

Internationalization of Firms:
Antecedents, Speed, and Performance Implications
Evidence from the German renewable-energy industry

Dominik Chahabadi

Bachelor of Arts in Business Administration

Master of International Business

Master of Science in International Business Strategy

This thesis is presented to fulfill the requirements for the doctoral degree in economic sciences

Faculty of Economics

Chair of Organization and Corporate Development

Georg-August-Universität Göttingen

&

Faculty of Business and Economics

Department of Marketing and Management

Macquarie University, Sydney

Submitted: October 2016

Table of contents

Table of contents	I
List of figures	IV
List of tables	V
Declaration for admission to the doctoral examination	VI
Acknowledgements of contribution	VII

1 Introduction to thesis.....	1
1.1 Development and advancements of International Business research	4
1.2 Development and advancements of International Entrepreneurship research	7
1.3 Insights on subsequent internationalization of INVs	10
1.4 Shortcomings of current International Business and Entrepreneurship literature	13
1.4.1 Institutional distance.....	13
1.4.2 Speed of internationalization.....	17
1.5 Aim, structure and empirical context of the thesis.....	21
 2 Paper I.....	 26

Modelling the moderating impact of institutional distance on subsequent international new venture internationalization

2.1 Introduction.....	27
2.2 Literature review	29
2.2.1 International new venture phenomenon.....	29
2.2.2 Institutional theory.....	34
2.3 Conceptualization of the subsequent international expansion	38
2.3.1 Firm-level antecedents.....	42
2.3.2 Home country market antecedents	44
2.3.3 Moderating role of institutional distance	46
2.4 Future research and implications.....	52
2.4.1 Future research	52

2.4.2	Practical implications	55
2.5	Conclusion	56
3	Paper II.....	65
<p>The impact of internationalization speed along its multiple dimensions on firms' international performance – A comparison between INVs and traditional exporters</p>		
3.1	Introduction.....	66
3.2	Speed of internationalization and performance	70
3.2.1	Internationalization speed and performance in IB literature	72
3.2.2	Internationalization speed and performance in IE literature	74
3.3	Dimensions of internationalization speed and hypotheses development	76
3.3.1	Country speed	79
3.3.2	Commitment speed.....	80
3.3.3	Scope speed	81
3.3.4	Equity speed	83
3.3.5	Differing impact of subsequent internationalization speed for INVs and traditional exporters	84
3.4	Method.....	86
3.4.1	Sample and data collection	86
3.4.2	Measurement of variables	89
3.4.3	Analytical approach and measurement validity.....	92
3.5	Results	95
3.6	Discussion and conclusion.....	97
	Appendix for Paper II	102
4	Paper III.....	109
<p>Managerial misperception of differences between home and host countries – An empirical study on antecedents and performance effect</p>		
4.1	Introduction.....	110
4.2	Theory and hypotheses	113
4.2.1	Antecedents of managerial misperception of country differences	114

4.2.2	Individual level: Manager's international experience.....	116
4.2.3	Organizational level: Firm's size and international scope.....	117
4.2.4	Inter-organizational level: Effective key partnerships in the host country	120
4.2.5	Environmental level: Cultural distance	121
4.2.6	Misperception and its impact on host country performance	122
4.3	Data and method.....	124
4.3.1	Sample and data collection	124
4.3.2	Measurement of variables	125
4.3.3	Validity and modeling approach	131
4.4	Results	134
4.5	Discussion and conclusion.....	135
4.5.1	Contribution	137
4.5.2	Limitations and future research.....	137
4.5.3	Practical implications and concluding remarks.....	140
	Appendices for Paper III.....	141
	Appendix 1: Measurement items for managerial misperception	141
	Appendix 2: Measurement items (other variables)	143
5	Conclusion to thesis	151
5.1	Theoretical contribution.....	154
5.2	Practical implications.....	156
5.3	Concluding remarks.....	157
	References.....	159

List of figures

Figure 1.1: Data collection	24
Figure 2.1: Conceptual model	41
Figure 2.2: Impact of institutional distance over time.....	52
Figure 3.1: Structural equation modelling results for Model 1 (overall sample).....	95
Figure 3.2: Structural equation modelling results for Model 2 (subsample INVs)	95
Figure 3.3: Structural equation modelling results for Model 2 (subsample traditional exporters)	96
Figure 4.1: Empirical model	123

List of tables

Table 3.1: Correlation matrix	93
Table 3.2: Goodness-of-fit statistics of models.....	96
Table 4.1: Correlation matrix	133
Table 4.2: Results OLS regression – Antecedents of misperception.....	134
Table 4.3: Results OLS regression – Firm’s host country performance	135

Declaration for admission to the doctoral examination

I confirm

1. that the dissertation

*Internationalization of Firms: Antecedents, Speed, and Performance Implications -
Evidence from the German renewable-energy industry*

that I submitted was produced independently without assistance from external parties, and not contrary to high scientific standards and integrity,

2. that I have adhered to the examination regulations, including upholding a high degree of scientific integrity, which includes the strict and proper use of citations so that the inclusion of other ideas in the dissertation are clearly distinguished,
3. that in the process of completing this doctoral thesis, no intermediaries were compensated to assist me neither with the admissions or preparation processes, and in this process,
 - No remuneration or equivalent compensation were provided
 - No services were engaged that may contradict the purpose of producing a doctoral thesis
4. that I have not submitted this dissertation or parts of this dissertation elsewhere.

