulted in increased FDI flows (World Bank, 2017). Conversely, while IMF-backed reforms in Guyana appeared to spur economic growth pre-recession, FDI flows have gradually declined. Guyana's structural weaknesses, an oversized government, inefficient bureaucracy and significant restrictions on foreign investment may partly explain the slow growth.

We found that, while export-led growth models pursued successfully elsewhere reveal gradually declining reliance on inward FDI, in contrast, the domestic demand-driven growth models pursued in the Caribbean region rely on their ability to attract international investment (see de la Torre, Pienknagura, & Levy Yeyati, 2013). Inflows to this region are driven partly by the rising internal demand and the privatisation and liberalisation programmes undertaken in key sectors (telecommunications, electricity, natural resources, financial services and tourism). We propose that

understanding the role of domestic institutions and the links to growth is also important from a practical perspective to enhance the region's international competitiveness.

Methodology

We utilised data for ten CARICOM Members collected for the period between 1990 and 2014. These Caribbean economies are classified as high income (Bahamas, Barbados and Trinidad and Tobago), upper-middle income (Suriname) and lower income (Dominica, Grenada, Haiti, Jamaica, St. Vincent and the Grenadines and St. Lucia) based on gross national income (GNI) per capita revised as of 1 July 2016 (World Bank, 2017). Our empirical research is guided by two central research questions concerning (1) the effect of total factor productivity (TFP) on capital accumulation and labour productivity and (2) the relationship between institutional quality and economic performance.

Results on Variance in the Caribbean Region's Economic Performance

The first research question examined in this chapter looks at the impact of TFP on capital accumulation and labour productivity. An augmented Cobb–Douglas growth accounting exercise decomposes economic performance proxied by GDP per capita (Solow, 1994). Solow (1994) considered TFP to be a completely independent exogenous process, even though he does not address how technical progress is subsequently accelerated (see also Romer, 1994). Technical progress is considered the result of improved and new ways of accomplishing traditional tasks. Neutral technological progress occurs where an economy experiences an increase in output levels with no increase in TFP and no change in the combination of factor inputs. Alternatively, TFP that results in savings on labour inputs is considered labour-saving technical progress (Solow, 1994). Capital-saving TFP, although considered an unusual phenomenon, is the result of low-cost, efficient and labour-intensive techniques of production.

While the productive capacity of an economy is commonly described through the use of aggregate production functions, the results should be cautiously interpreted. TFP not only measures technical progress, but captures the effects of myriad other determinants of efficient factor usage

(government policy, political unrest and even weather shocks). It would be difficult to isolate individual determinants within the production function model as the results highlight proximate causes of economic growth but not the underlying fundamental determinants (Barrell, Holland, & Liadze, 2010; Hall & Jones, 1999). Secondly, the Solow (1994) model does not explain the differences in technical progress across countries with similar technologies.

The following Cobb–Douglas specification is assumed for all economies in the data set:

$$Y_t = A_t K_t^\alpha L_t^{1-\alpha} \quad (6.1)$$

For each time period t :

Y	GDP per capita (PPP) (constant 2011 international \$)
K	Capital stock (2011 US\$)
L	Total employment
A	TFP
α	Output elasticity of capital
$1-\alpha$	Output elasticity of labour.

The mean wage-share of CARICOM over 1990–2014 was used as guidance for the estimate of $1-\alpha$ which gives a value of 0.45 and a 0.55 for α . While $1-\alpha$ may deviate somewhat from the imposed mean coefficient for individual CARICOM Member economies, such differences should not bias the potential output results. Y values and L values were taken from the World Development Indicators (World Bank, 2017). K was collected from Penn World Tables (Feenstra, Inklaar, & Timmer, 2015). To calculate TFP for each year, we use the following derivative of Eq. (6.2):

$$A_t = Y_t - (K_t + L_t) \quad (6.2)$$

Table 6.2 summarises the growth accounting results. The first row shows each country's output growth. Over the period between 1990 and 2014, Suriname experienced an annual average growth of two percent, Haiti and Trinidad and Tobago each experienced an average of one percent annual growth in labour. Bahamas, Barbados, Jamaica, St. Vincent and St. Lucia experienced stagnated growth at less than one percent. Dominica and Grenada exhibited negative labour force growth over the period (−3.76 and −3.5%, respectively). These results may be attributed to the stagnant 2%

Table 6.2 Sources of growth—annual percentage rate of change (All results for the period 1990–2014, unless otherwise indicated). *Source* Authors estimates, data from World Bank (2017)

	GDP growth	Capital	Labour	TFP
The Bahamas	1.24	2.59	0.97	−2.31
Barbados	0.81	2.62	0.29	−2.10
Dominica ^a	1.68	1.38	−3.76	4.06
Grenada ^b	3.51	3.44	−3.50	3.57
Haiti	0.78	2.42	1.35	−2.99
Jamaica	1.27	0.85	0.34	0.08
St. Vincent and the Grenadines	2.77	2.20	0.54	0.03
St. Lucia	3.12	3.18	0.90	−0.96
Suriname	2.79	2.00	2.10	−1.31
Trinidad and Tobago	4.44	0.22	1.22	3.01

^aData only available for the period 1990–2002

^bData only available for the period 1990–1999

average growth rate of the working-age population in these economies during this period; this is indicative of a capital-intensive economy, requiring greater investment in capital than skilled or unskilled labour.

Extensive economic development is generally considered unsustainable (Barrell et al., 2010; Hall & Jones, 1999) as it relies heavily on investment in capital stock and labour. Similarly, a negative TFP (the Bahamas −2.31%, Barbados −2.10%, Haiti −2.99%, St. Lucia −0.96% and Suriname −1.31%) could reflect the inefficient use of the labour force, misallocation of resources, failure to meet consumer demands and an inefficient economy (Hall & Jones, 1999). Barbados and Haiti's low rate of growth (0.81 and 0.78%, respectively) is indicative of economies heavily dependent on capital (2.62 and 2.42%, respectively). The negative TFP coupled with increased capital and labour utilisation exhibited in Suriname indicates performance that may lead to economic contraction.

The Effect of Institutional Quality on Economic Performance

The second research question investigates the relationship between institutional quality and economic performance. For this, institutional observations for the same period (1990–2014) were collected from the Economic Freedom of the World (EFW) index computed by Gwartney, Lawson, and Hall (2016).

Table 6.3 Descriptive statistics of institutional quality data observations. *Source* Authors calculations, data from EFW database Gwartney et al. (2016)

	Count	Mean	Min.	Max.	St. Dev.
Judicial independence	100	-0.133	-2.191	1.960	0.889
Impartial courts	100	0.222	-1.281	1.707	0.842
Military interference in rule of law and politics	100	0.181	-2.431	1.233	0.840
Integrity of the legal system	100	0.214	-1.641	1.747	0.869
Legal enforcement of contracts	100	0.408	-1.450	3.655	1.141
Regulatory restrictions on the sale of real property	100	-0.279	-2.083	2.439	0.832
Reliability of police	100	0.113	-1.563	1.962	0.723
Tariffs	100	-0.091	-2.421	1.123	0.993
Compliance costs of importing and exporting	100	0.416	-2.910	2.322	0.801
Non-tariff trade barriers	100	-0.417	-3.502	2.035	1.123
Ownership of banks	100	-0.018	-1.130	0.750	0.841
Private-sector credit	100	0.130	-2.852	1.507	0.873
Interest rate controls/negative real interest rates	100	0.132	-3.123	0.665	0.836
Hiring regulations and minimum wage	100	-0.182	-4.608	1.915	1.124
Hiring and firing regulations	100	0.185	-2.361	1.789	0.830
Centralised collective bargaining	100	0.449	-2.721	1.937	0.971
Hours regulations	100	-0.079	-2.665	1.154	0.914
Mandated cost of worker dismissal	100	-0.026	-2.878	1.773	0.985
Bureaucracy costs	100	0.335	-2.024	3.174	0.975
Starting a business	100	-0.400	-4.788	1.319	1.192
Extra payments/bribes/favouritism	100	0.200	-1.485	1.941	0.802
Licensing restrictions	100	-0.210	-2.111	1.654	0.929
Tax compliance	100	0.212	-1.730	1.786	0.930
Control of corruption	100	0.226	-1.363	1.466	0.899
Government effectiveness	100	0.202	-2.344	1.582	0.913
Political stability and absence of violence/terrorism	100	0.228	-1.523	1.851	0.895
Foreign ownership investment restrictions	100	0.074	-1.974	2.124	0.840
Capital controls	100	-0.233	-1.009	1.560	0.841

EFW ranks the degree to which policies and institutions are supportive of economic freedom. Data from EFW has been used in other studies examining the impact of economic freedom on key outcomes such as investment flows, economic growth, income levels and poverty rates (Góes, 2016; Le, 2009). In line with existing studies, an expectation maximisation (EM) algorithm utilising an iterative method was used to find the maximum likelihood estimates of missing values (Siddiqui & Ahmed, 2013) yielding 100 observations per country (Table 6.3). To reduce the institutional variables into fewer significant components, common factor analysis ('CFA') was used to isolate the underlying correlation of institutional quality indicators and explain variance (Siddiqui & Ahmed, 2013).

Utilising the Kaiser criterion (1960), the top four components were retained. The data was orthogonally rotated using the Varimax method. After rotation, the first component explained on average 37% of the total retained variance and the remaining three components explained 25, 20 and 17%, respectively. The four components are interpreted through the correlation between observed variables and components; higher loadings mean that the indicator is more relevant in defining the component. The components were classified as market-creating (MC), market-regulating (MR), market-legitimising (ML) and market-stabilising (MS) (summarised in Table 6.4).

INST is measured as an aggregate index of the four institutional factors. MR was the largest contributor to INST (37%), followed by ML (25%), MS (20%) and MC (17%). The primary objective of market-creating institutions is providing the basis for exchange, lowering transaction costs and facilitating economic growth. CFA has identified that the major weights in this factor come from legal enforcement of contracts, hiring and minimum wage regulations, hours' regulations and starting a business. MR institutions provide an element of economies of scale that can increase the cost of enforcing MC institutions, making private protection of property rights expensive and inefficient. Indicators that were strongly related to this factor include judicial independence, reliability of police, cost of tariffs, ownership of banks, hiring and firing regulations, centralised collective bargaining, bureaucracy costs, licensing restrictions and government effectiveness.

Indicators that weighted strongly as ML factors included extra payments/bribes/favouritism derived from 'Business Regulations' sub-index of EFW. These measure the perceptions of the quality of equity within the economic system, in particular equity of government officials when deciding policies and contracts. In turn, the indicators that weighed strongly on

Table 6.4 Results of common factor analysis of institutional indicators. *Source* Author calculations

Institutional quality variable	MC		MR		ML		MS		INST (weighted sum factor)
Factor loadings after rotation ^a (Weights and correlations between each variable and the factor)									
Judicial independence	-0.062	106%	-0.034	-3%	-0.481	109%	-0.162	1145%	-0.178
Impartial courts	0.000	-1%	0.044	4%	0.032	-7%	0.019	-137%	0.028
Military interference in rule of law and politics	0.005	-9%	0.001	0%	0.004	-1%	0.034	-238%	0.009
Integrity of the legal system	0.002	-3%	0.032	3%	0.041	-9%	0.072	-512%	0.037
Legal enforcement of contracts	-0.535	911%	0.113	10%	0.227	-52%	0.285	-2019%	0.064
Regulatory restrictions on the sale of real property	-0.052	89%	-0.012	-1%	-0.149	34%	-0.318	2255%	-0.116
Reliability of police	-0.012	20%	0.061	6%	-0.185	42%	-0.166	1178%	-0.060
Tariffs	-0.004	7%	-0.075	-7%	-0.128	29%	-0.037	260%	-0.068
Compliance costs of importing and exporting	-0.003	5%	0.010	1%	-0.015	3%	-0.015	104%	-0.004
Non-tariff trade barriers	0.002	-4%	-0.021	-2%	-0.003	1%	0.100	-708%	0.012
Ownership of banks	0.001	-1%	0.003	0%	0.043	-10%	0.001	-4%	0.012
Private-sector credit	0.000	-1%	-0.002	0%	0.020	-5%	0.012	-87%	0.007
Interest rate controls/negative real interest rates	0.003	-5%	0.018	2%	-0.007	2%	-0.036	252%	-0.002
Hiring regulations and minimum wage	0.395	-673%	0.086	8%	0.031	-7%	0.252	-1788%	0.159
Hiring and firing regulations	0.012	-21%	0.034	3%	0.100	-23%	-0.026	184%	0.035
Centralised collective bargaining	0.000	0%	0.009	1%	0.071	-16%	0.029	-206%	0.027

(continued)

Table 6.4 (continued)

Institutional quality variable	MC	MR	ML	MS	INST (weighted sum factor)				
	Factor loadings after rotation ^a (Weights and correlations between each variable and the factor)								
Hours regulations	0.009	-16%	0.002	0%	0.001	0%	-0.007	47%	0.001
Mandated cost of worker dismissal	0.043	-74%	0.121	11%	0.020	-5%	-0.316	2236%	-0.007
Bureaucracy costs	0.002	-4%	0.005	0%	0.052	-12%	-0.014	102%	0.012
Starting a business	0.067	-114%	0.006	1%	0.033	-8%	0.066	-465%	0.036
Extra payments/bribes/favouritism	-0.023	39%	0.009	1%	-0.054	12%	0.057	-404%	-0.003
Licensing restrictions	-0.007	13%	0.011	1%	0.062	-14%	-0.099	700%	-0.002
Tax compliance	0.009	-15%	0.018	2%	0.026	-6%	0.002	-15%	0.015
Control of Corruption	0.060	-102%	0.458	42%	-0.041	9%	-0.016	115%	0.166
Government effectiveness	0.013	-23%	0.076	7%	-0.093	21%	0.130	-922%	0.033
Political stability and absence of violence/terrorism	0.027	-46%	0.168	16%	-0.108	24%	-0.138	974%	0.011
Foreign ownership investment restrictions	-0.006	10%	-0.029	-3%	0.043	-10%	0.190	-1349%	0.038
Capital controls	-0.007	11%	-0.034	-3%	0.019	-4%	0.084	-597%	0.008

Factors extracted using Common Factor Analysis method. Rotation performed using Varimax method with Kaiser normalisation

^aWeights based on amount of variance explained by each factor in proportion to the total variance explained by all retained factors

the MS factor included regulatory restrictions on the sale of real property, non-tariff trade barriers, mandated cost of worker dismissal and foreign ownership investment restrictions. MS institutions not only target inflation or impose government enforcement of fiscal actions, but also reduce uncertainty, encourage investment and other productive activities through setting out collective and 'humanly devised' constraints.

To test the relationship between institutions and economic growth, this study followed a specification based on Barro (1991), Delgado et al. (2012), and Siddiqui and Ahmed (2013) which draw on empirical studies by Solow (1956), Lucas Jr. (1988), and North (1994) that confirm evidence of conditional convergence on input factors, some of which are related to institutions. The specification used below:

$$y_{it} = \alpha_0 + \beta_1 \text{MACRO}_{it-1} + \beta_2 \text{INST}_{it} + \beta_3 \text{TFP}_{it} + \epsilon_{it} \quad (6.3)$$

y_{it}	GDP per capita (PPP) (constant 2011 international \$)
MACRO_{it-1}	Lagged macroeconomic covariate comprised of capital and total employment
INST_{it}	Institutional sub-indices
TFP_{it}	TFP as a 'black box' of other determinants of efficiency of factor usage.

It should be noted here that year dummies are included in the model to control for fixed time-specific effects. Table 6.5 summarises the descriptive statistics for this data. Equation (6.3) focuses on the effect of MACRO and INST on national output, controlled for by TFP and fixed time-specific effects. Each variable is measured differently; therefore, the standardised regression coefficients are used to compare the magnitude of their effects.

Following Delgado et al. (2012), the dependent variable is measured by the log of GDP per capita. It provides a measure of the potential for productivity of labour and capital. Average annual inflation rates for the Caribbean economies over the 25-year test period average 5.64%, with standard deviations of 16.5 points, respectively (World Bank, 2017). Adverse labour market institutions are expected to have a negative influence on long-run economic growth, through increased unemployment. Developing economies are characterised by higher levels of unemployment and the absence of unemployment insurance, limited access to social security and welfare support and lower levels of income. These institutional factors suggest that the added worker effect is likely to be stronger for developing Caribbean economies.

Discussion and Conclusions

Table 6.6 presents the results of the model on the relationship between economic performance and the individual categories of macroeconomic and institutional factors, controlling for TFP. Model 1 examines the effect of the macroeconomic environment. We find that capital has a growth-limiting

Table 6.5 Descriptive statistics of macroeconomic variables. *Source* Author calculations, data from World Bank (2017), Feenstra et al. (2015)

	Obs.	Mean	Min.	Max.	St. Dev.
Capital	254	0.02	-0.01	0.07	0.01
Labour	221	0.01	-0.45	0.29	0.05
TFP	221	0.00	-0.27	0.51	0.06
GDP per capita, PPP ^a	244	13204.13	1502.03	31951.02	7118.96

^aGDP per capita, constant 2011 International \$millions

effect on GDP per capita, but no evidence of a significant effect on the variable economic performance. Models 2–7 examine the individual influence of institutional factors on GDP per capita. The results indicate the existence of a robust relationship between MR, ML and MS and GDP per capita. The negative coefficient for MS suggests that these institutions have a growth-maximising level effect on GDP per capita. The negative but significant relationship could be due to the restraint of parallel informal institutions, which may occur as their quality increases and the market adjusts against external shocks. The parallel informal institutions make it easier for economic actors to conduct business within the complex bureaucratic regulations of an economy. Their erosion with the introduction of more regulation may create inefficiencies, bureaucracy and increase the cost of transactions.

These results are also robust to substitute the aggregated institutional index INST (Model 7). The results validate INST and suggest that our findings are not driven by potential bias in any one institutional index. Models 1–10 provide evidence that MR, ML and MS institutions become significant influencers on national output and the attractiveness of these small-island economies of Caribbean for international investment. This would suggest that endowments that may be captured by TFP have separate effects on levels of economic performance. On average, a standard deviation increase in capital is associated with approximately 23% decrease in GDP per capita. This is significantly less than the effect of labour mobilisation, where an average standard deviation increase is associated with a 32% increase in GDP per capita. Similarly, on average, a standard deviation increase in TFP is associated with a decrease of less than one percent in GDP per capita.

Institutions are important for economic growth. However, earlier empirical studies have not identified which institutions matter most or how they matter for economic growth in different countries and/or regions. This study presented a sub-index of institutions for the period between 1990 and 2014,

Table 6.6 OLS regression models results. Source Author calculations

Dependent variable (in)	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
<i>Macroeconomic</i>										
Capital	-0.226 (0.190)	-0.536 (0.393)	0.348 (0.597)	-0.333 (0.440)	0.131 (0.468)	0.311 (0.409)	0.007 (0.478)	-0.187 (0.137)	-0.209 (0.166)	-0.240 (0.161)
Labour	0.324 (0.913)	0.437 (1.192)	0.115 (1.938)	-1.444 (1.676)	1.063 (1.745)	1.148 (1.504)	-0.648 (1.872)	-0.248 (0.669)	-1.020 (0.696)	-0.109 (0.101)
<i>Endowments</i>										
TFP	0.060 (0.221)	-0.333 (0.210)	0.081 (0.301)	0.055 (0.251)	-0.319 (0.338)	-0.047 (0.243)	-0.013 (0.289)	0.108 (0.171)	-0.081 (0.158)	
<i>Institutional sub-indices</i>										
ML		0.611* (0.271)			0.910* (0.425)				0.491** (0.171)	0.435** (0.155)
MS		-0.904*** (0.186)				-0.916** (0.249)			-0.259* (0.109)	-0.252* (0.108)

Table 6.6 (continued)

Dependent variable (in)	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
<i>Macroeconomic</i>										
MC		-0.516* (0.224)	0.279 (0.333)						0.035 (0.141)	0.055 (0.140)
MR		0.680** (0.181)	0.733** (0.225)						0.670*** (0.138)	0.629*** (0.134)
INST						0.948 (0.503)				
Constant	-0.439 (0.734)	-1.111 (0.815)	0.019 (1.224)	-0.864 (0.967)	0.625 (1.150)	-0.610 (0.917)	-0.064 (1.088)	-0.424** (0.150)	-0.401* (0.150)	-0.404** (0.149)
N	78	51	51	51	51	51	51	78	51	52
Year fixed effects	YES	YES	YES	YES	YES	YES	YES	NO	NO	NO
r2	0.169	0.790	0.231	0.465	0.344	0.509	0.317	0.036	0.486	0.464
ar2	-0.279	0.448	-0.747	-0.217	-0.492	-0.117	-0.552	-0.003	0.4861	0.392
df_r	50.000	19.000	22.000	22.000	22.000	22.000	22.000	74.000	43.000	45.000

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

which captured the effect of market-creating, market-regulating, market-stabilising and market-legitimising institutions alongside macroeconomic variables on economic performance and international competitiveness. There is evidence that those institutions designed to regulate and legitimise the market impose roles within the market and constrain inefficiencies and as such tend to have a significant impact on productivity levels. However, there is also evidence that market-stabilising institutions reach a growth-maximising level beyond which increased bureaucracy can reduce the incentive for investment and productivity. These findings suggest that strengthening market-legitimising and market-regulating institutions is crucial for these developing Caribbean economies, whether high, middle or lower income, to promote economic growth and international competitiveness.

These results also indicate that in the absence of controls for TFP, institutions that focus on the measure of political participation and target external shocks have a significant impact on output levels. It would suggest that holding proximate determinants constant, productivity in these Caribbean economies is reliant on the control of inflation, self-imposed government enforcement of fiscal policies, integrity of the legal system, control of corruption and political stability. This study contributes to existing literature on the competitiveness of host economies within international business, with a focus on developing countries and the overlooked Caribbean region. Results from this study build upon existing work and move the discussion beyond property rights and contracts. In line with existing literature, we confirm that institutions play a role in the economic performance of the selected economies. Interestingly, the results indicate that specific institutions play varying roles within this region's economies. We found that different categories of institutions appear to matter more than others for the growth and international competitiveness of a country. Particularly, we found significant differences in the impact of market-regulating institutions compared to that of market-stabilising institutions. Specifically, market-stabilising institutions appear to have a growth-maximising level beyond that which increased red tape and bureaucracy would significantly reduce the incentive for investment. Scholars interested in this topic may contribute to the literature on international competitiveness both theoretically, by providing a more nuanced understanding of and contextualising the role of institutions, and practically, by understanding how institutions matter and which institutions matter particularly in regions with heterogeneous country environments.

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7

The Complementarity of Foreign and Domestic Investments by Emerging-Market Multinationals

Pavida Pananond and Alvaro Cuervo-Cazurra

Introduction

The impact of outward foreign direct investment (OFDI) on the home economy has been a contentious issue for policymakers in advanced economies (Globerman, 1994, 2012; Kokko, 2006) generating a debate around whether OFDI complements or substitutes domestic investment. On the one hand, critics argue that foreign investment substitutes domestic

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investment as firms relocate activities to countries with better comparative advantage, leading to the reduction or closure of operations at home. Under this view, international expansion of domestic firms brings negative impacts on the home economy—for example, domestic employment and wage levels are reduced (Graham, 1997), or home exports are replaced by production in overseas subsidiaries, further reducing investments in domestic operations (Svensson, 1996). This view of foreign investments has regained credibility in recent times, especially among political leaders who pinpoint the overseas expansion of domestic firms as one of the top causes célèbres for the home country's economic malaise. Among the most notable examples was US President Donald Trump's criticism that US firms' investments in Mexico would take place at the expense of domestic investments, and therefore their imports to the US should be met with punitive tariffs (*Economist*, 2017).

On the other hand, proponents consider outward foreign investment as complementary to domestic investment. The underlying arguments in this camp focus on the strategic benefits that firms obtain from international expansion. Firms that undertake OFDI can sell more and benefit from economies of scale or can buy better and benefit from arbitraging international differences in factor endowments, costs and regulatory differences among host countries (Cuervo-Cazurra, Narula, & Un, 2015). Domestic investment can increase as firms that invest abroad to facilitate their sale of products, also need to expand domestic capacity to serve the new markets, while those that venture overseas to obtain raw materials and technologies enlarge their domestic operations to incorporate new inputs.

However, the relationship between foreign and domestic investment may need more nuanced arguments. First, the benefits of OFDI on the home economy may depend on layers of interrelated factors (see Kokko, 2006 for a detailed review). Overall, the impact of OFDI on home countries (variously measured as domestic production, investment, exports or employment) is expected to differ depending on the type of investment, industry, time perspective and home- and host-country characteristics (Kokko, 2006). Second, the rise of emerging-market firms adds a new layer of complexity to the debate, which so far has been usually based on studies of advanced-economy firms (for a review of emerging-market multinationals, see articles in the books edited by Cuervo-Cazurra & Ramamurti, 2014; Ramamurti & Singh, 2009; Williamson, Ramamurti, Fleury, & Fleury, 2013). This complexity stems not only from the differences in emerging-market multinationals' capital cost structure, but also from differences in the nature of their competitive advantages and their positioning along global value chains. These differences lead to various internationalisation patterns that may bear more nuanced implications on the impact of OFDI on the home economy.

In this chapter, we contribute to the literature by studying the relationship between foreign and domestic investments of firms from emerging economies. We propose that emerging-market firms' foreign and domestic investments are complements rather than substitutes because foreign direct investment enables these firms to increase their efficiency and improve their value chain positioning. International expansion strengthens emerging-market firms' efficiency because they can sell more and benefit from economies of scale and scope, or they can obtain innovations and technologies that compensate for the weaknesses in their home country's innovation systems. Increased efficiency helps these firms improve and expand domestic operations and, at the same time, upgrade their positioning in the value chain of global industries. The analysis of a sample of 402 publicly traded Thai firms during 2006 and 2014 revealed that foreign investment has a positive and short-term impact on domestic investment.

These arguments and findings bear important policy implications. Some emerging-market governments are directly and actively supporting OFDI of their firms (see an overview of the case of China in Luo, Xue, & Han, 2010). Assertive OFDI support may be the result of a search for resources, technologies or a desire for global influence and leadership via national champions. However, such policies are criticised for fomenting state capture and subjective support of well-connected firms at the expense of government investments in basic social and infrastructure that may provide more broad-based benefits in emerging countries. Emerging-market governments, therefore, have to carefully consider the potential impacts of OFDI. Our study in this chapter illustrates the idea that foreign direct investment complements rather than substitutes domestic investment and is thus beneficial for the home economy.

The Impact of Foreign Direct Investment on Domestic Investment

At the firm level, theoretical arguments concerning the impact of foreign investment on domestic operations acknowledge that investing abroad brings beneficial consequences. Firms expand overseas for a myriad of reasons that ultimately contribute to their improved profitability (Cuervo-Cazurra et al., 2015): (1) to sell more and benefit from the competitive advantage they have developed in the home country; (2) to buy better and benefit from the comparative advantage of other locations in terms of lower production costs; (3) to obtain sources of competitive advantage that help

them upgrade their home operations; or (4) to escape the underdevelopment of the home-country conditions. Companies that become multinationals are likely to have developed unique resources and capabilities at home, which become the basis of their advantage when expanding overseas (Hymer, 1976). As a result, multinationals enjoy superior profitability as they expand their operations across multiple countries (Lu & Beamish, 2004). This is the case despite additional investment costs (Hymer, 1976) and information costs (Eriksson, Johanson, Majkgård, & Sharma, 1997) that may reduce their success in the early years (Zaheer & Mosakowsky, 1997).

In contrast, at the country level, discussions on the benefits of domestic firms' foreign investment on the home economy are less definitive, and this has led to diverging government policies towards OFDI (Gammeltoft & Kokko, 2013; Kokko, 2006; Sauvart, 2017). The influence is inconclusive for many reasons (Kokko, 2006). First, it is difficult to determine the net impact of OFDI on the home economy since there are multiple influences, many of which yield opposite effects. Second, as a country accumulates more sophisticated resources and human capital, firms shift from the more low-end and labour-intensive stages of production to higher skill-based activities. OFDI becomes a mechanism that enables local firms to relocate activities that are no longer competitively or efficiently done at home to other countries that provide better location advantages. Impacts of OFDI on the home economy may vary, as there are multiple contingencies that can positively or negatively influence these relationships (see Kokko, 2006). Such factors include type of investment (greenfield or acquisition), type of industry (manufacturing or service), time perspective (short- or long-run) and motive of investment (strategic asset-seeking or asset-exploiting).

Empirical studies of the impact of OFDI on the home country are similarly inconclusive. Table 7.1 summarises selected studies on the impact of foreign direct investment on domestic investment. The studies illustrate the variety of variables, levels of analysis, sample countries and conclusions. To facilitate a better comprehension of the topic, we organise the literature into three groups: (1) 'complements' are those studies that find a positive relationship between OFDI and domestic investment (2) 'substitutes' are those that find a negative relationship and (3) 'inconclusive' are those that find unclear or conflicting relationships.

Table 7.1 Selected studies analysing the impact of foreign direct investment on domestic development

Study	Arguments	Sample	Dependent variable	Independent variable	Main findings
Complements					
Desai, Foley, and Hines (2005)	OFDI increases the overall efficiency of operations as it can generate outputs at a cheaper cost	Country-level data for 20 OECD countries and US-based capital expenditures	Domestic capital expenditures over gross domestic product (GDP)	Foreign capital expenditures over GDP	OFDI is complementary to domestic investment as firms can increase the overall efficiency
Globerman (2012)	OFDI stimulates corporate growth, which, in turn, stimulates domestic investment, but the relationship between OFDI and domestic investment also depends on OFDI motives	Case studies of 22 Canadian multinational companies (MNCs) (2000–2010)	Sales growth (revenue index) and domestic capital investment (domestic asset index)	Foreign assets/total assets	OFDI and domestic capital investments are complements
Hsu et al. (2015)	OFDI increases interactions and interdependencies among foreign affiliates and home operations, but relationship depends on nature of industries and investment destinations	15 Taiwanese manufacturing industries (1991–2007)	Labour productivity	FDI flows and export	OFDI complements domestic investment, but not in all cases. OFDI to China in Heckscher-Ohlin industries has a positive impact on domestic investment, but negative in other countries in the same industries. In Schumpeter industries, a positive effect is observed only for OFDI in other countries

(continued)

Table 7.1 (continued)

Study	Arguments	Sample	Dependent variable	Independent variable	Main findings
Tan et al. (2016)	OFDI of ASEAN firms can allow them to be part of global value chains and, in turn, stipulate domestic growth	ASEAN 8 countries, country level	Gross fixed capital formation (GFCF) from the World Bank	OFDI from UNCTAD	Both inward FDI and outward FDI, to some extent, are complementary to gross domestic investment
Substitutes					
Feldstein (1994)	OFDI reduces internal capital to investment in domestic operations and leads to dollar-by-dollar displacement of domestic investment	OECD, country level	Gross domestic investment (GDI)/GDP	OFDI/GDP	Domestic investment is replaced by foreign investment dollar-by-dollar
Al-Sadiq (2013)	OFDI impacts on domestic investment depend on motives. There is a negative relationship between OFDI impacts on the home economy in developing countries	121 developing and transition economies over the period 1990–2010	GDI/GDP	OFDI/GDP	OFDI flows negatively impact the rate of domestic investment

(continued)

Table 7.1 (continued)

Study	Arguments	Sample	Dependent variable	Independent variable	Main findings
Goh and Wong (2014)	OFDI substitutes domestic investment because OFDI crowds out capital that could be used for domestic investment and replaces exports from home economies, reducing domestic investment	Bank Negara Malaysia's (BNM) Monthly Statistical Bulletin	GDI/GDP	OFDI/GDP	The effect on domestic investment by OFDI flows is substitutional and inelastic
Inconclusive					
Branunerhjelm and Oxelheim (2000)	Impacts of OFDI on domestic investment depend on the nature of the industry. OFDI in R&D-intensive production would lead to positive domestic investment, whereas the opposite applies for OFDI in production based on comparative advantages	Sweden, industry level	Percentage changes in GDI by industry and region	Percentage changes of OFDI, by industry and region	Strong substitutability between investment abroad and at home in the Schumpeter industries in European Union (EU) regions, but opposite pattern in traditional comparative advantage industries
Kim (2000)	Impacts of OFDI on domestic investment and exports depend on the relative importance of OFDI to domestic investment, how it is financed, and interactions between foreign and domestic units	Trends of outward and domestic investment over 1978–1995	Aggregate domestic investment	OFDI/GDP	Overseas investment does not crowd out domestic investment, but OFDI of Korean multinationals has a positive effect on exports

(continued)

Table 7.1 (continued)

Study	Arguments	Sample	Dependent variable	Independent variable	Main findings
Hejazi and Pauly (2003)	Impacts of OFDI on domestic investment depend on investment motives (market-seeking; factor price arbitrage; natural-resource seeking; and intra-firm trade access)	Canadian industry-level data (1984–1995)	Gross fixed capital formation	Industry-level OFDI	OFDI effects depend on the motive of investment, not on the growth of outward relative to inward investment
Branunerhjelm et al. (2005)	Impacts of OFDI on domestic investment depend on how the industry is organised	Sweden 1982–2001, industry level	Gross fixed capital formation	OFDI flows to EU and rest of world	Complementary relationship prevails in vertically integrated industry, whereas the opposite applies in horizontally organised production
Herzer and Schrooten (2007)	Impacts of OFDI on domestic investment depend on labour costs in the home economy. High labour costs tend to reduce domestic investment	Macroeconomic time series data for the US (1970–2003) and Germany (1971–2004)	Gross fixed capital formation	Net FDI outflows	In the USA, outward FDI has positive long-run effects on domestic investment. In Germany, this complementary relationship exists only in the short run. In the long run, outward FDI substitutes for German domestic investment

(continued)

Table 7.1 (continued)

Study	Arguments	Sample	Dependent variable	Independent variable	Main findings
Lin and Chuang (2007)	The impact of FDI on domestic investment in Taiwan depends on the size of the investing firm	Taiwanese Manufacturing Firms, firm-level data, 1993–1995 and 1997–1999	Domestic capital stock	Dummy variable if firms are engaged in OFDI	FDI has a positive influence on the domestic investment of larger firms, while the influence is negative for smaller firms
Onaran et al. (2013)	Impacts of OFDI on domestic investment depend on the type of industry and for high-/low-wage countries	German 19 industry and ten services sectors. (Industry level) 1998–2005	Domestic investment by industry	OFDI stock	FDI to low-wage countries crowds out domestic investment, whereas FDI to high-wage countries outside Europe crowds in domestic investment. In services, FDI to Western Europe crowds in domestic investment

Complements: Foreign Investment has a Positive Impact on Domestic Investment

One side of the debate highlights how foreign investment complements domestic investment and therefore facilitates the development of the home country. The underlying argument of studies in this group is that OFDI leads to more interactions and interdependencies between foreign and home-based affiliates, resulting in further investment at home. Firms combine foreign investment and domestic activities to raise efficiencies (Desai, Foley, & Hines, 2005). Specifically, foreign investments enable firms to arbitrage different comparative advantages of countries to promote intra-company exports (Andersen & Hainaut, 1998) or raise their overall efficiency through lowering costs (Globerman, 2012; Hsu, Wang, & Clegg, 2015; Tan, Goh, & Wong, 2016). This, in turn, creates positive outcomes in the domestic market, including increased productivity, growth and domestic investment.

In studies of advanced-economy OFDI, the trading of intermediate products between foreign subsidiaries and domestic units is often referred to as a key mechanism that promotes more interdependencies and linkages between foreign and domestic units (Kokko, 2006). A slightly different mechanism may be at play for OFDI from emerging economies. Tan et al. (2016) argue that foreign investment of firms from Southeast Asia allowed them to deepen their participation in the value chain of global industries and to stimulate further domestic growth and investment.

Using the quintessential metaphor of a pie, this set of studies argues that OFDI enlarges the pie, i.e. the overall growth of the home economy. The pie grows due to the favourable consequences of foreign investment, which include the increased competitiveness of the investing firms that allows them to invest more domestically, as well as other positive impacts derived from upgrading spillovers that are passed on to other home-country economic actors like competitors and suppliers. Each slice of the pie, foreign and domestic investments in our case, grows.

Substitutes: Foreign Investment has a Negative Impact on Domestic Investment

The other side of the debate argues that foreign expansion substitutes for domestic investments, thus undermining the development of the home economy. The reasons offered to support this view are the following.

First, given that financial resources are limited, the foreign expansion will, to a certain degree, replace investments in activities at home, as companies may not have the necessary funds to invest in both home and host countries. As such, foreign investment crowds out domestic investments. Feldstein (1994) was instrumental in pointing out this crowding-out effect in the internal capital structure of the investing firms and confirmed that there was a dollar-for-dollar displacement of domestic investment by outbound foreign investment. Desai et al. (2005) also discuss this idea of capital crowding out.

Second, foreign investments substitute domestic ones when outbound investments are undertaken to obtain better comparative advantage and conditions than those existing at home. In such cases, the investing firm may decide to shift operations to foreign countries that are more conducive to its operations and discontinue activities previously conducted at home. This adverse effect is often linked with the decrease in exports from home once production in foreign subsidiaries replaces domestic outputs. Some empirical studies that support this view include Branunerhjelm, Oxelheim, and Thulin (2005), Al-Sadig (2013) and Goh and Wong (2014).

Counter to the growing pie analogy of the 'complements' camp discussed before, the 'substitutes' group views the size of the pie as set. Therefore, any foreign investment would take away part of the pie that would have been allocated to domestic investment.

Inconclusive: Foreign Investment has an Unclear Influence on Domestic Investment

There are also empirical studies that have yielded unclear or inconclusive findings on the relationship between foreign and domestic investment. These debatable results are often explained as the effect of moderating factors that alter the direction of the relationship between outward and domestic investment. Many studies argue that the impact of OFDI on domestic investment cannot be generalised because other details of the investment need to be taken into consideration. These moderating forces range from country-level factors, such as home-country wage level (Hering, Inui, & Poncet, 2010; Herzer & Schrooten, 2007; Onaran, Stockhammer, & Zwickl, 2013) to industry-level characteristics (Braunherhjelm & Oxelheim, 2000; Branunerhjelm et al., 2005; Hering et al., 2010; Onaran et al., 2013); to firm-level factors such as investment motives (Hejazi & Pauly, 2003), or investing firm characteristics, financing options, size of the investing firms and relative size of outward to domestic investment (Kim, 2000; Lin & Chuang, 2007).