I am aware that false claims (and the discovery of those false claims now, and in the future) with regards to the declaration for admission to the doctoral examination can lead to the invalidation or revoking of the doctoral degree.

Date

Dominik Chahabadi

Acknowledgements of contribution

This thesis by publication includes three papers written in a journal-article format. While I am the sole author of Paper II, Paper I and III are the result of collaborating with different authors. I acknowledge the contribution of my supervisors, Dr. Meena Chavan (Macquarie University) and Prof. Dr. Indre Maurer (Georg-August-Universität Göttingen), as well as my colleague Dipl.-Kff. Clarissa Weber (Georg-August-Universität Göttingen). I sincerely thank my co-authors for their constructive feedback and support throughout my PhD candidature.

Outlined below are the three papers included in this thesis, listing the co-authorship of each paper.

Paper I

Title: Modelling the moderating impact of institutional distance on subsequent international new venture internationalization

Authors: Dominik Chahabadi and Meena Chavan

Chapter in thesis: Chapter 2

This paper is a revised version of a paper that was invited to be re-submitted to the European Journal of Management. Earlier versions of this paper have been accepted in competitive tracks at the Australia and New Zealand International Business Academy (ANZIBA) Conference, Sydney 2013; at the European International Business Academy (EIBA) Conference, Bremen 2013; and at the Academy of International Business (AIB) Conference, Vancouver 2014.

Paper II

Title: The impact of internationalization speed along its multiple dimensions on firms' international performance – A comparison between INVs and traditional exporters

Author: Dominik Chahabadi

Chapter in thesis: Chapter 3

An earlier version of this paper has been accepted in a competitive track at the McGill International Entrepreneurship Conference, London 2015 and was presented at a Doctoral Colloquium at the University of Göttingen, Göttingen 2015.

Paper III

Title: Managerial misperception of differences between home and host countries – An empirical study on its antecedents and performance effect

Authors: Dominik Chahabadi, Clarissa Weber, and Indre Maurer

Chapter in thesis: Chapter 4

Earlier versions of this paper have been accepted for the International Management Paper Development Workshop at the Annual Meeting of the Academy of Management (AOM), Anaheim (CA) 2016, as well as in competitive tracks at the Strategic Management Society (SMS) Annual Meeting, Berlin 2016; and at the European International Business Academy (EIBA) Conference, Wien 2016.

Please note that Paper III will also be included in the PhD thesis of my colleague Clarissa Weber, as it is the result of a joint collaboration during our PhD candidature.

1 Introduction to thesis

In an increasingly globalized world, businesses expand operations beyond domestic borders and engage in the global marketplace. During the first half of the last century, international operations were mostly limited to large firms, whereas smaller firms began to enter the international stage during the last decades in order to increase market reach and profit, achieve growth, and build competitive advantages (Oviatt and McDougall, 1994; Aharoni and Brock, 2010). In particular, rapid technological advancement, simplified global trade, and cultural convergence have facilitated internationalization, which is why a growing number of firms participate in international operations by sourcing, producing, and selling goods and services across borders (Shrader et al., 2000; Bloodgood et al., 1996).

This development has been accompanied by substantial research in the area of international business (IB). Scholarly work has profoundly advanced our understanding of the drivers, outcomes, and processes of internationalizing firms. Literature in this field can be broadly distinguished between two streams, each devoting attention to different types of firms. First, traditional IB research focuses on large and mature multinational enterprises (MNEs) as well as on firms that follow an incremental international growth pattern (Johanson and Vahlne, 1977; Buckley, 2002). Second, scholars in the area of international entrepreneurship (IE) have largely dedicated their analyses to the international new venture (INV) phenomenon. This phenomenon describes young ventures internationalizing at a rapid pace shortly after inception instead of following an incremental approach (Oviatt and McDougall, 1994; Knight and Cavusgil, 1996). Generally, IE literature can be seen as a sub-field of IB literature. However, this thesis distinguishes between the two terms by referring to IB literature as work that employs more traditional internationalization theories (e.g., incremental internationalization of MNEs). The term IE literature is used to refer to work dealing in particular with internationalization of INVs. Although accomplishments of past research in both streams are

significant, internationalization processes as well as macro-environmental conditions constantly evolve, which need to be addressed in future research.

Thus, for example, since the discovery of the INV phenomenon, IE scholars have focused on drivers and effects of early and rapid internationalization, which in the early stages was explained mostly as a result of changes in the global business environment and an effect of internationally experienced entrepreneurs (Madsen and Servais, 1997). However, until recently most IE scholars have ignored how these firms develop in the long run (Autio et al., 2000; Hagen and Zucchella, 2014; Almor et al., 2014; Knight and Liesch, 2015). During the subsequent stage of internationalization (i.e., time period since firms commence international operations), INVs undergo significant changes (Gabrielsson et al., 2008; Nummela et al., 2014). They are exposed to new environmental conditions (Kiss and Danis, 2010; Almor and Hashai, 2004) that might ultimately alter their subsequent internationalization process. With further international expansion, forces stemming, for instance, from increased institutional and psychic distance – referring to differences between countries in terms of regulation, business conventions, and culture (Johanson and Vahlne, 1977; Kostova et al., 2008; Scott, 2008) – are likely to strongly impact the international expansion process of INVs. While the role of such country differences has been analyzed to a great extent in IB research (Brouthers, 2002; Meyer et al., 2009; Johanson and Vahlne, 2009), IE research falls short in addressing such influences during INVs' subsequent internationalization (Bruton et al., 2010; Sui et al., 2012).

But it is not only in the context of INVs where research falls short in considering factors related to the institutional environment and firm internationalization. Previous MNE research limits its analysis to either researching the impact of actual or perceived country differences on internationalization processes of firms (Brouthers, 2013). However, research that combines both constructs is absent. Therefore, it has yet to be explored, how the deviation between actual differences of countries and managers' perceptions of these differences, i.e. managerial

misperception of country differences, impacts international activities of firms (Håkanson and Ambos, 2010).

Due to the convergence of global markets and increased international competition, also rapid expansion into international markets has become crucial for many firms, which aim to benefit from first-mover advantages and increase their revenue base. Thus, more research is required in the area of internationalization speed (e.g., number of foreign expansions of a firm within a specific time period) to understand whether internationalization speed translates into better performance for INVs and firms following an incremental internationalization approach (Vermeulen and Barkema, 2002; Prashantham and Young, 2011).

By addressing the research gaps mentioned above – to be further elaborated in more detail in the remainder of this introduction – this thesis contributes to extant literature by analyzing the subsequent internationalization of firms. Acknowledging the role of institutional differences between countries, this thesis provides new insights on how these forces might shape an INV's subsequent internationalization process with regard to speed, geographic scope, and market entry mode. Thereafter, the thesis focuses on speed within the subsequent internationalization process of firms and contributes to literature in this emergent area by analyzing in a comparative study how subsequent internationalization speed impacts international performance of both INVs and firms internationalizing incrementally. Finally, this thesis contributes to extant research by introducing the concept of managerial misperception of country differences and by empirically analyzing factors influencing managerial misperception and how misperception impacts firms' host country performance. Therefore, this thesis is embedded within both IE and IB fields.

The remainder of this introduction is structured as follows: A thorough overview of dominant scholarly work of IB and IE research establishes the foundation of the thesis. This includes an analysis of the historical development, definitions, as well as the most recent advancements of

both research streams. Having provided a general overview of the research field, closer attention is paid to three research areas to highlight shortcomings of current literature that motivated this thesis: (1) the subsequent stage of INV internationalization, (2) institutional distance regarding its role in subsequent internationalization of INVs as well as managers' misperception, and (3) subsequent internationalization speed for INVs and incrementally internationalizing firms. Finally, the research aim, thesis structure, and the empirical context of this thesis are outlined.

1.1 Development and advancements of International Business research

IB research is a relatively young field that originated in the United States six decades ago (Wright, 1970; Aharoni and Brock, 2010). It has constantly evolved, providing rich insights into why and how firms internationalize (Buckley, 2002; Eden, 2009). Overall, IB literature deals with the underlying mechanisms of firm internationalization in a global environment, which can be defined as the process of increasing involvement in international operations (Welch and Luostarinen, 1988). It is mostly centered around decisions regarding entry modes, market selection, and international organizational structures (Andersen, 1997; Buckley, 2002; Oesterle and Wolf, 2011). Buckley (2002) broadly classifies the IB research agenda along three stages of evolution. Initially focusing on explaining flows of foreign direct investment (FDI), scholars then moved towards explaining the existence, strategy, and organization of MNEs, and later analyzed internationalization in light of a highly globalized environment.

Several noteworthy theories of firm internationalization have emerged since inception of the IB field. While early IB research was advanced by the monopolistic-advantage theory (Hymer, 1976) and the product-lifecycle theory (Vernon, 1966), three internationalization theories in particular strongly shape current IB research: (1) Internalization approach (Buckley and Casson, 1976), (2) OLI-Paradigm (Dunning, 1980), and (3) the Uppsala internationalization process

model (Johanson and Vahlne, 1977). The *internalization approach* is based on the idea of market imperfections, which firms need to overcome during their international expansion by way of internalizing transactions between “markets” and “hierarchies”. Transaction costs caused by market imperfections and uncertainty need to be reduced by vertically internalizing transactions to the point where costs would outweigh the benefits of internalization (Williamson, 1979; Hennart, 1988; Buckley and Casson, 1976). The *OLI-Paradigm* describes advantages of internationalization that are based on ownership, location, and internalization of international operations (Dunning, 1988). Ownership advantages can lie in specific assets firms obtain, such as superior experience, skills, production techniques, and large size (Dunning, 2000). Location advantages refer to positive impacts from operating in foreign markets stemming from infrastructure, market potential, culture, and costs of production. Internalization advantages describe the positive effect from choosing high-control entry modes to internalize transactions that would otherwise result in significant costs (Dunning, 1993). While the two above-mentioned theories are prominent in IB research, this thesis places great importance on the Uppsala internationalization process model (in the following referred to as Uppsala model), since it describes in detail how firms internationalize in a gradual manner. Therefore its underlying concepts will be discussed in more detail below.