Using the same pie analogy, this group of studies argues that the size of the pie for domestic investment cannot be predetermined because it depends on how the pie is made. One has to consider specific details before any definite conclusion on the relationship between foreign and domestic investment could be made.

The Impact of Foreign Direct Investment on Domestic Investment by Emerging-Market Firms

Most of the empirical studies debating the complementary or substituting nature of OFDI on domestic investment are based on the analysis of aggregate country or industry-level data of advanced economies. This tendency may have introduced some unstated biases that analyses of firms in the emerging economies challenge.

First, the differences in comparative and competitive advantages of firms from emerging economies may conceivably alter the relationship between their OFDI and domestic investment, and hence the impact of OFDI on domestic investment. The assumption that firms from advanced economies are endowed with sophisticated capabilities implies that these firms are in a better position to arbitrage the differences in factor endowments across countries. Their expansions to emerging economies are considered as efficient strategies to relinquish the less sophisticated part of their value chains, like production, to overseas suppliers in low-cost countries. Firm resources could be freed up and used for further domestic investment in higher value-adding activities.

However, this scenario may not apply to the outward investment by emerging-market firms, which tend to derive much of their international competitiveness from home-country comparative advantages, such as lower labour and regulatory costs, leading to different positioning and roles in the value chain of global industries. The role of outward investment may bear different implications on the value chain positioning of emerging-market firms (Pananond, 2016) possibly causing diverse impacts on domestic investment.

Second, the focus on analyses of country and industry-level data creates challenges in the identification of mechanisms by which foreign investment affects domestic investment. Increases in the level of domestic investment may not result directly from foreign investment of the expanding firms, but by other firms. For example, as a firm relocates production abroad, suppliers

and competitors at home may expand their capacity to capture the potential domestic market that the focal firm may be unable to serve. Or domestic distributors may expand their investment at home to facilitate the importation and sale of foreign products in the domestic market.

Hence, our study can contribute to a better understanding of the relationship between OFDI and domestic investment for two reasons. First, by focusing on emerging economies, we uncover new and different relationships that contribute to the discussion based on previous studies of advanced economy firms. Second, and more importantly, by studying the relationship between foreign and domestic investment at the firm level, we can appropriately establish whether the relationship between these two actions is driven by actions undertaken by the same firm, rather than by its competitors, suppliers or distributors.

The Complementarity of Foreign and Domestic Investment by Emerging-Market Multinationals

We propose that emerging-market firms' foreign investments complement rather than substitute their domestic investments because foreign investments help these firms upgrade their capabilities through four mechanisms. These mechanisms vary with the underlying motive for each specific foreign investment.

First, international investments can help emerging-country firms reap economies of scale in their domestic operations by selling larger volumes, hence leading to increased investments at home to enhance efficiency. This mechanism could be particularly relevant to market-seeking investments of emerging-market firms in other emerging economies. Given the early stage of their overseas investment (Ramamurti, 2012), many firms from emerging economies tend to concentrate their overseas investment in other developing countries, initially to sell more. The additional sales generated from these overseas subsidiaries could increase sales and exports from the home base and therefore encourage further investments in domestic operations. The increased sales volumes help them improve efficiency in their home operations, thanks to the ability to produce at higher capacity, to invest in new machinery, or to expand production lines to serve the new markets. These efficiency-enhancing processes ultimately enable emerging-economy firms to reap benefits from the economies of scale of selling larger volumes as they expand overseas towards the downstream end of the value chain.

Second, emerging-market firms can benefit from improved learning processes that lead to additional domestic efficiency-enhancing investments. As firms from emerging economies increase their foreign operations through deepening and broadening regional and global value chains, they also learn more about different customer needs and alternative practices from new competitors. This learning can be achieved when investing not only in emerging economies but also in advanced economies. Investing in other emerging economies allows these firms to benefit from the scope economies of selling different versions of the product created at home in markets with various local needs. This process enables these firms not only to improve their production process, but also to sharpen their innovativeness from having to cater to a variety of customer needs. Similarly, investing and serving more sophisticated customers in more advanced economies could prompt emerging-market firms to introduce new or more advanced features. Finally, interacting with competitors and suppliers around the world helps these firms to gain insights. They not only learn how competitors in other countries create and innovate products to address the varying needs of customers, but also how suppliers in other countries manage their production processes and use alternative materials and components to create products. All these knowledge and skills gained from international expansion enhance their innovation skills (Bartlett & Ghoshal, 1989) and allow them to further improve and expand domestic operations as a result.

Third, overseas investment can lead to the expansion of domestic operations to incorporate new and more sophisticated technologies. Emerging-market firms may suffer from disadvantages of weak innovation systems in their home economy, which could limit their ability to develop advanced technologies and know-how. Strategic asset-seeking international investment can address such limitations (Cuervo-Cazurra, 2012; Luo & Tung, 2007; Mathews, 2006). Acquisitions of firms in advanced economies may enable these firms to access state of the art technologies that could help improve their operations at home (Madhok & Keyhani, 2012). Such acquisitions are usually made with the explicit purpose of transferring the technology back to the home operations and upgrading their overall competitiveness; this in many cases is achieved by providing the acquired operations with more autonomy that can be expected from acquirers from advanced economies (Wang et al., 2014). Additional responsibilities and control over foreign units, as well as the direct presence in countries with more advanced innovation systems, expose emerging-market firms to new solutions to problems they currently face at home, helping them to upgrade their home operations to international levels of competitiveness.

Fourth, outward investment of emerging-market firms could boost domestic operations even when firms invest abroad to reduce production costs. Unlike firms from advanced economies that face higher production costs due to higher wages and more stringent regulatory standards in their home locations, emerging-market firms already operate in countries with relatively low production costs. As a result, there are lower economic pressures to relocate production to other countries for cost advantages. Hence, international expansion of emerging-market firms in other emerging countries does not have to lead to the termination of domestic activities. Even if when firms open new production facilities in other lower-cost emerging economies, these investments tend to be accompanied by the upgrading of domestic facilities towards more complex value-added activities rather than the replacement of domestic by foreign production. The lower-cost differentials between locating production in other emerging economies, in many cases, may not warrant the closure of domestic operations. Rather, leveraging production flexibility from different locations could increase the efficiency of home operations and lead to further domestic investment to upgrade and differentiate facilities at home from other locations. This is rather different from overseas investment in production by advanced economy firms in low-cost locations, which often leads to the closure of high-cost domestic operations.

These four mechanisms explain the different processes through which foreign expansion of emerging-market multinationals can improve the efficiency and sophistication of their home operations, ultimately contributing to further domestic investment and growth. We summarise these ideas in the following hypothesis:

Hypothesis 1. *Foreign direct investments by emerging-market firms have a positive impact on their domestic investments.*

Research Design

We test this argument on a panel of 402 publicly traded Thai firms in the period between 2006 and 2014. Thailand is a relevant context for analysing the relationship between foreign and domestic investment given that the government started promoting outward foreign direct investment by Thai companies in 2013. The Board of Investment included Thai outward foreign direct investment among its objectives for the first time in its Five-Year Investment Promotion Strategy Draft (2013–2017) (Wongviwatchai, 2013). Part of the drive behind this policy framework was a desire to upgrade the

capabilities and to transform domestic firms into multinationals. This effort was a component of an ambitious government-led strategic plan that aimed to transform the country from a middle- to a high-income country and avoid the middle-income trap that bedevils many emerging economies.

We collected financial information and firm characteristics from Thompson Reuters Datastream. We obtained data on foreign direct investment of SET-listed firms from the Research Department of the SET. The main source of information on this firm-level OFDI statistics is the Annual Registration Statement (Form 56-1) and financial statements each listed company submits to the SET. This database provides information on the amount and nature of OFDI activities, foreign revenue and size of firms (SET 50; SET 50–100; SET 100–150; and SET 150–200). Data are available only from 2006 to 2014. However, since Thai firms did not start investing abroad until the early 2000s (Pananond, 2007), including previous years in the analysis would not alter the results. Following UNCTAD's practice, we excluded financial firms because their accounts are not comparable, and firms with missing information. We also excluded firms from the Market for Alternative Investment (MAI) as MAI listed firms tend to be small- and medium-size enterprises, which differ from the general population of the SET-listed firms. This gave us a sample size of 148 firms with reported OFDI by 2014. For our analysis, we also included listed firms that had no OFDI as a control group. The final sample is 402 firms. Table 7.2 presents a summary of the variables and measures that we use to analyse these relationships.

Our dependent variable is domestic investment. Since listed companies are not required to disclose their domestic investment for the year, to compute domestic investment we had to use a proxy. We first deducted total assets for the year from total assets from the previous year and added the depreciation as reported in Datastream to get a measure of the total investments for the year. We then deducted foreign investments for the year reported in the SET dataset to end up with a measure of domestic investment. We then divided domestic investment by total assets and multiplied by one hundred to get a relative level of domestic investment. This relative level helps account for the capital intensity of the firm.

The independent variable of interest is foreign investment. This comes from the foreign investments reported for the year by the SET. For each firm, we added the foreign investments by each subsidiary in all the countries in which it invested in the year. We then computed foreign investments by dividing the investments abroad by the total assets of the firm and multiplied by one hundred to get to a relative level of foreign investment.

Table 7.2 Description of variables and measures

Variable	Measurement
Domestic investment	Assets minus assets of the previous year plus depreciation of the previous year minus foreign assets divided by assets multiplied by 100
Foreign investment	Foreign investment divided by total assets multiplied by 100
Exports	Exports divided by sales multiplied by 100
Profitability	Earnings before interest and taxes divided by sales multiplied by 100
Size	Number of employees
Sales	Sales in US\$
Age	Number of years since creation
Industry	Indicator of industry of operation
Year	Indicator of year of analysis

We controlled for alternative influences on domestic investments. First, we controlled for exports because these may be driving domestic investments as the firm may increase domestic operations to serve foreign markets. We measured exports by dividing exports by total sales and multiplying by one hundred. Second, we controlled for profitability as companies that are more profitable have more funds for investment. We measured profitability as the earnings before interest and taxes divided by sales and multiplied by one hundred. Third, we controlled for the size of the firm because larger firms may have better ability to undertake investments. We measured size with the number of employees and sales with revenues in Thai Baht. Fourth, we controlled for the age of the firm because new firms may have more need to undertake investments. We measured age as the number of years since registration. Fifth, we controlled for the industry because investments vary with the capital intensity of the industry. We measured industry with a bivariate indicator for the industry that appears in the SET: Agro & Food Industry, Consumer products, Industrials, Property and Construction, Resources, Services and Technology. Sixth, we controlled for the year of analysis because external events may affect the incentive and ability of firms to undertake investments. We measured this with a bivariate indicator of the year of analysis (2006–2014). Seventh, we controlled for other firm-specific unobservable characteristics with an indicator of the firm using a random effects model; a fixed-effect model cannot be used because firms that do not invest during the period and other time-invariant variables would drop out of the analysis.

We use a generalised least squares model, controlling for heteroscedasticity and panel specific (firm) autocorrelation. Since there may be a gap in decision-making between domestic and foreign investments, we use several lag-time periods of one, two and three years to account for the differences in decisions.

Results

Table 7.3 presents the descriptive statistics and correlation matrix. The average firm has US\$523 million in sales revenues and 1176 employees, is 27 years old and exports 24.49% of sales. Except for employees and sales, the correlations are relatively low. We excluded these two variables one at a time, and the results do not change, indicating limited problems with collinearity (Greene, 2000).

Table 7.4 provides the results of the analysis of the impact of foreign investment on domestic investment. The results provide support to our argument that foreign investment complements domestic investment. The coefficient of foreign investments is positive and statistically significant with a one-year lag (Model 1). It is not statistically significant with a two-year lag (Model 2), indicating that this complementarity is short-term. Limiting the analysis to companies that only have foreign investments produces similar results, with foreign investments having a positive impact on domestic investment after one-year lag (Model 3), but the relationships weaken after two years (Model 4). We ran additional tests to ensure the robustness of the results on alternative specifications. First, we computed alternative measures of domestic investment, using the same measure as before without including the depreciation. We found similar results. Second, we used random- and fixed-effect panel regressions. We found similar results, with foreign investments having a positive and statistically significant relationship on domestic investments. This relationship holds for one year but disappears after two years.

Table 7.3 Descriptive statistics and correlation matrix

Variable	Average	Std. Dev.	1	2	3	4	5	6	7
1 Domestic investment	12.81	26.59	1.00						
2 Foreign investment	0.28	1.99	-0.02	1.00					
3 Exports	24.49	471.73	0.01	-0.01	1.00				
4 Profitability	10.10	43.22	0.152*	0.01	-0.042*	1.00			
5 Employees	1176.07	3806.60	0.03	0.069*	-0.01	0.00	1.00		
6 Sales	523,000,000	3,510,000,000	0.00	0.050*	-0.01	0.00	0.375*	1.00	
7 Age	27.07	14.80	-0.1078*	-0.01	-0.02	0.01	0.104*	0.00	1.00

Significance: * $p < 0.05$

Table 7.4 Generalised least squares analysis of the impact of foreign investment on domestic investment

	Dependent variable: domestic investment			
	All firms		Firms with foreign investments	
	One-year lag	Two years lag	One-year lag	Two years lag
	Model 1	Model 2	Model 3	Model 4
Foreign investment	0.271* (0.107)	-0.00702 (0.101)	0.433*** (0.0840)	0.108+ (0.0592)
Exports	0.000643* (0.000297)	0.000850+ (0.000469)	-0.0120 (0.0453)	-0.114* (0.0497)
Margin	0.0106 (0.00746)	0.0416*** (0.00183)	0.151*** (0.0155)	0.164*** (0.0357)
Employees	0.000140** (4.65e-05)	-1.65e-05 (5.00e-05)	2.06e-05 (3.36e-05)	-8.73e-06 (8.12e-05)
Sales	7.91e-06 (3.05e-05)	6.75e-05+ (4.09e-05)	9.92e-05** (3.67e-05)	6.67e-05 (5.14e-05)
Age	-0.0796*** (0.0113)	-0.0741*** (0.0102)	-0.0444** (0.0161)	0.00592 (0.0225)
Industry indicators	Included	Included	Included	Included
Year indicators	Included	Included	Included	Included
Constant	18.96*** (0.681)	14.34*** (0.628)	22.59*** (1.132)	14.79*** (2.072)
Chi2	1895***	14,415***	148,422***	2462***
Observations	3058	2653	291	225

Standard deviation appears in parenthesis. Significance: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Conclusion

We analysed the impact of foreign investment on domestic investment in emerging-market firms to address the debate on whether domestic and foreign investments are complements or substitutes. The literature analysing the impact of OFDI on domestic investment, which is mostly based on the study of advanced economies, has generated inconclusive results. One reason is that it has usually analysed OFDI data aggregated at the country and industry levels, limiting the ability to establish the relationship clearly. We proposed that for emerging-market firms, foreign investments have a positive

influence on domestic ones, because foreign investments help them upgrade their domestic operations and reconfigure their global value chains. We tested this idea on a dataset of publicly listed Thai firms and found that foreign investments appear to have a positive impact on domestic investment, most notably within a one-year time lag. In other words, foreign and domestic investments seem to be complementary, at least in the short run.

These ideas and findings contribute to the literature by providing one solution to the debate on whether foreign and domestic investments are complements or substitutes. First, by analysing firm-level data, we can establish the relationship between foreign and domestic investment by the investing firm properly. Studies at the country and industry levels may have generated conflicting results because foreign investments by some firms may result in domestic investments by others like competitors, suppliers or distributors, which limit the ability to establish causality. By studying foreign and domestic investment by the same firms, we can establish that there is a positive short-term relationship. Additionally, by including a control group of firms that are not multinationals, we can confirm the relationship between foreign and domestic investments in comparison with firms that do not engage in foreign investment.

One unexpected finding is the short-term effect of foreign investment on domestic one. The positive relationship between the two appears to be short-lived, having an impact in one or at most two years post-investment. One plausible explanation is that the early stages of internationalisation of these firms make domestic investment relatively more significant. Firms that are just becoming multinationals still bear the responsibility of improving and upgrading their home-country operations to be in tandem with their foreign investments. Once these firms become more global, the significance of home country decreases as firms turn their attention towards building up wider regional and global operations and not just their home facilities.

The second contribution of our study is the novelty added to the literature from studying outward investments of emerging-market firms. Faced with different conditions in their home country, emerging-market firms may benefit from lower labour costs but suffer from weaker innovation systems. These different home-country contexts modify the mechanisms by which foreign investment affects domestic investment. We explained how emerging-market firms' upgrading of capabilities via foreign direct investment results in a complementary relationship between foreign and domestic investments as a result of economies of scale, economies of scope and integration of foreign technology and innovation.

Although these mechanisms are also at play for advanced-economy firms, the strength of such mechanisms is higher in emerging economies as a result of two particular characteristics of their home country: lower production costs driven by lower labour costs and weaker regulatory standards; and lower degree of innovativeness driven by weaker innovation systems. We argue that these two features of emerging economies help enhance the positive relationship between foreign and domestic investment by emerging-market firms.

First, lower production costs of emerging economies reduce the pressure to move production to other lower-cost countries, and hence strengthening the positive effect of foreign investments on domestic ones. Unlike their advanced country counterparts that may look for cost advantages when investing overseas, emerging-market firms are already operating in a low-cost environment. As a result, overseas expansions in search of new markets tend to be accompanied by investments in domestic capacity to serve these new customers. Even when these firms open new production facilities in lower-costs countries, domestic operations are not always closed down. Rather, they can be upgraded to create higher value-added products and to cater to more sophisticated demand from overseas.

Second, the weaker innovation system in emerging economies hinders the degree of innovativeness of their domestic firms. This, in turn, compels these firms to use overseas investment as a mechanism to obtain technology and innovations from other countries. To maximise the benefits from such acquisitions, these firms are expected to integrate the acquired technology with their home operations. As a result, foreign investments can help upgrade their domestic facilities and transform their operations to become more internationally competitive.

These findings bear important implications. For policymakers, our study indicates that foreign direct investments should not be discriminated against because they complement rather than substitute for domestic investments. This is important in the current political environment in which some countries that used to be the forces of globalisation, like the US and the UK, have turned against it; in 2016, UK citizens voted to leave the European Union and US voters elected a President who was a sceptic of globalisation. In light of our findings, claims that foreign investments are made at the expense of domestic investments need to be taken with caution. A particular plant may be closed and production relocated to another country, but that does not mean that all foreign investments result in the reduction of domestic investments. On the contrary, it appears that foreign investments result in additional domestic investments and thus policies that aim to curtail

foreign investments may have deleterious impacts on domestic investments and on the ability of domestic firms to compete globally.

These findings are not without limitations, which can be addressed in future studies. First, our analyses rely on the publicly submitted reports of firms on their foreign investments. Some of the information was limited, thus restricting our ability to undertake more detailed analyses of the type of foreign investments. Future studies can be designed to measure more accurately the extent and nature of foreign direct investments undertaken by emerging-market multinational enterprises.

Second, we relied on information available from Datastream to construct the measure of domestic investments as we lacked details on investments. Future research can use alternative sources of data and identify the level of domestic investment as well as the type of investments undertaken to determine more clearly how foreign investments affects different types of domestic investment.

Third, we only analysed the relationship between foreign and domestic investments that are represented in financial figures, without taking into account that there are other intangible impacts on domestic investment such as knowledge and managerial skills. These intangible flows of knowledge and technology are part of the benefits for the home country, but may not be reflected in financial accounts. Future studies can address these issues through more in-depth case studies that complement statistical analyses of this relationship.

Fourth, the data on domestic and foreign investment we analysed were aggregate and not differentiated by activities. There might be particular relationships among different types of investment that more differentiated data can capture. This limitation could be an area for further investigations. For example, future studies can analyse whether and how foreign investments in sales and distribution subsidiaries result in investments in plant expansions, or whether acquisitions of foreign technology result in domestic investments in new machinery and operations.

Fifth, we analysed firms from Thailand, which is an upper-middle-income economy whose firms have only recently started investing abroad. Although the experience of Thai firms may be common to many emerging economies, the broad variety of emerging-market firms may not be captured by studies of Thai firms. Future studies can analyse the relationship between foreign and domestic investment in other emerging and less developed economies to identify similarities and differences with our findings and outline the reasons for such differences. Such investigations could advance our understanding of the relationship between foreign and domestic investment in different home- and host-country contexts.

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Part III

HQ-Subsidiaries Relations

8

The Dynamics of Differentiation: The Resource Bases of Development and the Roles of MNE Subsidiaries

Robert Pearce

Introduction

The inevitable core of the potentials and problems of achieving sustainable development in a national economy will be changes in its defining competitive resources. The sources of these changes may be either innate to the internal dynamics of the development process itself or externally imposed (through policy) in an attempt to influence its nature and objectives. The endogenous source of change will reflect forces of supply and demand within the process that affect the availability and prices of the resources that are central to current competitiveness. Responding to this would help prolong the viability of the current mode of development, based on the established resource base and its prevalent means of exploitation. Then, the exogenous source of change will derive from governmental policies that are likely not only to seek to underpin the current progress, but also to build the bases to move on from it, into new areas of developmental ambition. These policies should be innately exploratory, not only pursuing better exploitation of current resources but also the knowledge scopes that can take development into new directions and, perhaps, escape from constraints emerging in the present dominant mode. Our central concern here will be with the involvement of

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multinational enterprises (MNEs) with the processes of exploitation and evolution of such developmental resources. Do they secure better exploitation of the resources in the short term and/or assist in the processes of their upgrading and renewal into the longer term? Alternatively, do they merely take advantage of short-term potentials, with no attempt to adjust to, or assist in, the resource changes that should be endemic to sustainable development?

In the next section, we introduce a typology of three ‘levels of resources’ that are seen to play different roles in the growth and development of a national economy. We will see that these resources can be distinguished in terms of two criteria: first, the ability to provide an economy with the bases of international competitiveness *at a point in time*, and second the extent to which they have dynamic potentials *through time*. Will they ultimately prove to be vulnerable as sources of sustainable development or do they embody the potential for upgrading and perpetuation of development?

The third section provides the core of our substantive analysis, by imposing on the levels of developmental resources and the competitive objectives of a national economy, the potential roles that MNE subsidiaries’ operations might play. This accepts a categorisation of the MNE as a ‘dynamic differentiated network’ in which it builds its global competitiveness through the pursuit of a range of different strategic motivations. Here, the MNE will address the same twin priorities we discern in national economies—to optimise performance at a point in time, whilst being ready and willing to reconfigure its operations through time in response to emerging vulnerabilities and potentials. The analytical themes developed in section three will thus address the implications of the overlaps and interdependencies between two dynamic processes: the changes in an economy’s resource base endemic to a successful development process and the capacity and willingness of MNEs to reposition the role (or even existence) of its subsidiaries as its own competitive needs evolve and its location options change. In its essential nature, the MNE will always be seeking to leverage whatever local resources its subsidiary activates, towards one or other of its strategic needs. In this case, will the ways it does this coalesce supportively with the needs and dynamics of the host economy or will it ultimately undermine them and compromise developmental potentials?

Levels of Developmental Resources

In our categorisation, the first level of resources comprises ‘natural or primary resources in the form of extracted minerals or agriculture and forestry’ (Pearce & Zhang, 2010; Zhang & Pearce, 2012, 33). Though the discovery

and activation of such resources may occur in an economy that has already achieved significant degrees of industrialisation,¹ we will emphasise its potential to act as a defining input into the initiation of national development. We then need to accept two limitations of such resources in terms of the depth and sustainability of this process. Firstly, these competitive strengths ‘inherited’ from nature ‘are either totally non-renewable (e.g. minerals) or can only be renewed over periods that are too long and uncertain to provide a reliable basis for sustainability (e.g. forestry)’ (Pearce & Zhang, 2010, 484). Secondly, the developmental scope of these resources may be very ‘shallow’ in terms of wider implications for the domestic economy; their benefits may not extend beyond an enclave around the source of the resource itself (e.g. mine or plantation). The two further levels of resources then address the need to differentiate the bases of development and inculcate more conscious sources of dynamism into them.

Here, level-two resources are inputs into predetermined manufacturing (or service supply) processes. Though labour can be seen as the most obvious example of a level-two resource as a driver of early industrialisation, other defining characteristics of an economy, such as energy supply² or infrastructure, also play vital supporting roles. Our analysis here will focus on one strength and a limitation in the developmental potentials of level-two resources.

The strength is that such resources are amenable to upgrading as an embedded aspect of developmental sustainability. Whilst the market forces endemic to a successful growth process may push up the prices of level-two resources (e.g. higher wage-rates), these may be validated (as a distributed reward of development) by higher productivity. This would need to be central to developmental policies, directly addressing improved productivity of labour and greater efficiency in energy supply and infrastructure provision, so that level-two resources can accede to higher value-added roles (Pearce, 2017, 68). Then, the limitation we ascribe to these resources is that it is not within their own competences to define the more technologically advanced, higher productivity processes that their upgrading could allow them to address. The resources that seek to define these more exploratory and innovative agendas of developmental refocusing and renewal are designated here as level-three.

We consider level-three resources to include ‘individuals, teams, firms, knowledge-support infrastructures and technology policies’ providing the ‘technology, skills, inventiveness and imagination [that can] contribute interactively and interdependently to the interjection of creative dynamism into an economy’ (Pearce & Zhang, 2010, 490). The generation of such a distinctive *knowledge* base becomes a defining feature of a country’s

international competitiveness. In alternative terms, level-three capacities become a new form of location advantage (LA) (Dunning, 1977, 1998; Dunning & Lundan, 2008) and, as such, a potential source of attractiveness to MNEs that are seeking new dimensions of their own competitive differentiation and dynamism.

Developmental Resources and the Strategic Diversity of MNEs

We can now see the broad-brush issue of the effects of MNE participation on the development of host-country economies as a very multifaceted and contingent one. This reflects the endemic pursuit of effective differentiation in both national development through time and strategic diversity of MNEs at a point in time. In the case of national development, our characterisation has suggested that its sustainability needs to move from the early exploitation of readily available standardised inputs towards a more conscious policy-based attempt to generate distinctively differentiated sources of competitiveness to individualise its positioning in the global economy. In international business (IB) terms, this means that at different phases in its development, and to differing degrees, an economy comprises varied LAs with the diverse potential to attract the participation of MNEs.

The relevant characterisation of the MNE here is that of a dynamic differentiated network. At any point in time, a range of differentiated subsidiaries feed into a network of operations that are pursuing a set of diverse strategic objectives, choosing the most appropriate location to achieve each one. This can affect the immediate benefits and developmental potentials secured by a host economy from its LAs. Beyond this, such MNEs are also innately dynamic and provisional. The structure of the network and the positioning of individual subsidiaries in it are always open to adjustment. In accepting that national development, in effect, means changing its LAs we also need to accept that it is always likely to challenge the existing participation and role of *in situ* MNE subsidiaries. Can they encompass the changing LAs and hopefully enhance their contribution to development? Will they be alienated by them and, perhaps, lessen (or terminate) their participation in ways that compromise the progression of development?

Just as we have seen that primary (level-one) resources may have often provided the starting point for processes of national development, we can also suggest that the related IB strategy of resource seeking (RS)³ may also

have been a prevalent starting point in the historical evolution of MNEs as globally structured enterprises. Thus, business historians have often distinguished RS as the dominant motivation in the wave of FDI in the half-century or so up to 1914. This reflected the growing need to access such resources externally in the home countries of the proto-MNEs, reflecting the needs of high-growth industrialisation. In a similar manner, analyses of China's recent outward FDI (e.g. Tang & Pearce, 2017) have suggested a key role there for RS to secure increasingly scarce inputs in order to underwrite the sustainability of its current modes of industrial competitiveness. We can now see that these historically diverse contexts nevertheless suggest that RS FDI mediates between the developmental circumstances of two differently positioned economies. One is that of a resource-scarce home country (where it aims to secure prolongation of an in-place developmental process), and the second is that of a resource-rich host (when it may be central to the origins of internationally competitive development).

Focusing on the earlier context, where natural endowments of primary resources provide a country with its development-formulating source of competitiveness, we suggest two ways in which MNE RS participation can help propel this. Firstly, it would have often been the case that, where such resources did define the most immediately exploitable competitive potential available to a country that is seeking plausible bases from which to *start* development, an associated implication would be that it lacks vital complementary attributes necessary to allow it to do so effectively. This could include the appropriate technical knowledge and expertise in, for example, plantation agriculture or mining practices, and domestic access to necessary capital. It would then be the MNEs' possession of such facilitating capacities, in the form of access to capital and international markets along with the relevant technologies and experience (ownership advantages [OAs], Dunning, 1977; Dunning & Lundan, 2008) that underpin their participation.

The second potential for MNEs in the exploitation of primary resource potentials relates to the need to address the likely eventual exhaustion of such resources and, therefore, their compromised status as a component of prolonged and deepened development. One prescription to deal with this would be for such countries to seek to indigenise sequential stages in a value chain that is built from these level-one resources and thus to gain more localised productive value from them. Vertically integrated MNEs with established expertise in these subsequent stages would then be a plausible means of securing this in an internationally competitive manner. There are, however, likely to be constraints in both the effective viability of this and

its value as an escape from the innate vulnerability of these resources. From the point of view of possible MNE participants, a serious concern would be whether or not the country at such an early stage of its industrial development could supply necessary inputs (skilled labour, reliable and cost competitive energy) to the required standard for these subsequent stages. Also, such forward integration would not in fact delay the redundancy of the key level-one resources. Indeed, their more effective utilisation might speed up their exhaustion. In addition, the building of more local value-added activity around these resources, which benefitted in the short run, would mean the losses when the process ceases to be viable would be more widespread and more disruptive.

The more realistic, but more challenging, way forward was thus often seen to be to seek to break away from such primary resource dependence by reapplying strengths it may have helped to generate (tax revenue, foreign exchange, international associations and contacts) as a basis for more fundamental diversion into sectors with greater scope for endogenous regeneration and sustainability. The pioneering potentials for this could be found in level-two inputs, with their scope for upgrading and renewal. Thus, such resources are seen as standardised inputs into fully formulated production processes. From the IB perspective, we see these inputs as playing roles in MNEs' pursuit of their first overarching strategic objective: to secure, at a defined point in time, the most effective activation of their current sources of competitiveness in particular host countries contingent on specific characteristics of those economies. But these conditions will differ considerably between countries, as they will have done through time. This requires us to accept two different MNE strategies that may be applied in ways that activate level-two resources: market seeking (MS) and efficiency seeking (ES). Here, our concern is how the adoption of the alternative positions can affect the growth and development of the host economies.

In fact, in the MS case, level-two resources will only operate as facilitating, rather than determining factors. Thus, an MS subsidiary will be set up to supply parts of its parent MNE's established product range to the domestic market of its host country. The determinants of such a commitment will then be the viability of the host economy's demand for the MNE's goods and the presence of trade barriers that will, in most cases, prevent the MNE from supplying from a more efficient location elsewhere. This has been described as 'tariff jumping' FDI, so that a prevalent interpretation has, therefore, been that MS supply will embody the types of productive and allocative inefficiencies expected from a protection dominated international economy.⁴ This positioning does not generate any decisively

positive or negative expectations of MS in terms of host-country growth and development. This may also reflect the nature of the originating context for the MS role (Pearce, 2017, Chap. 4). One of these, an import-substitution strategy in the less developed countries (LDCs) did indeed precisely target infant industry industrialisation as a source of economic growth. But this was quickly abandoned when an endemic inefficiency was revealed as undermining the realisation of the economy's genuine sources of developmental potentials (in effect the internationally competitive scopes of level-two resources).⁵

The other highly influential source of protectionism was in already industrially developed economies. This had been put in place initially in the 1930s, with the aim of protecting existing levels of employment and production and with no projected expectation that it would provide a meaningful basis for achieving internally logical growth. Once again, MNEs' MS participation was the defensive need to try to retain at least some degree of profitability from a potentially viable market. Of course, where this market does grow, the MNE can share the benefit. But this benefit should not be interpreted as deriving from the firm's competitive development in terms of a proactive commitment to any distinctive potentials that are endemic to that country's supply-side characteristics. The detection and activation of such defining potentials come much more into focus on the MNE's ability to adopt the ES subsidiary role in a more open trading environment.

Here, it becomes the explicit aim of an ES operation to target the optimally efficient supply of specified parts of its group's existing product range to its wider international markets. Its ability to do this will now be determined by access to host economy factors (its level-two resources) that can be activated effectively as inputs into these goods' accepted production technologies.⁶ Where the economy is at a very early stage of development, many of the level-two resources may be unemployed or, at least, seriously underemployed, so that drawing them into internationally competitive operations may be interpreted as an 'easy' and quick source of growth. However, questions can be raised regarding the viability of MNEs' ES strategies as providing a prospectus for logical and sustainable development.

One implication of the 'easy' phase of growth is that it should quite soon achieve the point of full employment of at least some of the level-two resources. Though this is clearly a desirable objective, it then invokes new challenges in terms of the further evolution of this mode of development. The cause of this would be upward pressure on wages and other inputs. Though, once again, this would be in itself a desirable manifestation of the deepening of development, it has been interpreted as also questioning the

depth of MNEs' commitment to such a process. In IB terms, these price increases are a change in the country's LAs. The low-cost conditions that originally attracted the MNEs' ES involvement will have changed in apparently unfavourable ways. The suggestion of innate 'footloose' behaviour by MNEs projects that once the conditions that originally attracted the ES operations change, the firm, always open to the reconfiguration of its supply network, will relocate production of those goods to a new location that, in effect, replicates the original beneficial cost structure. But this very interpretation of the MNE as operating an internally dynamic supply network, always seeking beneficial reconfiguration, helps to suggest the scope for a successful ES facility to become a more profoundly embedded part of an orderly and sustainable development in the host country.

Two factors could allow for this more positive interpretation. Firstly, as already outlined, level-two resources can be upgraded so as to play higher value-added roles. Achieving this should certainly be a part of a government's policy for moving the economy into more endogenously sustainable developmental progress. A higher price can be validated by higher productivity. Secondly, the competitive diversity of the MNE should involve a wide range of goods targeting markets at different levels of income and sophistication and applying very different production technologies in terms of input needs. If a location that is generally viewed favourably loses viability as a cost-effective source of its current products, the MNE may then carefully evaluate the cost-efficiency bases of its new input configuration and hopefully relocate there another (probably more technically demanding) part of its product scope. Effectively implementing this would benefit both parties. The country would find its upgraded level-two resources securing work that justifies their higher price and productivity—a manifestation of continued deepening of development. The MNE can reconfigure its global supply network whilst retaining positive roles for basically successful and well-managed subsidiaries in what it essentially considers as favourable locations. In a sense, MNEs' ES operations are 'footloose' but in ways that have positive potentials, rather than merely 'hollowing-out' development processes they earlier helped to initiate.

A second reservation regarding the limits of this mode of MNE participation allows us to draw in another principal concern of a national development process—the 'independence' of its key drivers. Whilst the ability to upgrade level-two resources can impute a degree of endogeneity, this remains dependent on access to new opportunities for their utilisation. This then points us towards the second characteristic we imputed to level-two resources. Whilst they can play higher value-added roles, they do not them-

selves possess the capacity to define what these new roles might comprise. ES accepts the accessing of these upgraded knowledge scopes from abroad through the auspices of MNE participation. But, eventually, it would need to become a priority of the developmental process that, as such new knowledge bases become increasingly central to its differentiation and renewal, local sources should become integral to this. This takes us into the territory of level-three resources as the core of the long-term dynamics of competitive differentiation in a national economy. It also takes us into the realms of the knowledge-seeking (KS) strategy of MNEs in pursuit of their own competitive renewal. If successful level-three resources are capable of generating new sources of competitiveness for their national economy they can also then be considered to be, in and of themselves, a new form of LA that could attract the interest and involvement of MNEs, effectively in pursuit of new OAs. Whether, and if so how, they should do so opens up the next set of issues regarding MNE involvement with economic development.

For the MNE, the adoption of KS represents the internationalisation of the second of its core strategic priorities—to renew the bases of its competitiveness and to move forward from dependence on its current range of goods and services. To do this, it will seek to detect, access and operationalise plausible new sources of relevant knowledge and expertise, wherever they may be located. The potential, but also an organisational challenge, of such KS, derives from the increasing range of locations capable of providing high-quality differentiated sources of creative competence. This, in turn, reflects the increasing number of countries that have found it necessary to support their own developmental progress by the generation of such innovation-oriented level-three resources. The most successful of these efforts will then be those that have resulted in truly distinctive new dimensions of competitive knowledge. It would be those differentiating national creative competences that become potential attractions to MNEs in their KS programmes. This then points to another facet of our key question here. Where MNEs co-opt an element of a country's level-three capabilities, they are presumed to usually do so as one component of a wider globalised approach to innovation (Papanastassiou & Pearce, 2009, 142–146) in order to be combined with other pieces of knowledge elsewhere. Does this preclude MNEs' KS commitment from supporting a country's ability to secure competitive progress from its level-three resources, or may there be compensating positive potentials?

As already implied, the ultimate objective of a country's range of level-three resources is to secure the innovation by the locally-based enterprise (that could include MNE subsidiaries) of new internationally competitive

products. To do this, level-three resources will encompass a large range of distinct and separate, but hopefully complementary and effectively interactive, sources of creative expertise and knowledge; pure (basic and/or applied) scientific research, exploratory market research, inventive engineering and ambitious entrepreneurial management. These are, of course, defining components of the now very influential concept of a national system of innovation (NSI).⁷ For the ability of such a system to provide the bases for the coherent long-term development of its national economy, it would need to possess both very-high-quality and distinctive capabilities on each of its separate facets and also to be configured internally in a logically interactive and balanced way. However, the fragmented but systemic nature of MNEs' KS strategies means that where they find value in associating themselves with level-three capacities of a particular country, it will be in a selective and partial way, leveraging particular attributes of that NSI towards the needs of their wider global innovative programmes. This provides two questions regarding how KS strategies influence a country's ability to secure nationally distinctive development from its creative resources. Firstly, will the MNE's participation enhance the scope and performance of the part of the NSI (the particular type of level-three) resources that it involves itself with? Secondly, will the ways this involvement affects the content and aims of that selected element of the NSI improve (or compromise) its overall balance and ultimate capacity to generate new sources of *national* competitiveness?

Clearly, the precise developmental implications of an MNE's involvement in this will be contingent on which aspects of its diverse KS programmes it is addressing and, therefore, which particular level-three resources it seeks to co-opt. In order to provide some indicators of the types of issues that can prove influential in these interactions, we can heroically simplify the scopes of an NSI into two levels, firstly, abstract and purely speculative *precompetitive* investigation agendas (in science or exploratory market research) that are not articulated in the light of any so far perceived innovation objective. The hope is then that such intuitive exploration will generate aspects of radical new knowledge that do possess the potential to break new competitive ground. If this does occur and the (initially quite abstract) bases for a major new breakthrough are perceived, then the second aspect of our simplified dichotomy comes into play. These will be the attributes of the now market-oriented innovation process itself, which seeks to develop the initially abstract insights into fully defined new goods and services and the procedures for their production and effective marketing.

The types of level-three resources that most clearly exemplify the precompetitive phase of an NSI are those involved in the pure scientific investiga-

tion of basic or applied research. Here, the agenda is to address unresolved issues that are initially perceived as important and potentially valuable by the scientific community itself. Business and governments because of its potential to ultimately provide radical new perspectives to future innovations will nevertheless support it. How then will the participation of MNEs in this type of work affect its capacity to enrich innovation scopes in the host country? We can note two ways in which it could enhance performance at this phase at least. Firstly, extra sources of funding can improve scientific infrastructure by building new research facilities and helping upgrade and refurbish older laboratories. It can also improve the employment conditions of the personnel. Not only might it provide better incomes and prospects to established scientists but also enhance the opportunities available to well-educated new entrants to the scientific labour force. These new scientists may be central to the progress of the sector in the country. Their education will, hopefully, have inculcated in them a strong basis in those notable research disciplines that define the country's current leadership agenda. But entering into the work programmes set out by an MNE for its facility, they should have the opportunity to not only build on this existing knowledge but to widen its scope.

This latter point reflects the second possible benefit in the co-option of parts of a country's basic research capacities by foreign MNEs; they may set new challenges that can broaden its scope and mitigate any dangers of self-referencing introversion. The MNE will have selected the location because of its distinctive research, leading knowledge and expertise, but also because it believes these can play a role in its own wider exploratory agenda. The laboratory will be positioned not only *from* scientific strengths of its own country but *into* the international programmes of the MNE. From this context, the most decisive communicative network for the laboratory will be with sister facilities of the same group in other countries, which are pursuing complementary agendas reflective of the defining strengths of *their* scientific communities. Indeed, such laboratories may be involved in joint research projects; either being set up as such or because the perceived overlaps or complementarities between their ongoing work in progress encourage pursuit of such synergies.

However, this then emphasises the major limitation of MNE involvement in the precompetitive phase of an NSI. The laboratory's work may indeed produce path-breaking scientific results, which do feed into a major innovation achieved by the MNE group. But where the final stages of this innovation are realised (within the often geographically widespread network of contributing facilities) will be at the informed competitive discretion of the

MNE. It would normally, only be a very serendipitous coincidence if the same country hosted this competitiveness boosting high value-added and development driving implementation of the fully achieved innovation. The MNE participation may unbalance the NSI and distort its internal operative cohesion. Against this, it can be reiterated that it may nevertheless enhance the scope of the basic research stage on its own terms. An important facet of this is that the new knowledge generated by the MNE laboratory takes on elements of a public good; whilst disseminated and perhaps activated elsewhere in the group, it remains a core competence of the host country with the scope to manifest future value there.

The second element of our dichotomy then encompasses the completion and operationalisation of an innovation, product development. This assumes that the earlier stages (scientific investigation and exploratory market research) have delineated the broad parameters of an innovation; the breakthrough service it will provide to consumers and the technologies needed to supply it. The competitive completion of the process will now need to fully define the good in its optimal market responsive forms and put in place the operationally effective production techniques. The types of level-three resources that are needed to play these roles can include technologists (to understand and communicate the new scientific capacities implied), engineers (to define the prototype manufacturing or supply process in the relevant environment) and marketing (to realise the product in the forms responsive to its expected consumer base). This contextualisation will then provide another phase in the KS strategies of an MNE. Having put together the outline bases of a major new innovation from the more intuitive exploratory work of the earlier phase, it will look for ideal locations to finalise it competitively—perhaps in different formulations for different geographical markets. The selection of locations for the subsidiaries⁸ to play this high value-added role will be strongly influenced by a country's NSI's capacity to provide the types of level-three resources listed.

Securing this type of KS MNE participation would clearly have powerfully attractive potentials for a host country. It would achieve the leveraging of strong elements of its NSI towards new dimensions of international competitiveness and thereby generating extensive employment for high-wage labour as well as earning valuable foreign exchange. In these ways, it becomes a significant component of development. There will, however, be caveats as to the depth or sustainability of its role in long-term national competitive progress. The subsidiaries playing this role are ultimately defined more by their position in the parent MNE's globally oriented competitive evolution than that of the host economy. The prolongation and value of

their involvement will be dependent on a range of factors, some outside of the host country's influence.

Firstly, it will depend on the ability of the parent MNE's wider KS and creative networks to continue to derive the type of major new innovation potentials that such a subsidiary is adept at realising in commercially effective formats. Secondly, the ability of the subsidiary to attract such group-defined new opportunities will depend on its own capacity (and that of its host NSI) to project its persisting and upgrading quality of appropriate level-three resources. This form of product development role will be a notably valuable and, therefore, competitively contentious one within the group. The MNE's commitment will be provisional and contested, therefore lacking in reliable depth as a source of national competitive progress. A potentially dangerous misperception that could result from overconfidence in this form of MNE involvement would be to focus NSI policy on provision of the level-three resources appropriate to it, at the expense of the more unpredictable and exploratory pure science. Such an unbalanced NSI would eventually lack the depth of originality capable of supporting an independent innovation sustainability.⁹

Conclusion

In the current (albeit increasingly fragile) open global economy, it is a key aim of both national economies and MNEs to assert and refine their sources of international competitiveness.¹⁰ It has been an inevitable consequence of this shared objective and context that the two processes have generated crucial interdependencies; in effect, MNEs have pursued their globalised programmes through a selective and potentially provisional involvement with separate national economies. The detailed exposition has sought to delineate the nature of this MNE participation and to assess the ways in which it may affect the ability of the host countries to achieve their aims in terms of growth and development.

From the point of view of the MNE, we have discerned elements of both differentiation and dynamics in its approach to its globalised operations. At a point in time, it will aim to leverage the diverse and distinctive strengths and potentials of a range of different locations towards the achievement of its own objectives. In broad terms, these will be to secure the most beneficial performance available from its current sources of firm-level competitiveness (MS and ES) and, at the same time, to pursue relevant sources of new knowledge so as to upgrade and extend these core competences (KS).

This latter concern points us towards the two senses in which dynamism is innate to the wider competitive bases of the MNEs. Firstly, they do need to include in their differentiated operations the need to regenerate their knowledge scopes for future competitive regeneration. Secondly, it will always need to reconfigure its networks of global operations (subsidiary-level differentiation) so as to tap into the full range of ever-evolving potentials of national economies. This takes us to the developmental concerns of the national economies themselves.

Naturally, we conceive of development as an intensely dynamic objective. To sustain their national competitiveness in the dynamic, global economy, these countries need to themselves pursue differentiation, but over time (rather than across geographical space for the MNE). Once a possible 'easy' phase of growth has moved an economy to full employment of its present sources of competitive advantage, the developmental challenge becomes that of getting more value from them. We traced two complementary facets of this: upgrading the productivity that can be obtained from the economy's inputs to supply processes and creating or accessing new higher value opportunities for the use of these enhanced resources. For better or for worse, the structural resource changes embedded in such development change the nature of the potentials it offers to MNEs. Always ready to reconfigure their network of global commitments, the vital issue indeed becomes whether MNEs can respond positively to these changes, deepening their participation in development, or be alienated by it and finding more positive options in alternative economies. Though our detailed discussion found it possible to discern reasons why MNEs could involve themselves proactively with these developmental changes, this would certainly be conditional—dependent both on the precise content of the changes and their positioning within the wider policy bases of the country's programmes for industrial and competitive progress.

From this background, we can derive that the core of national development policy should be to improve the competitive value of the country's key resource strengths. The target of this should clearly be to increase the economy's competitiveness. But evaluating *national* competitiveness as manifest in *international* market performance logically points policy towards a potential role for MNEs, since their natural constituency is the global economy. Their knowledge and experience is of the global marketplace—its needs and opportunities. This means that drawing international business into a role in the deepening of national development necessitates understanding these firms' nature as strategically diverse and innately dynamic global opera-

tors; policy needs to move beyond seeing them as merely undifferentiated sources of 'inward FDI' that can fill macro-level developmental resource gaps. As successful development changes the competitive bases of a country and defines new issues in discerning the way ahead, the potential role of MNEs also needs to be redefined. But this, we have emphasised, should be well within their compass as always evolving and differentiated international networks. The main focus of this paper has been to review the range of contingent possibilities that could be available from a natural overlap of the developmental concerns of national economies and international business.

Notes

1. The discovery and development of North Sea oil reserves, for example, carried significant implications for already developed industrial economies such as UK and Norway. In general terms, such a 'belated' access to level-one resources provided distinctive challenges for such economies. It would be most desirable to either assimilate them into already successful industrial sectors or initiate new ones based around the resources so as to generate additional sources of 'real economy' progression. Where newly accessed level-one resources have been directly marketed internationally simply as a new source of international competitiveness, there has proved to be a danger of macro-level effects (notably exchange-rate changes) that prove deleterious to established sectors—the risk of deindustrialisation.
2. Here, we are concerned with energy supply as an operative 'system' (in many respects as a specific aspect of infrastructure) that directly supports productive operations. When sources of energy (coal, oil, gas) play the level-one resource role, they are perceived as a natural resource strength of the economy, whose high level of availability greatly exceeds any local demand for them, so that they become a directly leverageable source of comparative advantage.
3. The definition of resource seeking used here differs from that of Dunning and Lundan (2008, 68) in one important respect. Thus, we focus on exploitable (but essentially non-renewable) *primary* resources. This excludes Dunning and Lundan's 'cheap and well-motivated unskilled or semi-skilled labour'. This becomes central to our level-two resources and, therefore, accessed as part of the MNE strategies utilising these (market seeking and efficiency seeking).
4. Three sources of such inefficiency have been discussed in the analyses of the performance of MS subsidiaries (Papanastassiou & Pearce, 2009, Chap. 1; Pearce, 2017, Chap. 4). Firstly, the local market, whilst capable of allowing

sufficient profitability for the subsidiary to satisfy its parent HQ, may be too small to permit full realisation of economies of scale. Second is the problem of inappropriate technology transfer. Which goods are supplied by the subsidiary will depend on the demand structure of the host economy. Production of these using the technologies initiated in the home country may involve a mismatch with local inputs (level-two resources), such that too much use is made of locally expensive factors and too little of cheaper ones. Third is the potential for X-inefficiency in terms of a failure to realise the fully effective use of the inherited technologies and practices. A protected market situation may allow the subsidiary to perform well enough to satisfy HQ decision-makers who may not be able, or even motivated, to compare this 'satisfactory' performance with an idealised optimum.

5. The use of level-two resources in an MS operation could actually improve their efficiency due to their activation in conjunction with more effective technologies (the MNEs' OAs) but not to a degree likely to alter the efficiency bases of development to a major degree.
6. There are several sources of presumed efficiency relative to the logical inefficiencies of the MS role (see previous note). Firstly, access to the parent company's international markets should eliminate concerns over realisation of economies of scale. Secondly, the defined objective of matching host country input factors with the needs of the relevant production techniques should mitigate concerns over inappropriate technology transfer. Thirdly, each production subsidiary is now perpetually competing for its position in the MNE's ever-evolving supply network. It cannot afford the inadequate managerial, marketing and engineering performance of 'X-inefficiency'.
7. The key foundation texts of the NSI concept (Edquist, 1997; Freeman, 1987; Lundvall, 1992; Nelson, 1993) depict an NSI 'as a complex and ever-evolving nexus of creative inputs and learning processes mediated by associated institutions [such as] the education system, research laboratories, enterprises and government support' (Pearce & Zhang, 2010, 490). This underlines the point that NSIs differ widely in terms of their content (the range and quality of the level-three resources they encompass) and how they are structured in terms of internal logic and coherence. This innate heterogeneity between such systems indicates the way different countries offer different alternative potentials to KS programmes of MNEs.
8. Such subsidiaries have been described as 'product mandates' (Pearce, 1989, 121–125; Poynter & Rugman, 1982; Rugman, 1983), the 'strategic leader' (Bartlett & Ghoshal, 1986) or the 'competence-creating subsidiary' (Cantwell & Mudambi, 2005).
9. Indeed, there could be an odd problem of aggregation. What if all leading potentially creative economies took the same opportunistic and short-term

stance, and abandoned basic research in the expectation that MNEs could access it elsewhere? Eventually, the capacity of science to fuel progress would disappear!

10. The main historical exception to this was the era of protectionism when both national and international businesses needed to attempt to secure the best performance feasible from the constrained context of predominantly isolated national economies.

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9

Unfolding the Intra-organisational Perception Gap in Decision-Making

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Introduction

Decision-making in multinational enterprises (MNEs) has long been an important area of international business research (Child & Hsieh, 2014; Gates & Egelhoff, 1986). Whilst the earliest stream of literature

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identified MNE decision-making as either ‘centralised’ or ‘decentralised’ (Gates & Egelhoff, 1986; Hedlund, 1980), current research findings suggest a trend of moving away from these ‘dichotomous’ forms of arrangement, evolving towards a structure of internal differentiation (Aharoni, Tihanyi, & Connelly, 2011; Kostova, Marano, & Tallman, 2016). Specifically, recent research suggests that the latest shift of MNE structure (i.e. from the early form of market-seeking ‘hierarchy’ to the recent ‘interdependent network’ of differentiated subsidiaries) has created an internal organisational environment of complexity and dynamism (Brauer & Heitmann, 2013; Kostova et al., 2016; Papanastassiou & Pearce, 1999). Such complexity and dynamism are predominately the results of subsidiary technology upgrades and mandate changes through multiple facets of network embeddedness (Mudambi, Pedersen, & Andersson, 2014). Consequently, the nature of the relationship between headquarters and subsidiaries in terms of decision-making is likely to become less ‘transparent’ and ‘straightforward’ (Aharoni et al., 2011; de Jong, van Dut, Jindra, & Marek, 2015; Mudambi et al., 2014). Furthermore, previous research has revealed that subsidiary power strengthening (in terms of decision-making) through upgrades in its own technology-based charter (Mudambi et al., 2014; Nell & Andersson, 2012) makes decision-making in today’s MNEs an ever more complex task that can potentially lead to a greater perception gap (PG) between headquarters and subsidiaries. However, as of today, the empirical investigation into the loci of decision-making in the light of the latest MNE evolution still remains limited.

Building on previous research, we take a bi-layered comparative approach to investigate recent decision-making trends in MNEs. Building on previous findings of subsidiary evolution (Kostova et al., 2016), headquarter–subsidiary conflict and power bargaining (Ambos, Andersson, & Birkinshaw, 2010; Dörrenbächer & Gammelgaard, 2006, 2011; Håkanson, Ambos, Schuster, & Leicht-Deobald, 2016) as well as theories of cognitive limitation, we argue that the headquarter–subsidiary relationship is likely to lead to biased views of individual managers on each other’s involvement in decision-making. This chapter contributes to the literature by building on the work of Gates and Egelhoff (1986) in empirically linking decision-making loci to organisational structure. We focus on Greek MNEs to investigate the dyadic views between headquarters and subsidiaries. The recent emergence and success of small open economy MNEs in the global arena offers fertile ground to investigate how such companies manage to take efficient decisions and avoid PG traps. Following the identification of PG in

headquarter–subsidiary decision-making, we bring awareness of the dyadic approach to future research on the broad area of headquarter–subsidiary relationships.

This chapter is structured as follows. We first provide a literature review and theoretical development, followed by methodology and findings. We then offer a discussion of the findings and conclusions with implications and recommendations.

Literature Review and Conceptual Development

Evolution of the MNE and Decision-Making

The discussion on MNE organisational structure can be traced back to early international business research (Gates & Egelhoff, 1986; Hedlund, 1980), continuing to date (Birkinshaw, Nobel, & Ridderstrale, 2002; Jiang, Holburn, & Beamish, 2015), reflecting the undeniable importance of the topic in contributing to the understanding of MNE organisation. Early research into MNEs identified the first form of organisational structure as ‘multidomestic hierarchy’ (Bartlett & Ghoshal, 2002; Papanastassiou & Pearce, 2009). This form of organisation describes a highly *centralised* internal arrangement explicated by tightly controlled and resource-constrained subsidiaries and ‘hands-on’ headquarters. More specifically, the centralised form emphasises the role of headquarters in an attempt to build global competitiveness through horizontal integration of home-based advantages in new markets, using subsidiaries as their vehicle (Birkinshaw & Morrison, 1995; Papanastassiou & Pearce, 2009).

International business has since witnessed the intensification of global competition through aggressive liberalisation of trade and international investment, technological developments, economic integration efforts and the rise of emerging economies. Under such a dynamic global context and considering the effects of both the global and local environment (Cantwell, Dunning, & Lundan, 2010), a prerequisite for MNEs is to evolve continuously.

The key feature of the renewed organisational structure is the revised roles of both headquarters and subsidiaries (Bartlett & Ghoshal, 2002). In measuring the degree of centralisation versus decentralisation, research has predominantly focused on headquarter–subsidiary decision-making as an important indicator (Gates & Egelhoff, 1986; Hedlund, 1980; Mudambi et al., 2014). For instance, Hedlund (1980) was amongst the first to discuss the link between headquarters’ control and the subsidiary role by examining

their decision-making rights. Hence, scholars have found decision-making to be an inherent part of MNE organisational structure and the centralisation/decentralisation debate and discussions are predominantly nested in the core question of who makes what decisions.

Previously centralised MNEs have evolved from strictly hierarchical to coordinative and negotiating with their subsidiaries, whilst decentralised MNEs have moved away from local-responsiveness towards interdependent individualism (Papanastassiou & Pearce, 2009). Such a structural shift exemplifies a move towards a more complex decision-making arrangement which often leads to inefficiency. For example, Hamel and Prahalad (1983) identify organisational challenges associated with MNEs' structural shifts during the initial transitional period, which '*cannot accommodate an emerging reality*' and that can lead to a misfit or disharmony between '*strategic imperative and apportionment of strategic responsibility*' (Hamel & Prahalad, 1983: 344).

The shift of a formerly centralised MNE towards a structure with headquarters resuming a more central role in decision-making whilst leaving subsidiaries 'naked' of previous decision authority can lead to local resistance. Subsequently, the decision-making arrangement becomes 'sensitive' and 'negotiated' between headquarters and subsidiaries (Dörrenbächer & Gammelgaard, 2006). This presents the rather difficult question of 'who makes what decisions' in today's MNEs?

In particular, the 'sensitive' and 'negotiated or shared' decision-making arrangement under the recent structure of interdependent networks reflects a highly complex phenomenon, given the external embeddedness and idiosyncratic subsidiary technologies and associated power (Balogun, Jarzabkowski, & Vaara, 2012; Mudambi et al., 2014). Indeed, the literature acknowledges that subsidiaries possess different degrees of relative power to headquarters' authoritative power, which has been developed through learning from deepened local network relationships over time. Subsequently, the roles of these subsidiaries evolve from technology 'implementers' towards 'centres of excellence' (Papanastassiou & Pearce, 1999). Thus, the greater power the subsidiary possesses, the more influence it is likely to have over decisions of resource allocation (Mudambi et al., 2014). Prior studies find that the more distinct the subsidiary technologies become, the greater the 'knowledge distance' between them and the knowledge pool of the rest of the MNE (Kostova et al., 2016). Consequently, whilst some subsidiary evolution is desired for diverse capability building across the MNE, there are instances when such an evolution has led to subsidiaries deviating from the benefits of the MNE and concentrating on local self-interest agendas (Brauer & Heitmann, 2013; Mudambi et al., 2014).

However, in the light of the recent evolution of subsidiary roles, the research on headquarter–subsidiary decision-making arrangements has been limited (Aharoni et al., 2011). Hence, the MNE evolution warrants new studies on antecedents and implications of decision-making loci relating to ‘who’ and ‘what’ (Aharoni et al., 2011). We summarise relevant literature of the intended and unintended subsidiary evolution and the associated decision-making dynamics in Fig. 9.1.

Figure 9.1 leads us to draw three main conclusions. First, decision-making arrangement has become more complex, and therefore, managerial perception of the loci is potentially ambiguous and diverged. Second, it is increasingly difficult to determine which decisions ‘should’ be organised more centrally compared to those that ‘should’ be taken at subsidiary level. Lastly, building on the existing literature, decision-making arrangements can be an inherent *reflector* of organisational structure.

In what follows, we propose that there is a PG between headquarters and subsidiaries in terms of their own involvement in making various decisions and that the PG prevails at the organisational functional level. Previous literature on MNE structure suggests three main types of organisational arrangements: centralisation, decentralisation and differentiated network (Bartlett & Ghoshal, 2002; Gates & Egelhoff, 1986; Hedlund, 1980).

A common aspect prevailing amongst them is the spatial and temporal differences between headquarters and subsidiaries. For instance, under the centralised structure, subsidiaries are mainly responsible for sales and

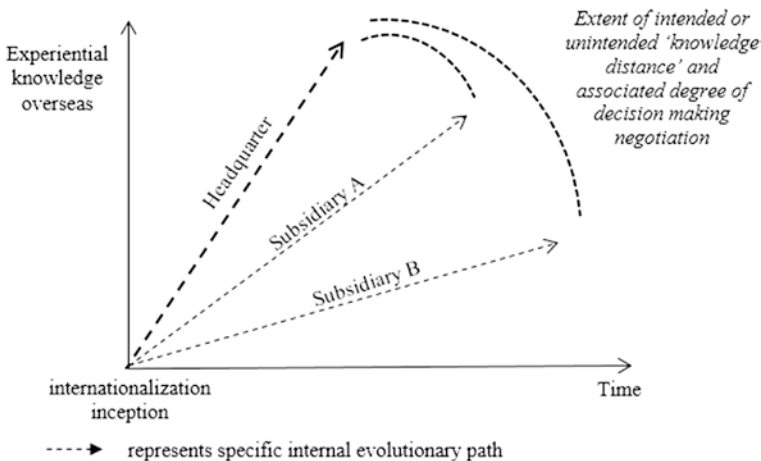


Fig. 9.1 Evolution of headquarter–subsidiary relationship. *Source* Authors' own conceptualisation

marketing which enables them to gain host-country knowledge over a period of time. In contrast, headquarters spend the majority of their time and attention managing the rest of the value chain activities (Bartlett & Ghoshal, 2002). In the case of a decentralised structure, subsidiaries are highly autonomous and responsible for a full range of value chain activities targeted at the local market. Their set of knowledge is therefore distinct from the knowledge of the headquarters whose main responsibility is on corporate financial performance and shareholder engagement (Bartlett & Ghoshal, 2002). Lastly, under the interdependent network structure, subsidiaries are responsible for different stages of the global value chain. Whilst they are dependent on each other for carrying out different sets of value-adding activities, they are simultaneously distinct from each other, as they accumulate different sets of knowledge over time (Papanastassiou & Pearce, 2009). Hence, we argue that despite structural difference, there is likely a PG between headquarters and subsidiaries.

In order to determine if a PG is present, we statistically compare the perceptions of headquarters and subsidiaries managers. A comparative overestimation or underestimation between the managerial perceptions of headquarters and subsidiaries decision-making is defined as having a PG. Moreover, we rely on the terminology of ‘overestimation’ and ‘underestimation’ to compare the perceptions of headquarters and subsidiaries. Accordingly, we determine two levels of PG in terms of involvement in decision-making: headquarters *overestimates/underestimates* its level of involvement in intra-organisational decision-making; subsidiary *overestimates/underestimates* its level of involvement in intra-organisational decision-making. A comparative overestimation or underestimation between the two groups is defined as having a PG.

Furthermore, we argue that when the organisational structure is highly interdependent between headquarters and subsidiaries, the subsidiary autonomy is increased, and as negotiable and shared decision-making responsibilities will occur, a greater PG is to be expected (Gates & Egelhoff, 1986; Hedlund, 1980). Therefore, the greater the ability of subsidiaries to make sense based on their knowledge, the more likely they are, to be more involved in decision-making (Schuler-Zhou & Schuller, 2013; Taggart, 1997, 1998). Consequently, the more involved the subsidiaries become in decision-making across the entire product-line functions, the more prevalent the PG is between headquarters and subsidiaries in terms of functional decision-making loci.

Methodology

Data Description

The literature on small open economies (SOEs) as defined by Castello and Ozawa (2014) shows that a handful of larger MNEs are responsible for the majority of outward FDI. Statistics from Forfas (2006) show that between 10 and 15 companies were responsible for the majority of Irish outward FDI. Bellak (1996) confirms that the leading 20 manufacturing Austrian MNEs comprised almost 75% of total employment in overseas subsidiaries in 1989 (through a network of 669 subsidiaries) and that their investment in 1990 represented 40% of the total Austrian OFDI. Similarly, Oxelheim and Gartner (1996) show that the top 10–15 MNCs from Finland, Sweden, Denmark and Norway were the main overseas investors. Thus, when selecting Greek MNEs, we identified and assessed the largest stock-listed Greek MNEs in the ICAP database (2006) in terms of turnover and found a population of 50 companies that met our criteria of having established multinational operations through FDI.¹

In order to examine the dyadic PG, we follow the data collection approach used by Chini, Ambos, and Wehle (2005) and Ambos, Ambos and Schlegelmilch (2006).² A questionnaire was developed and sent to the headquarters and directed to the CEO of each MNE. We then asked each headquarter to provide data for three to five representative subsidiaries of their group (to maximise subsidiary response rate) aiming at an average population of 200 subsidiaries. A questionnaire was also developed and directed to the subsidiaries of these leading Greek MNEs. Further, considerations relating to language differences were taken to avoid language-related biases (Chidlow, Plakoyiannaki, & Welsh, 2014), and subsidiary questionnaires were in English whilst headquarters' questionnaires were in both Greek and English. Questionnaire surveys were conducted in 2006.

We collected 13 valid responses from headquarters and 36 corresponding subsidiary responses.³ The response rate on the headquarters side was 26% (13/50) and on the subsidiary side was 18% (36/200). The dyadic pairs varied from one to four subsidiaries per corresponding MNE. The response rate for both headquarters and subsidiaries aligns with response rates reported in previous studies (Chidlow et al., 2014; Harzing, 2000; Harzing, Reiche, & Pudelko, 2013).

Thus, our sample is fairly representative of Greek leading MNEs (Kosmidou, Pasiouras, & Tsaklanganos, 2007). Indeed, the 13 Greek MNEs in our final sample represent a total employment of 113,346 from

Table 9.1 Overview of participating sample

Sector classification	No. of MNE	Country of origin	Level of internationalisation (no. of countries in range)	Number of participating subsidiaries	Host region (of participating subsidiaries)	Subsidiary ownership type	Subsidiary age (since)
Services (Banking and ICT)	6	Greece	3–28	16	Balkans/ EU/ROW ^a	WO/MO ^b	1990s
Manufacturing	7	Greece	2–25	20	Balkans/ EU/ROW ^a	WO/MO ^b	1990s
Total	13			36			

^aROW represents 'Rest of the World' which consists of small parts of Africa and America

^bWO/MO represents wholly-owned and majority-owned

manufacturing and services sectors (based on company annual reports for 2010–2012), which is equivalent to 20.05% of the total national industry employment of Greece. In terms of the final sample of subsidiaries, they are also representatives of the Greek subsidiary population, as the total overseas employment of our sample subsidiaries corresponds to approximately 30,000 people, which is equivalent to 36% of total overseas employees of all Greek overseas subsidiaries.

Table 9.1 provides a summary of the sample. Our sample of subsidiaries reflects homogeneity in terms of ownership type (i.e. either wholly- or majority-owned) as well as period of establishment (i.e. in the 1990s).

Questionnaire Design

Decision-making items were derived from Gates and Egelhoff (1986) and were further enriched with value chain-associated activities as developed by Porter (1985), resulting in a total of 23 key decision variables capturing the product-line functions (see Table 9.2⁴). To ensure that we account for both headquarters and subsidiary perspectives, the 23 decision items were included in the questionnaires of both headquarters and subsidiaries. These decision items were the same in both questionnaires, as the goal was to enhance response validity and account for potential discrepancies between the perceptions of headquarters and subsidiaries with regard to the loci of decision-making.

To statistically measure headquarters and subsidiaries' assessment of the locus of each decision as well as the similarity of understanding of each decision item, in both surveys a seven-point Likert scale was used where one indicates a decision taken at the headquarters (centralised) and seven indicates a decision taken at the subsidiary level (decentralised). In order to capture the three levels of decision-making loci (centralisation, decentralisation and negotiated) within the MNEs, we follow Frost, Birkinshaw, and Ensign (2002) to pursue the following categorisation: scores of one and two of the seven-point Likert scale reflect centralised decision-making structure and scores of six and seven of the seven-point Likert scale reflect decentralised decision-making, whereas the scores in the middle reflect a 'negotiated' structure.

Table 9.2 Means, standard deviations and medians of the item responses of subsidiaries and headquarters

Item	Subsidiaries		Headquarters	
	Mean (\pm standard deviation)	Median	Mean (\pm standard deviation)	Median
New product	4.06 (\pm 2.19)	5.00	3.69 (\pm 1.97)	4.00
Trade name/mark	2.53 (\pm 2.12)	1.50	2.69 (\pm 2.21)	2.00
Selection of suppliers	4.44 (\pm 1.70)	4.00	4.62 (\pm 1.94)	5.00
Relationships with distributors network	6.31 (\pm 1.14)	7.00	5.69 (\pm 1.55)	6.00
Relationship with competition	5.47 (\pm 1.25)	6.00	4.69 (\pm 1.80)	5.00
Relationship with customers	6.28 (\pm 1.28)	7.00	5.92 (\pm 1.26)	6.00
Market segmentation	5.44 (\pm 1.70)	6.00	4.85 (\pm 1.68)	5.00
Product positioning	5.56 (\pm 1.54)	5.50	4.62 (\pm 1.80)	4.00
Advertising	5.22 (\pm 1.42)	5.00	4.83 (\pm 1.57)	5.00
Corporate communication	4.56 (\pm 1.98)	5.00	4.38 (\pm 1.85)	4.00
Public relations	5.19 (\pm 1.88)	6.00	4.77 (\pm 1.59)	4.00
Manpower recruiting	4.86 (\pm 1.40)	5.00	4.15 (\pm 1.63)	4.00
Training	5.11 (\pm 1.62)	5.00	4.31 (\pm 1.65)	4.00
Measuring productivity	5.56 (\pm 1.52)	6.00	4.77 (\pm 1.74)	5.00
Rewards system	4.03 (\pm 2.01)	4.00	3.85 (\pm 1.91)	3.00
Budgeting	4.14 (\pm 1.44)	4.00	4.08 (\pm 2.06)	4.00
Financial management	4.19 (\pm 2.38)	5.00	5.00 (\pm 2.00)	6.00
Accounting	5.47 (\pm 1.70)	6.00	4.77 (\pm 1.24)	5.00
Legal services	5.17 (\pm 1.72)	5.00	5.85 (\pm 0.99)	6.00
Operations management	5.89 (\pm 1.30)	6.00	4.83 (\pm 1.86)	5.00
Corporate development	3.67 (\pm 1.67)	4.00	3.08 (\pm 1.12)	3.00
Product pricing	4.65 (\pm 1.80)	4.65	4.15 (\pm 2.27)	4.00
Management of direct sales	5.89 (\pm 1.58)	7.00	5.77 (\pm 1.24)	6.00
Inventory management	5.40 (\pm 1.50)	5.70	3.77 (\pm 1.88)	3.00

Data Analysis and Results

Our analysis consists of descriptive statistics and nonparametric estimations. To show the existence of the PG by evaluating any potential discrepancies in perceptions between headquarters and subsidiaries, we first describe and compare the mean/median scores between headquarters and subsidiaries for the same decision items and then perform nonparametric score compari-

son tests using Wilcoxon's signed rank test (Lehmann, 2006). Accordingly, we assess headquarter and subsidiary rankings of their level of involvement in each of the 23 key decisions. This not only provides a clear identification of the locus of each decision-making, in both headquarters and subsidiaries surveys, but also allows a direct comparison of perception between headquarters and subsidiaries. It should be noted that the Likert scale scores—even though they are discrete numbers—are treated as continuous variables, because (a) the underlying concept they measure (degree of proximity to the decision-making locus) is continuous and (b) the seven points of the scale have enough variance to allow meaningful conclusions (Carifio & Perla, 2007; Glass, Peckman, & Sanders, 1972).

Wilcoxon's signed rank test compares the related samples of headquarters and subsidiary to assess whether their population rank distributions differ in terms of perception of who has a more decisive role in decision-making described by the corresponding item. The use of Wilcoxon's signed rank test is necessary when the score differences are not normally distributed.

The results in Table 9.2 show that there is a discrepancy in means/medians between headquarters and subsidiaries for the same decision items. For instance, the median of 1.50 in trade name/mark decision indicates a highly centralised authority, whilst management of direct sales and relationship with customers are considered to be highly decentralised (median of 7.0), whereby subsidiaries are fully responsible for the decisions. The results of mean and \pm standard deviation for each decision across HQs and subsidiaries quantify the difference in perception with regard to the locus and provide a measure of the variability of responses to each question. In particular, for headquarters, financial management decision is the item with the greatest variability in responses (± 2.38), whilst for subsidiaries, product pricing is the item with the greatest variability in responses (± 2.27).

To test if the observed differences in perception between HQs and subsidiaries (in Table 9.1) are statistically significant, score comparisons between headquarter and subsidiary samples means are performed with the nonparametric Wilcoxon's rank-sum test.⁵ The negative values indicate that the headquarters had a lower score than the subsidiaries, which implies that headquarters perceived a greater involvement in that particular decision-making than the subsidiary. The *p*-value of Wilcoxon's signed rank test (Table 9.3) shows that the difference is significant for 13 out of 23 decision items. Thus, we find evidence for a significant PG between headquarters and subsidiaries in terms of decision-making loci.

In addition, to show the existence of a PG in terms of functional decision-making, we follow Gates and Egelhoff (1986) and Porter (1985), and

Table 9.3 Differences in locus scores between headquarters and subsidiaries

Item Score Comparison		
Decision item	Mean difference	<i>p</i> -value (Wilcoxon's signed rank test)
Inventory management	-1.457	0.000
Market segmentation	-0.861	0.001
Product positioning	-1.056	0.003
Manpower recruiting	-0.639	0.004
Public relations	-0.639	0.005
Measuring productivity	-0.722	0.021
Relationship with competition	-0.722	0.023
Training	-0.722	0.036
Rewards system	-0.611	0.050
Financial management	1.000	0.061
Accounting	-0.556	0.065
New product	-0.667	0.071
Management of direct sales	-0.114	0.112
Relationships with distributors network	-0.222	0.125
Operations management	-0.514	0.169
Advertising	-0.355	0.185
Corporate development	-0.417	0.213
Corporate communication	-0.306	0.268
Budgeting	-0.194	0.618
Trade name/mark	0.083	0.630
Product pricing	-0.129	0.833
Selection of suppliers	0.028	0.940

we assign each of the 23 decision items to a particular factor (four factors in total), consisting marketing, finance, manufacturing and firm infrastructure, respectively (Table 9.4).

We then repeat the Wilcoxon's signed rank test to test whether there are significant differences in the perception of decision-making scores between headquarters and subsidiaries for the four factors in step one, which represent the shared decision-making.

To be able to compare the mean score of items corresponding to each factor between headquarters and subsidiaries, we average the item scores

Table 9.4 Assignment of items to factors

Factor	Firm infrastructure (Porter, 1985)	Finance (Gates & Egelhoff, 1986)	Marketing (Gates & Egelhoff, 1986)	Manufacturing (Gates & Egelhoff, 1986)
Items	Corporate communication	Budgeting	Trade name/mark	Selection of suppliers
	Public relations	Rewards system	Product pricing	Operations management
	Manpower recruiting	Financial management	Management of direct sales	New product development
	Corporate development	Accounting	Relationship with customers	Measuring productivity
	Advertising		Market segmentation	Inventory management
	Training		Product positioning	Relationship with competition
			Relationships with distributors network	

corresponding to each factor. The corresponding factors will be referred to as factor average scores. In the case of a statistically significant result, the headquarters and subsidiaries perceive themselves to have different involvements in a particular factor, whereas a statistically insignificant difference suggests concordance in perceptions between headquarters and subsidiaries.

The results of Wilcoxon's signed rank test show that mean difference scores are statistically significantly positive and for both 'Firm Infrastructure' and 'Manufacturing' factors. Thus, subsidiaries perceive themselves as having a greater involvement in decision-making in these areas. The result for 'Marketing' indicates that subsidiaries view themselves as having a significantly lower involvement in this area. In contrast, for 'Finance', headquarters and subsidiaries show agreement in decision-making. Therefore, except for 'Finance'-related decisions, the results generally support the argument of the existence of a PG in terms of functional decision-making loci.