The *Uppsala model* – also referred to as the stages model or internationalization process theory – is one of the most influential theories, describing firm internationalization as an incremental process along the establishment chain (Johanson and Wiedersheim-Paul, 1975; Johanson and Vahlne, 1977). The process is considered incremental as the theory assumes that firms start with ad-hoc export in close geographical markets. They successively increase entry mode commitment by moving from non-equity to equity modes and expanding into new markets that are more distant from the home country. The underlying mechanism of this incremental internationalization approach is explained by two important concepts Johanson and Vahlne (1977) label psychic distance and experiential knowledge. First, *psychic distance* is

the differences between a firm's home and host country and describes distance in terms of cultural, economic, and political differences. These differences are expressed through language, education, industrial development, and business practices. Second, firms rely on *experiential learning* to acquire essential knowledge to continue expanding internationally. Accumulated experiential knowledge helps firms to perceive foreign market opportunities, reduce risk perception, and more efficiently adapt internationalization strategies. Both psychic distance and experiential knowledge cause firms to internationalize in smaller steps by first entering culturally and geographically proximate markets with low-commitment entry modes and subsequently increasing commitment when they obtain knowledge of markets and internationalization processes (Johanson and Vahlne, 1977). One of the reasons why the Uppsala model has continued to maintain its efficacy might be that Johanson and Vahlne (2009) have revisited their model since its introduction to account for substantial changes in the global and business environment. In the revisited model the authors account for the crucial role of networks within the internationalization process (Johanson and Vahlne, 2009). Networks have been shown to be a significant driver of firm internationalization, as all firms form part of a formal or informal network that enables knowledge acquisition through which the internationalization process is facilitated (Autio et al., 1997; Welch and Welch, 1996; Coviello and Munro, 1997). Furthermore, some scholars argue that foreign markets themselves can be seen as borderless network relationships through which firms expand internationally and consequently international activities occur through network expansion (Johanson and Vahlne, 2009).

The above-mentioned approaches have considerably contributed to understanding and modelling the internationalization behavior of firms, but have not been without criticism (Andersen, 1997; Andersen, 1993). In particular, the Uppsala model has been criticized for being too static and deterministic in nature (Andersen, 1993; Reid, 1983; Keupp and Gassmann, 2009). Furthermore, much of the empirical work undertaken to validate the

proposed paradigms was conducted on large and often mature MNEs (e.g., Johanson and Vahlne, 1977; Buckley and Casson, 1976), which does not reflect the internationalization patterns of newly established ventures that internationalized shortly and rapidly after inception (Oviatt and McDougall, 1994). These critiques have motivated scholars to analyze in more detail the internationalization path of entrepreneurial and small firms.

1.2 Development and advancements of International Entrepreneurship research

In the mid-1990s several scholars made the empirical observation that a considerable number of firms deviate from the internationalization path predicted by traditional internationalization theories (Oviatt and McDougall, 1994; Rennie, 1993; Knight and Cavusgil, 1996; Madsen and Servais, 1997; McDougall et al., 1994; Bell, 1995). In the seminal work by Oviatt and McDougall (1994), the concept of the so-called INV was introduced for the first time, defined as a “business organization that, from inception, seeks to derive significant competitive advantage from the use of resources and the sale of outputs in multiple countries” (p. 49). This type of firm rapidly internationalizes by making use of FDIs and hybrid entry mode structures shortly after inception instead of following an incremental approach to internationalization (Oviatt and McDougall, 1994; Knight and Cavusgil, 1996). The aftermath of these early works resulted in increased research to understand the internationalization process of this set of firms – predominantly SMEs – and ultimately contributed to the creation of the IE field (Autio, 2005; Oviatt and McDougall, 2005; Keupp and Gassmann, 2009). In general, IE research deals with “the discovery, enactment, evaluation, and exploitation of opportunities – across national borders – to create future goods and services” (Oviatt and McDougall, 2005: p. 540).

Co-existing terms, such as born-globals (Knight and Cavusgil, 1996; Rennie, 1993), global start-ups (Oviatt and McDougall, 1994), and early internationalizing firms (Rialp et al., 2005) are used to describe the INV phenomenon associated with rapid and early internationalization,

although minor differences in definition endure between the terms (see Jones et al., 2011). The reason why these firms did not follow a traditional approach to internationalization, as described in previous IB theories, was initially explained by macro-environmental changes (Oviatt and McDougall, 1994; Oviatt and McDougall, 2005). For instance, “new market conditions, technological developments in the areas of production, transportation and communication, and finally more elaborate capabilities of people, including the founder/entrepreneur” (Madsen and Servais, 1997: p. 565) were considered to be the main drivers contributing to the INV phenomenon. Much research on INV internationalization has been conducted in high-technology industries, as firms in these industries seem to be particularly impacted by globalization effects such as increased competition, short product lifecycles, and protection of proprietary knowledge (e.g., Autio et al., 2000; Coviello and Munro, 1995; Jones, 1999; Burgel and Murray, 1998; Freeman et al., 2006). Building on macro-environmental changes and technological progress has helped explain why traditional internationalization theories might lose their efficacy for certain firms and has helped to understand the rapid increase in INVs. However, INVs are distinct from other firms mainly because firm-level factors – in particular the entrepreneur – expedite internationalization (cf. Oviatt and McDougall, 2005; Rialp et al., 2005; Zahra and George, 2002). Although new ventures are considered to be strongly constrained by a lack of resources resulting from liability of newness and size, INVs manage to overcome these impediments to rapid internationalization by greatly relying on the previous international experience and the network of the founder (Oviatt and McDougall, 1994; Burgel and Murray, 1998; Oviatt et al., 1995; Bloodgood et al., 1996; Coviello, 2006; Preece et al., 1999). Previous international experience of the entrepreneur and top management team gained through studying or working abroad compensates for a firm’s lack of experiential knowledge (Reuber and Fischer, 1997; Harris and Wheeler, 2005; Madsen and Servais, 1997). Thus, instead of experiential knowledge on the organizational level (Johanson and Vahlne, 1977; Clarke et al., 2013), INVs

benefit from such experience on individual level and rapidly expand internationally (Zucchella et al., 2007). Furthermore, the personal characteristics of the entrepreneur, such as proactive and opportunity-seeking behavior, risk perception, and networking capabilities significantly aid international expansion of INVs (Jones and Coviello, 2005; Dimitratos et al., 2012; Oviatt and McDougall, 2005; Gabrielsson et al., 2014; Nummela et al., 2004). As also acknowledged by Johanson and Vahlne (2009) in their revisited Uppsala model, networks play a crucial role in a firm's internationalization process and are paramount for INVs. Thus, Harris and Wheeler (2005) conclude that international relationships "can be regarded as [...] firms' most important assets" (p. 204). The entrepreneur's network is decisive for fast internationalization (Oviatt and McDougall, 2005; Coviello and Munro, 1995) as it helps to overcome constraints of internationalization (Freeman et al., 2006) and significantly influences the selection of foreign markets (Coviello and Martin, 1999; Coviello and Munro, 1997). Summing up, it can be concluded that IE research has pointed out several enabling factors helping firms to overcome the hurdles of early and fast internationalization and explains why and how INVs deviate from more traditional internationalization patterns (Autio, 2005).

Moving from a broad overview of the theories, concepts, and research foci of IB and IE literature, the subsequent internationalization of INVs will be elaborated in more detail in the following section, as the majority of studies presented in the thesis are placed within the subsequent internationalization stage of firms. Since its inception, IB research has implicitly focused on the subsequent rather than the pre-internationalization stage, whereas IE scholars have only recently started to explore the subsequent stage of INV internationalization (Hashai, 2011; Morgan-Thomas and Jones, 2009; Almor, 2013). Therefore, the most recent developments on subsequent internationalization of INVs are discussed below.

1.3 Insights on subsequent internationalization of INVs

Internationalization theories embedded in traditional IB literature have focused on the antecedents, developments, and outcomes of firm internationalization over time. However, IE scholars have long studied the pre-internationalization stage of INVs instead of analyzing how these firms develop in the long run (Mathews and Zander, 2007; Autio, 2005). Thus, little is known about how INVs develop after starting international operations and whether they continue to rapidly expand internationally (Jones and Coviello, 2005; Mudambi and Zahra, 2007; Knight and Liesch, 2015). Despite some early IE work that distinguishes between the initial and the subsequent stage of internationalization (e.g., Autio et al., 2000; Bloodgood, 2006), only recently have researchers turned their attention to the subsequent international development of INVs (e.g., Hagen and Zucchella, 2014; Almor, 2013; Morgan-Thomas and Jones, 2009; Hashai, 2011). The research focus on the subsequent stage of internationalization can be broadly categorized along three foci: antecedents, speed of internationalization, and overall growth.

The first focus is on *antecedents* of subsequent growth and changes of firm level factors (e.g., Hagen and Zucchella, 2014; Glaister et al., 2014). A recent study by Hagen and Zucchella (2014) provides a framework depicting the relevant drivers of subsequent internationalization behavior of INVs. The authors differentiate between entrepreneurial characteristics, internal firm factors, and macro-environmental factors that drive subsequent internationalization of INVs. Although the framework is novel in that it focuses on the subsequent international expansion process, the factors considered do not significantly differ from antecedents identified for INVs' initial internationalization. However, results of the authors' qualitative study highlight that previous international experience, networks, and knowledge acquisition need to be constantly enlarged in order for a firm to continue expanding internationally. The study of Nummela et al. (2014) analyzes the decision-making process in light of the subsequent

international expansion of INVs and explains how the decision-making process changes over time and how management characteristics influence this process.