The results show that subsidiaries generally perceive themselves as having a greater involvement than their headquarters, as 3 out of 4 factors (apart from 'Marketing') show a positive difference, combined with the scores being above the Likert scale mid-point. This set of results may be interpreted as the reflection of an increasingly autonomous group of subsidiaries as small open economy MNEs grow.

Discussion and Conclusion

This chapter contributes to the literature by unfolding the complexity of decision-making in MNEs in relation to decision loci and organisational structure. At the individual locus level, we identify PGs across more than half of the decisions. At the functional level, we also find significant PGs in three out of four areas (statistical insignificance of finance suggests a converged view). Finally, PG is also found at the organisational level whereby subsidiaries view they have more independence than headquarters perceive. Previous studies suggest that once subsidiaries become established in their local environment, they tend to experience enhanced capability and greater autonomy. This argument supports our finding that subsidiaries perceive themselves to be more independent than the view of headquarters. Hence, we can argue that in the case of Greek subsidiaries, there are no SOE idiosyncrasies found, as their view of greater autonomy is similar to the trend found in subsidiaries of advanced economy MNEs. Upon reflection on our findings, an ex-post framework of HQ and subsidiary decision-making is provided in Fig. 9.2.

Overall, the identified PGs in decision-making loci and associated organisational structure suggest a high degree of disharmony between headquarters and subsidiaries. Whilst this may be explained using the perspective

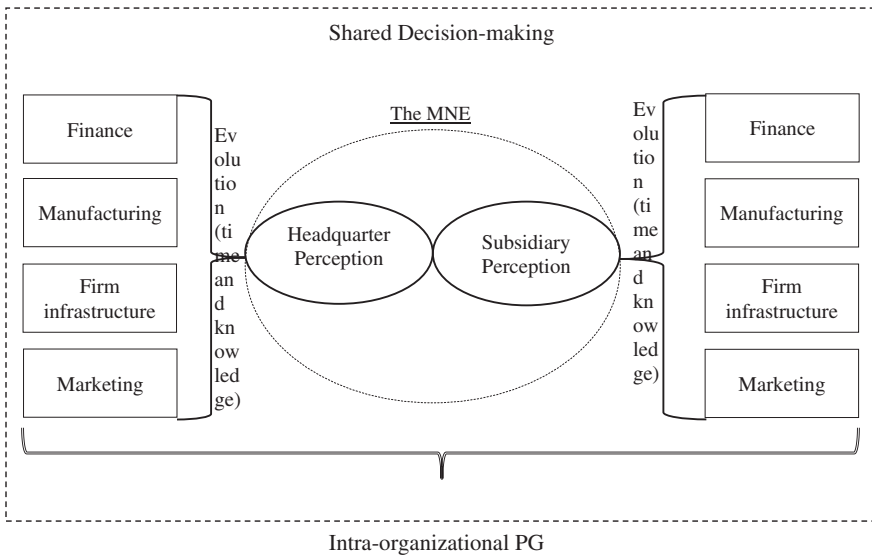


Fig. 9.2 Headquarter–subsidiary PG of decision-making. Source Authors' own

of subsidiary evolution and embeddedness to reflect positive local development, the potential defects these may bring to performance outcomes may be more damaging in the long term. We argue that such a misalignment can lead to the creation of internal transaction costs and operational deficiency, which cause performance implications for the MNEs. This conclusion is also supported by Brauer and Heitmann (2013), Lunnan, Tomassen, and Benito (2016) and Mudambi et al. (2014) who note that the nature of subsidiary perceptions of internal operations is likely to significantly influence its performance.

Limitations and Recommendations

Our analysis is based on a small but representative sample of Greek MNEs and their corresponding subsidiaries. Given the small sample size, the analysis is based on statistical techniques that are fit to incorporate such samples and attenuate sampling errors. Larger databases are usually desirable, as they increase statistical significance in test analysis. However, based on the statistically significant results of the test, we find evidence of PG in decision-making between headquarters and subsidiaries. Researchers should not take our findings to imply that high-quality solutions can be obtained routinely using small samples. Rather, it is the choice of appropriate statistical techniques that are applied and interpreted correctly that matter for the quality of result. Furthermore, our results should only apply to the service and manufacturing industry of an SOE, namely Greece. We urge future research to test our results to a wider industry base and larger MNEs from developed economies. Furthermore, we recommend that future research should explore any potential sector-related differences or similarities across a larger sample. This study offers a new approach to testing dyadic perceptions as well as statistical methods for assessing organisational decision-making and structures. Other studies are recommended to apply these techniques to larger or different samples. Although the Greek MNEs have a relatively higher level of homogeneity of firm-level variables, we recommend that future studies test for subsidiary age, role and location using larger and indigenously diverse samples.

We also recommend that, as the main focus of our study is on exploring headquarter–subsidiary PG on decision-making loci, future studies build on our findings to test for a series of potential PG implications. Although our study is not concerned with PG implication, the identified PG in the case of Greek MNEs leads us to believe that it is important that future studies explore potential organisational and performance implications of

headquarter–subsidiary PG. We believe that an SOE context, as represented by Greek MNEs, is a useful first step. Additionally, it is hoped that following the identification of PG in headquarter–subsidiary decision-making, future research relating to the broad area of headquarter–subsidiary relationship can incorporate the possible gaps, and therefore, a dyadic approach is encouraged to identify discrepancies and draw more balanced conclusions.

Notes

1. See Oladottir et al. (2012) on comparative study of MNEs from Iceland, Israel and Ireland; Damijan et al. (2007) on Slovenia's MNE impact on productivity; Barry et al. (2003) on Ireland's outward FDI.
2. This chapter uses data collected for IOBE 2007 and 2009 reports. Authors were granted permission to further analyse these data.
3. This is the final number of usable questionnaires that have answered the items of the surveys analysed in this chapter.
4. For similar classifications, see O'Donnell (2000), Slangen and Hennart (2008) and Gammelgaard et al. (2012).
5. The differences are also tested for normality when discrepancies between *t*-test and Wilcoxon test significances are observed and decisions are based on the valid test, i.e. the *t*-test when normality was confirmed and Wilcoxon's test when the differences were not normally distributed.

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10

Strategy Creativity in Multinational Subsidiaries

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Introduction

Traditionally, the strategic role of the subsidiary CEO was based on their capacity to maintain and grow local operations while managing their unit's relationship with corporate headquarters. This view no longer captures the mounting constraints facing subsidiary managers and the array of skills required to be successful in today's multinational corporations (MNCs). Subsidiary managers are currently facing increasingly complex strategic choices. On the one hand, they are expected to contribute to innovation in the MNC, while at the same time they are often becoming more integrated

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within the MNC network, reducing their strategic choices. This innovation–integration dilemma has major challenges for how subsidiaries are managed in the modern MNC (Mudambi, 2011). This article addresses the issue of how subsidiary managers balance the sometimes-contradictory strategic agenda of innovation and integration by studying the drivers of strategy creativity at the subsidiary level.

As the dominant organisation of this era, the size, complexity and multiple boundaries (geographical, cultural and functional) of MNC units provide particular challenges for research (see, e.g., Dunning, 1995; Mudambi, 2011; Newbury, 2011; Rugman & Verbeke, 2003; Rugman, Verbeke, & Nguyen, 2011). This complexity creates a multifaceted and dynamic arena for developing management theory. However, despite its progress, strategy research has struggled to uncover management practices within the multinational firm. Specifically, management attributes at the subsidiary management level of the MNC are very much an under-researched area (Dörrenbächer & Gammelgaard, 2011).

The unique competitive advantage of MNCs is based on the potential contribution of their large network of subsidiaries. It is these subsidiaries, which produce new ideas and innovations, that can enhance the overall competitive position of the firm (Birkinshaw & Hood, 1998b; Mudambi, 2011; Rugman & Verbeke, 2001). The subsidiary's ability to be creative has the potential to bring huge benefits to the organisation overall, but to do so the structure of the organisation must allow it. The subsidiary management must also have the ability to pursue a creative agenda. This leads to the research question: What are the drivers of strategy creativity in multinational subsidiaries and how are they affected by the entrepreneurial self-efficacy of the subsidiary CEO?

By focusing on strategy creativity in subsidiaries, this study addresses a strategic outcome which up to now has received very little attention. Crucially, the micro-level of the relationship between the subsidiary context and creativity is also taken into account to give a more complete picture. Although organisations are made up of individuals, strategy research has tended to focus on the organisation at the expense of the individual (Felin & Foss, 2005). This is particularly true in strategy research on subsidiaries where the organisation and not the individual has predominately been the unit of analysis. This research makes two important contributions. First, this study uncovers the drivers of strategy creativity in multinational subsidiaries. Second, by taking a micro-foundation approach, the importance of entrepreneurial self-efficacy in subsidiary CEOs as a crucial attribute in subsidiary managers is confirmed. The paper now outlines the theoretical background for the study, followed by the research methodology, data collection, results and a discussion of the findings.

Theoretical Background

Strategy in Multinational Subsidiaries

While corporate headquarters in the MNC is the ultimate arbitrator of strategy for its subsidiary units, the literature accepts that to varying degrees subsidiary units contribute to their strategic direction through engaging in strategy development activities (Birkinshaw & Hood, 1998b; Taggart, 1998). However, there is little empirical evidence to add to our understanding of subsidiary managers, and in particular, how subsidiary CEOs influence strategic outcomes.

Considering the depth of subsidiary management research, it is strange that from a strategy perspective there are few clear insights to guide either researchers or subsidiary managers (Dörrenbächer & Geppert, 2009; Scott, Gibbons, & Coughlan, 2010). One of the factors behind these problems has been the confusion over what constitutes subsidiary strategy and what are its main components. A distinction is commonly made in the literature between the concepts of subsidiary strategy and subsidiary roles. Analysis of subsidiary studies confirms that subsidiaries are engaging in strategy development, at least at a local level, with a view to building or maintaining current resources (Birkinshaw, 1997, 1999; Birkinshaw & Hood, 1998a, b; Delany, 2000; Garcia-Pont, Canales, & Noboa, 2009; Rugman & Verbeke, 2001; Taggart, 1998).

Developing management theories that can apply to MNCs demands recognition of the particular complexities within MNC literature, specifically the dynamic between headquarters and subsidiaries, as these key issues are inextricably intertwined with those of headquarters–subsidiary relations. These complexities underpin the three key dilemmas of the MNC (Mudambi, 2011). First, MNCs must constantly balance the innovation–integration dilemma, allowing subsidiaries sufficient freedom to innovate while ensuring that their activities remain aligned with headquarters' strategy. Second, the headquarters' approach to align ownership and property rights in order to execute control is an arduous task in the widespread organisation of the MNC. As is argued by Foss and Foss (2005), property rights—rather than ownership rights—are a source of control. Some subsidiaries that are distant from headquarters are resource-rich and in control of critical linkages to key actors in their local environments (Cantwell & Mudambi, 2005) so this enables the subsidiary CEO to build a strong negotiating position with headquarters. Third, a constant dilemma for both headquarters and subsidiary management is the dynamics of subsidiary

mandate evolution over time. Essentially, subsidiaries are aligned with headquarters in terms of 'creating profits and working against external threats, but can be opposed when bargaining with each other over the intra-firm allocation of resources' (Mudambi, 2011: 319). These pressures highlight the complex dilemmas and environment of the subsidiary CEO and stress the importance of creativity in their approach to strategy.

Strategy Creativity

To date, subsidiary contribution to MNCs has been considered largely in terms of business performance, initiative generation and knowledge access and transfer within the MNC (Ambos, Andersson, & Birkinshaw, 2010; Birkinshaw, 1997, 1999; Williams, 2009). However, prior research has neglected the vital contribution of creative strategies developed by individual subsidiaries, despite recent exploration of individual-level creativity within organisations (Gong, Huang, & Farth, 2009; Hirst, Knippenberg, & Zhou, 2009). Organisations are encouraged to be creative in their strategies, but there is limited guidance on how this is to be achieved. Despite the interest in creativity from practitioners and its apparent relevance to many areas of organisational study, the topic remains relatively underdeveloped in management research (Scott et al., 2010). One of the primary inhibitors of strategy creativity originates from strategic embeddedness, whereby organisations tend to approach new problems by using their existing routines. As a result, the same frameworks are used to analyse the information gathered, and whether justified or not, links between strategy, routines and success become established (March, 1991; Nelson & Winter, 1982). To be creative, managers must often engage outside of their existing system and structure, but in many subsidiaries, they are becoming increasingly integrated into the internal MNC structure, so reducing this opportunity. Within this type of structure, how can subsidiary managers still drive creative strategic outcomes?

Subsidiary CEO Entrepreneurial Self-efficacy

Self-efficacy or self-confidence in a given domain is based on an individual's self-perception of their skills and abilities (Wilson, Kickul, & Marlino, 2007). It is a general belief by an individual, in their ability to produce high levels of performance in tasks undertaken in life (Bandura, 1997). Self-efficacy has been found to influence cognition and behaviour and is consid-

ered to be a characteristic that increases with experience and ability (Philips & Gully, 1997). People with high levels of self-efficacy tend to set challenging goals; persist toward the achievement of their goals, even under difficult and stressful circumstances; recover quickly from failure, even in the face of conditions that would appear to be overwhelming to the average person; be more satisfied with their jobs; and experience greater levels of life satisfaction (Bandura, 1997; Hmieleski & Corbett, 2008).

We suggest here that in MNC subsidiaries the entrepreneurial self-efficacy of the subsidiary CEO will influence the ability of the subsidiary to produce creative strategies. Specifically, we assess the impact of the subsidiary CEO on the relationship between strategy creativity and the following three aspects of the subsidiary context: (1) Strategic Learning Capability, (2) Strategic Autonomy and (3) Strategic Capabilities (Fig. 10.1).

Strategic Learning Capability

The ability of firms to learn strategically falls under the rubric of organisational learning which is defined by Levitt and March (1988) as the acquisition of knowledge that precedes changes to key elements of the organisational system. A firm's strategic learning capability can be defined as its ability to derive knowledge from previous actions and then subsequently leveraging that knowledge to adjust firm strategy (Pietersen, 2002; Thomas, Sussman, & Henderson, 2001). The concept of strategic learning capability has garnered increased attention in strategic management literature but there



Fig. 10.1 Hypothesised model. Source Authors' own

is little evidence of it being applied to MNC subsidiaries. The most common conceptualisations of strategic learning capability stress the strategic change component of the construct (Anderson, Covin, & Slevin, 2009) but studies have tended to look at the factors that lead to the development of the capability and not what the capability leads to.

For subsidiaries, the dual processes, of the creation of new strategically relevant knowledge and the development of new creative strategies, are a crucial process that drives subsidiary development. However, for the subsidiary, to turn its learning capability into actionable strategies that are creative and enable the subsidiary to implement a new approach requires the influence of subsidiary management. The following hypothesis is put forward:

Hypothesis 1 *The relationship between a strategic learning capability and strategy creativity in a subsidiary is mediated by the entrepreneurial self-efficacy of the subsidiary CEO.*

Strategic Autonomy

Autonomy 'is related to the division of decision-making authority between a local unit and an outside organisation that controls it' (Garnier, 1982: 893–894). Thus, subsidiary autonomy is defined as the 'degree to which the foreign subsidiary of the MNC has strategic and operational decision making authority' (Watson O'Donnell, 2000: 527). Ghoshal, Korine, and Szulanski (1994) contend that subsidiary autonomy is a key structural attribute of MNCs and allows the subsidiary manager to exercise greater discretion in dealing with the demands of the local market and the task environment. A foreign subsidiary may be given more autonomy because it is in a better position than headquarters to evaluate the needs and demands of the market it serves. Additionally, the use of subsidiary resources, including physical, technological, intellectual, financial and human resources, is better determined by subsidiary management, as they are better able to identify the particular resources and to deploy them appropriately. The devolution of authority to subsidiaries is suggested by Hedlund's (1986) theory of heterarchy, which proposes that global responsibilities are increasingly devolving from headquarters to selected subsidiaries. This results in greater subsidiary management discretion (Gupta, Govindarajan, & Malhotra, 1999) and the ability to influence strategy at the subsidiary level (Etemand & Dulude, 1986), implying greater autonomy in decision-making and mobilising resources (Rugman & Verbeke, 2003). The following hypothesis is put forward:

Hypothesis 2 *The relationship between strategic autonomy and strategy creativity in a subsidiary is mediated by the entrepreneurial self-efficacy of the subsidiary CEO.*

Strategic Capabilities

Subsidiary capabilities can be interpreted as a reflection of the existing stock of knowledge within a subsidiary (Foss & Pedersen, 2004) and underlie the specialised resource development within the subsidiary. In the modern MNC, capabilities are dispersed throughout the global firm and corporate strategies are focused on maximising this integrated network. For subsidiary managers, the relative level of capabilities under their control will dictate much of their own strategic actions. Research highlights that the decisions under a subsidiary's control are a major predictor of that subsidiary's level of importance within the global firm (Birkinshaw & Hood, 1998a). Certain subsidiary capabilities are necessary for a subsidiary to be given particular mandates (Cantwell & Mudambi, 2005; Roth & Morrison, 1992). Therefore, subsidiary capabilities greatly influence the strategic activity of subsidiaries (Bartlett & Ghoshal, 1986). The received wisdom today is that subsidiaries start out with certain responsibilities, but as the parent company grows, and as subsidiaries develop resources and capabilities of their own, they take on strategic responsibilities, tapping into new ideas and opportunities, interacting with other actors and building unique capabilities on which the rest of the MNC can draw (Bartlett & Ghoshal, 1989; Birkinshaw, Hood, & Jonsson, 1998; Hedlund, 1986; Prahalad & Doz, 1981).

Hypothesis 3 *The relationship between strategic capabilities and strategy creativity in a subsidiary is mediated by the entrepreneurial self-efficacy of the subsidiary CEO.*

Data and Methods

The entire population in excess of 1100 foreign-owned MNC subsidiaries located in Ireland was surveyed for this study. A comprehensive database was developed based on Irish government sources and publicly available company information. On the basis of a focus group and pretest results, the subsidiary general manager was selected as the key informant, as in other studies of subsidiary behaviour (e.g. Holm & Sharma, 2006). The mail questionnaire followed the 'tailored design method' of Dillman (2000) in

design and administration. The success of this approach is reflected in the profile of respondents, all of whom have General Manager/director titles. The response rate was 17%, and the total number of usable responses was 186 which compares favourably with the average top management survey response rate (Hult & Ketchen, 2001).

Independent Variables

Strategic Learning Capability

A six-item, seven-point scale measured strategic learning capability. This scale included three original items from Covin, Green, and Slevin (2006) and three additional items which were added by Anderson et al. (2009). The additional items were designed to better capture the concept that strategic learning capability is composed of the ability to generate strategic knowledge and to make adjustments to form a strategy based on that strategic knowledge. The variable produced Cronbach's alpha of 0.88.

Strategic Autonomy

An eight-item scale was employed for autonomy made up of a combination of a five-item scale from Watson O'Donnell (2000) and a three-item scale adopted by Birkinshaw et al. (1998). After the factor analysis, the scale fell out into two separate items—product autonomy and strategic autonomy. Strategic autonomy was the construct employed in the study. The variable produced Cronbach's alpha of 0.64.

Strategic Capabilities

The scope and level of the subsidiary's capabilities have a major impact on its approach to strategy development. It was important to measure not only the actions that the subsidiary engaged in but also its relative competence in those areas. A number of options were looked at to measure this variable, and it was decided to develop Roth and Morrison's (1992) eight-item scale. A nine-item scale was developed which included a split between supportive and strategic capabilities (Harzing & Noorderhaven, 2006). The supportive capabilities were HRM, IT, Purchasing, Marketing, Finance and Logistics,

and the strategic capabilities were R&D, International Activity, Innovation and Entrepreneurship. Strategic capabilities are the construct employed in the study. The variable produced Cronbach's alpha of 0.73.

Dependent Variable

Strategy Creativity

The measure of strategy creativity is based on a measure employed by Scott et al. (2010). It is a combination of Menon, Bharadwaj, Adidam, & Edison's (1999) creativity focused items and Karagozoglou and Brown's (1988) measure of management's willingness to engage in strategic experimentation, adapted to the subsidiary unit of analysis. The variable produced Cronbach's alpha of 0.85.

Mediating Variable

Subsidiary CEO Entrepreneurial Self-efficacy

This construct was measured using an instrument developed by Chandler and Jansen (1992) who used self-assessments of competence and showed those assessments to be significantly related to venture performance. Evidence was provided by Gist (1987) outlining a strong relationship between perceived and actual competencies. This is supported by performance appraisal literature that has shown self-ratings of performance and competence to be valid (Henderson 1984; Heneman 1974; Latham & Wexley, 1981; Tsui & Ohlott, 1988). A six-item self-assessment scale was employed similar to the measures used in other studies of self-efficacy (Hmieleski & Corbett, 2008; Wilson et al. 2007). The variable produced Cronbach's alpha of 0.75.

Control Variables

In order to fully specify the model, a number of control variables were introduced. Firstly, in line with similar studies, *age* and *size* were introduced (Andersson, Dellestrand, & Pedersen, 2014). *Age* was included as older subsidiaries are more established in their business contacts and operations and exhibit certain attributes such as greater autonomy and innovation (Cohen & Levinthal, 1990; Foss & Pedersen, 2002). To control for age, the number

of years since the subsidiary was established was recorded and the logarithm of that number was included in the regression equation. Subsidiary size has been shown to be an important factor in terms of subsidiary power, knowledge exchange and overall subsidiary importance (Bouquet & Birkinshaw, 2008; Mudambi & Navarra, 2004). *Size* was measured using the natural log of the number of subsidiary employees. *Tenure* was also included as a control, as the length of time a manager has held a post can have an impact on their engagement in strategic activities (Hambrick & Finkelstein, 1995). The natural log of the number of years the subsidiary CEO had held their post was included in the analysis. The location of the parent company was also included to control for potential parent company effects.

Descriptive Statistics and Statistical Safeguards

The correlation coefficients and descriptive data (mean values, standard deviations and normality statistics) on all the variables are provided in Table 10.1. To minimise the potential for common method bias, we employed a number of safeguards. We ensured respondent anonymity in the data collection phase. The scales used in the study are based on existing well-tested scales. Statistically, to assess the potential for common method bias, we conducted a Harman's one-factor test (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). The results showed that the items employed did not produce one single factor. In addition, we applied the marker variable (MV) method as outlined by Lindell and Whitney (2001). This method entails using a scale theoretically unrelated to at least one of the scales in the analysis as the MV offers a prior justification for predicting a zero correlation and is therefore a reliable test for common method bias. The variable chosen in this study was two-item variable *Dependence on Trademarks* outlined in Ramani and Kumar (2008). This variable had no significant relationship with any of the variables in the study.

Data Analysis

Factor analysis using principal factors method with Varimax rotation was used to identify underlying dimensions of middle manager strategic activities. Factor analysis is based on the assumption that the structure of a data set can sometimes be adequately defined by a relatively small number of underlying factors or latent constructs, which are derived from analysing the correlations between the variables (Dess, Lumpkin, & Covin, 1997).

Table 10.1 Correlation. Source Authors' own

Correlations		1	2	3	4	5	6	7	8	9
	Mean	SD								
1	Strategic creativity	4.16	1.20							
2	Strategic learning	5.23	0.94	0.375**						
3	Strategic autonomy	3.67	1.31	0.217**	0.162*					
4	Strategic capabilities	4.17	1.14	0.234**	0.185*	0.099				
5	CEO self-efficacy	4.58	1.33	0.300**	0.324**	0.025	0.213**			
6	Tenure	1.87	0.89	-0.180*	-0.079	0.157*	0.122	0.185*		
7	Age	2.91	0.82	-0.122	0.021	0.138	0.048	0.158*	0.185*	
8	Size	4.72	1.69	0.282**	0.219**	0.199**	0.193*	0.131	-0.079	0.001
9	Parent location	2.16	1.53	-0.004	0.083	0.049	-0.199**	-0.082	0.055	-0.074
										-0.015

*Correlation is significant at the 0.05 level (2-tailed)

**Correlation is significant at the 0.01 level (2-tailed)

The number of cases considered by this research was 186, and as loadings on components are high, this comfortably meets acceptable levels (Comrey & Lee, 1992; Pallant, 2013; Tabachnick & Fidell, 2007). For this study, the communalities table for each factor indicated that the majority of items achieve a minimum communality of 0.5, with many variables achieving communalities in excess of 0.6. The hypotheses were tested using the mediation model as put forward by Hayes (2013). This 2-1-2 model involves a single-stage process that estimates the direct relationship between the independent variables and the mediator variable, and the indirect relationship between the independent and dependent variables via the proposed mediator. This analysis calculates mediation based on 95% bootstrap confidence intervals.

Results

In Model 1 (see Table 10.2), analysis of variance (ANOVA) was used to examine the overall association among the three independent variables and subsidiary strategy creativity. The control measures were also included as covariates. The results indicated in Model 1 outline an R^2 value of 0.304, confirming that 30% of the variance in the outcome variable *Strategy Creativity* is explained by the control variables and the independent variables.

In Model 2 the proposed mediator, *CEO Self-Efficacy* was included as the dependent variable. The results indicated in Model 2 outline that the R^2 value at 23% of the variance in the mediator variable *CEO Self-Efficacy* is explained by the control variables and the independent variables. All of the independent variables are significant predictors of the mediating variable, but strategic learning is the most significant.

The mediation analysis is carried in Model 3. The product of coefficients method calculated indirect or mediated effects, where the total coefficient ($\alpha\beta$) is the product of (α) the regression path between the independent variable and the mediator and (β) the regression path between the mediator and the dependent variable. The indirect effects ($\alpha\beta$) for the mediator on each of the three established relationships are presented in Model 3. Statistical significance for the total coefficient is validated using bootstrap 95% confidence intervals (Preacher & Hayes, 2008). Bootstrap confidence intervals tend to more powerful than competing methods (Williams & MacKinnon, 2008). To be a significant mediator, the indirect effect should be above zero between the higher and lower confidence intervals (Hayes, 2013). As can be seen in Model 3, two of the relationships are mediated and fit the criteria set out by Hayes (2013).

Table 10.2 Analysis. Source Authors' own

	Model 1			Model 2		
	Strategy creativity			CEO self-efficacy		
	Coef.	SE	P	Coef.	SE	P
Strategic learning	0.392	0.088	0.000	0.381	0.072	0.000
Strategic autonomy	0.142	0.063	0.026	-0.093	0.051	0.072
Strategic capabilities	0.181	0.072	0.013	0.133	0.059	0.025
Tenure	-0.231	0.093	0.014	0.055	0.075	0.470
Age	-0.174	0.099	0.082	0.026	0.081	0.744
Size	0.113	0.050	0.024	0.044	0.040	0.275
Parent location	-0.001	0.056	0.994	-0.077	0.066	0.313
	R² =	0.304		R² =	0.226	
	P = 0.000			P = 0.000		
Model 3: Indirect Effects						
	R ²	P	Coef.	BootLLCI	BootULCI	
Strategic learning	0.312	0.000	0.1673	0.0728	0.2848	(Hypo 1.)
Strategic autonomy	0.333	0.000	-0.0229	0.0319	0.0367	(Hypo 2.)
Strategic capabilities	0.294	0.000	0.0752	0.0381	0.1638	(Hypo 3.)

1. Hypothesis 1 holds as Subsidiary CEO Self-Efficacy mediates the relationship between strategic learning capability and strategy creativity.
2. Hypothesis 2 does not hold as Subsidiary CEO Self-Efficacy does not mediate the relationship between strategic autonomy and strategy creativity.
3. Hypothesis 3 holds as Subsidiary CEO Self-Efficacy mediates the relationship between strategic capabilities and strategy creativity.

Discussion

Despite growing scholarly interest and recognition of the importance of innovative approaches to strategy development in multinational subsidiaries, strategy creativity has not been studied in any great detail. Subsidiaries are under increasing pressure to meet the demands of integration and innovation in increasingly complex MNC structures. Concepts such as strategy, autonomy and capabilities are constantly evolving in today's global companies. This research focuses on these changes by analysing strategy creativity and crucially utilising a micro-foundations approach.

This research contributes in two important ways: the first contribution of the study is in uncovering the drivers of strategy creativity at the subsidiary level of the modern MNC. Creativity at the subsidiary level of the MNC has been identified as a key goal of the MNC (Mudambi, 2011) but the factors that enable subsidiaries to actually develop creative strategies need greater attention. By testing the relationship between strategy creativity and three strategic context variables, it is possible to uncover a greater picture of management processes relating to strategy at the subsidiary level. Some of the most interesting findings in this research relate to strategic learning. While autonomy and capabilities have been established as important drives of entrepreneurial subsidiaries, the ability of subsidiaries to learn from past activities is a very interesting addition. What this research highlights is that learning which is developed by the subsidiary itself is a more important driver of creativity than autonomy and capability, which are controlled by the corporate parent. This is a very important finding in understanding how creativity is nurtured and developed.

The importance of looking within the subsidiary for drivers of creativity is further enhanced by the second contribution of this study. At the micro-foundation level, this research highlights the importance of subsidiary CEO attributes in developing creativity at the subsidiary level.

This research moves away from taking the subsidiary itself as the unit of analysis and looks deeper. The findings highlight that although contextual-level factors are undoubtedly important, the attributes and approach of individual CEOs can have a major bearing on the subsidiaries' ability to be creative and responsive to opportunities in their environment. Particularly, the impact of the subsidiary CEO on the learning–creativity relationship in subsidiaries is one of the standout findings of this research. Subsidiaries that have the ability to learn from past mistakes and implement that knowledge are more creative, and those subsidiaries with entrepreneurial CEOs can develop that advantage even further. This is a crucial finding in terms of understanding how subsidiary management can meet the expectations from them on innovation. As the role of the subsidiary becomes more complex in today's MNCs, the findings of this research highlight the importance of not just looking at the subsidiary as a unit of analysis, but also considering the micro-level of the individual manager.

Implications for Practice

The framework put forward in this research is a basis to study the attributes required of subsidiary managers in creative environments. As members of global management teams, they are required to engage in a diverse range of management activities. Their global management skills must be combined with the ability to drive their own subsidiary unit forward and to provide leadership to the workforce under their control. This research sets the foundation to study this unique management role, and the findings could have implications for all business unit managers in large diverse organisations.

Limitations and Implications for Future Research

An important limitation of this study is that it only includes subsidiary managers from one country. There is major potential to expand this study across a broad geographic location. Also in subsidiary studies such as this, it would be preferable to get a headquarters perspective on the role of the subsidiary manager. A possible avenue for future research could be for management at headquarters to rate the performance of subsidiary management on the framework outlined.

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11

Subsidiary Combinative Capability for Knowledge Creation as a Co-evolutionary Development Process

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Introduction

The competitive advantage of the multinational enterprise (MNE) stems from its capacity to acquire, assimilate and combine knowledge from geographically dispersed locations (Doz, Santos, & Williamson, 2001). It has increasingly come to depend on knowledge created in the MNE by its subsidiary units that themselves can combine knowledge bestowed by corporate HQ with that absorbed from their host locations (Kogut & Zander, 1992;

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Phene & Almeida, 2008; Cantwell & Mudambi, 2011). Recent studies have increasingly shown that these knowledge-creating subsidiaries operate and create knowledge at the nexus of the internal MNE corporate domain and its external local knowledge network (Achcaoucaou, Miravittles, & Leon-Darder, 2014, 2017; Ciabuschi, Holm, & Martin Martin, 2014; Collinson & Wang, 2012; Figueiredo, 2008, 2011; Meyer, Mudambi, & Narula, 2011). Less explored is *how* subsidiaries develop a knowledge-creating role while operating in this dual context. Questions and issues of over-, under- and optimal embeddedness in both networks persist. Since previous research has strongly tended to be cross-sectional at a point in time, there is a knowledge gap about the processes of not just a subsidiary's internal role evolution in the internal domain but also the evolution of available and requisite knowledge stock in the external knowledge network.

Therefore, in this chapter, we develop a conceptual framework using a novel co-evolutionary lens that examines the evolving role for advanced knowledge creation for the dual embedded subsidiary. We suggest a future research agenda for theoretical development using a co-evolutionary lens and advocate for process studies of longitudinal forms.

The chapter contributes to the theory of subsidiary role evolution within the international business domain. Given the recognition that subsidiaries of an MNE are chartered with particular activities along the value chain (Rugman, Verbeke, & Yuan, 2011) and that by undertaking these activities the subsidiary can assume a role ranging from that of an implementer (knowledge exploiting) to one of the strategic leaders (knowledge-creating), international business literature has come to focus on subsidiary evolution (Cantwell & Mudambi, 2005). This chapter argues that as the subsidiary operates in both an internal and an external network, its evolution must be viewed in the context of the evolution of the local host environment as well as the internal network; that is, a co-evolution perspective needs to be taken (Cano-Kollmann, Cantwell, Hannigan, Mudambi, & Song, 2016; Cantwell, Dunning, & Lundan, 2010; Lewin & Volberda, 1999; Madhok & Liu, 2006).

The chapter is structured as follows: the next section of the paper develops the conceptual background focusing on the potential role of the subsidiary in the internal corporate and external network, and the capabilities required that underlie this role. Differences in the aspirations of managers for the subsidiary are also discussed in this section that may impact the development trajectory of the subsidiary and the extent to which they develop capabilities to engage with both the internal and external networks. The third section presents the agenda for future research, and finally, the discussion

and conclusions summarise the arguments developed, present a conceptual framework and discuss implications for policymakers and subsidiary managers.

Conceptual Background: The Janus-Faced Subsidiary

The Janus-Faced Subsidiary: Allegiance to Internal and External Networks

The subsidiary exists inside an arena of contested resources within the MNE (Ambos, Andersson, & Birkinshaw, 2010). HQ and the subsidiary are in a perpetual bargaining process for resources and influence (Andersson, Björkman, & Forsgren, 2005; Bouquet & Birkinshaw, 2008). As it vies for HQ attention above sister subsidiaries, the ambitious subsidiary endeavours to influence HQ to expand its assigned mandate for knowledge creation which, in turn, can increase its importance within the internal corporate domain. The subsidiary can best expand its knowledge creation role within the MNE through initiative-taking (Birkinshaw, 1997). Over time, the subsidiary's visibility and recognition grow internally through the lobbying of and attraction of attention from HQ for its track record of performance and development of innovation capabilities (Birkinshaw & Ridderstrale, 1999; Dörrenbacher & Gammelgaard, 2010). The recognition and legitimisation by HQ of a subsidiary's capabilities for knowledge creation confer on it an increased importance and strategic place within the internal corporate network (Garcia-Pont, Canales, & Noboa, 2009). While taking initiatives, it can thus lead to increased recognition at HQ and it can also attract greater monitoring which can be restrictive for the subsidiary's autonomy over its activities (Ambos et al., 2010; Ambos & Birkinshaw, 2010). This can affect a subsidiary's capacity to surreptitiously expand its knowledge creation role by covertly undertaking non-sanctioned, clandestine initiatives. In essence, subsidiaries can be simultaneously attracting and avoiding HQ monitoring and attention in a complex power game of visibility and secrecy (Conroy & Collings, 2016).

Over time, the subsidiary's internal strategic role can evolve from initially being a passive executor of mandates from HQ for simple assembly operations to, over several iterations, one as a creator and provider of critical knowledge for the entire MNE (Asakawa, 2001; Delaney, 2000)

and ultimately an important position as a 'competence creator' (Cantwell & Mudambi, 2005) and even 'global innovator' (Gupta & Govindarajan, 1991) within the internal MNE corporate network.

The achievement of a higher order mandate from HQ can elevate the subsidiary's status as an attractive partner in its local knowledge network (Cantwell & Mudambi, 2011). Local knowledge networks provide resources that the subsidiary can draw on to increase its knowledge-creating capability (Andersson, Forsgren, & Holm, 2002; Andersson, Dellestrand, & Pedersen, 2014; Jenkins & Tallman, 2010). The local network consists of a set of actors interacting for knowledge creation and must be knowledge rich to be of value to incoming investors seeking to create knowledge. A subsidiary's interactions in the local knowledge network can, however, also lead to critical vulnerabilities from unintentional knowledge spillovers (Santangelo, 2012), especially to co-located competitors (Alcacer & Chung, 2007). The subsidiary has a duty of care within the MNE to protect valuable internal knowledge (Perri, Andersson, Nell, & Santangelo, 2013; Perri & Andersson, 2014; Shaver & Flyer, 2000).

Through these interactions with knowledge-bearing subsidiaries, the local knowledge network evolves and upgrades its aggregate knowledge base. As a local knowledge network evolves, it benefits from the learning associated with increased knowledge specialisation (Mudambi & Swift, 2012). Over time, however, the local knowledge network must develop multiple technology trajectories to ensure its sustainability (Martin & Sunley, 2011) first in related and later in unrelated technology regimes (Boschma, 2015). Local knowledge network resilience can be achieved through constant mutation, reorientation and renewal of its resource base (Martin & Sunley, 2011). This is the case since over-specialisation can make it vulnerable to decline or even more disastrous, extinction (Menzel & Fornahl, 2009) due to technological lock-in (Malmberg & Maskell, 2002; Narula, 2002) and a lack of capability to adapt quickly to technological disruptions. The imperative for evolutionary growth and relevance of the local knowledge network is to expand its knowledge stock in terms of amount, quality, depth and breadth. Subsidiaries can act as anchors in the local knowledge network (Feldman, 2001) that educate and lobby government to take initiatives to deepen and diversify knowledge stock in the local network (Giblin & Ryan, 2012). An MNE subsidiary can, therefore, be both a recipient and a source of knowledge in the ongoing upgrading of its local knowledge network.

This iterative and complementary process, wherein the subsidiary takes initiatives and creates knowledge and resources in its local network to use in the bargaining process with HQ for an increased charter, and where the

subsidiary utilises its added mandate to further its potential knowledge creation in the local network, is a co-evolutionary process (McKelvey, 1997) that can result in a virtuous spiral of dual upgrading of subsidiary role internally and external local knowledge network evolution.