The second focus of subsequent internationalization of INVs is on *speed of internationalization* (e.g., Prashantham and Young, 2011; Morgan-Thomas and Jones, 2009; Oviatt and McDougall, 2005). Speed of internationalization was a main factor that sparked initial research interest in INVs (Jones et al., 2011; Oviatt and McDougall, 2005). As outlined earlier, many studies have focused on explaining what drives early and rapid internationalization of INVs. Given the high importance IE literature places on internationalization speed, it seems surprising that most of these scholars conceptualize internationalization speed as the time span between firm foundation and its first international market activity (Autio et al., 2000). Thus, it only encompasses the pre-internationalization stage of INVs (Autio et al., 2000; Casillas and Acedo, 2013). Although Autio et al. (2000) highlighted this issue more than a decade ago and distinguish between initial speed (i.e., time to first internationalization) and speed of subsequent internationalization growth, only recently have INV scholars paid closer attention to the subsequent internationalization speed of firms. The important work of Autio et al. (2000) shows that rapid initial internationalization speed leads to faster subsequent internationalization speed, suggesting that early internationalizing INVs also internationalize more rapidly in the long run. This notion is also supported by Morgan-Thomas and Jones (2009), who find that INVs are more likely to enter a greater number of markets than are traditional exporters. Prashantham and Young (2011) emphasize the role of knowledge accumulation, specifically market and technological knowledge, as being strong facilitators of rapid subsequent speed.

The third focus of research is concerned with the *overall growth* in terms of products, markets, and survival (e.g., Sui et al., 2012; Hashai and Almor, 2004; Sleuwaegen and Onkelinx, 2014). According to Almor (2013), INVs can grow internationally by expanding customer, country, and

product scope and by choosing different strategies such as FDI expansion or network strategies depending on the scope of growth anticipated. Most studies dealing with subsequent international expansion of INVs focus in particular on country or geographic spread of INVs to understand whether the growth of these firms is actually global, as predicted by INV scholars (Hashai and Almor, 2004; Lopez et al., 2009; Bell et al., 2001; Freeman et al., 2012b). Results of these studies often challenge the born-global idea – which implies that INVs’ operations rapidly span the globe – indicating instead that these firms show a preference for regional internationalization (Lopez et al., 2009; Almor and Hashai, 2004; Sui et al., 2012). For instance, Almor and Hashai (2004) analyze subsequent internationalization growth patterns of knowledge-intensive INVs and conclude that despite the fact that INVs internationalize early and generate the largest proportion of sales abroad, they share many similarities with larger MNEs’ international growth patterns in the subsequent stage. Results indicate that, similar to the expectations of the Uppsala model, INVs internationalize in regionally close markets first before expanding to psychically distanced markets, and follow an incremental approach in terms of market entry modes (Almor and Hashai, 2004). A similar observation was made by Lopez et al. (2009), who find that INVs internationalize quickly within one geographic region where most of their sales are derived. These results support the theory of regional multinationals suggested by Rugman and Verbeke (2005), who, based on transaction-costs economics, show that MNEs have a clear preference for operating in regional markets. Further studies support this notion, reasoning that operating in institutionally and geographically distant markets requires significantly greater resources, more experience, and a dramatic adaption of operational routines, ultimately leading to a preference for regional internationalization (Barkema and Drogendijk, 2007; Rugman and Verbeke, 2007; Johanson and Vahlne, 2009). INVs following a more regional approach to internationalization instead of expanding rapidly on a global scale also have higher survival chances, as past research has shown (Sleuwaegen and Onkelinx, 2014; Sui and Baum, 2014). Overall, it can be argued that

INVs differ significantly in their early stage of internationalization from firms following a traditional approach to internationalization, but are equally constrained by psychic distance in the subsequent stage of internationalization and show a regional preference instead of striving to become truly global.

1.4 Shortcomings of current International Business and Entrepreneurship literature

Based on the discussion on subsequent internationalization of INVs as well as the general background of IB and IE literature, the main theoretical context of the thesis has been outlined. However, several shortcomings remain that require further attention. Two in particular will be addressed in this thesis dealing with institutional distance and the conceptualization of internationalization speed as a multidimensional construct.

1.4.1 Institutional distance

Insights on the psychic-distance concept of the Uppsala internationalization process model (see section 1.2) as well as on the subsequent internationalization of INVs as they mature and grow (see section 1.3) highlight the important role of country differences. These differences are often considered as impediments to fast and further international growth. Psychic distance is one of the major reasons for firms' gradual expansion or regional internationalization preferences (Johanson and Vahlne, 2009; Barkema and Drogendijk, 2007). The psychic distance construct describes "the sum of factors preventing or disturbing the flow of information between firms and markets" (Johanson and Wiedersheim-Paul, 1975: p. 308) and has been widely studied in IB research (Brewer, 2007; Dow and Karunaratna, 2006; Child et al., 2009; Freeman et al., 2012a). Factors causing psychic distance stem from differences in economic development, culture, education, business practices, and language (Johanson and Vahlne, 1977). However, an increasing number of IB scholars include influences and differences of the

institutional environment in their studies – a concept derived from institutional theory originating in social science – to explain internationalization behavior of firms and to derive performance implications (e.g., Brouthers, 2002; Meyer et al., 2009; Kostova and Zaheer, 1999; Gaur and Lu, 2007). Compared to psychic distance, institutional distance encompasses a much larger scope of environmental difference and is theoretically more established.