The Combinative Capability of the Janus-Faced Subsidiary

Functioning in a dual network of local and global connectivity and membership, multiple embeddedness derives from balancing the forces that require local responsiveness of subsidiaries with those that require subsidiaries' global integration within the umbrella of the MNE's overall structure (Meyer et al., 2011). Significant research regarding the MNE subsidiary at the nexus of its external local network and internal corporate network (Achcaoucaou et al., 2014, 2017; Bresciani & Ferraris, 2016; Cantwell, 2017; Ciabuschi et al., 2014; Figueiredo, 2011; Kostova, Marano, & Tallman, 2016; Meyer et al., 2011; Yamin & Andersson, 2011) illustrates the formidable organisational challenge for the subsidiary (Birkinshaw & Pedersen, 2008). This challenge arises from the basic tension faced by the subsidiary, which assumes or receives autonomy for local knowledge network embeddedness on the one hand, while still remaining cohesive and integrated into the MNE network.

The subsidiary builds critical linkages with key external actors so as to learn and assimilate knowledge from the host country environment and may wilfully use corporate linkages in order to control and transfer value-adding resources, especially knowledge, on which the rest of the MNC can draw (Birkinshaw, Hood, & Young, 2005). Corporate may have legitimate concerns about relinquishing such control to the subsidiary (Mudambi & Navarra, 2004). A related challenge for the subsidiary is to realise a situation of optimal embeddedness within its dual network so as not to be either under- or over-embedded in either network (Andersson, Forsgren, & Holm, 2007; Garcia-Pont et al., 2009) and therefore at odds. From its vantage point of operating in both the local and corporate network, the subsidiary endeavours to gain traction in either its internal or external network or both, that can serve to propel it in a 'virtuous spiral' in either its internal or external context, where each context is not mutually exclusive and a change in one context has a bearing on the other.

The subsidiary must resolve the tension of appropriate embeddedness in the local network to engage attractive partners for knowledge creation,

with the coinciding necessity to be cohesive within the MNE in order to secure a mandate to generate and transfer valuable knowledge (Cantwell & Mudambi, 2005; Meyer et al., 2011). Valuable knowledge creation from vital external alliances can enhance a subsidiary's significance and access to resources with a strategic role within the MNE (Andersson et al., 2007; Bouquet & Birkinshaw, 2008; Frost, Birkinshaw, & Ensign, 2002). Tensions may arise from the contest of coordinating the needs of actors in the local network with the mandate from corporate for independent governance of activities. Too little independence or autonomy can weaken the subsidiary's capacity to manage its R&D and over-reliance on the local context can result in misinterpretation of HQ imperative and even knowledge loss through unintentional spillover (Perri et al., 2013; Shaver & Flyer, 2000). In addition, knowledge generation and transfer between local knowledge network partners can add to the existing competencies of the local context through both intentional and unintentional spillovers in a dynamic process (Madhok & Liu, 2006). However, strong external embeddedness does not inevitably grant role extension for the subsidiary and subsidiary autonomy can alter at the parent's whim (Ambos et al., 2010).

Notwithstanding this, there is ample rationale for the knowledge-creating subsidiary to dedicate itself towards greater co-evolution of its contributory role in its internal MNE network and in its local network. A higher degree of local embeddedness can enhance the subsidiary's role as a knowledge source for and contributor to the MNE (Andersson et al., 2005). This in turn improves the capacity of the subsidiary to interact with attractive local partners for knowledge creation (Cantwell & Mudambi, 2011; Mudambi & Swift, 2012), which leads to a rise in the quality and stock of knowledge in the local context, thereby increasing the stock and quality of knowledge in the local network in a virtuous cycle.

This virtuous cycle should be maintained in an effort to survive and thrive. The subsidiary's combinative capability for knowledge creation and transfer (Kogut & Zander, 1992; Phene & Almeida, 2008) entails the formation of mutually dependent reciprocal relationships in both its internal and external contexts. Amalgamating the subsidiary's own existing knowledge with knowledge from the local context, the subsidiary gradually converts itself from a beneficiary of MNE knowledge to a donor of valuable knowledge. Its reputation in its internal network is enhanced, and it is considered an internal guru in its specialisation, and beyond (Madhok & Liu, 2006). An amplified mandate for the subsidiary can, in turn, impact the local knowledge network through enlarged requirements on business, non-business, and institutional actors in the subsidiary's external network.

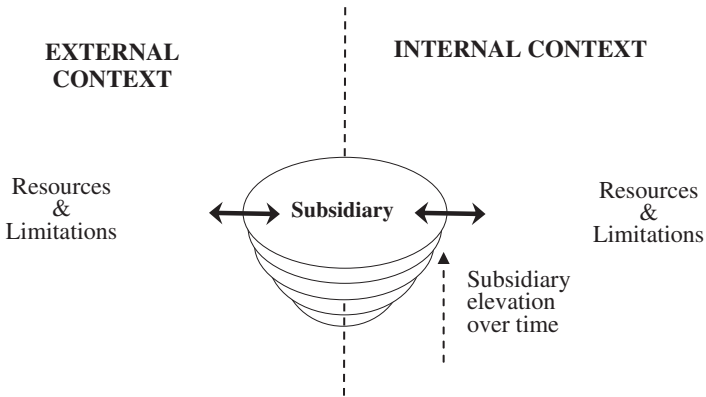


Fig. 11.1 Dual context of the Janus-Faced Subsidiary. *Source* Authors' own

Whereas internal embeddedness is a strong antecedent of corporate HQ inclination for resource allocation (Bouquet & Birkinshaw, 2008; Yamin & Andersson, 2011), external embeddedness imposes resource implications for subsidiary effort, time and investment in cooperating with attractive partners (Ciabuschi et al., 2014). The subsidiary compensates for resource gain in one domain with restrictions or limitations in the other, in a dynamic co-evolutionary process (see Fig. 11.1). This may involve trade-offs in that dependence on one context for resources may restrict its access to resources in the other context (Gammelgaard & Pedersen, 2010) or complementarities for balanced co-evolution in both contexts (Ciabuschi et al., 2014). In addition, the importance of being locally embedded in the market and the characteristics of the industry might call for larger or smaller levels of subsidiary embeddedness within the MNC (Garcia-Pont et al., 2009).

The Combinative Capability of Competence Creators Versus Competence Exploiters

The extent to which the subsidiary develops and undertakes this combinative capability of drawing on both internal and external networks for knowledge creation and transfer may depend on the subsidiaries' permissions, motivations and aspirations to become a competence creator versus remaining a competence exploiter. In the case of a competence creator, the subsidiary takes on a mandate that requires a higher level of R&D complexity and 'a more technologically creative function' (Cantwell & Mudambi, 2005, p. 1110). This subsidiary contributes to the strategic development of the

corporation and attracts significant R&D to engage in exploratory activity. Rugman et al. (2011) contend that the competence-creating role of a subsidiary as described by Cantwell and Mudambi (2005) refers to their specific role in undertaking innovation activity in the value chain (with production, sales and administrative support being the other value chain activities that the subsidiary may or may not be involved in). A competence creator subsidiary in undertaking innovation activity is akin to being a strategic leader (Bartlett & Ghoshal, 1986, 1989), whereby the subsidiary has developed a high level of competence in this activity and the local environment is of high strategic importance to the corporation (Bartlett & Ghoshal, 1986, 1989). This type of subsidiary is exploring knowledge for the development of new technology and resultant products. On the other hand, the R&D activity of a competence exploiting subsidiary is mainly in the realm of incremental adaptation of products, for example, and the subsidiary mostly sources knowledge from corporate and acts more like an implementer than a leader in the innovation sphere. Therefore, while both types of subsidiaries may engage in R&D, fundamentally there is a qualitative difference in the type of R&D performed (Cantwell & Mudambi, 2005).

It is argued that subsidiaries evolve gradually to becoming competence creators. Influencers of this process of evolution are the subsidiary, the MNE corporation and the location in which the subsidiary is based (Cantwell & Mudambi, 2005), as well as the interplay between these. To become a competence creator, subsidiary managers must in the first instance hold such aspirations for the subsidiary and generate support from corporate HQ (if the subsidiary is not automatically mandated with this role from its initial establishment). In turn, HQ must react positively to such motivations of the subsidiary managers. The host location's characteristics in terms of its research infrastructure and labour skills base will also impact a subsidiary's attempts to gain support from HQ and explore new technological areas to become a competence creator. The extent to which a subsidiary can attract and recombine internal corporate knowledge and resources, embed itself in the local network (Andersson, Forsgren, & Holm, 2001, 2002), absorb local knowledge (Lane & Lubatkin, 1998) and manage knowledge spillovers that may occur from engaging in relations with local actors (Perri et al., 2013; Santangelo, 2012) may impact whether the subsidiary becomes a competence creator. Rugman (2014) takes this further by arguing that to become an 'effective' competence creator (p. 7), a subsidiary must be 'effectively embedded in the external host environment' (p. 7), and for the corporation to benefit from the competencies created by the subsidiary, the subsidiary must also be 'firmly embedded within the MNE network'

(Rugman, 2014, p. 7). As the subsidiary evolves into competence creation, the question of the extent to which the competencies will or can be utilised by MNE HQ comes to the fore, and multiple embeddedness is central (Rugman, 2014).

Therefore, competence-creating subsidiaries will need to develop the combinative capability of embedding itself—to an appropriate extent—in both the internal corporate and the external local networks. On the contrary, the competence exploiting subsidiary that stays as such will give precedence to embed itself internally over engaging with the external network.

Towards a Research Agenda

Despite the growth of interest in and research on the MNE subsidiary at the nexus of its external local network and internal corporate network (Achcaoucaou et al., 2014, 2017; Ciabuschi et al., 2014; Collinson & Wang, 2012; Figueiredo, 2008, 2011; Meyer et al., 2011), much remains to be understood and explained about the interwoven knowledge creation process in this dual context. From the subsidiary point of view, the main question is how to integrate effectively into the local host country and simultaneously benefit from being part of the MNC network (Holm, Holmström, & Sharma, 2005).

Separating the treatment of internal and external networks has been deemed by leading scholars in the IB field to be inadvisable, possibly even deceptive (Cantwell, 2014). Several previous studies have usefully examined either the evolution of a subsidiary's internal MNE role for knowledge creation (Ambos et al., 2010; Asakawa, 2001; Birkinshaw, 1998; Birkinshaw & Ridderstrale, 1999; Dörrenbacher & Gammelgaard, 2010) or the evolution of the external local knowledge network (Andersson et al., 2001, 2002; Boschma & Fornahl, 2011; Giblin & Ryan, 2012; Martin & Sunley, 2011; Menzel & Fornahl, 2009; Mudambi & Swift, 2012). Given that the subsidiary draws from both these contexts for knowledge creation, there is still the limited integrated explanation of the co-evolution of internal subsidiary role for knowledge creation and knowledge density and breadth in the local network. Despite its potential to shed light on the functioning of the MNE, the co-evolutionary framework has not been explicitly extended into research on the MNE (Madhok & Liu, 2006). Co-evolution theory considers the interplay between environmental structure and agency, in that organisations, industries and environments co-evolve interdependently (Lewin & Volberda, 1999, 2011; Madhok & Liu, 2006; McKelvey, 1997; Ter Wal &

Boschma, 2011). However, co-evolutionary processes for knowledge creation are underexplored (Cantwell et al., 2010; Murmann, 2013) which is disappointing for the advancement of the field since a co-evolutionary theory of the MNE can constitute a solid theoretical foundation for such research despite limited usage to date (Michailova & Mustaffa, 2012). Therefore, we call for future research to examine and explain the co-evolutionary process of how subsidiaries heterogeneously drive role expansion and contribute to and draw from enhanced external knowledge stock and quality in the local network. It is important to understand not just whether but also how organisations co-evolve within their environment and balance their knowledge creation activities in their dual networks as a dynamic, ongoing process over time.

We also point to the need for future research which addresses the effect of autonomy and embeddedness on the combinative capability of subsidiaries. Gammelgaard, McDonald, Stephan, Tuselmann, and Dorrenbacher (2012) build on the work of Birkinshaw et al. (2005) by developing a model that includes the interaction effects of changes in autonomy, network relationships of the subsidiary and effects on performance. Increased autonomy is suggested to increase the number and frequency of the subsidiary's inter-organisational network relations (Giroud & Scott-Kennel, 2009) and is likely to facilitate innovation designed to take advantage of existing relationships (Gammelgaard et al., 2012). Conversely, studies indicate that subsidiary autonomy may have a negative effect on intra-organisational knowledge sharing (Phelps & Fuller, 2000). Given the complex interactions regarding increases in and types of autonomy (Cavanagh, Freeman, Kalfadellis, & Cavusgil, 2017), it would be interesting to see how this affects the combinative capability of subsidiaries. Moreover, future research on subsidiary combinative capability should consider the conditions under which autonomy, amongst other factors, can achieve overlapping network benefits between both intra- and inter-organisational networks.

Methodologically, the dual context literature has tended to take a static and cross-sectional exploration of MNE activity in a local knowledge network, which is restrictive. In IB theory development generally, there are routine calls for studies of evolutionary change processes over time using longitudinal approaches in the future studies sections of cross-sectional research papers. But there is a conspicuous absence of such studies in the IB literature. We advocate for process studies that employ longitudinal data to examine co-evolution for the dual embedded subsidiary (Van de Ven, 2007). Such approaches must go beyond mere static studies, which we suggest is the current norm. Process studies can better capture the complexities of events

across time (Welch, Pekkari, Plakoyiannaki, & Paavilainen-Mantymaki, 2011). The outcome should be enriched descriptions of processes of co-evolution. The sequencing of events, many critical, can provide explanations of these co-evolution processes and their drivers as they intersect and change over time (Welch et al., 2011). A robust, coherent narrative and chronological analysis of a longitudinal chain of events can overcome issues of short-termism that may miss longer term causes and permits IB researchers to develop process-based explanations of co-evolution for the dual embedded subsidiary. This is because a co-evolutionary perspective is particularly suited to longitudinal study with multiple levels of analysis of how the structure of direct interactions between the organisation and its environment evolves (Lewin & Volberba, 2011). We thus exhort that future research should longitudinally investigate the processes of how subsidiaries knowledge creation capabilities co-evolved with the local knowledge network's transition to new phases of technological development and how the subsidiary can gain a foothold in one network to leverage its capability to progress upwards in the other for optimisation of its dual embeddedness over time.

Discussion and Conclusions

The conceptual framework in Fig. 11.2 illustrates how the particularities of an MNE subsidiary mean that it is positioned within the internal corporate context but also simultaneously in the external host region's local network.

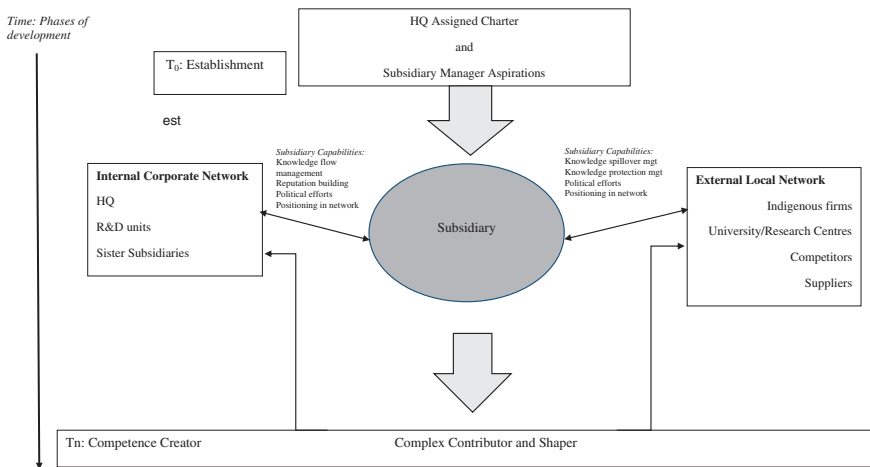


Fig. 11.2 Conceptual framework: Combinative capability of competence creator

For the subsidiary to evolve into a competence creator and thus knowledge generator, Fig. 11.2 emphasises the need for the subsidiary to develop a combinative capability of using resources in one network context to potentially overcome limitations that may exist in the other network, and thus gaining footholds in both. In this way, the subsidiary must carefully manage its embeddedness in both networks, engaging in activities and initiatives in each context at appropriate junctures with the ultimate aim of advancing itself and enhancing its own self-preservation by becoming a significant contributor to the MNE corporation and to the local network. Consequently, the subsidiary plays a role in the development of the external local network in the quest to advance itself. Therefore, it can be argued that the evolutionary development of the subsidiary in its dual network occurs in an integrated and harmonised manner.

For this synchronised co-evolutionary development to occur, the subsidiary needs to develop a combinative capability that entails seeking out, using and generating knowledge to create advantages for the MNE corporation, which then can be used as a bargaining tool to gain more value-added mandates from HQ. The subsidiary may use knowledge within the internal corporate network but also significantly from the local external network to create advantage; to translate it and combine it with its own knowledge; and to subsequently transform it into new knowledge. The generation of knowledge contributes to the development of the corporation and assists in the subsidiary securing further enhanced mandates to advance itself, which may be at the expense of other corporate subsidiaries. Notably, it also results in the development of the local network as the subsidiary engages with local actors to access and generate knowledge. Sometimes the subsidiary may be using one network more than the other in the process of generating knowledge; therefore, it must develop a complementary ability to manage its embeddedness in both networks as required and as circumstances demand it. Ultimately, the development of a strong combinative capability results in the subsidiary gaining more resources and responsibilities that place it in a stronger contributing position within the corporation as well as an influencer within the local network as it may become an appealing partner for external actors.

This identifies a strong imperative to attend to the call to place extant IB theory in a co-evolutionary context (Cantwell et al., 2010). We propose a research programme to generate theory from particularised interpretations and explanations of subsidiaries that develop a combinative capability and play a co-evolutionary development role involving the local external network and the subsidiary itself. To do this, we call for an

important extension to the relatively recent strand of literature focusing on the dual context of the subsidiary (Achcaoucaou et al., 2014, 2017; Ciabuschi et al., 2014; Figureido, 2012; Meyer et al., 2011; Mudambi & Swift, 2012) that involves the need to progress beyond a rather static view. Taking a co-evolutionary perspective necessitates capturing and understanding a dynamic process. Therefore, we argue for a longitudinal account of knowledge creation and how this occurs, to be taken over a number of years, with respect to the subsidiary within its corporate network context and the local external network's evolution. Rather than ascribing to the thesis that engagement in one context may result in placing a limitation on the subsidiary gaining access to the other network context (Gammelgaard & Pedersen, 2010), we attend to a perspective of a more balanced co-evolutionary development account between the subsidiary and the external local network (Ciabuschi et al., 2014). We also acknowledge that there are different types of subsidiaries with different aspirations and motivations, and therefore, potential differences in the combinative capability of competence creator subsidiaries versus competence exploiter subsidiaries need to be investigated.

Future research, we argue, should seek to engage in longitudinal studies that combine quantitative and qualitative data collected on heterogeneous subsidiaries and their respective corporate headquarters as well as the various actors in the local host network, such as research centres, higher education institutes, indigenous firms and state/semi-state bodies. In investigating the subsidiary and its local external network, we would see two main aspects to the research. First, the extent to which the knowledge stock and quality have changed over the time period accounted for, and second, how this change occurred by investigating how the knowledge creation capability of the subsidiary developed and the subsidiary's role as an influencer in the change that may have occurred in the local network. Both qualitative (e.g. interviews, patent content analysis) and quantitative (e.g. R&D statistics, patent count, survey) data could be employed to measure the change in the knowledge base over time: quality and stock. However, qualitative data, in particular, would allow for the depth that is required to understand how the change occurred: the development of the necessary capabilities, the influencing actors and the contingent factors at play.

Furthermore, focusing the research around idiosyncratic sectors would be useful to take into account different sector-specific developments that may have taken place over the time period under investigation. Alternatively, if multiple sectors are chosen for study, then this would allow for an analysis to be made across technology sectors.

Taking a co-evolutionary development perspective of the subsidiary and the dual context requires a rich in-depth empirical investigation of dynamic processes over time. Undertaking this research would provide important insights for both managers and public policymakers. The research could help subsidiary managers identify the correct balance of internal corporate and external local network embeddedness to assist them in advancing into a competence creator role or fulfil a competency exploiter role. We have already highlighted that future research on subsidiary combinative capability should consider the conditions under which subsidiaries can achieve overlapping network benefits between both intra- and inter-organisational networks. Gammelgaard et al. (2012) shed light on how a careful evolution of autonomy, and inter- and intra-organisational networks, can generate performance benefits that do not necessarily drive a wedge between subsidiaries and parent companies and increases embeddedness in the host location which is the core of subsidiary evolution.

The co-evolutionary perspective may demonstrate how a subsidiary can manage knowledge flows internally and potential knowledge spillovers externally. For policymakers, the research would help design policies to facilitate subsidiaries to advance into more value-added activities by supporting embeddedness locally. The research may emphasise particular aspects of the local knowledge network that could be targeted by policy to help subsidiaries gain a stronger foothold locally to advance. This would increase the quality of existing inward FDI as well as attract new foreign investment as competence-creating subsidiaries, thereby upgrading the overall profile of the local network.

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Part IV

Location Decisions and MNEs Performance

12

Establishing How MNCs Are Defined: A Response to the Regional/Global Debate

Louis Brennan, Lisa Spencer and Jim Stewart

Introduction

There is extensive International Business (IB) literature on the theory and empirical evidence of multinational corporation (MNC) internationalisation. The DOI (degree of internationalisation or firm-level multinationality) changes over time (Lu & Beamish, 2004; Ruigrok, Amann, & Wagner, 2007). Firms evolve as they develop and internationalise. Rugman refers to this evolutionary process as patterns of internationalisation (Aggarwal, Berrill, Hutson, & Kearney, 2011; Johanson & Vahlne, 2009; Rugman, 2000). Intrinsic to this change are internal (firm-specific) and external factors (country-specific).

The increasing connectivity and interdependence of the world's markets and businesses is referred to as globalisation. Given increasing globalisation

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of markets and production, this chapter aims to explain patterns of internationalisation through the evolution of some of the largest firms that exist today. Our objective is to assess the regional/global debate and related methods used to measure DOI, both theoretically and empirically. Three models will be tested using a unique sample of MNCs. The data set is based on annual sales broken down by geographic region, from 1990 to 2010.

The focus of this chapter is to consider classification systems that are used to categorise firms for empirical analysis, in particular, the empirical results that gave rise to (home-) regionalisation theory.

Literature Review

Regionalisation Versus Globalisation

Rugman, and his co-authors (Rugman, 2003; Rugman & Collinson, 2005; Rugman & Oh, 2013; Rugman & Verbeke, 2004) proposed a measure of multinationality by making a distinction between the ratio of foreign (F) to total (T) sales¹ (F/T) and the ratio of regional to total sales (R/T) (Rugman 2007). The ratio of regional to total sales calculates sales per region (Europe, North America and Asia). This gives a more detailed and nuanced description of firm multinationality. Using these categories, Rugman and Verbeke (2004) suggest that most MNCs do not have a sizable global operation and limit their revenue-generating activities predominantly to their home region. They have challenged the notion of 'global' strategy and instead suggest a focus on 'regionalisation'. Others have suggested that MNCs are 'semi-global' (Ghemawat, 2003; Osegowitsch & Sammartino, 2008). Subsequently, a major focus within IB scholarship has focussed on the fact that firms may be home biased and regionally oriented rather than global in market share and scope (Aggarwal et al., 2011; Banalieva & Dhanaraj, 2010; Ghemawat, 2003; Osegowitsch & Sammartino, 2008; Rugman, 2003; Rugman & Verbeke, 2004).

Regionalisation

Rugman and Verbeke (2004) found that very few MNCs have true global sales dispersion. Their observation of firms growing within their own region and the persistence of such patterns over time and space is based on a sample of MNCs—the Fortune 500 Global firms. Rugman and Verbeke conclude

that in 2001, 430 of the world's largest 500 MNCs had core sales in the triad (North America, Europe and Asia) and that most firms largely operate in their home region. Issues with this research have been identified. Rugman and Verbeke study excludes regions outside the triad (North America, Asia and Europe) such as Africa, Australasia and South America, and questions remain whether regionalisation theory is generalisable beyond the criteria that they have used. Observations that MNCs are predominantly regional in scope have puzzled researchers and have given rise to a new and ambitious research programme.

Rugman maintains that the essence of the regionalisation hypothesis is that the world's largest MNCs exhibit a regional component in their operations, such as regional headquarters or regional operating divisions and that the majority of firms appear to be home region bound rather than having global deployment (Rugman & Verbeke, 2007). Rugman's method of firm classification implies that for a firm to be global, it must have successful deployment in three distinct markets—North American, Asian and European regions. For example, Rugman and Girod's (2003) study of the retail industry—based on 49 retail MNCs from the Fortune Global 500—found only one retail MNC was global, namely LVMH (Louis Vuitton Moët Hennessy SA).

Likewise, Rugman and Brain (2003) report an analysis of the regional sales of the world's 20 most transnational firms as defined by the United Nations' World Investment Report 2002. Of these 20 firms, only one was global (Philips); five were bi-regional; two were host-region oriented and 12 were home-region oriented. Furthermore, Rugman and Hodgetts (2001) state that most US-headquartered MNCs earn the bulk of their revenue within their home country or by selling to members of the triad: NAFTA (North American Free Trade Agreement), the European Union (EU), or Japan to enhance the theory of regionalisation and show how business strategies are apparently triad/regional and responsive to local consumers, rather than global and uniform. Rugman and Hodgetts (2001) conduct ten firm-based case studies encompassing seven European MNCs and three North American MNCs using the Global Fortune 500. They suggest, using these case studies, that successful MNCs do not always use globalisation (one-size-fits-all) strategy but instead find a balance of economic integration and national responsiveness (Rugman & Hodgetts, 2001).

Similarly, Rugman and Collinson (2008) based on the largest Asian firms assert that Asian business is also regional, not global. They state that 115 Asian firms from the top 500 have an average of 81.87% of home-region sales. Using data for both marketing (sales) and production (assets) for

64 Japanese firms from the Fortune 500 list in 2003, they show that only three firms operate globally; 57 firms have an average of 81% of their sales in their home region; and four firms were bi-regional. Both sales and assets data show the regional rather than global nature of Japanese MNCs.

Nguyen (2014) discusses economic integration of national markets as a regional rather than a global phenomenon, at both country level and firm level. This paper uses the benchmarks that Rugman and his co-authors used to classify firms and Ohmae's triad regions (Ohmae, 1985) in measuring regionality. This empirical analysis of regionalisation is a function of one classification system, as proposed by Rugman. Yet as noted by Nguyen (2014) in the IB and international management literature, there is no uniform typology for grouping countries into broad regions.

Globalisation

Although Rugman et al. strongly support the regionalisation hypothesis, authors such as Contractor (2007) and Hennart (2007) stress that cross-sectional data cannot be used to determine how internationalisation, an evolutionary process, takes place.² They argue, on both theoretical and operational grounds, that models of internationalisation have not been tested thoroughly on a longitudinal basis. Regionalisation theory and empirical research may thus warrant a real shift in methodology. This explains why IB scholars have begun to dedicate their efforts to explore practical methods for improving MNC classifications used by Rugman and Verbeke (2004).

Osegowitsch and Sammartino (2008) suggest further research and refinement of the classification of MNCs. Their research highlights the growing share of bi-regional and global firms between 1991 and 2001. With relatively simple and justifiable adjustments to Rugman's methods of classifying and determining firm multinationality, they find that a considerable number of companies have substantial sales beyond the home region. Using longitudinal sales data from 1991 to 2001, as opposed to a cross section of data, they highlight the growing share of bi-regional (firms that have a considerable proportion of sales in two regions) and global firms (firms in three regions). By lowering the benchmarks that Rugman uses and testing data beyond one year, they conclude that their results do not support regionalisation.

Osegowitsch and Sammartino (2008) initially lowered the 20% host-region threshold to first 15% and then 10%, while retaining the 50% home-region threshold. They then abolished the 50% home-region threshold while retaining the original 20% host-region threshold. Using this new system

of classification, results vary distinctly from Rugman's. Their results confirm that it is the 50% home-region threshold that overwhelmingly drives Rugman's classification. As Osegowitsch and Sammartino have shown, a significantly different picture emerges when the benchmarks are relaxed. Rather than the majority of the world's largest companies being home regional, a substantial portion are bi-regional and a greater number are global players. This means if the trends presented in O/S (2008) persist, the home-regional category will be further lessened in years to come as more large companies assume bi-regional and possibly global status.

Rugman and his co-authors consistently dismiss bi-regional and global strategies, asserting that there are severe limits on the transferability and acceptability of firms' existing FSAs (firm-specific advantages) beyond the home region. Osegowitsch and Sammartino (2008) suggest that one way to establish further the extent of or lack of regionalisation would be an exploration of country and region-level data. They conclude that the current assumptions and information that support regionalisation theory must be changed to accommodate a scenario where bi-regional and global firms are no longer exceptions and that regionalisation theory requires further longitudinal studies.

Rugman suggests that future empirical research should attempt to study regional versus global strategies at the level of specific industries and highlight differences among them. In 2007, Rugman and Verbeke state that most previous research on the geographical distribution of activity by MNCs had used macro-level information on the stocks and flows of foreign direct investment (FDI). They conducted a broad longitudinal continuation of their 2004 work from 1999 to 2003, again highlighting the large proportion of regional firms. Rugman and Oh (2013) again using the sales and assets data for the Fortune 500 firms from 1999 to 2008 compiled a study from annual reports of the firms, by triad region. They reiterate Rugman and Verbeke's earlier work and find that over time 80% of the world's largest firms are classified as home-region oriented, and only four per cent are classified as global.

The evidence and conclusions by Rugman and his co-authors have been extensively re-examined by Asmussen (2009) and Osegowitsch and Sammartino (2008) using sales data, and by Dunning, Fujita and Yakova (2007) using FDI data. These researchers while sympathetic to the research by Rugman (and co-authors), question their implication, which is that global strategy is a myth.

Others argue that globalisation is about more than trade and economic events and that sales (the principal variable used by regionalists) do not adequately capture MNCs' international activities (Clarke & Knowles, 2003).

Flores and Aguilera (2007), in their review of the regionalisation–globalisation debate, highlight the need for ‘improved definition and operationalisation of MNC activities’ (Flores & Aguilera, 2007 p. 1189). Aggarwal et al. (2011) propose a broader method of classification. They analyse firms beyond the triad regions to incorporate the entire globe and construct a novel firm-level data set of over 1000 firms from the G7 countries: Britain, Canada, France, Germany, Italy, Japan and the USA. Defining MNCs in terms of size and scope leads to ambiguous results; hence, they developed a classification system that defines firms from domestic to regional, to bi-regional, to trans-regional and to global, based on breadth and depth of firm operations. Their results show that the world’s largest firms are best seen on a continuum from purely domestic (with no international sales or subsidiaries) to fully global, and that most are trans-regional; that is, they operate in and beyond their home regions but not in all regions. Aggarwal et al. (2011) take the 283 firms classified as ‘home-region orientated’ as found by Rugman and Verbeke’s (2004) system; reclassify them using their matrix model; and find 52 domestic firms, six regional firms, 211 trans-regional firms and 13 global firms. Rather than looking at a percentage of (triad) sales as in Rugman and Verbeke (2004), Aggarwal et al. (2011) classify firms based on the sales in all global regions, therefore providing a more complete view of each firm’s multinationality. The matrix model defines firms beyond a single ratio like foreign or regional sales to total sales—a singular dimension—and instead considers firms’ breadth and depth of multinationality. By using a two-dimensional taxonomy of multinationality, a more accurate classification of Fortune 500 firms’ multinationality and the process of internationalisation is found (Aggarwal et al., 2011).

Close inspection of the data from Aggarwal et al. (2011) reveals some support for Rugman’s regionalisation argument. For many firms, the bulk of sales or subsidiaries are commonly in the company’s home region—even when the firm is classified as operating in several. Boeing, for example, is classified as trans-regional four using the location of subsidiaries. This means it has subsidiaries in four of the globe’s six regions. It has 69 subsidiaries in total: 58 in North America, eight in Europe, two in Oceania and one in Asia. Another example is Volkswagen, which is classified as global according to sales. This means that it has sales in all six regions of the globe. Yet most sales are in Europe (73%), with fourteen per cent in North America, five per cent in South America, three per cent in Asia, three per cent in Oceania and two per cent in Africa. This is generally consistent with Rugman (2003) and Rugman and Verbeke (2004).

The main issues in classifying firms are the appropriateness of the 'triad' regions, the effects of thresholds on the level of activity within and across regions, the almost exclusive focus on sales data and the extent to which the conclusions about global or regional strategic vision are supported by data.

Methodology Employed

Conclusions in the regional versus global debate are often contradictory. One problem is that various models use different definitions of a global firm or a regional firm. This means that the same firm can be classified differently, depending on the model and definition used. Much of the current literature on the regionalisation/globalisation debate finds that the world's largest firms (Fortune 500) are regional rather than global, based on an analysis of the geographical spread of firm-level sales data. This paper argues that this analysis is over-simplistic. Our research is motivated by the need for a more nuanced analysis of the international exposure of firms.

This study examines and adopts various models and variables to classify 88 firms over time. We draw on Rugman and Verbeke (2004), Osegowitsch and Sammartino (2008) and Aggarwal et al. (2011), which show that the majority of firms are home-region oriented, bi-regional oriented or trans-regional oriented, respectively.

Data from a Fortune 500 sample is examined in five yearly intervals, from 1990 to 2010, using different definitions of globalisation and regionalisation. Data is also plotted annually based on overall sample results using time series graphs and a correlation matrix.

We extend the existing studies (Aggarwal et al., 2011; Osegowitsch & Sammartino, 2008; Rugman & Oh, 2013; Rugman & Verbeke, 2004) in terms of the time period examined, the variety of models and their scope, and expand geographic space beyond the triad.

Variables Selected

Firms can potentially be classified on the basis of any number of characteristics, but the following six high-level categories of particular interest to IB scholars were used: (1) Ownership Type (public, private listed and private unlisted), (2) Industry (NAICS codes), (3) Age (in years from date of incorporation), (4) Size (total sales), (5) Location (country of headquarters) and (6) Multinationality (sales across countries and regions).

Our study uses data on publicly traded firms, which unlike private companies have available public information, although data availability may vary. Firms are classified according to industry using the North American Industry Classification System (NAICS) available at the two-digit level.

Data

Data reporting by firms is problematic because disclosed sales are often on the basis of a broad geographical area, for example the Europe, Middle East and Africa (EMEA) region. This has the affect of exaggerating sales from Europe and underestimating MEA sales even if they reach the suggested threshold.

We use longitudinal (actual) sales data from 1990 to 2010 as the performance measure when classifying our sample. The data is reported in annual company reports (e.g. Form 10 K), made available by Datastream, and widely used by IB scholars. The data is based on actual sales and not on the return on sales (ROS).

Our sample includes 88 of the world's largest firms from the Fortune 500 Global List. The Fortune 500 List ranks firms on the basis of total sales each year. It also shows firm's profits, assets, stockholder's equity and number of employees. The Fortune 500 list has been the main source of prior research that we aim to expand and build upon (Aggarwal et al., 2011; Johanson, Vahlne & Ivarsson, 2011; Osegowitsch & Sammartino, 2008; Rugman & Verbeke, 2004). Choosing larger firms provides greater geographical scope, allowing extensive analysis and testing of models. We use convenience sampling to choose our sample of firms. The firms in our sample were chosen because they have available data for the time period (1990–2010). The sample consisted of firms chosen from USA (United States of America), Australia, Brazil, Britain, Canada and France. Table 12.1 shows the firms selected by country.³

Table 12.1 Countries in sample

Countries included in sample	Number of firms in sample	Total F500 firm number
USA	15.0	133.0
Britain	28.0	30.0
France	25.0	35.0
Canada	9.0	11.0
Australia	8.0	8.0
Brazil	3.0	7.0
Total	88.0	224.0

Classification Methods and Definitions

Regional sales for each firm in North America, South America, Europe, Asia, Oceania, Africa and Domestic sales were calculated as a percentage of total sales, and results were compared with prior research in order to examine Rugman's theory of regionalisation and to further explore the regional/global debate. By encompassing all countries in the world, this categorisation is more inclusive than many others (Aggarwal et al., 2011).

Summary of Models

Our analysis considers three different models: (a) The regionalisation model; (b) The Osegowitsch and Sammartino (O/S) model and (c) The matrix model.

The *regionalisation model* is a direct interpretation and continuation of Rugman's method of defining MNCs (Rugman & Verbeke, 2004). In line with this model, we maintain that firms that have 50% or more of home sales are considered home regional regardless of sales elsewhere. Instead, to reach global status, a firm must attain 20% sales in all three triad regions.

In the *O/S model* (Osegowitsch & Sammartino, 2008), the Rugman definitions are altered to relax and reduce home-region bias and give rise to four firm classifications, viz. home-region, bi-regional, host-region and global oriented. The *O/S-altered model* redefines the O/S classifications to those given in Table 12.2. One additional alteration has been made in our work to the O/S model, which is to incorporate all regions of the globe as opposed to just looking at sales in the triad regions.⁴

The *matrix model* (Aggarwal et al., 2011) does not impose benchmarks and incorporates all levels of sales. If sales occur in a certain region, this region will be included in classifying the DOI of the firm. The matrix model looks at all regions of the globe, not just the triad regions.

Results

We analyse our sample using the model definitions given in Table 12.2. We examine the evolution over time of the distribution of firms by category across the three different models. Our results indicate that firm classifications vary greatly, depending on the model and definitions used.

Table 12.2 Summary of models

Regionalisation		O/S altered		Matrix	
Category	Category definition	Category	Category definition	Category	Category definition
Home regional	Sales>50%	Home Regional	Sales>20% home region <20% other region	Domestic (D)	100% sales home country
Bi-regional	Sales<50% home region >20% in other triad region	Bi-regional	Sales>20% in two regions <50% in any one region	Regional (R)	100% sales home region
Host regional	Sales>50% in triad region, outside home region	Host Regional	Sales in non-home region>home region <less 20% in other regions	trans-regional 1, 2, 3, 4, 5 (T1–T5)	Sales within home region and sales in regions 1–5
Global	Sales<50% in home region>20% in each triad region	Global	Sales>20% in three regions	Global	Sales in 6 regions

According to the regionalisation model, the home-region category declines over time. The global variable increases over time slightly as does the bi-regional classification. Still, there remain an overwhelmingly large proportion of home-regional firms, supporting Rugman's theory of regionalisation.