Institutional theory is centered around the influence of the institutional environment on social and organizational behavior (Scott, 1995; DiMaggio and Powell, 1983). According to Scott's (2008) definition "institutions are comprised of regulative, normative and cultural-cognitive elements that, together with associated activities and resources, provide stability and meaning to social life" (p. 48). These three pillars of institutions – regulative, normative, and cultural-cognitive – conceptualize the most important elements forming the institutional environment and help explain the ubiquity of institutions in an internationalization process as well as the concept of institutional distance (Scott, 1995).

Institutional distance describes the differences among the three institutional pillars between countries (Kostova and Zaheer, 1999). Differences between institutional environments cause information asymmetries resulting from market imperfections, which firms need to overcome during the international expansion process (Meyer et al., 2009). Large institutional distance increases the difficulty of establishing and maintaining legitimacy in a host country (Kostova and Zaheer, 1999). Thus, a large body of literature has analyzed how institutions influence entry mode behavior of firms to identify the most suitable entry mode choice depending on conditions of the institutional environment (Brouthers, 2002; Xu and Shenkar, 2002; Hilmersson and Jansson, 2012; Gaur and Lu, 2007). However, findings are inconclusive, as some studies suggest that high institutional distance leads firms to favor high-equity entry modes (Gaur and Lu, 2007; Yiu and Makino, 2002), while others propose low-entry mode commitment to enter markets with high institutional distance (Xu and Shenkar, 2002;

Brouthers, 2002; Delios and Beamish, 1999). Also studies regarding the impact of country distance on performance remain inconclusive (cf. Brouthers, 2013; Chao and Kumar, 2010; O'Grady and Lane, 1996). Despite ambiguous findings and a great need for further investigation on differences caused by the institutional environment, scholars commonly agree that institutional forces significantly impact the internationalization process and constrain firms with regard to geographic scope, entry mode decisions, and speed of internationalization (Chao and Kumar, 2010; Coeurderoy and Murray, 2008; Meyer et al., 2009; Sui et al., 2012; Kiss and Danis, 2008).

However, one academic debate in particular needs to be resolved in order to understand whether it is the actual institutional environment that shapes international expansion decisions of firms or whether the firms' key-decision makers' perception of institutional differences is the driving force (Brouthers, 2013). Thus, Brouthers (2013) argues that strategic choices of management are based on subjective perceptions, whereas outcomes of an internationalization strategy are strongly impacted by the actual institutional distance. The debate on the usefulness of actual and perceived distance in different contexts implies that the two differ in reality (Håkanson and Ambos, 2010). As managers are influenced by bounded rationality (Simon, 1955; Simon, 1957), no "correct" perceptions of host country environments and their distance from a given home country can be expected, i.e. perceptions that exactly reflect the country's actual environment and the actual differences to the home country. This deviation between actual and perceived country differences can be expressed as managerial "misperception" of country differences. Previous research has shown that perceptions of country differences will directly influence managerial decision-making (Dow and Larimo, 2009). If these perceptions widely deviate from actual differences, poor decision-making might be more likely. This can be the case when a chosen strategy is not adequately adapted to the host country's environment, which might consequently influence performance outcomes. However, current research fails to empirically analyze this relationship and it is yet to be demonstrated

what causes managers' misperception of country differences. Therefore this thesis aims to address the following research gap (cf. Håkanson and Ambos, 2010; Baack et al., 2015; Brouthers, 2013):

Shortcoming 1: Lack of empirical analysis of managers' misperception of country differences, the identification of its antecedents, as well as its impact on firms' host country performance.

The shortcoming presented above relates to a research gap entailed in both IB and IE literature. However, it is especially scholars in the IE field that have not yet fully explored the importance and the influencing role of institutional forces regarding INV internationalization. The literature review (see sections 1.2 and 1.3) has shown that IE studies have thoroughly analyzed the drivers and processes of the early internationalization of INVs, and scholars have recently shifted attention to analyzing the subsequent international growth of maturing INVs. While studies on the latter issue have provided first insights about how INVs continue to grow after commencing international operations (e.g., Hagen and Zucchella, 2014; Gabrielsson et al., 2014), the research falls short by failing to consider the role of institutional forces acting upon INVs' international expansion process. This fact is surprising, since findings from these studies often point out that country institutional differences prevent firms from rapidly internationalizing on a global scale (e.g., Sui et al., 2012; Lopez et al., 2009; Hashai and Almor, 2004; Kiss and Danis, 2008; Freeman et al., 2012b). Thus, although INVs seem to be less constrained by institutional forces in their earliest stages of internationalization, research has not provided any indication that this relationship holds true in the subsequent stages (cf. Schwens et al., 2011; Kiss and Danis, 2008). This lack of restraint is unlikely, considering studies on MNE internationalization that indicate that institutional differences act as strong impediments to further internationalization (Meyer et al., 2009; Brouthers, 2002; Rugman and Verbeke, 2005). Although models depicting driving forces of subsequent INV