Applying the O/S-altered model shows a larger proportion of bi-regional firms compared to that obtained for the regionalisation model, although the share of bi-regional MNCs drops over time. The home-regional category is dominant but to a lesser extent compared to the regionalisation model and is quite stable over time. There is a slight increase of host-regional firms and global firms from 2004 onwards.

According to the matrix model trans-regional, one and two are consistently the dominant categories. This can be seen as support of semi-globalisation—somewhere between regionalisation and globalisation (Aggarwal et al., 2011; Dunning et al., 2007; Ghemawat, 2003). The number of firms that is trans-regional three (T3) and trans-regional four (T4) gradually increases over time, and the proportion of domestic (D) firms sharply declines from the year 2000 onwards. This also affects the share of home-regional

MNCs, which drops by more than 15 percentage point in a few years. Thus, firms are increasingly extending their sales beyond the home region. For example, Vale changed from being classified as purely domestic in the year 2000 to trans-regional three in 2010, while Scottish and Southern Energy moved from domestic in 2000 to trans-regional two in 2010.

Figure 12.1 shows that there is a large difference between the models in terms of the percentage of firms classified as home regional. MNCs classified as home-regional peak in 1992 using the regionalisation model and in 1991 using the matrix model, however, at very different values (around 80 vs. 20%). According to the regionalisation model, this drop continues over time, while the matrix model reveals a sharp drop in 2000 and a stable pattern thereafter. O/S altered shows slight variations in the share of home-regional MNCs from 2000 to 2010.

Overall, the home-regional category declines over time according to each model. However, the benchmarks applied in the regionalisation and O/S-altered models appear to increase the likelihood for firms to be classified as home regional. When three individual firms were examined in detail, we observed that the data increasingly supports a bi-regional and trans-regional perspective over time, contradicting the view of home regionalisation.

Our results indicate that the theory of regionalisation is rooted in the definitions and benchmarks imposed by the authors of the regionalisation theory. Whether or not the world's larger sized firms show an overwhelming share of

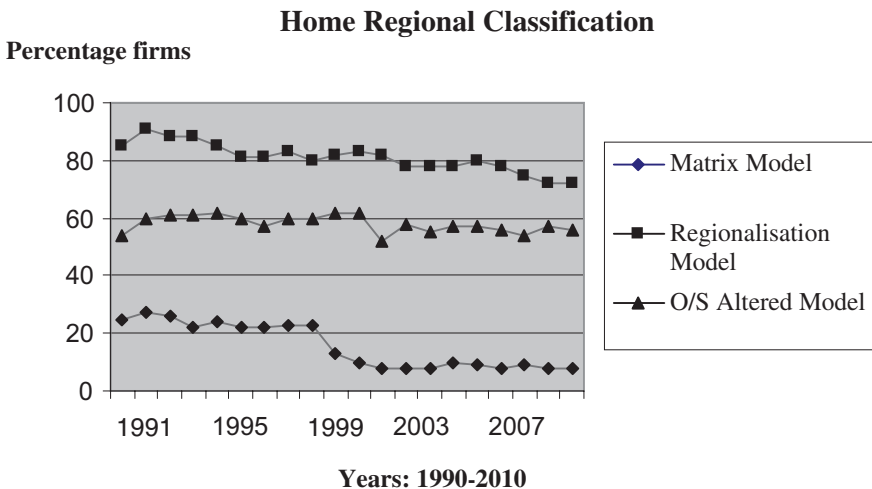


Fig. 12.1 Time series of percentage of firms classified as home regional according to three models based on the sales

home-regional firms depends on the model applied. As a result, measures of globalisation are strongly influenced by definitions used.

In Fig. 12.2, we show the implications of different definitions of bi-regional according to the three models.

The percentage of bi-regional firms according to ‘O/S altered’ reduces over time: 1990, 54%; 1995, 33%; 2000, 32%; 2005, 32%; and 2010, 29% with deviations to that trend only occurring in 1997 and 2003, when at least 40% of firms are bi-regional. Nonetheless, our results show a substantially larger share of bi-regional firms, according to ‘O/S altered’, in comparison with the ‘regionalisation model’. Therefore, as found in prior research (Osegowitsch & Sammartino, 2008), when we alter Rugman’s definitions slightly, the results reveal substantially less support for the home-regionalisation theory.

As a final step of our analysis, we address whether or not the same firm is classified similarly using different models. Take for example Firm X from our sample, which is home regional according to the regionalisation model, global according to O/S altered and is T2 according to the matrix model in 1990; or Firm Y, which is classified as bi-regional according to the regionalisation model and T2 according to the matrix model and is global according to the O/S-altered model in 1995. Taking the year 2000, according to O/S altered, Firm A, Firm B and Firm C are all classified as global, yet remain bi-

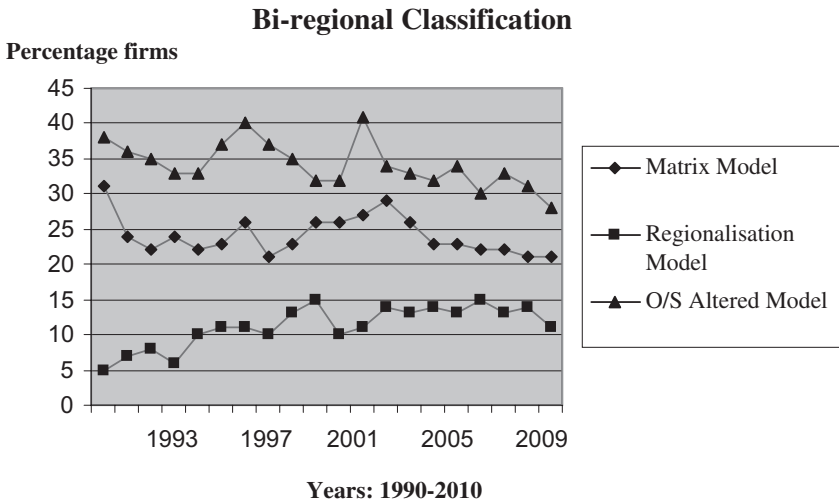


Fig. 12.2 Time series of percentage of firms classified as bi-regional according to three models based on the sales. Note bi-regional represents T1 for the matrix model in this series

Table 12.3 Correlation matrix for home-regional classification

	RM-home regional	OS-home regional	M-home regional
RM-home regional	1.0	0.413	0.665
OS-home regional	0.413	1.0	0.393
M-home regional	0.665	0.393	1.0

Note RM: Regionalisation Model, O/S: O/S altered, M: Matrix Model

Table 12.4 Correlation matrix for bi-regional classification

	RM-bi-regional	OS-bi-regional	M-bi-regional
RM-bi-regional	1.0	-0.378	-0.083
OS-bi-regional	-0.378	1.0	0.312
M-bi-regional	-0.083	0.312	1.0

Note RM: Regionalisation Model, O/S: O/S altered, M: Matrix Model

regional according to the regionalisation model, and are T2 according to the matrix model.⁵

We next generated three correlation matrices, derived from annual classifications for each firm. As the data is not normal, we used Kendall's non-parametric model equation.

We found that the various models tend to have low correlations or negative correlations; for example, Table 12.3 shows that the correlations for home-regional categories vary from 0.393 to 0.665, while in Table 12.4 the correlation matrix for bi-regional classification varying between -0.378 and 0.392. We find a similar pattern emerges in the case of the global categorisations.

Concluding Remarks

Initial benchmarks/findings in any research topic are generally refined in the light of new data and research questions. This paper finds that firm categories in the 'regional/global' debate are very sensitive to the definitions used. Measures of globalisation and regionalisation and transnationality are complex. Those factors affecting globalisation or impacting globalisation vary over time.

The focus of this paper is to critically assess the model developed by Rugman and associated hypotheses on firm-level internationalisation

patterns (Aggarwal et al., 2011; Osegowitsch & Sammartino, 2008; Rugman, 2000; Rugman & Verbeke, 2004, 2007).

We find similarities and differences across the three models. The empirical evidence for different definitions of regional, bi-regional, trans-regional and global classifications vary for each of the three models. Furthermore, we find dissimilarities over a twenty-year period between each model. We find that the DOI is a function of various definitions used.

We find that according to the matrix model, firms are largely trans-regional and trans-regionality increases over time. We observe a rise in firms classified as T4 and T5, which means firms are further extending their breadth of multinationality up to five global regions; but over time, the sample predominately ranges between T1 and T2. According to the matrix model, the number of domestic and home-regional firms reduces over time. According to the regionalisation model, most firms are home regional. Yet the percentage of bi-regional firms increases from around 5% within the first five years (1990–1995) to 15% by the year 2010. Otherwise, there is little change in the data over twenty years according to this model. The home-regional classification does decrease slightly in later years. For the O/S-altered model, a majority of firms are again home regional in scope over time though to a lesser extent. Yet home regionality does decrease over time and the global classification increases.

The benchmarks set by the authors of the regionalisation model generate home-region bias when determining the DOI of MNCs. For example, firms with 50% sales in the home region must be classified as home regional regardless of substantial sales elsewhere.

As shown in this paper, a significantly different picture emerges when Rugman's benchmarks are altered. Rugman's regionalisation model maintains that the vast majority of firms are home region bound rather than having global deployment and exploitation potential. In essence, the regionalisation hypothesis is that the world's largest MNCs exhibit a regional component in their operations, such as regional headquarters or regional operating divisions (Rugman & Verbeke, 2007). Our findings raise critical issues around the regionalisation model. Using the matrix model (and to some extent the O/S-altered model), more firms are trans-regional (or bi-regional), not regional or global, and using the altered version of Rugman's model (O/S altered), the sample has a much larger portion of bi-regional firms. If we used lower benchmarks for the O/S-altered model, we would expect to see an even greater proportion of bi-regional and global firms. The home-regional definition employed by Rugman and co-authors suggests a predisposition towards a theory of regionalisation.

It is important to note that this research is based on 88 firms, for which regional sales data was available. A full population may produce different results from those we reported in this paper.

Future research could improve on these models, their construction and content. What is particularly important is the degree to which current measures of multinationality manage to characterise the complexity of firm internationalisation.

Future research could give greater consideration to the foreign entry modes of firms, other measures of multinationality apart from sales data, e.g. employee numbers and nationality and more extensive testing of current models by greater variation in the applied benchmarks.

Most firms in practice classify their markets in broad geographic areas (Nguyen, 2014). Sales data broken down by region is not available for all firms. Some firms, for example Microsoft, disclose limited disaggregated data in their Form 10K; for example, sales are shown in two categories—non-USA and USA.

Finally, researchers should consider more qualitative methods to gain an appreciation of firm patterns of internationalisation. The changing nature of business—contract manufacturing and the globalisation of supply chains—may determine firm(s) categories while disguising the true extent of globalisation.

Notes

1. F/T—which is the percentage of sales outside the domestic home market against the total sales that the firm accumulates.
2. Also Ruijgrok et al. (2007) and Osegowitsch and Sammartino (2008) have indicated the need for more longitudinal studies in the area of firm multinationality.
3. North America, Europe and Oceania.
4. Using a broader set of regions beyond the triad could change the classification of firms using the O/S-altered model. In addition, greater data disclosure could have a significant effect on classification by all models.
5. Firm X: News Corporation Firm Y: Oracle Firm A: Intel Firm B: GlaxoSmithKline Firm C: BP.

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13

Outward FDI from South Korea: The Relationship Between National Investment Position and Location Choice

Jae-Yeon Kim, Nigel Driffield and Jim Love

Introduction

One of the key debates in international business (IB) is concerned with the following question: “What are the drivers of internationalisation of multinational enterprises (MNEs) from both advanced economies and emerging economies (EMNEs)?” Further, an increasing body of literature looks at the location choices of traditional MNEs and EMNEs (e.g. Bhaumik & Driffield, 2011; Bhaumik, Driffield, & Zhou, 2016; Buckley et al., 2007; Dunning, 2006; Narula & Guimón, 2010; Peng, Wang, & Jiang, 2008; Vahlne & Johanson, 2013). Extant literature concentrates on the topic of internationalisation processes and location decisions from mainly two perspectives. The first perspective considers internationalisation as a process by which firms expand their operations in neighbouring countries and as they acquire more knowledge through experience, they look for new markets

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further afield (notably, Johanson & Vahlne, 1977). The second perspective studies the motivations behind location choice (Dunning, 1993, 1998; Dunning & Narula, 1994; Narula, 1996) whereby host locations are categorised either as those with advanced economies in which firms seek to attain strategic assets, or emerging economies where firms look for advantages of cost-based assets (Dunning, 1998).

In the context of EMNEs, the existing literature focuses almost entirely on how these firms can access technological capabilities by investing in developed host countries. This is a challenging question since EMNEs' firm-specific advantages may be different compared to those of their Western counterparts (Meyer & Xia, 2012; Bhaumik, Driffield, & Pal, 2010; Guillén & García-Canal, 2009; Narula, 2012; Peng et al., 2008). Notable studies such as Peng et al. (2008) describe experiences of EMNEs that spur them into going abroad, while Guillén and García-Canal (2009) offer generalisations as to how EMNEs differ from MNEs that originate from developed countries. EMNEs first internationalise through country-specific assets (CSAs) such as economies of scale, thereby increasing their competitive advantages and overcoming their inherent liability of "foreignness" (LOF) (Bhaumik et al., 2010; Bhaumik & Driffield, 2011). EMNEs are also expected to be motivated by potential for technology sourcing and subsequent technological upgrading in developed host markets (Bhaumik et al., 2016; Driffield & Love, 2003). Yet, extant literature on EMNEs pays little attention to how their patterns of investment and motivations for foreign direct investment (FDI) evolve over time and even fewer studies focus on how the development of new investment positions affects EMNEs' subsequent location choices.

In this chapter, we develop a conceptual framework in which to anchor the motivations for FDI by South Korean firms to their different location choices, while taking into account the development process of South Korean outward FDI over time. We combine analysis of FDI motives with location choices and explore more specifically how South Korean firms managed to exploit different location advantages at different stages of their internationalisation and in varying locations—as for instance, by changing their motivations from technology-seeking FDI to market-seeking FDI even in developed host countries. We develop our conceptualisations based on the notable work of Dunning and colleagues on FDI motives and the antecedents of firm location choices (Dunning 1980, 1981, 1993; Dunning & Narula 1996; Galan, Gonzalez-Benito, & Zuñiga-Vincente, 2007; Narula 1996; see also Narula & Dunning, 2010; Narula & Guimón, 2010). Broadly, these authors suggested a systematic relationship between the

determinants of FDI flows and the stages of investment position based on a country's net outward investment (NOI) (Dunning, 1981, 1986; Narula, 1996). Furthermore, this relationship is proposed to be symbiotic within the structure of a country's economic development (Narula & Dunning, 2010; Narula & Guimón, 2010).

Therefore, we used as our methodological reference the investment development cycle (IDC) first introduced by Dunning (1981) and later updated by Dunning (1986) as well as more recently by Narula and Dunning (2010) and Narula and Guimón (2010) to account for the various factors which may affect what was assumed as a direct relationship between FDI and a country's development. Drawing on Dunning's (1980) eclectic paradigm, the basic thrust of the IDC approach is that, during the process of economic and social development, a country's NOI occurs in stages. For example, a country may be at first mainly a net inward receiver of foreign investment and as it undergoes economic and social transformations, it continues to progress until it eventually becomes also a net outward investor. Further, a country's progression through different stages of the IDC (from a receiver of FDI to an outward investor) is explained in relationship to changes in the ownership (O) advantages of domestic firms within that country, the ownership advantages of MNEs and the location (L) advantages of home and host countries (Dunning, 1980, 1998). In this way, an analysis of a country's evolving investment patterns can explain not only how the country and its firms have developed their internationalisation strategies during the course of the country's development, but also how the development of investment positions subsequently affects firm location choices.

To this end, we developed a unique data set from this Export–Import Bank of Korea (EXIM). We found that, as net outward investment (NOI) increased, South Korean firms changed their investment decisions to expand internationalisation into the developed countries for motives other than the mere acquisition of technology. We observe a convergence of FDI motives from 1980 to 2014, moving from a clear distinction between technology sourcing in the West and efficiency-seeking in the East to technology-driven market-seeking FDI in all host countries starting with 2001. South Korean firms have, despite their initial technological weakness, increased their competitiveness rapidly by revisiting their motives for internationalising and tweaking their location preferences in order to effectively exploit the location-specific advantages of their host countries. Our study complements previous research that uses the updated IDC to investigate the complex factors that influence how countries move through stages of development (see Narula and Guimón's (2010) study on Eastern Europe).

To date, research on IDC has not looked in great depth at the change in FDI motivations over time, specifically across different locations. We highlight how the stages of South Korean economic development and economic structures are related to South Korea's flow of outward direct investment, with the ownership advantages of MNEs directly reflecting country-specific characteristics. We use the updated IDC perspective and the South Korean context to argue that both location choices and FDI motivations can be associated with different turning points in a country's investment development path, which in turn will vary significantly with the idiosyncratic socio-economic and political contexts of that country (Narula & Dunning, 2000).

This chapter is structured as follows: first, we explain how the IDC model is applied to explain the evolution of South Korean investment and the location preferences of outward FDI. Next, we illustrate the evolution of FDI and the changing internationalisation strategies of South Korean firms. Finally, this chapter provides a discussion of findings and conclusions.

Revisiting the IDC Perspective: The Case of South Korean Outward FDI Development

The basic hypothesis of the international development cycle (IDC) (in some texts referred to as the international development path) is that as a country develops, the investment conditions facing its domestic and foreign companies change. Dunning (1981) suggested that a firm's capacity to engage in FDI depends on three factors: country, industry or enterprise specific. Through its various stages of development, the IDC model "envisages economic development as a succession of structural changes and contends that such economic and social transformations have a systematic relationship with the behaviour of inward and outward FDI" (Narula & Guimón, 2010: 5). In other words, a country's stage of economic development is closely related to the flow of inward and outward direct investment in those industries which benefit most from favourable government policies (Narula & Guimón, 2010).

Each stage has its own feature based on its NOI position. In Stage 1, domestic markets are small so inward FDI and outward FDI are almost non-existent. In Stage 2, inward FDI begins as the country is viewed to have location advantages that attract foreign MNEs, but there is still no outward FDI so NOI is negative. In Stage 3, domestic firms begin to internationalise after strengthening their ownership advantages, which leads to an increase

in outward FDI and a reduction in the negative NOI. By Stage 4, NOI increases to the point of becoming positive, and the country has become a net outward investor. Scholars (Dunning, 1981; Dunning & Narula, 1996; Narula, 1996; Narula & Dunning, 2000) assumed a direct and positive relationship between a country's NOI scores and its expected level of economic development. Dunning and Narula (1996) confirmed that there may be what they refer to as a Stage 5 of the IDC which today's developed countries experience. In this stage, beyond a certain level of development, with both inward and outward FDI stocks being high, NOI may not predict well a country's competitiveness. As a result, it is important to critically examine the IDC model in individual countries (Buckley & Castro, 1998).

Following the logic of the IDC perspective, and given the location-specific advantages of each country (Dunning, 1981), less developed countries start by attracting resource-seeking and efficiency-seeking FDI in the product market and developed countries attract strategic asset-seeking and market-seeking FDI. Dunning adds the effect of economic integration to this equation. In Dunning's theory of international production (Dunning, 1993), the dynamic effects of international economic integration are expected to significantly improve the competitive advantages of MNEs established within the area by expanding their market size, creating opportunities for scale economies, and increasingly standards for innovation activities. These effects can enhance the competitive advantages of MNEs from countries within the integrated economic area, which are expected to gain newly created location advantages over MNEs from countries outside of the integrated area. While the focus on technological development as the main source of firm-specific advantage flows naturally from traditional "ownership" advantage, it is also important to allow for other sources of firm-specific knowledge-intensive assets within the analysis of MNEs (Driffield & Love, 2007). Specifically, outward FDI may be promoted by utilising the knowledge and expertise embedded in investors with international experiences from the home country to host countries (Bhaumik et al., 2010). In a notable study, Driffield and Chiang (2009) illustrate that outward FDI plays a significant role in the structural changes of the economy and the move towards becoming more skill intensive in the case of Taiwanese outward FDI. They explain that Taiwanese outward FDI to China contributes to the reallocation of activities of manufacturing, towards more high technology sectors such as electronics. These sectors are associated with higher levels of export-intensive, value-added and skill-intensive industries.

Our contention is that South Korea provides a unique context to examine the revisited IDC model. Since countries with similar levels of FDI inflows/outflows may experience differing patterns of development and technological advancements within each respective industry (Narula & Dunning, 2010), we focus also on the interdependent relationships among different types of industries that may cast effects on internationalisation (Narula & Dunning, 2010; Vahlne & Johanson, 2013). While South Korean outflows were relatively low until 1987, as illustrated in Fig. 13.1, NOI flows have rapidly changed from Stage 3 to Stage 4 of the IDC investment position. South Korean NOI become positive in the 1990s. After 2000, the country had become a net outward investor (Stage 4). As discussed later, unlike other emerging countries, the South Korean development process has a unique pattern in terms of technology development.¹ The data reflect how the industrialisation of South Korea in the early stage was a process of learning, how to utilise and improve upon foreign technologies for their industrial development; technological learning through technical agreement, rather than domestic technology development, was at the core of the early development stage (Chung, 2011). Data on the payment of royalties on imported technologies reveal the critical role of technology transfer in key industries i.e. Electronics and Electrical and Machinery (see Read, 2002).

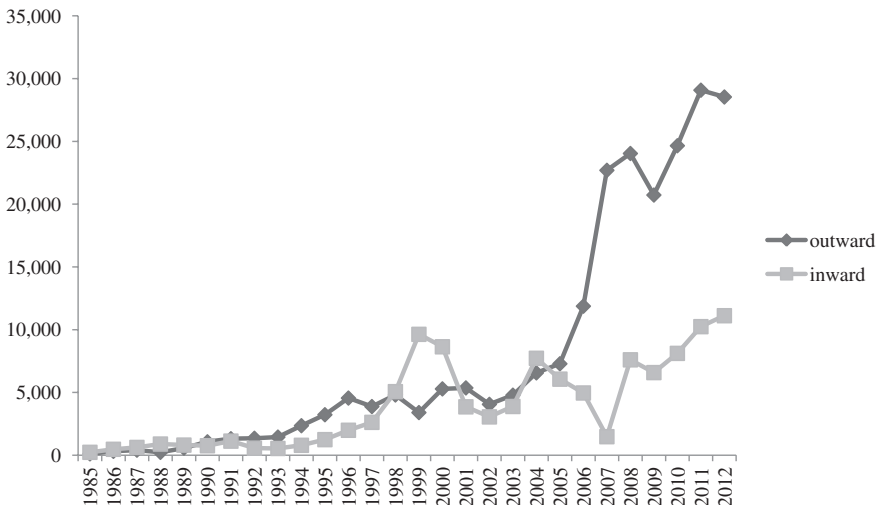


Fig. 13.1 Korean inward and outward FDI industrial total unit: million US dollars. *Source* Calculated from Korean Export–Import Bank data and OECD statistics data

Although South Korean investment development generally followed the rationale put forward by the IDC, it is worth noting here that “learning by doing” enhanced the firm-specific advantages of South Korean firms, allowing outward direct investment to advance rapidly. At the same time, South Korean economic development caused an erosion of the cost competitiveness of the country’s assets in labour-intensive industries, which subsequently impacted the incentive for inward FDI (see Fig. 13.2 representing the evolution of outward FDI in the broader manufacturing sector). These initial findings are in line with the updated IDC model (Narula & Guimón, 2010; Narula & Dunning, 2010) in that there are sub-industries within the manufacturing sector in which Korea’s comparative ownership advantages are strong but its comparative location advantages are relatively weaker. Indeed, during its internationalisation process, South Korea targeted some factors that partially eroded the international competitiveness of its manufacturing and assembly activities. For example, there is outward FDI from South Korea to South Wales as a result of increasing wages in the late 1980s, and from South Korea to many Asian countries in order to secure South Korean domestic supplies of raw material and labour-intensive manufacturing (Read, 2002).

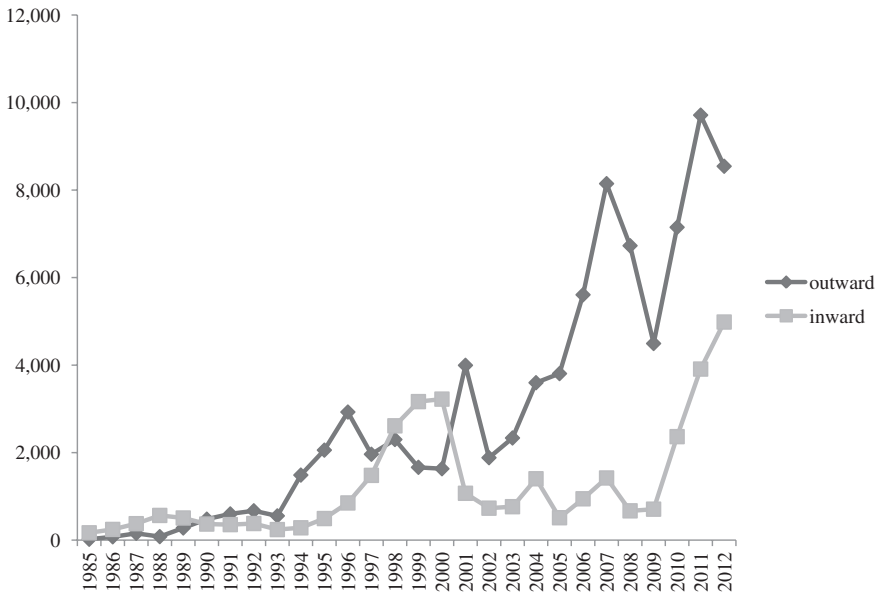


Fig. 13.2 Korean inward and outward FDI of manufacturing industry unit: million US dollars. *Source* Calculated from Korean Export-Import Bank data and OECD statistics data

South Korean Outward FDI Motives: An Integrated Model

Our focus, however, is not on the investment cycle hypothesis per se, but on the *evolution* of FDI in terms of the changing internationalisation strategies of South Korean firms. The diagram in Fig. 13.3 provides our conceptual framework for South Korean outward FDI as per the updated IDC logic. In the taxonomy of FDI motives by Dunning and colleagues (see Dunning, 1993; Dunning & Lundan, 2008 for details), there is a four-way classification of FDI motives, namely resource-seeking, efficiency-seeking, strategic asset-seeking and market-seeking. These explain the reasons for outward FDI in terms of assets that firms either do not possess or do not have sufficient quantity of, to enable them to compete with their rivals. Our analysis argues that the framework on FDI motives also needs to be revisited to reflect the changing investment positions of South Korean firms from a weak position to a strong position.

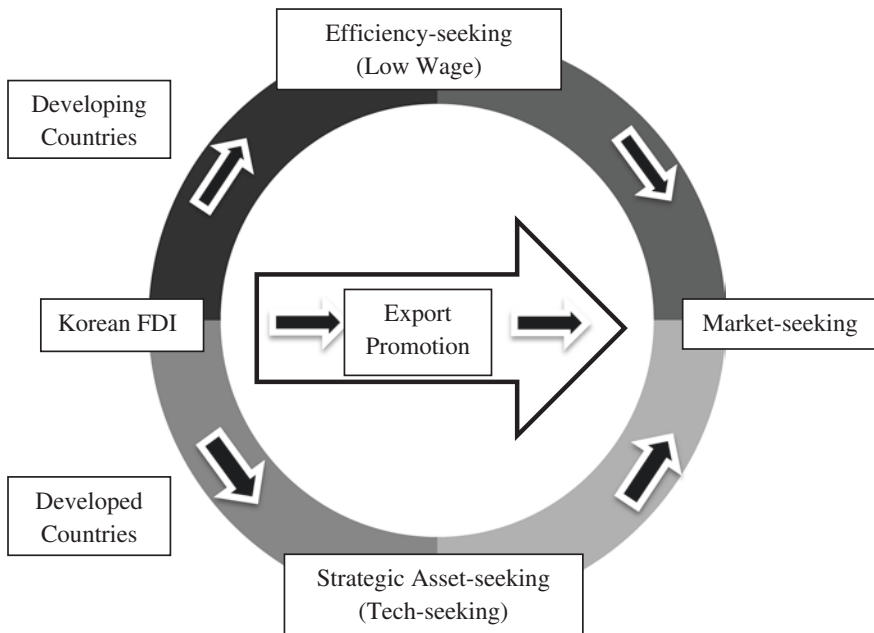


Fig. 13.3 A conceptualisation of the South Korean FDI development model. *Source* Compiled by the authors

When South Korea was in Stage 3 and early Stage 4 (from 1990 to 1997) of the IDC, MNEs have transformed South Korea into a net outward investor. At that point in time, FDI was motivated by export promotion, cost reduction and technology-seeking. Hence, firm internationalisation was driven by location advantages, such as low wages, acquisition of technology and pursuing export-led growth, during a period of very rapid economic growth. In Table 13.1, we show how specifically location choices and FDI motives are related and how they evolve over time. Specifically, the OECD data analysed in Table 13.1 illustrate the changes in South Korea's investment position as it has moved through the phases of the IDC. At first, the motive for South Korean FDI is predominantly export promotion, in both developed and developing host countries. The proportion of low wage (efficiency-seeking FDI) was significant in host developing countries while the proportion of technology-seeking (strategic asset-seeking FDI) was higher in developed host countries.² South Korean MNEs' ownership advantages may have been in technologies forgotten by developed countries but not yet adopted by latecomers. Market-seeking FDI was less in both developing and developed countries.

However, once South Korean FDI reached the stage of positive NOI (which occurred in Stage 4—in 2001), South Korean MNEs had different motives for internationalisation. It can be observed that the motives for foreign production have changed from 2001 as the ratios of market-seeking South Korean FDI became greater than both the ratios of efficiency-seeking (low wage) in developing countries and strategic asset-seeking in developed countries. This explains the country's investment position (Stage 4) whereby South Korean MNEs could acquire resource endowments from foreign affiliates. When considering the differences between Stage 4 and Stage 3 of the IDC, we argue that location advantages play a special role in influencing FDI motives, and together they affect South Korean FDI location choices in both developing and developed countries. At the point at which outward South Korean FDI exceeds inward FDI after 2001, the South Korean FDI to technology-intensive countries changes from technology sourcing to market-seeking. At the same time, FDI to low wage countries changes from efficiency sourcing to market-seeking also. Although South Korean MNEs have initially located their FDI in developing countries for motives of efficiency-seeking, and in developed countries for strategic asset-seeking, over time, their location decisions become driven by market-seeking motives in both developed and developing host countries.

Table 13.1 South Korean manufacturing NOI and FDI motives in different countries unit: million US dollars. Source Calculated from Korean Export-Import Bank data and OECD statistics data

Year	World			Outward FDI to developed countries			Outward FDI to developing countries				
	Inward	Outward	NOI	Market	Export	Low wage	Market	Export	Low wage	Tech	
1988	564.8	80.4	-484.4	5.4	6.3	0	0	0	6.1	3.1	0
1989	506.6	278.0	-228.6	29.4	109.5	0	0	2.2	16.0	3.4	0
1990	367.8	479.8	112.0	44.1	97.3	0	0	7.8	41.9	13.0	0
1991	354.8	599.5	244.7	18.7	137.9	0	4.6	12.0	95.8	30.1	0.1
1992	379.9	671.2	291.3	96.6	74.7	1.2	11.3	0.4	230.1	76.6	0
1993	241.8	554.8	313.0	3.5	33.0	1.4	9.6	12.5	205.0	158.2	0
1994	282.1	1486.9	1204.8	16.9	87.9	0.2	172.2	55.9	628.2	228.6	0.1
1995	493.6	2057.3	1563.7	44.1	222.0	5.3	75.9	48.5	916.8	314.7	0.2
1996	850.2	2927.5	2077.3	100.5	934.8	11.2	20.3	88.2	684.6	413.1	0.3
1997	1480.4	1963.3	482.9	99.5	488.7	3.5	38.3	127.8	490.3	242.6	0.5
1998	2612.5	2299.8	-312.7	93.0	256.5	14.8	10.6	69.3	855.6	165.5	0
1999	3166.2	1663.9	-1502.3	190.9	463.3	4.0	20.2	95.6	346.8	164.5	0.5
2000	3223.1	1631.6	-1591.5	232.4	194.9	0.8	98.7	119.6	485.5	133.3	0.0

(continued)

Table 13.1 (Continued)

Year	World			Outward FDI to developed countries				Outward FDI to developing countries			
	Inward	Outward	NOI	Market	Export	Low wage	Tech	Market	Export	Low wage	Tech
2001	1070.8	3995.3	2924.5	25.9	2475.9	0.1	46.9	73.9	477.4	300.1	2.9
2002	731.0	1884.4	1153.4	110.2	182.4	0.1	41.0	314.3	544.9	291.6	3.6
2003	764.5	2335.1	1570.6	73.4	269.6	1.0	16.2	426.7	683.3	505.6	11.6
2004	1402.7	3597.9	2195.2	322.3	389.5	2.2	36.7	549.5	826.6	612.7	19.5
2005	512.3	3806.0	3293.7	126.8	91.1	4.7	46.4	821.7	987.5	786.9	62.0
2006	945.0	5607.4	4662.4	398.3	110.9	7.4	36.2	1560.4	1246.8	986.8	23.4
2007	1421.2	8147.1	6725.9	701.1	149.8	0.9	154.6	2638.6	2415.6	1177.1	102.2
2008	669.8	6729.0	6059.2	827.2	202.3	10.8	59.6	1912.6	1325.6	1536.9	11.3
2009	708.1	4493.8	3785.8	435.1	159.6	6.7	244.6	1724.0	813.1	621.6	6.6
2010	2365.4	7149.6	4784.3	344.5	104.0	2.2	82.6	4075.5	959.3	768.0	19.9
2011	3910.0	9712.9	5802.9	911.3	1062.3	0.2	166.7	3408.0	1638.6	1321.3	231.4
2012	4984.4	8544.6	3560.2	522.1	235.4	0	405.6	4320.4	1057.9	859.7	23.2

In line with the new IDC, there are various factors that can affect the relationship between NOI and investment development, including the degree of development of the host countries themselves. Our diagram in Fig. 13.3 proposes two different patterns of South Korean outward FDI, which apply to host countries at different stages of economic development. FDI is generally related to country-specific phenomena, or a benefit such as a cost and technological advantage conferred on the firm by its decision to operate in a particular host country, which then become location-specific advantages (Driffield & Love, 2007). South Korean firms have been constrained by their lack of knowledge infrastructure even though they have lower production costs. Hence, South Korea's outward FDI has been directed from the very start towards both developing and developed countries as a result of the country's poor environment for knowledge absorption. Based on the IDC, South Korean MNEs' investment pattern demonstrates a different priority at the point of positive NOI in 2001. South Korean FDI into developed countries was positively perceived as creating channels of technological transfer and market access, which did not exist prior to that. The growth of South Korean firms' FDI into developing countries, on the other hand, is expected to enhance the competitiveness of South Korean firms' in the global market in terms of cost reduction through employing low-wage employees in developing countries (compared to other emerging countries, i.e. China, wages in South Korea were high when the country opened up for inward FDI). Next, we discuss how the location choices of South Korean MNEs can, by using our proposed diagram (Fig. 13.3), be explained by different motives for the FDI through location factors over time.

Evolution of FDI and the Changing Internationalisation Strategies of South Korean MNEs

As Driffield and Chiang (2009) illustrate for Taiwanese firms investing in the Chinese market, outward FDI plays a key role in the structural changes of the economy and the move towards becoming more skill intensive. For instance, Taiwanese firms' FDI motives may be derived from their host country's superior R&D knowledge required for value-adding activities, or it may be that they are basing their motives on what it is that they are achieving, such as disaggregation of their core activities or taking advantage of low wages

(see Driffield & Chiang, 2009). In South Korea's case, the industrial sectors are associated with an export-intensive structure; as South Korea has changed the core of its industrial structure moving from labour-intensive industries (based on the textiles and other light industries) through to heavy/chemical industries, and then to knowledge-intensive industries. The upgrading process reflects a more export-oriented industrial structure and emphasises value-added manufacturing. We found that, while the significant increase in South Korea's exporting and FDI has drawn academic attention, government policy remains concentrated on the country's strong state intervention, which harnesses the importance of scale advantage.

Table 13.2 illustrates the changes in exporting patterns of South Korea's industrial sectors. In 1980, the major exporting commodities were apparel, synthetic fibre as well as heavy industrial items such as ships and iron and steel. However, from 1990, significant changes can be observed in South Korean exports towards heavy/chemical and knowledge-intensive commodities (e.g. video equipment, semiconductors). Notably, starting with the 1990s, one of the major global export commodities was electronics/electrical equipment. South Korea's major export items are now IT products such as semiconductors, telecommunication equipment and electronic parts, chemical industrial products and machinery, including vehicles. Table 13.2 also reflects the increase over time in machinery and chemical industrial products, with a decline in textiles and household items. Within South Korea, the industrial structure has therefore developed to emphasise more knowledge-intensive and heavy industries. In addition, the country's trade insensitivity, industrial structure and extent of urbanisation were highest in 2014. It can therefore be observed that, in the case of South Korea, the main labour-intensive and knowledge-intensive industries require specific internationalisation strategies to extend the geographic scope of their firms' activities, given the changing industrial structure, linkages with the domestic wages level and degree of technological development.

The effect of the South Korean industrial change needs to be considered as part of South Korea's outward FDI strategy due to the complicated pattern of export products from South Korea. As South Korean labour-intensive industries faced pressure from rising wages in the mid-1980s, firms turned to FDI to replace the exporting activities. South Korean firms started to set up foreign affiliates to be close to their customers' local tastes or the production standards (see Kim, 2000). Simultaneously, the importance of high technology industries has substantially increased as major firms in

Table 13.2 South Korean Top 10 export commodities from 1980 to 2014. Source Calculated from Korea International Trade Association data

Rank	1980	1990	2000	2007	2014
1	Apparel	Apparel	Semiconductors	Automobiles	Semiconductors
2	Iron and Steel	Semiconductors	Automobiles	Semiconductors	Petroleum products
3	Ships	Shoes	Ships	Telecom. equipment	Automobiles
4	Synthetic fibre	Ships	Cell phones	Ships	Ships
5	Audio	Video equipment	Synthetic fibre	Petroleum products	Telecom. equipment
6	Tire	Iron & Steel	Auto parts	Displays	Auto parts
7	Wooden products	Synthetic fibre	Display	Auto parts	Displays
8	Miscellaneous goods	Computers	Telecom. equipment	Computer	Synthetic fibre
9	Semiconductors	Audio equipment	Computers	Visual instruments	Steel
10	Video	Automobiles	Colour televisions	Electronic parts	Electronic parts

leading export industries relocated some segments of their production lines into new export bases, into developing countries (most notably, China), while capital-intensive input production and core R&D activities are kept at home. On the other hand, the pattern of FDI and export to key developed markets such as the USA is mostly concentrated in high technology industries (Ahn, Lee, Lee, & Woo, 2005). The relocation of the industry to a host country thereby replaces South Korea's exports, which provides an example of how FDI activities may substitute for a home country's overall exports. South Korean MNEs might wish to seek comparative advantages through FDI. Thus, FDI could be an engine for industrial growth and international expansion for South Korea's industries, whether they are less developed, growing or mature. Benefitting from outward FDI flows by restructuring economic frameworks has become a major concern for emerging countries. On the other hand, we add here that the impact of a country's foreign affiliates on exports should be weighed over the reduction of the substitution of final exports and the creation of intermediate and parts exports.

Overall, we discussed how South Korean industrial change could be explained by the characteristics of Korean export-oriented industries and the relationship between FDI and exports. South Korea's tendency towards technological development can be seen as a core motive for the initial engagement of South Korean firms with foreign investment, as their economy rapidly developed. The country-specific advantages/firm-specific advantages logic (Rugman, 1981) explains that the technological or internationalisation behaviour gaps between two countries reflect different country-specific advantages and that MNEs internalise in order to upgrade their firm-specific advantages (see also Rugman & D'Cruz, 1993). We observed this in the case of South Korea where, as a result of the industrial changes from the 1980s to the present day (leading to an upgrade in status from emerging to advanced country), South Korean firms have moved away from labour- and resource-intensive assets to capital- and knowledge-intensive ones. Studies on the internationalisation of R&D suggest a range of motives for FDI in R&D, generally concerned with the relative technological strengths between home and host countries (Driffield & Love, 2007). In addition, the traditional labour/resource-intensive industries are influenced by the strategies of MNEs, as South Korean firms leverage their firm-specific assets in other emerging economies to lower the costs associated with wage levels or the attainment of natural resources.

South Korean Outward FDI Location Choices by Industry and FDI Motives

We therefore integrate ideas from Dunning and colleagues and Driffield and Love (2007) to discuss the nature of FDI location choices by industry and FDI motives over time in the case of South Korea. We explained earlier that South Korean MNEs have changed location choices in three ways: first they invested in developing countries such as China and Southeast Asia in order to amalgamate their existing firm-specific advantages with the host country's advantages (i.e. low wage economies) and concentrate their production capacities. South Korea has seen a gradual decrease of labour-intensive industries, whereby local firms have become more competitive in leading domestic and global export commodities for South Korean trade in the 1980s. Then, countries with an advanced economy and level of technology have succeeded in attracting subsidiaries of South Korean MNEs due to their high level of domestic capabilities and industrial infrastructure. Finally, we found that South Korean MNEs learned how to leverage their firm-specific advantages in other countries in order to obtain cost advantage, thus enabling product cost reduction and greater competitiveness in a third country.

Most importantly we found that motivations for FDI are not static as they change over time in parallel to development in the South Korean economic landscape. Table 13.3 provides a detailed overview of the outward FDI motives of South Korean MNEs. In this table, we can see three different paths, across different sub-sectors of the manufacturing industry. Most labour- and resource-intensive industries start their internationalisation programme by following the path of efficiency/natural resource-seeking and market-seeking FDI motives. Thus, in the initial stage of investment, in labour- and resource-intensive industries, the main motives of FDI are (i) to access cheap labour costs in developing countries, (ii) to access natural resources in resource-rich nations (which can be either developing and developed countries) or (iii) to access advanced technologies in developed countries. The three motives then converge as firms in most South Korean manufacturing industries internationalise for reasons of market-seeking.

We examined these findings in more detail by looking at the changing patterns of FDI motive ratios over time in three main sectors: apparel (Fig. 13.4), pharmaceutical (Fig. 13.5) and computer, video, sound and telecommunications equipment (Fig. 13.6). First, as indicated in Fig. 13.4, the South Korean apparel industry has been investing in foreign markets mainly for cost reduction from the 1980s (Stage 3 of the IDC). However, this changes to a market-seeking motive after 2010, even though the low

Table 13.3 South Korean outward FDI motives in developing and developed countries

Industries	FDI summary		Motives			
	Flow	Countries	Developed countries		Developing countries	
			3rd stage	4th stage	3rd stage	4th stage
10	3562	72	Resource	Resource Market	Resource Efficiency	Resource Market
11	833	13		Resource Market		Resource Efficiency Market
12	342	9		Market		Market
13	3431	69	Resource	Market	Resource Efficiency	Efficiency Market
14	3864	68	Resource	Market	Resource Efficiency	Efficiency Market
15	1467	34	Resource	Market	Efficiency	Efficiency Market
16	479	40	Resource	Market	Efficiency	Efficiency Market
17	537	34		Market	Resource Efficiency	Efficiency Market
18	83	25	Resource	Market	Resource Efficiency	Efficiency Market
19	926	27		Resource Market		Resource Market
20	7807	62	Resource	Market	Resource	Market
21	598	38	Technology	Technology Market	Resource	Market
22	4082	47	Resource	Market	Resource	Efficiency Market
23	2248	50	Resource	Market	Resource Efficiency	Efficiency Market
24	9121	58	Market	Market	Market	Market
25	3743	62	Technology	Market	Efficiency	Efficiency Market
26	26,792	71	Technology Market	Technology Market	Efficiency	Efficiency Market
27	1289	69	Technology	Technology Market	Efficiency	Efficiency Market
28	4047	62	Technology Market	Technology Market	Efficiency market	Efficiency Market
29	4598	62	Technology	Technology Market	Efficiency	Efficiency Market

(continued)

Table 13.3 (continued)

Industries	FDI summary		Motives			
	Flow	Countries	Developed countries		Developing countries	
			3rd stage	4th stage	3rd stage	4th stage
30	13,633	58	Technology Market	Technology Market	Efficiency	Efficiency Market
31	4595	39		Efficiency Market		Market
32	255	29	Resource	Market	Resource Efficiency	Efficiency Market
33	1790	70	Resource	Technology Market	Resource Efficiency	Efficiency Market
Total man- ufacture	100,135	155	Resource Technology	Technology Market	Resource Efficiency	Efficiency Market

Note 10. Manufacture of food products 11. Manufacture of beverages 12. Manufacture of tobacco products 13. Manufacture of textiles 14. Manufacture of wearing apparel 15. Manufacture of leather and related products 16. Manufacture of wood and of products of wood and cork, except furniture 17. Manufacture of paper and paper products 18. Printing and reproduction of recorded media 19. Manufacture of coke and refined petroleum products 20. Manufacture of chemicals and chemical products 21. Manufacture of basic pharmaceutical products and pharmaceutical preparations 22. Manufacture of rubber and plastics products 23. Manufacture of other non-metallic mineral products 24. Manufacture of basic metals 25. Manufacture of fabricated metal products, except machinery and equipment 26. Manufacture of computer, video, sound and telecommunication equipment 27. Medical, precision and optical instruments 28. Manufacture of electrical equipment 29. Manufacture of machinery and equipment n.e.c 30. Manufacture of motor vehicles, trailers and semi-trailers 31. Manufacture of other transport equipment 32. Manufacture of furniture 33. Other manufacturing

wage FDI ratio remains very high. Thus, the major motives of initial FDI are resource-seeking and efficiency-seeking (i.e. low wage). In Stage 4 of the IDC (i.e. after 2001), the trend of FDI changed to efficiency-seeking and market-seeking motives. Similar patterns can be seen in most of the resource- and labour-intensive industries (Table 13.3: as for industries 10, 13, 14, 15, 16, 17, 18, 19, 22, 23, 24, 32 and 33). When looking at some of the knowledge-intensive industries (Table 13.3: 21, 25 and 27), we observed that when South Korean firms initially invested abroad (i.e. before 2001), the primary FDI motive was to gain access to advanced technology abroad. Figure 13.5 shows that the internationalisation motives of the firms that manufacture basic pharmaceutical products and preparations changed from technology-seeking to both technology-seeking and market-seeking FDI motives. South Korean leading industries after 2001 show a change towards efficiency and market-seeking FDI motives in developing countries, and technology-seeking

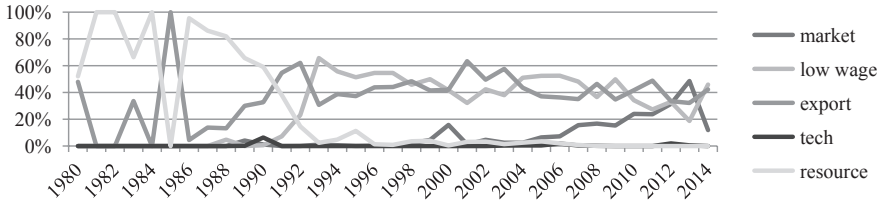


Fig. 13.4 Korean outward FDI ratio of wearing apparel from 1980 to 2014 by motives. *Source* Calculated from Korean Export-Import Bank data

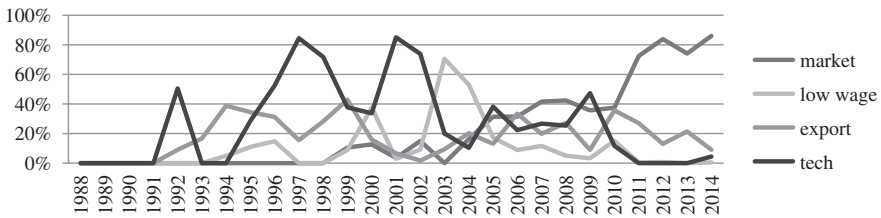


Fig. 13.5 Korean outward FDI ratio of manufacture of basic pharmaceutical products and pharmaceutical preparations from 1980 to 2014 by motives. *Source* calculated from Korean Export-Import Bank data

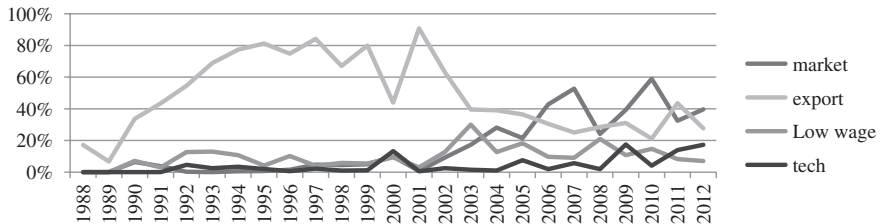


Fig. 13.6 Korean outward FDI ratio of computer, video, sound and telecommunication equipment from 1980 to 2014 by motives. *Source* Calculated from Korean Export-Import Bank data

and market-seeking motives in developed countries, including electronics and electrical equipment (Table 13.3: 26 and 28), chemicals and chemical products (20), machinery (29) and automobiles (30).

Hence, South Korean firms are still making labour-intensive products such as textiles, but they are not produced in South Korea. South Korean firms used efficiency-seeking FDI to offshore them. The figures implicitly reflect the relationship between FDI and trade. However, as already illustrated in Tables 13.2 and 13.3, the total volume of high- and medium-high- technology industries has substantially increased for outward

FDI as well as for exports. As for high-technology industries, South Korean FDI has actually induced an increase in export trade. From this, it can be concluded that the motives of South Korean outward FDI in the host locations chosen have played a significant role in the structural changes of the economy.

In Fig. 13.6, we specifically examine the manufacture of computers, videos, sound and telecommunication equipment, which is one of the leading industries in South Korea. Here, we see a different pattern of investment as compared to the apparel (Fig. 13.4) and pharmaceutical industries (Fig. 13.5). The industry has changed its focus from exporting to undertaking market-seeking FDI. There has been some low wage and technology-seeking FDI, but these numbers are not significant before 2001. After 2001, efficiency-seeking FDI existed in developing countries and strategic asset-seeking FDI in developed countries. Examples provided here based on the case of South Korea confirm our proposition that FDI location decisions are influenced by an industry's level of technical competence as compared to that observed in the host country. Analysing South Korean FDI by industry, the different patterns of FDI motives become more distinctive. In the case of a labour-intensive industry such as apparel, South Korean firms, in Stage 3 of the IDC, were motivated by reasons of cost competitiveness in developed countries and technological advances in developing countries. Therefore, the main business strategy for South Korean apparel firms was to obtain cost advantages. After 2001 (Stage 4 of the IDC), the industry's main FDI motive was efficiency-seeking. On the other hand, South Korean knowledge-intensive industries, such as the manufacturing of pharmaceutical products, have continued to seek and obtain strategic asset advantages in developed countries from Stage 3 of the IDC. Hence, the initial position of South Korean industries and South Korean firms' FDI location decisions are influenced by the technological differences that existed between South Korea and the host countries. Like previous studies (Narula & Guimón, 2010), we pay tribute to the heterogeneity of FDI motivations and industry contexts when looking at the relationship between FDI and IDC progression.

Discussion and Conclusions

This chapter invited reflections on how the motives for FDI, the location choices and (implicitly) the investment development paths of a country may evolve over time. We capture not only the quantity of FDI but also the quality of FDI (Narula & Guimón, 2010) by taking into account, if and how the investment strategies of South Korea MNEs reflected the country's

aspirations and investment paths. Analysing South Korean FDI motives from the perspectives of where they were located over time, allowed us to develop further insights on the dynamic nature of the relationship between the character of the sector and the host country's characteristics (Boudier-Bensebaa, 2008). South Korean MNEs' motives for FDI are in similar vein to asset exploitation and asset exploration (Buckley et al., 2007; Makino, Lau, & Yeh, 2002). In the industrial analysis, we showed that South Korean outward FDI has developed to combine the paths between different industries: the path of knowledge-intensive industries for strategic asset-seeking and market-seeking motives, and the path of resource/labour-intensive industries for natural resource/efficiency-seeking motives. This therefore lends itself to re-conceptualisation of the different paths of a country's outward FDI also across different industry categories.

In line with the propositions of Dunning and colleagues, South Korea has manufacturing sub-industries in which South Korea's comparative ownership advantages are strong but their comparative location advantages are relatively weaker. Based on our diagram in Fig. 13.3, South Korean outward FDI shows two different paths, which reflects the country-specific characteristics of South Korea and reflects the changes in its industrial structure over time. Therefore, the impact of the motives of a firm to invest in a particular location, to its advantage, may be matched to the home environment because of advantages that are specific to that home market location. When the technological gap between countries is too large, the possibility for technology or knowledge transfer is low because the local market lacks the absorptive capacity necessary to learn (Bhaumik et al., 2016; Narula & Jormanainen, 2008; Narula & Guimón, 2010). Hence, receiving the type of FDI that has potential for spillover is important. Bhaumik et al. (2016) highlight not only that the choice of location in the host country will be influenced by the firm-specific advantages of EMNEs but that the findings pose a real problem for the wide generalisation about the access to technology-based motives for the internationalisation of EMNEs. The authors explain that not all EMNEs can leverage country-specific advantages equally, in that EMNEs are better than non-MNE domestic partners in terms of exploiting their country-specific advantages. This implies symmetrical interests between emerging and developed market MNEs. The function of technological capacity from EMNEs and the technology gap between host and home countries remain key issues, which can remain neglected if we overestimate the positive role of knowledge and technology spillovers (Crisuolo & Narula, 2008; Narula, 2003).

Overall, the patterns of South Korean FDI across different industries show that the natural resource-seeking and efficiency-seeking FDI types, in which South Korean MNEs leverage their firm-specific assets in other emerging economies for cost reductions, appear to be the most attractive options. We see the impact of this cost advantage when South Korean MNEs locate their production facilities in countries with lower labour costs rather than domestically. Meanwhile, strategic asset-seeking FDI in other geographical locations with advanced knowledge environments may be needed not only to gain knowledge of their technological developments, but also to seek new markets. Specifically, South Korean industrial restructure from labour-intensive industries to heavy/knowledge-intensive industries has forced South Korean firms to seek relatively cheaper labour markets to reduce production costs (including the cost of labour). As the IDC is completed, local production in low value activities is replaced by foreign production, and the strategic asset-seeking benefits of chosen locations have increased the competitiveness of South Korean firms, leading these EMNEs to further upgrade their assets in developed host country locations.

A framework on FDI from emerging countries needs to be rethought to reflect the weak position of EMNEs and the changing nature of FDI motives as a country develops. South Korean economic development shows its own sub-patterns of outward FDI varying with location advantages in developed and developing countries.

Notes

1. In Dunning's investment development cycle (1981), the author categorises four stages of investment development stages. However, due to availability of data, we focus more in our discussion on Stage 3 (increasing outward FDI) and Stage 4 (more outward FDI than inward FDI (net Outward FDI is positive)).
2. The ratios of technology-seeking FDI in developing countries and that of efficiency-seeking in developed countries are less than 1%, respectively.

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14

Does It Pay to Be International? Evidence from Industrial District Firms

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Introduction

Many authors have entered the debate on internationalisation processes of manufacturing activities from various perspectives in recent years (Bausch & Krist, 2007; Dunning, 1979; Kotabe & Mudambi, 2009; Tate, Ellram, Schoenherr, & Petersen, 2014). Scholars stress the need for firms to compete in global markets to reduce costs (the efficiency perspective), gain access to knowledge (explorative strategies) and develop new foreign markets (exploitation paths) (Contractor, Kumar, Kundu, & Pedersen, 2010; Hätönen, 2009). Within the theoretical debate on offshoring, a new strand of literature concerns back-shoring or re-shoring trends (Bailey & De Propriis, 2014; Bals, Daum, & Tate, 2015). Despite the benefits of

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productive internationalisation, being a multinational also offers firms the advantage of returning to their domestic markets and fostering a presence in their home countries (Arlbjørn & Mikkelsen, 2014; Kinkel & Maloca, 2009). For many reasons, back-shoring is usually linked to more effective management of innovation processes due to the co-location of research and development (R&D) and production; to the need for more efficient customer relationship management and speedier reactions to market requests; and to exploitation of country-of-origin effects (Fratocchi et al., 2016).

This framework bears asking if it really pays to be international amid the emerging re-definition of location choices concerning manufacturing activities. This topic is analysed by approaching firms in industrial districts (IDs) as local manufacturing systems, which is a specific model of organisation of economic activity (Becattini, Bellandi, & De Propris, 2009; Belussi, 2015). On the one hand, large multinational enterprises (MNEs) exploited IDs as new forms of local development in developing and emerging countries (Bellandi & Lombardi, 2012) or as manufacturing platforms to benefit from cheap labour costs and manufacturing specialisation (Bair & Gereffi, 2001; Corredoira & McDermott, 2014). On the other hand, following MNEs' internationalisation strategies, small and medium-sized enterprises (SMEs) from IDs of advanced countries have progressively offshored production processes in recent years due to saturation in their home markets and to pursue cost-saving strategies (Chiarvesio, Di Maria, & Micelli, 2010). This also had implications for the local configuration of supply chains (Camuffo & Grandinetti, 2011) and the governance of global value chains (Crestanello & Tattara, 2011).

The aim of the chapter is to understand the relationship between firm performance and the location of manufacturing activities. In the context of back-shoring and manufacturing revamp, assumptions that led to the internationalisation of manufacturing activities may be reconsidered, and local production could be a competitive resource with positive impacts on firm performance (De Treville, Ketokivi, & Singhal, 2017). To address this research question, this study analyses the performance of ID firms that have internationalised manufacturing production and those that produce domestically.

Theoretical Framework

Offshoring, Manufacturing, and Organisation of the Value Chain

Firms' offshoring decisions have received increasing attention over the years and are the subject of analysis from multiple perspectives. The literature on foreign direct investments (FDIs) considers the motivation for and the impact of those investments on firms' internationalisation strategies. Regarding motivation, the eclectic paradigm identifies three main internationalisation processes: cost-driven (focusing on efficiency), resource-based and market-seeking internationalisation (Dunning, 1979). Other studies stress the knowledge implications of the internationalisation process, exploring the opportunities for the firm to gather new knowledge from different locations and to organise knowledge flows in different contexts within its organisational borders (headquarters–subsidiaries) (Cantwell, 2004) and with suppliers (Maskell, Pedersen, Petersen, & Dick-Nielsen, 2007).

Recent studies on offshoring describe the dynamic scenario the firm faces when organising its value chain activities at the international level. According to Contractor, Kumar, Kundu, and Pedersen (2010), offshoring and outsourcing decisions are interconnected: the firm structures its internationalisation process while viewing the value chain from a fine-grained perspective, in other words, taking into account single activities rather than aggregated functions (i.e. operations). Additionally, offshoring and specifically, outsourcing decisions attract great attention due to their increasing relevance to firms, especially in the context of efficiency-driven opportunities related to low-cost countries (Kusaba, Moser, & Rodrigues, 2011).

In the literature on upstream internationalisation based on the global value chain approach, Mudambi's (2008) simple but very powerful smile model has become a popular reference. Mudambi (2008) proposes the smile curve of value creation to investigate the location strategies of value chain activities and to explain the rationale for offshore manufacturing, especially in developing countries and emerging economies. The increased offshoring by MNEs in low-cost countries that characterises the globalisation process and gives rise to new forms of governance of global value chains (Contractor et al., 2010; Gereffi, Humphrey, & Sturgeon, 2005) is captured by the growing international trade flows between advanced and emerging countries and by the growing total number of FDIs made by Western companies (UNCTAD, 2016). This relocation trend, however, has not only reduced

the scale of manufacturing firms and the number of employees in manufacturing but has also weakened the national and local competencies and the industrial commons of advanced countries (Pisano & Shih, 2009).

There is no general consensus on how the firm can disaggregate its value chains and determine the location of its component production while maintaining its competitive advantage over time (Contractor et al., 2010). There is no best way to structure the value chain at the global level (Mudambi & Venzin, 2010) due to the firm's resources, the risks and the uncertainty of the location choice (transaction costs) and the knowledge management implications.

Recently, scholars stress the advantages of controlling manufacturing processes through insourcing decisions and through co-location of R&D and manufacturing, benefiting from geographical (and cognitive) proximity (Alcácer & Delgado, 2013; Buciuni & Finotto, 2016). Studies on backshoring emphasise the multiple drivers pushing Western firms to relocate their manufacturing activities closer to or within their domestic countries: costs, quality, time, flexibility, skills, knowledge, risks, market (i.e. the made-in effect) and other factors (Fratocchi et al., 2016; Stentoft, Olhager, Heikkilä, & Thoms, 2016). Some companies are not satisfied by earlier offshoring decisions (Bals et al., 2015; Lewin & Volberda, 2011) due to the quality and performance of suppliers and due to various competitive reactions. Similarly, the value of manufacturing may be linked to the tacit knowledge and inimitable, locally based capabilities (i.e. craftsmanship in IDs) that push firms to locate where such manufacturing competencies are available (Bettiol & Micelli, 2014). Market-driven motivations are also crucial. For instance, in the case of country-of-origin effect, a growing number of consumers explicitly compare the countries of design and production (Hamzaoui & Merunka, 2006; Moradlou & Backhouse, 2016).

These research streams and the ongoing debate on the future of manufacturing, particularly in the context of advanced countries (De Treville et al., 2017), open new perspectives on the relationship between manufacturing internationalisation and firm performance. Relocation of manufacturing activities in advanced countries, especially in home countries, is emerging as a viable, competitive solution for firms (Ketokivi, Turkulainen, Seppälä, Rouvinen, & Ali-Yrkkö, 2017), in addition to or in substitution of offshoring in low-cost countries, which were the principal offshoring sites in recent decades (Cattaneo, Gereffi, & Staritz, 2010; Feenstra, 1998). In this scenario, further knowledge is needed to better understand how the organisation of manufacturing activities between the local and the global is linked to firm performance.

Local and Global Location Strategies of Industrial District Firms

The development of this debate is especially interesting from the perspective of firms in IDs. IDs are characterised by high levels of manufacturing specialisation by SMEs operating in selected industries. In selected and well-limited geographical areas, geographical proximity creates positive agglomeration externalities, such as knowledge spillover and labour market pooling (Becattini, Bellandi, & De Propris, 2009). ID firms benefit from agglomeration economies to manage their manufacturing processes.

Since the 1990s, many IDs have undertaken downstream and upstream internationalisation (Becchetti, De Panizza, & Oropallo, 2007; Camuffo & Grandinetti, 2011; Chiarvesio et al., 2010; Pla-Barber & Puig, 2009). The internationalisation of manufacturing activities through the offshoring strategies of leading ID firms in advanced countries modifies the internal structure of IDs as local manufacturing systems, affecting the organisation of the local supply chain *vis-à-vis* the global supply chain (Corò & Grandinetti, 1999; De Marchi & Grandinetti, 2014). In this scenario, the ID firm's location of manufacturing activities within the district is not taken for granted but results from a strategic process in which the firm's strategic orientation influences the steps of the value chains located within the ID (and domestically) or internationally, as well as the related form of governance (Brancati, Brancati, & Maresca, 2017; Chiarvesio, Di Maria, & Micelli, 2013). On the one hand, ID firms can benefit from new knowledge related to international processes about innovation opportunities linked to foreign sources (Belussi & Sedita, 2009; Morrison, 2008). On the other hand, upstream internationalisation may weaken local innovation and manufacturing capabilities in the case of progressive substitution of local and foreign suppliers (Camuffo & Grandinetti, 2011).

In this context, the aim of this study is to explore the link between ID firms' performance and location (domestic or international) of manufacturing activities. The main research question, therefore, is whether internationalisation of production pays off in performance, given the debate on the advantages and shortcomings of this strategy.

Data and Methodology

This research focuses on eight IDs in North-eastern Italy (in the regions of Veneto and Friuli Venezia Giulia) specialising in the so-called made-in-Italy industries (furniture, mechanics and fashion): the Treviso, Pordenone and

Manzano (Udine) furniture districts, the mechanics districts in Vicenza and Pordenone, the sports system in Montebelluna, the shoes district in Riviera del Brenta and the eyewear district in Belluno. These two regions have a high concentration of IDs, and the selected IDs represent important areas of specialisation in their industries and have strong relevance at both the national and international levels.

The firm population is extracted from Bureau van Dijk's AIDA database by selecting companies in the ID municipalities that perform the appropriate activities (according to the Italian Institute of Statistics' classification). The sample includes the firms in each district with a turnover of more than 1 million euros, yielding a final population of 1,002 firms. A survey was conducted between April and June 2016 by computer-assisted telephone interviewing of company operation managers, entrepreneurs or employees in charge of production management. The final number of respondents is 259 (25.8% response rate), with firms equally distributed among the three sectors and representative of the entire population: 33.2% in the furniture industry, 36.3% in the mechanics industry and 30.5% in fashion (eyewear, sports system and shoes). The survey is divided into three parts: (1) general information about the firm; (2) the organisation of the firm's production and the location of its suppliers and plants; (3) the firm's back-shoring processes and business relationships with emerging countries. The firms' balance sheets are extracted from the AIDA–Bureau van Dijk database to obtain data on how firms performed from 2011 to 2015.

An econometric model is developed using ordinary least squares (OLS) regression models with robust standard errors. The dependent variable is the *return on assets* (ROA) in 2015 (as a robustness check, the mean of ROA for 2011–2015 is used, and the results do not vary). ROA is chosen instead of return on equity or 'Tobin's q ' as it is used more frequently in internationalisation studies and is less sensitive to the firm's capital structure (Camisón & Villar-López, 2010; Majocchi & Zucchella, 2003; Miller, Lavie, & Delios, 2016).

The independent variables are a set of indicators related to the firm's organisation of production, geography (local vs. international) and overall strategy. The first variable considered is related to the level of the internalisation of the firm's activities. As a proxy for the firm's *vertical integration*, the number of activities performed inside the firm is used (without taking into account if the same activities are also outsourced to suppliers). Not all the activities of each district are considered; instead, a more fine-grained approach is adopted, splitting the value chain into four production activities (the same across industries): (1) production of components, (2) production of semi-finished goods, (3) production of high-quality products (i.e. luxury eyewear) and

(4) production of low-quality products (i.e. cheap furniture). Vertical integration is represented by a continuous variable that takes the value of zero if the firm outsources all the activities considered, four if it performs all the activities internally, and one–three if the firm performs one to three of the activities (mix).

The same four activities can be performed either domestically or abroad (offshoring decision). This leads to the two sets of geography-related variables: the number of activities done domestically (*Domestic activities*) and the number done abroad (*Foreign activities*) whether internally within the firm or externally through suppliers. To capture the degree of internationalisation, suppliers' location is also a variable. Four dummy variables consider the location of firm' suppliers: one dummy counts 1 if the firm has suppliers located in the ID (*District suppliers*) 0 otherwise; one dummy counts 1 if the firm has suppliers located in the same region as the ID (*Regional suppliers*) 0 otherwise; one dummy counts 1 if the firm has suppliers located in Italy (*Italian suppliers*) 0 otherwise and the last dummy counts 1 if the firm has suppliers located in other countries (*Foreign suppliers*). The four dummies are not mutually exclusive, in the way that the same firm could have more than one suppliers' location. Finally, we add an additional control dummy variable for outsourcing that takes the value of one, if the firm outsources at least one activity, and zero otherwise (Antonietti, 2016).

To mitigate potential omitted variable bias, a set of controls is added: the ratio of foreign sales to total sales (FSTS), four dummy variables for innovation (product, process, organisation and marketing), a dummy for firm investment in communication strategies and firm age and size (number of employees). A set of dummy variables is also introduced to consider industry and province fixed effects. Table 14.1 shows the variables used in this study and provides details about the measures. Summary statistics and the correlation matrix are included in the Appendix.

Results

Before discussing the econometric analysis, the internationalisation strategies adopted by the firms are reviewed. The sample is representative of the typical structure of IDs: the firms are mostly SMEs, with an average turnover of 9.8 million euros and 44 employees on average in 2015. Despite the small firm size, as evidenced in Table 14.2, the export intensity is quite high, with 46% of turnover (on average) realised through foreign markets (FSTS). The firms obtain these results primarily by investing in product quality and innovation, the two most important drivers of competitive advantages identified by the respondents.

Table 14.1 Variable description. *Source* Author's own

Variable	Measure	Type
<i>Dependent variable</i>		
ROA	Return on assets in 2015	Continuous
<i>Independent variables</i>		
Vertical integration	Number of activities performed internally by the firm independent of their geographic location considering 4 activities: production of components, production of semi-finished products, production of high-quality finished products and production of low-quality finished products	Continuous (0–4)
Outsourcing	1 if at least one activity is outsourced, 0 otherwise	Dichotomous
<i>Foreign activities</i>		
F_components	Activities performed <i>abroad</i> (both inside and outside the firm):	Dichotomous
F_Semi-finished		Dichotomous
F_HighQ	– components	Dichotomous
F_LowQ	– semi-finished products	
	– high-quality finished products	
	– low-quality finished products	
<i>Domestic activities</i>		
D_components	Activities performed <i>domestically</i> (both inside and outside the firm):	Dichotomous
D_Semi-finished		Dichotomous
D_HighQ	– components	Dichotomous
D_LowQ	– semi-finished products	
	– high-quality finished products	
	– low-quality finished products	
District suppliers	1 if a firm has at least one district supplier, 0 otherwise	Dichotomous
Regional suppliers	1 if a firm has at least one regional supplier, 0 otherwise	Dichotomous
Italian suppliers	1 if a firm has at least one Italian supplier, otherwise	Dichotomous
Foreign suppliers	1 if a firm has at least one foreign supplier, 0 otherwise	Dichotomous
<i>Controls</i>		
FSTS	Foreign sales over total sales	Continuous (0–1)
Product innovation	Product or service innovations	Dichotomous
Process innovation	Innovation in logistics and distribution	Dichotomous

(continued)

Table 14.1 (continued)

Variable	Measure	Type
Organisational innovation	Innovation in lean production and supply chain management	Dichotomous
Marketing innovation	Innovation in prices and packaging	Dichotomous
Communication investments	Investments in advertising, public relations and sponsorships	Dichotomous
Size	Firm size, measured as total number of employees	Continuous
Age	ln of firm age (2015–foundation year)	Continuous
District	8 dummies for belonging to each district under investigation	Dichotomous
Province	6 dummies for belonging to each province where the industrial district is located	Dichotomous

Turning to the organisation of production, outsourcing is a common practice: 84.6% of the companies outsource at least some activities in the production process, and another four percent outsources all production activities. Considering the geography of supplier relationships, 39.4% of the companies have suppliers abroad. Regarding the overall supplier portfolio (not shown in Table 14.2), 58.7% of the suppliers are located in the ID, 18.6% in the region of the ID, 13.3% in Italy and 9.3% abroad. The foreign suppliers are mostly located in the European Union (56.5% of firms with foreign suppliers report that they are present there), Eastern Europe (47.5%) and the Far East (40.3%). In addition to foreign suppliers, approximately seven percent age of the firms also have productive FDI in Eastern Europe (50%), the Far East (31.6%), South America (21.1%), the European Union (11.1%), the USA and Canada (10.5%).

When did these internationalisation strategies take place, and what are the future trends? Out of all the companies with international production, 41% started global sourcing before 2000, and another 32.3% decided on global sourcing between 2000 and 2007. Most FDIs were undertaken after 2000. Internationalisation of production appears to be a persistent and quite stable trend: approximately 72% of the firms have not modified the international organisation of their value chains in recent years, and only five companies operating in emerging countries have back-shored some activities. In fact, out of the 59 companies, only 17 have considered back-shoring

Table 14.2 Summary statistics

		Obs	Mean	S.D.	Min	Max
[1]	ROA15	253	4.91	9.60	-64.24	42.61
[2]	Vertical integration	258	2.45	1.03	0.00	4.00
[3]	Outsourcing	258	0.85	0.36	0.00	1.00
[4]	D_Components	258	0.90	0.29	0.00	1.00
[5]	D_Semi-finished	258	0.91	0.28	0.00	1.00
[6]	D_HighQ	258	0.93	0.26	0.00	1.00
[7]	D_LowQ	258	0.64	0.48	0.00	1.00
[8]	F_Components	258	0.15	0.36	0.00	1.00
[9]	F_Semi-finished	258	0.14	0.35	0.00	1.00
[10]	F_HighQ	258	0.03	0.18	0.00	1.00
[11]	F_LowQ	258	0.01	0.12	0.00	1.00
[12]	District suppliers	258	0.87	0.34	0.00	1.00
[13]	Regional suppliers	258	0.59	0.49	0.00	1.00
[14]	Italian suppliers	258	0.5	0.50	0.00	1.00
[15]	Foreign suppliers	258	0.39	0.49	0.00	1.00
[16]	FSTS	251	0.46	0.33	0.00	1.00
[17]	Product innovation	258	0.83	0.37	0.00	1.00
[18]	Process innovation	258	0.68	0.46	0.00	1.00
[19]	Organisational innovation	258	0.69	0.46	0.00	1.00
[20]	Marketing innovation	258	0.57	0.49	0.00	1.00
[21]	Communication investments	258	0.37	0.48	0.00	1.00
[22]	Size	254	49.63	115.76	3.00	1.54
[23]	Age	254	32.27	21.02	2.00	189.00

strategies for market reasons (e.g. to produce a 100% made-in-Italy product or to improve customer service) or to overcome a lack of competence among suppliers. Most have not planned any such actions.

The correlation matrix reported in Table 14.3 shows relatively mild correlations among the variables used in the analysis, thus reassuring on possible multi-collinearity problems, while 14.4 presents the econometric relations between the location strategies and firm performance, controlling for a number of firms, locations and industry characteristics.

Column 1 includes the variables related to the location of activities in the domestic market. In this specification, the index for vertical integration has a negative and statistically significant coefficient, in accordance with the literature on ID and supporting the effect of vertical disintegration on firm competitiveness. The coefficient associated with outsourcing is negative and

Table 14.3 Correlation matrix

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]		
[1]	1.00																								
[2]	-0.06	1.00																							
[3]	-0.08	-0.16	1.00																						
[4]	0.01	0.37	0.15	1.00																					
[5]	0.06	0.36	-0.01	0.46	1.00																				
[6]	0.04	0.32	0.29	0.46	0.39	1.00																			
[7]	-0.04	-0.01	0.25	0.29	0.29	0.19	1.00																		
[8]	-0.09	-0.17	0.18	-0.12	-0.14	-0.05	0.12	1.00																	
[9]	-0.03	-0.21	0.17	-0.09	-0.08	-0.01	0.07	0.39	1.00																
[10]	-0.04	-0.12	0.08	-0.15	-0.16	-0.11	-0.03	0.21	0.29	1.00															
[11]	0.12	-0.02	-0.03	-0.17	-0.07	-0.08	-0.04	0.12	0.22	0.31	1.00														
[12]	-0.04	0.20	-0.17	0.29	0.25	0.07	0.15	-0.19	-0.01	-0.05	-0.04	1.00													
[13]	0.08	0.00	-0.36	-0.01	0.17	-0.03	0.05	0.07	0.04	0.03	0.04	-0.02	1.00												
[14]	0.03	0.01	-0.43	-0.12	0.08	-0.10	0.01	0.12	0.09	0.11	0.06	-0.09	0.58	1.00											
[15]	0.02	-0.05	-0.53	-0.19	-0.09	-0.19	-0.11	0.52	0.47	0.23	0.15	0.01	0.32	0.43	1.00										
[16]	0.05	-0.03	0.12	0.05	0.04	0.09	0.11	0.18	0.22	0.09	0.07	0.07	0.03	0.02	0.14	1.00									
[17]	-0.07	0.01	-0.01	0.06	-0.06	-0.05	0.07	0.04	0.09	0.08	-0.03	-0.02	0.07	0.05	0.06	0.18	1.00								
[18]	0.08	0.17	-0.06	0.11	0.06	0.09	-0.05	0.03	0.03	-0.05	0.02	0.05	0.05	0.03	0.06	0.12	0.34	1.00							
[19]	-0.03	0.08	0.01	0.09	0.09	0.09	0.03	-0.02	0.03	0.08	0.02	0.08	0.03	0.02	-0.07	0.02	0.21	0.2	1.00						
[20]	-0.00	-0.01	-0.06	0.01	-0.04	-0.00	0.02	0.14	0.14	0.08	0.04	0.01	0.09	0.06	0.18	0.13	0.27	0.25	0.35	1.00					
[21]	0.14	-0.03	0.06	0.03	0.03	0.06	0.04	0.15	0.18	0.21	0.10	0.08	0.05	-0.01	0.14	0.40	0.17	0.10	0.08	0.38	1.00				
[22]	0.07	0.03	0.03	-0.19	0.02	0.02	0.05	-0.02	0.16	0.33	0.49	0.03	0.05	0.06	0.08	0.07	0.03	0.05	0.04	0.06	0.09	1.00			
[23]	-0.05	0.01	-0.03	0.03	0.13	0.02	0.06	0.05	0.05	0.07	0.02	0.21	0.11	0.05	0.08	0.06	0.04	0.06	0.06	-0.06	0.05	0.07	1.00		

highly statistically significant, and outsourcing of manufacturing activities is associated with approximately 6% lower ROA. This result is quite counter-intuitive and needs further analysis. It could indicate that outsourcing contributes to deteriorating performance, but it cannot be excluded that it may reflect a reverse causality so that less profitable firms self-select outsourcing. Future research should investigate these causal relations.

The variables for domestic suppliers and the dummies for domestic activities are not significant, but the impact of foreign suppliers is negative and statistically significant. Supplying part of production abroad increases the transaction and coordination cost the firm bears and can explain the negative link with performance among ID firms. However, as noted, it is also possible that this result reflects self-selection. Concerning firms' characteristics, process innovation and communication investments are positive and highly significant, revealing their importance to firms' profitability. In column two of Table 14.4, the type of activities carried out abroad is controlled for. Also, for this specification, vertical integration is negative and highly significant, although the coefficients associated with outsourcing and the share of foreign suppliers become insignificant. This result is consistent with the idea that ID firms mostly carry out foreign operations through outsourcing contracts rather than internalisation. The international production of components and high-quality finished products seems to negatively affect firms' ROA.

More interesting are the results reported in column three, which includes all the variables and activities. Vertical integration consistently has a negative association with ROA, as in previous models. Some differences concerning foreign activities arise. The international production of components and high-quality finished products negatively affects ROA, as in the previous model, while international production of low-quality products is associated with an approximately seven percent increase in firms' ROA. This result suggests that low-quality and cheap products are well suited to be located abroad, but this is not the case for products related to ID competencies and manufacturing specialisation, including made-in-Italy products.

Discussion and Conclusion

This chapter contributes to the debate on offshoring and back-shoring by exploring how the location (at home or abroad) of different activities along the value chain affects the performance of SMEs from IDs in advanced countries. Studies on internationalisation processes document different paths and open new questions about the relationships between firm performances.

Table 14.4 Location of activities along the value chain and firm performance by ordinary least squares regression. *Source* Author's own

<i>Dependent variable:</i> return on assets	(1)	(2)	(3)
<i>Independent variables</i>			
Vertical integration	-1.68** [-2.37]	-1.49** [-2.38]	-1.69** [-2.44]
Outsourcing	-5.90*** [-2.65]	0.68 [0.20]	-0.08 [-0.02]
<i>Foreign activities</i>			
F_Components		-6.51** [-2.48]	-6.34** [-2.30]
F_Semi-finished		-2.03 [-0.88]	-1.99 [-0.85]
F_HighQ		-6.81** [-2.51]	-6.24** [-2.24]
F_LowQ		7.59 [1.55]	7.84* [1.71]
<i>Domestic activities</i>			
D_Components	0.65 [0.29]		0.15 [0.06]
D_Semi-finished	1.62 [0.68]		0.99 [0.43]
D_HighQ	2.29 [1.17]		1.61 [0.82]
D_LowQ	-0.32 [-0.17]		0.10 [0.05]
District suppliers	-0.47 [-0.20]	-0.356 [-0.18]	-0.72 [-0.30]
Regional suppliers	0.29 [0.20]	0.29 [0.20]	0.09 [0.07]
Italian suppliers	1.55 [1.02]	2.13 [1.32]	2.01 [1.25]
Foreign suppliers	-3.56** [-2.06]	1.970 [0.64]	1.83 [0.58]
Foreign sales on total sales	0.01 [0.01]	-0.52 [-0.25]	-0.57 [-0.27]
Product innovation	-2.55 [-1.49]	-2.36 [-1.46]	-2.26 [-1.28]

(continued)

Table 14.4 (continued)

<i>Dependent variable:</i> return on assets	(1)	(2)	(3)
Process innovation	2.73* [1.87]	2.57* [1.76]	2.56* [1.81]
Organisational innovation	-0.79 [-0.47]	0.01 [0.01]	-0.14 [-0.08]
Marketing innovation	-1.03 [-0.50]	-1.15 [-0.57]	-1.07 [-0.51]
Communication investments	3.03* [1.73]	3.58** [2.03]	3.49* [1.95]
Size	0.00 [1.62]	0.00 [0.19]	0.00 [0.15]
Age	-0.03 [-1.09]	-0.02 [-0.74]	-0.02 [-0.79]
Constant	17.15*** [2.77]	12.98** [2.00]	12.19* [1.81]
Observations	242	242	242
R-squared	0.19	0.22	0.22
Industry FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes

p-values based on the robust standard errors are in squared brackets

p* < 0.10, *p* < 0.05, ****p* < 0.01

In particular, a new research stream on back-shoring is enriching the debate on the gains for the firm to locate production activities abroad or to keep them in (bring them back to) the home country. Recent policy measures in major developed economies support re-internalising and keeping production activities in the home country. This chapter specifically investigates whether upstream internationalisation is rewarding for firms, especially for SMEs, in the context of Italian IDs.

The overview of ID firms' internationalisation strategies shows that, despite the emphasis on the opportunity to offshore production, the firms in this research, even leading firms, have never completely abandoned the local context. To the contrary, ID firms demonstrate the capability to balance cost savings with the search for manufacturing quality. Analysing how the process took place over time confirms that these firms seem to have achieved a balanced configuration of local and global production activities. Most companies did internationalise production in the past but have also invested in

domestic manufacturing activities in the value chains. In most cases, firms have not changed this strategy over time; indeed, they have conducted limited back-shoring.

Given this picture, the aim of this research is to understand how these strategies are related to economic performance. More specifically, the objective is to explore the impact of the internationalisation of production on firm performance. The results show that the international production of components is not associated with higher profitability (as measured by ROA) from high-quality goods but could be a profitable strategy for low-quality goods. These results support a more complex approach to manufacturing and the location of production activities by overcoming the idea that manufacturing makes a limited contribution to value generation and involves mainly low-cost countries (the smile curve). These outcomes answer the recent calls for research to understand not only whether manufacturing matters but also, in which manufacturing advanced countries should specialise (De Treville et al., 2017). Moreover, from a managerial perspective, the analysis suggests that—at least in industries related to made-in-Italy products—firms have to carefully consider offshoring strategies based on their market positioning and innovation strategy.

The results also contribute to the literature on IDs, showing that IDs have not disappeared over these years but instead demonstrate a high level of resilience, although not homogeneously and with different levels of performance (Belussi, 2015; Boschma, 2015). These results are in line with some evidence from more qualitative studies done by the authors (Bettiol, Chiarvesio, Di Maria, & Micelli, 2018, forthcoming) that show a trend towards increasing specialisation of manufacturing activities more related to quality than quantity. In particular, the present study investigates the relative importance of being located abroad, extending the work of Bettiol et al., (2018, forthcoming) with an in-depth analysis of the relationship between firm performance and the division of manufacturing activities between local and global locations.

The results are also relevant from a policy perspective: policy makers should evaluate how to sustain firms that maintain domestic production, often in addition to foreign production. Considering the strong impacts of economic crises on the global economy, politicians should develop tailored plans for firms that survive domestically, boosting their economic activities and preventing entire areas from facing new economic and employment shocks (Pike, Rodríguez-Pose, & Tomaney, 2017).

One limitation of this study is the focus on selected industries and regions. Further research should be aimed at better understanding whether

the obtained results are driven by firms' geographic context, for example, whether other Italian IDs face the same circumstances. Moreover, it would be interesting to collect data from other non-ID firms to test whether the findings are consistent for firms that do not benefit from agglomerative forces and advantages. Finally, the empirical analysis could benefit from disentangling the selection effects on production offshoring from the causal effects of offshoring on firm performance. The analysis could then focus on heterogeneous firm behaviour and look at the two tails of the distribution of firms. From a more qualitative perspective, this analysis could examine to what extent the best and the worst performers face international competition.

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15

Firm Diversification and Financial Performance: Evidence from Manufacturing Firms Worldwide

Jinlong Gu, Yong Yang and Roger Strange

Introduction

This paper attempts to link industry and national contexts to the joint effect of product and international diversification on firm performance. The research on how firm performance is affected by diversifying into new product and geographic markets has been an important topic of international business and strategy literature for more than 40 years (Bowen & Sleuwaegen, 2017; Castellani, Montresor, Schubert, & Vezzani, 2017). Product and international diversification are vital strategies in organisation expansion (Kistruck, Qureshi, & Beamish, 2013). Despite the fact that increasing number of firms have been engaging in the both diversification strategies, few papers study the interaction between the two diversification strategies and its performance implications. Most previous papers only focus on one type of diversification. Furthermore, those studies that do consider the joint

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effect of the two diversification strategies on firm performance (Geringer, Tallman, & Olsen, 2000; Hitt, Hoskisson, & Kim, 1997; Kistruck et al., 2013; Sambharya, 1995) identify either a complementary or a substitute effect between two diversification strategies. They generally ignore, however, the underlying factors that strengthen or weaken the joint effect.

Product and international diversification have two opposing interactive effects, namely complementary and substitute effects, on firm performance. On the one hand, the complementary effect suggests that the sophisticated managerial capabilities developed in managing multiple product divisions can be easily leveraged in multiple geographic markets. On the other hand, the substitute effect contends that resource constraints would require the firm to choose between the two diversification strategies, suggesting a trade-off. Previous empirical papers provide mixed results regarding the interaction effect of two diversification strategies, including not significant, positive or negative effects (Geringer, Beamish, & DaCosta, 1989; Hitt et al., 1997; Sambharya, 1995).

We contribute to this debate by examining the joint effect of two diversification strategies. More importantly, we further examine how industry and national contexts shape the relationship between the two diversification strategies and firm performance, particularly considering the technological capability of the home sector and the economic development of home country.

Our paper makes three contributions. First, recent studies have called for more research on the interactive effect of the two diversification strategies (Bowen & Sleuwaegen, 2017), particularly the relationship between the two diversification strategies and financial performance (Kistruck et al., 2013). We examine the joint effect of the two diversification strategies, instead of their individual effects. We argue that the two diversification strategies tend to be substitutes rather than complements. The firm needs to choose between the two strategies due to resource constraints and accelerating governance costs when simultaneously implementing both strategies. Second, few of the papers that study the joint effect consider the underlying factors that strengthen or weaken the effect. Recent research emphasises the importance of industry and national contexts (Bebenroth & Hemmert, 2015; Mayer, Stadler, & Hautz, 2015) in diversification strategies. We argue and find that the substitute effect is stronger for firms from high-tech sectors, while it is weaker for firms from developed countries. Third, until recently, past studies have mostly relied on US or Japanese firm data to support their findings. We make an empirical contribution by testing our hypotheses using a very large firm-level data set covering 13,142 multinational manufacturing firms from 70 countries over the period of 2004–2013.

Literature Review and Hypotheses Development

Diversification provides benefits. More specifically, product diversification provides firms with synergy effects, market power advantage, internal market efficiency and portfolio effects (Palich, Cardinal, & Miller, 2000). By diversifying into different geographic markets, international diversification helps multinational enterprises (MNEs) access cheaper resources, acquire foreign knowledge, realise economies of scale, obtain internationalisation experience, exploit firm-specific assets in foreign markets and reduce revenue fluctuations (Buckley & Strange, 2011; Castellani & Zanfei, 2007; Contractor, 2007; Yang & Driffield, 2012).

But diversification does not come without costs. The literature suggests that product diversification may be associated with increased information asymmetries, bureaucratic costs and cross-subsidisation inefficiencies that have a negative impact on firm performance (Palich et al., 2000). Further, international diversification may result in additional costs due to unfamiliarity with foreign markets, enhanced business risks and greater coordination costs (Majocchi & Strange, 2012). Overall, the individual effects of product and international diversification on performance will be determined by the net effects of these benefits and costs (Contractor, 2007; Palich et al., 2000).

The Joint Effect of Product and International Diversification on Firm Performance

Numerous studies have focused on the individual effects of product and international diversification, while the joint effect has attracted much less attention (Bowen, Baker, & Powell, 2015; Geringer et al., 2000), and the results are mixed. Some find a positive joint effect (Hitt et al., 1997), some find a negative joint effect (Kistruck et al., 2013; Sambharya, 1995), while some report an insignificant joint effect (Geringer et al., 1989). It is argued that the joint effects of the two diversification strategies are far more complex than previous research about the individual effects (Hitt et al., 1997). Our research model is shown in Fig. 15.1.

On the one hand, one may argue on the complementary effect between two diversification strategies on firm performance. Some scholars draw on the resource-based view and contend that the proprietary assets that support international diversification seem to be the same that support product diversification. Thus, firms can exploit the same proprietary assets to take

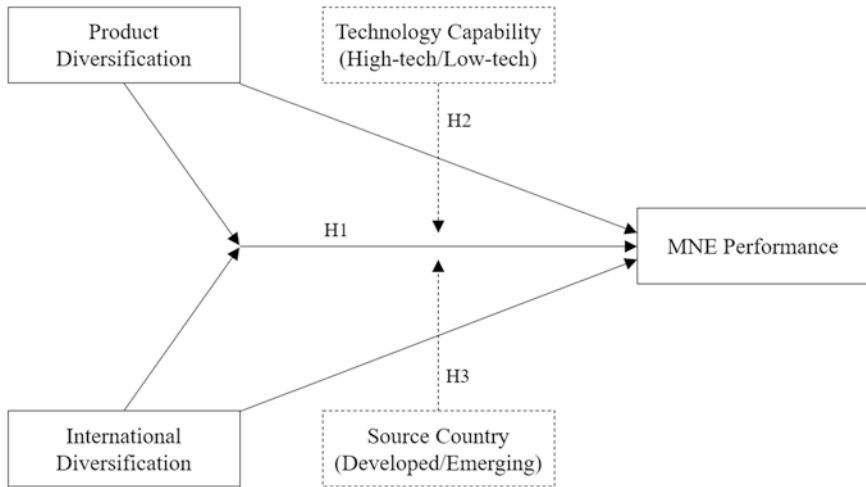


Fig. 15.1 Research model. *Source* Authors' own

advantage of new product and market opportunities (Caves, 1996; Matraves & Rodriguez, 2005). It is also argued that product-diversified firms have developed sophisticated managerial capabilities in dealing with multiple businesses, and these capabilities can be easily leveraged in multiple markets (Hitt et al., 1997). This implicitly assumes that the firms are sequential in making corporate strategies such that they first expand their product scope and then expand their market scope.

However, this assumption needs further investigation. For instance, born global firms enter the global market a very short time after the firm is set up (Bell, McNaughton, & Young, 2001), which means that increasing market scope but not product scope is the priority of these firms. Also, instead of arguing that the product diversification experience helps geographic expansion, one may argue that the prior product diversification experience actually imposes a real constraint on the firm's ability to expand subsequently into new geographic markets (Wiersema & Bowen, 2008).

A firm's expansion into new products or markets is motivated by the opportunities to leverage its excess resources (Wernerfelt, 1984), according to the resource-based view. However, many necessary resources, particularly managerial capability and attention, may be limited. Thus, although firms may pursue both strategies in the long term, the literature finds that there is a trade-off between product and international diversification in the short term. Firms' limited resources may thus limit their ability to find and invest in new product and market opportunities (Bowen & Sleuwaegen, 2017). Also, the

congestion problem of accessing common resources (e.g. proprietary assets) for multiple applications (Teece, 1980) tends to be more severe when simultaneously exploiting the proprietary assets in new product and geographic markets, thus impeding the realisation of diversification benefits.

On the other hand, some may argue the substitute effect between the two diversification strategies on firm performance. From the agency theory point of view, larger firms are usually associated with higher managerial remuneration (Rosen, 1990), so managers are motivated to increase firm size. Managers may accordingly choose a diversification strategy to build a business empire (Davies, Rondi, & Sembenelli, 2001). An international diversification strategy can be viewed as an alternative to a product diversification strategy (Denis, Denis, & Yost, 2002).

Due to resource constraints, there may thus be a substitute effect between product and international diversification. Both product and geographic expansions require significant investments and competition for the same stock of resources possessed by firm. Firms that simultaneously try to implement two diversification strategies will face resource constraints (Sambharya, 1995) and may not have enough resources to assure the success in both new product and geographic markets at the same time (Kumar, 2009), which will negatively affect the firm performance. Besides, research finds that international diversification reduces the advantages of related diversification since the synergy effects of marketing and production are impeded internationally (Hashai & Delios, 2012; Palich et al., 2000). In addition, prior research finds a negative relationship between product and international diversification in the short term, mainly due to the limit to the replicability and transferability of tacit knowledge between two corporate strategies (Kumar, 2009).

Simultaneously, pursuing high levels of product and international diversification incurs high coordination costs (Bowen et al., 2015; Tallman & Li, 1996). Firms with high levels of product and international diversification will face considerable costs that may outweigh the additional returns from the activities in geographically diverse markets. Managerial resources may be over stretched when firms have diversified product portfolios and extensive international operations (Jones & Hill, 1988; Tallman & Li, 1996).

Overall, firms will typically face resource constraints and increasing bureaucratic cost when simultaneously pursuing product and international diversification. Limited resources may impede firms' abilities to pursue both strategies, and there will be a trade-off in allocating the resources among the two strategies, both of which need significant investments. Also, simultaneously, pursuing high levels of product and international diversification incurs high governance costs that may exceed the benefits of diversification

and tend to adversely affect firm performance. Therefore, we propose the following hypothesis.

Hypothesis 1 *Product diversification and international diversification have a negative joint effect on firm performance.*

High-tech Versus Low-tech Sector Context

Most of the previous research that studies the joint effect of the two diversification strategies generally ignores the underlying factors that may moderate the joint effect. Only a few studies (Coad & Rao, 2008; Mayer et al., 2015) consider the industry context, but they do not link it to the joint effect. We suggest that industry context plays an important role in shaping the interactive effect of the two diversification strategies.

The distinction between high-technology and low-technology industries is vital when examining the joint effect of the two strategies on firm performance, in part because the importance of proprietary assets varies across industries with different technological capabilities. First, a high-tech firm's competitive advantage largely relies on proprietary assets, particularly technology resources like skilled research workers (Himmelberg & Petersen, 1994). The simultaneous diversification into new product and geographic markets raises the congestion problem of accessing these common resources, thus negatively affecting the high-tech firms' performance. In contrast, low-tech firms are less dependent on proprietary assets (Tihanyi, Johnson, Hoskisson, & Hitt, 2003). The congestion problem is thus more severe in high-tech firms, compared to low-tech firms.

The resource constraint problem in implementing diversification strategies is also more severe for firms from high-tech sectors than those from low-tech sectors. Due to high R&D expenditures and long payback periods in high-tech sectors, simultaneously diversifying into new product and geographic markets while maintaining current operation, requires significant resources with returns only forthcoming in the long-term. High-tech firms may thus experience difficulties in attracting enough investment funds from external financial markets, particularly from institutional investors that focus on short-term returns (Zahra, 1996) and may need to rely on internal finance (Himmelberg & Petersen, 1994). These internal financial resources may be needed for R&D, but also required to be used in new product or geographic markets if the firm is simultaneously implementing two diversification strategies (Tihanyi et al., 2003). In contrast, the resource constraint

problem is less severe in low-tech firms due to their low investments in long-term projects.

In addition, high-tech firms may be concerned that their innovative products are imitated by competitors in some foreign countries with low intellectual property (IP) rights, and may also be concerned about the high IP protection fees required by the patent offices in some developed countries in the USA and Europe (Love & Ganotakis, 2013; Smith, 2002). These concerns may limit the choice of overseas countries open to high-tech firms and inhibit their levels of international diversification. In contrast, those concerns are less important to low-tech firms. Thus, they have a wider range of choices of foreign market and encounter fewer costs in increasing international diversification.

To sum up, high R&D investments are expected in high-tech firms. This raises the potential severity of resource constraints in the simultaneous implementation of the two diversification strategies, as these also require significant investments. Also, the diversification benefits may be offset by various costs such as technology leakage in the foreign country. In contrast, low-tech firms face less severe resource constraints and gain more from diversifications.

Hypothesis 2 *The negative joint effect of product and international diversification is stronger for firms in high-tech sectors rather than low-tech sectors.*

Emerging Versus Developed Country Context

Apart from the industry context, we also explore the country context. A few papers have highlighted a possible source country effect (Bebenroth & Hemmert, 2015; Claessens & Van Horen, 2012), but they have not considered the joint effect of the two strategies on firm performance. We suggest that the source country plays a vital role in the interaction effect of the two diversification strategies.

We distinguish between firms from developed countries and firms from emerging countries. The resource endowments of firms in emerging countries, in terms of managerial skills, financial resources and intangible assets (e.g. brand and legitimacy), are quite different from their developed country counterparts. Furthermore, emerging country firms are looking to catch up technologically with the developed country MNEs and become leading players in their respective industries (Mathews, 2006). These differences have important ramifications for their abilities to diversify.

First, emerging country firms' limited managerial skills and attention do not allow them to diversify their business and geographic market at the same time. Many emerging country firms are newly privatised state-owned firms. The managerial practices and centralised management style that proved effective in a command economy context are no longer successful in the market-oriented global economy (Hitt, Dacin, Levitas, Arregle, & Borza, 2000; Shama, 1993). In contrast, developed country MNEs have sophisticated management systems, combined with important features of their home country institutional environments such as education system and regulation, leading to their enhanced competitive advantage in global markets (Bebenroth & Hemmert, 2015).

Second, emerging country MNEs lack financial resources, and this reduces their ability to simultaneously carry out both diversification strategies. The low levels of economic development and the weak institutional environments impede capital distribution in emerging countries (Hitt et al., 2000), so that capital is less available and more expensive (Svetličič & Rojec, 1994). In contrast, developed country firms have relatively more financial resources to support different dimensions of firm diversification (Li & Qian, 2005), notwithstanding the reality that firms are constantly struggling to balance the resource allocations in different product and geographic markets.

Third, emerging country MNEs are often lacking in intangible assets, particularly reputation and legitimacy, which affects firm's capability to exploit their proprietary assets across industries and national borders. Due to poorer brands and legitimacy, they need more time before products and services are accepted by the local customers (Fombrun & Shanley, 1990; Hitt et al., 2000). In contrast, developed country MNEs possess stronger intangible assets. The home countries' institutional advantages (governance, legal system) may be transferred inside the MNE structure, leading to the MNE's improved reputation and legitimacy in overseas countries (Cantwell, Dunning, & Lundan, 2010; Yang, Martins, & Driffield, 2013). This might also help MNEs access local resources, customers and suppliers in the host country.

In sum, firms from emerging countries face greater resource constraints than their developed country counterparts in balancing two diversification strategies. Emerging country MNEs typically have insufficient managerial skills, financial resources and intangible assets to support the development in new product and geographic market at the same time. In contrast, developed country MNEs have sophisticated managerial skills, sufficient financial resources and strong intangible assets.

Hypothesis 3 *The negative joint effect of product and international diversification is weaker for firms from developed countries rather than emerging countries.*

Data

We collected the financial data from Orbis data set which is made available by a consultancy called Bureau van Dijk. This database records each firm's NACE¹ Rev.2 core, primary and secondary code, which allow us to calculate product diversification (defined as the number of segments). Orbis also records subsidiary's equity (defined as minimum 10.01% equity) (Bureau of Economic Analysis, 1999) owned by parent and subsidiary's location, which allows us to identify domestic and overseas subsidiaries. Therefore, we can calculate the multinationality (defined as overseas/total subsidiaries). The firm's accounting information is available from 2004 to 2013, but the measures for the two diversification strategies are only available in the last available year in the data set, which mostly is 2012. We select firms that have information on employees, sales, leverage, return on assets, industry code and number of subsidiaries. The final sample contains 13142 manufacturing firms. Data on GDP per capita and GDP growth are collected from World Development Indicators.

Empirical Specification

Regression models with fixed effect estimators are employed. To examine the joint effect of two diversification strategies on performance, we present the following equation.

$$Y_{it} = \beta_1 PD_{it} * MULT_{it} + \beta_2 PD_{it} + \beta_3 MULT_{it} + \lambda X_{it} + \gamma_t + e_{it} \quad (15.1)$$

where Y_{it} refers to return on assets of firm i in t year. We include PD_{it} and $MULT_{it}$ to control the individual effects of product and international diversification. We also include control variables X_{it} , including firm size, leverage, sales per worker, GDP per capita, GDP growth, country and industry fixed effects. γ_t refers to time fixed effects. The key variable $PD_{it} * MULT_{it}$ refers to the interaction term between product and international diversification. The parameter β_1 indicates the joint effect of the two diversification strategies on firm performance.

Measurement of performance: We use the return on assets (PERF) (defined as net income divided by total assets) to measure firm performance (Y_{it}). Return on assets is commonly used as a measure of financial performance in the international business literature (Ruigrok, Amann, & Wagner, 2007).

Product diversification: Our paper employs the number of segments (PD) in which a firm operates as a proxy for product diversification (Hoechle, Schmid, Walter, & Yermack, 2012; Palich et al., 2000). We explored data availability in Orbis and found difficulty in identifying the sales by industry for each firm. Thus, we ruled out the Herfindahl measure, the entropy measure and Rumelt's categories. Instead, we use the number of segments, another common measure of product diversification, whose calculation is feasible since firms report core, primary and secondary NACE Rev.2 industry codes. To fully capture the product diversity of the firm, we calculate the PD_{it} by taking the number of 4-digit industry codes (core, primary and secondary) reported by both parent and majority-owned subsidiaries.

International diversification: This paper uses the number of overseas subsidiaries divided by total number of subsidiaries (MULT) as a proxy for multinationality or international diversification (Castellani et al., 2017; Yang et al., 2013). After exploiting data availability in the Orbis data set, we found difficulty in identifying foreign sales subtracting exporting and licensing when using FSTS (foreign/total sales) measure. Thus, we did not use FSTS, as well as the highly correlated FATA (foreign/total assets) (Annavarjula, Beldona, & Sadrieh, 2006). This paper instead employs OSTs (foreign/total subsidiaries), another common measure, which is feasible because Orbis data set records parent's ownership of subsidiaries and subsidiaries' location.

Control variables: Following Geringer et al. (2000), we control several firm characteristics that are believed to affect firm performance, including firm size, capital structure and labour productivity. Firm size (SIZE) is measured by employee count. Capital structure "leverage" (LEV) is the debt to equity ratio. Labour productivity "sales per worker" (PROD) is measured by total sales to number of employees ratio. We also control for home country characteristics (Li & Qian, 2005), including GDP per capita (ECON) and GDP growth (GROW). In addition, we include country, industry and time fixed effects. Table 15.1 provides detailed definitions and data sources of the variables.

Table 15.1 Operationalisation of the variables. *Source* Authors' own

Variable	Operationalisation	Source
PERF	The firm's return on assets using net income (ROA) (%)	Orbis
MULT	The ratio of the number of overseas subsidiaries to total number of subsidiaries	Orbis
PD	The natural logarithm of the number of segments (4-digit NACE Rev.2 codes) in parent and majority-owned subsidiaries	Orbis
SIZE	The natural logarithm of the firm's number of employees	Orbis
LEV	The firm's debt to equity ratio	Orbis
PROD	The natural logarithm of the firm's sales divided by the number of employees (US\$)	Orbis
ECON	The natural logarithm of the home country's GDP per capita (US\$)	WDI
GROW	The home country's GDP growth (%)	WDI

Descriptive Statistics

Table 15.2 presents descriptive statistics. On average, a firm has diversified into 5.96 industries and has 70% subsidiaries located in overseas countries. We also find that, on average, return on assets is 3.00%, labour force is 2631 employees, labour productivity is US\$509.80 thousand and the leverage ratio is 106%. The right panel in Table 15.2 shows that most of the correlation coefficients are low.

Regression Results

Multiple regression models with fixed effect estimators are employed. We control for country, industry and time fixed effects. Table 15.3 presents the main estimates. There are 13,142 observations in the full sample. Column 1 excludes any diversification measures. As we can see, the control variables have the expected signs. For instance, firm size and labour productivity both have positive signs, suggesting that large firms and firms with productive labour forces have better performance. Further, these signs remain largely unchanged across different specifications in Columns 2–5.

Columns 5 in Table 15.3 tests hypothesis 1. Let us turn to the interaction term (PD*MULT) which reports a negative sign (significant at 10% level), indicating that the joint effect of two diversification strategies negatively affects firm performance. This supports hypothesis 1. This shows the interactive effect of two diversification strategies on firm performance is

Table 15.2 Descriptive statistics and correlation matrix. Source Authors' own

Variable	Mean	Std. dev.	1	2	3	4	5	6	7	8
1 PERF	3.00	8.58	1							
2 PD	1.65	0.70	0.035***	1						
3 MULT	0.70	0.31	0.009	0.042***	1					
4 SIZE	5.80	1.88	0.075***	0.429***	-0.286***	1				
5 LEV	1.06	1.41	-0.247***	-0.046***	-0.015*	-0.059***	1			
6 PROD	12.58	0.92	0.142***	-0.007	-0.076***	-0.144***	0.046***	1		
7 ECON	10.47	0.62	-0.023***	0.116***	0.131***	-0.104***	0.016*	0.239***	1	
8 GROW	0.37	2.81	0.107***	0.082***	-0.211***	0.353***	-0.090***	-0.106***	-0.307***	1

Note Significance levels: *0.1; **0.05; ***0.01

Table 15.3 Firm diversification and financial performance: Main results. *Source* Authors' own

	(1) All MNEs	(2) All MNEs	(3) All MNEs	(4) All MNEs	(5) All MNEs
PD*MULT					-0.5841* (0.340)
PD		-0.5809*** (0.127)		-0.7203*** (0.129)	-0.3084 (0.260)
MULT			1.6414*** (0.252)	1.8555*** (0.257)	2.7252*** (0.575)
SIZE	0.6152*** (0.053)	0.7301*** (0.061)	0.6783*** (0.054)	0.8290*** (0.063)	0.8255*** (0.063)
LEV	-1.4849*** (0.054)	-1.4822*** (0.054)	-1.4767*** (0.054)	-1.4723*** (0.054)	-1.4743*** (0.054)
PROD	1.9200*** (0.105)	1.9615*** (0.105)	1.9672*** (0.105)	2.0248*** (0.106)	2.0216*** (0.106)
ECON	-5.7475*** (1.437)	-5.9075*** (1.446)	-5.0152*** (1.429)	-5.1182*** (1.435)	-5.0776*** (1.434)
GROW	0.1555* (0.093)	0.1690* (0.093)	0.1450 (0.093)	0.1605* (0.093)	0.1603* (0.092)
Country fixed effect	X	X	X	X	X
Industry fixed effect	X	X	X	X	X
Time fixed effect	X	X	X	X	X
Adj R-squared	0.142	0.143	0.145	0.146	0.147
No. observation	13142	13142	13142	13142	13142
F statistics	36.005	35.341	36.038	35.518	34.757

Note The dependent variable is the return on assets. All models control for country, industry and time fixed effects. Values in parentheses are robust standard errors. Significance levels: *0.1; **0.05; ***0.01

substitute rather than complementary. Developing either new product or new geographic market requires tremendous investment. Due to resource constraints and growing bureaucratic costs, the firm faces a trade-off in allocating the resources among the two strategic options. The firm will experience difficulty if implementing the two strategies simultaneously. This is to some extent consistent with the results of other scholars' work (Geringer et al., 2000; Li & Qian, 2005).

Table 15.4 Firm diversification and financial performance: Sectoral and source country analysis. *Source* Authors' own

	(1) High-tech sectors	(2) Low-tech sectors	(3) Emerging countries	(4) Developed countries
PD*MULT	-2.3369** (1.090)	-0.1934 (0.349)	-1.6836** (0.799)	-0.5029 (0.380)
PD	0.8887 (0.845)	-0.5888** (0.265)	-0.1947 (0.583)	-0.3125 (0.292)
MULT	4.7654** (1.912)	2.1389*** (0.587)	5.1970*** (1.539)	2.4662*** (0.619)
SIZE	1.4052*** (0.181)	0.6642*** (0.066)	0.6828*** (0.146)	0.8505*** (0.070)
LEV	-2.1212*** (0.212)	-1.4349*** (0.055)	-2.1243*** (0.215)	-1.4132*** (0.056)
PROD	2.3117*** (0.280)	1.9378*** (0.113)	1.2765*** (0.204)	2.1903*** (0.122)
ECON	-0.2663 (5.789)	-6.1518*** (1.248)	0.5658 (2.993)	-7.3562*** (2.347)
GROW	-0.2079 (0.291)	0.2652*** (0.096)	0.2793 (0.213)	0.1668 (0.121)
Country fixed effect	X	X	X	X
Industry fixed effect	X	X	X	X
Time fixed effect	X	X	X	X
Adj R-squared	0.142	0.159	0.192	0.145
No. observation	2113	11029	1775	11367
F statistics	12.770	31.339	6.848	30.126

Note The dependent variable is the return on assets. Significance levels: *0.1; **0.05; ***0.01

Table 15.4 shows how industry and national contexts shape the joint effect. Columns 1–2 in Table 15.4 are to test hypothesis 2. Following the previous literature (Mayer et al., 2015), which emphasises the role of industry context in diversification strategies, we distinguish between MNEs in high-tech and low-tech sectors. The interaction term in Column 1 is negative (significant at 5% level), while the interaction term in Column 2 is not significant. This supports hypothesis 2. The resource constraint problem is more severe in firms from high-tech sectors than those in low-tech sectors.

Columns 3–4 are used to test hypothesis 3. Following prior studies (Bebenroth & Hemmert, 2015; Hitt et al., 2000) which highlight the

role of national context in diversification strategies, we distinguish between developed country and emerging country MNEs. The interaction term is negative (significant at 5% level) in column 3, while the interaction term in column 4 is not significant. This supports hypothesis 3. Compared to emerging country MNEs, the developed country MNEs have sophisticated managerial capabilities, sufficient financial resources and strong intangible assets (e.g. reputation and legitimacy), and thus face less severe resource constraints when implementing the two diversification strategies.

Discussion and Conclusion

The relationship between diversification strategies and firm financial performance has been discussed for more than 40 years (Bowen & Sleuwaegen, 2017; Castellani & Zanfei, 2006), with inconclusive empirical results. Most of the extant literature focuses on the individual effects of product or geographic diversification on the firm performance, but it has been argued that more research is required on the interactive effect of the two diversification strategies (Bowen & Sleuwaegen, 2017). Some recent papers do study the interaction of the two diversification strategies, supporting either a substitute or a complementary effect (Geringer et al., 2000; Hitt et al., 1997; Kistruck et al., 2013). However, these studies disregard the contextual factors that strengthen or weaken the joint effect. In addition, these previous studies mainly rely on data for US or Japanese firms (Bowen et al., 2015; Denis et al., 2002; Sambharya, 1995).

This paper addresses these limitations by analysing data for 13,142 firms from 70 countries over the period 2004–2013. The central finding is that there is a negative joint effect of two diversification strategies on firm performance, supporting the substitute relationship between two diversification strategies. Product diversification tends to substitute for, instead of complement, international diversification. The firm faces a trade-off between the two strategies due to resource constraints and the increased bureaucratic costs of implementing both strategies simultaneously in the short term. These results suggest that, when developing corporate strategy, firm need to consider the interaction between product and international diversification strategies. One suggestion is to combine different levels of the two diversification strategies. For example, Meyer (2006) suggests that “global focusing”—increasing international diversification in a narrow range of products—promotes firm growth.

Further, we include the industry and national context in our research model, which is emphasised in the recent scholars' work (Bebenroth & Hemmert, 2015; Mayer et al., 2015). We find that, compared to low-tech sectors, firms from high-tech sectors experience a stronger negative joint effect of the two strategies. Also, we find that, relative to emerging country MNEs, developed country MNEs face a weaker negative joint effect of the two strategies. Thus, the interplay between the two diversification strategies depends on the technological intensity of the home sector and the economic development of the home country. All firms should consider their industry and national context when simultaneously implementing product and international diversification strategies.

The limitations of our paper need to be noted. First, the data are cross-sectional rather than panel, which does not allow us to control for firm fixed effects. Second, our analysis does not rule out potential reverse causality. Perhaps poor-performing firms expand into new product and geographic markets at the same time, expecting that performance will subsequently improve. Third, additional robustness checks would be helpful. We leave these topics for future research.

Note

1. NACE code is the industry classification sponsored by European Community.

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