internationalization consider environmental factors, these are mostly limited to changes based on globalization or information technology and do not explicitly analyze the role of institutional distance (e.g., Hagen and Zucchella, 2014; Oviatt and McDougall, 2005). This thesis therefore aims at contributing to closing the identified research gap (cf. Sui et al., 2012; Bruton et al., 2010):

Shortcoming 2: Lack of consideration of the institutional environment, and in particular institutional distance in research on subsequent international expansion of INVs.

1.4.2 Speed of internationalization

Speed of internationalization presents an important factor of a firm's international expansion process and has received increased attention in IB research. Chetty et al. (2014) define speed "as a relationship between the internationalization distance covered and the time passed to reach this" (p. 640). Scholars have long focused on explaining why, where, and how MNEs internationalize and have largely neglected the time dimension – *when* firms internationalize (Eden, 2009). IE scholars in particular put internationalization speed on top of the research agenda by analyzing early and rapid internationalization of INVs (Jones et al., 2011; Oviatt and McDougall, 2005). Rapid internationalization stands in stark contrast to the original Uppsala model, which regards internationalization as an incremental process resulting from constraints set by psychic distance and experiential knowledge (Johanson and Vahlne, 1977; Autio, 2005).

However, as outlined earlier (see section 1.3), INV researchers have mostly considered speed as the time to internationalization (i.e., initial internationalization speed), therefore focusing on the pre-internationalization stage. Studies on initial speed of INV internationalization have mostly focused on antecedents of rapid internationalization (Musteen et al., 2010; Andersson et al., 2014; Pla-Barber and Escribá-Esteve, 2006; Ramos et al., 2011) and to some degree on outcomes of internationalization speed (Zhou and Wu, 2014; Puig et al., 2014; Autio et al., 2000). Although these studies have helped to clarify the role of initial internationalization

speed with regard to firms' international expansion process, the conceptualization of initial speed is quite limited, as it only encompasses the pre-internationalization stage and does not consider any subsequent stages of firm internationalization (Autio et al., 2000). Few works have been carried out on speed during the subsequent internationalization phases of INVs (Prashantham and Young, 2011; Casillas and Acedo, 2013). Despite some studies analyzing explicitly or implicitly the subsequent speed of INV internationalization, focusing on drivers and outcomes (Morgan-Thomas and Jones, 2009; Prashantham and Young, 2011; Sleuwaegen and Onkelinx, 2014; Hagen and Zucchella, 2014; Weerawardena et al., 2007), literature remains scarce in this domain. This seems surprising given the strong focus on speed during the INVs' early stages of internationalization.

When analyzing the subsequent speed of internationalization, one aspect in particular deserves greater attention from both IB and IE scholars, namely the multidimensionality of the construct. Oviatt and McDougall (2005) as well as Casillas and Acedo (2013) have provided important conceptual works that highlight the significance of considering speed as a multidimensional construct, calling for a more detailed reflection of speed in future research. Oviatt and McDougall (2005) develop a model depicting the driving forces of internationalization speed and differentiate among initial entry speed, country scope speed, and commitment speed. While initial entry speed has been discussed earlier, the dimensions of country scope speed and commitment speed require further explanation. Speed of country scope can refer to either speed of the number of increase of countries entered, or speed of the number of psychically distant markets entered. Commitment speed, on the other hand, refers to the speed of increase in the percentage of foreign revenues. Although Oviatt and McDougall (2005) point out the different dimensions of internationalization speed, their work does not provide a more detailed discussion of how these dimensions are operationalized and what drives the individual dimensions. In a later study, Casillas and Acedo (2013) address this shortcoming, providing a more detailed analysis of internationalization speed sub-categorized

in three dimensions. The first dimension, labeled (1) speed of international growth, reflects the commitment speed dimension of Oviatt and McDougall (2005). The second dimension, referred to as (2) speed of the dispersion of international markets, can be seen as an extension of Oviatt and McDougall's (2005) country scope dimension. Casillas and Acedo (2013) suggest that this dimension can be measured in terms of number, variety, and distance of foreign markets. Speed of dispersion of international markets includes not only the number of countries in which firms operate through export or equity modes, but also reflects the physical and cultural distance between these markets and the firm's home country. The third dimension is (3) speed of increased commitment of resources to foreign activity, and can include assets of firms held abroad, employees working in foreign markets, or entry mode commitment.

The above-mentioned studies have significantly contributed to conceptually understanding the multiple dimensions of internationalization speed. To date, the majority of empirical studies on internationalization speed have only adopted a unidimensional conceptualization. However, unidimensional measures were by no means used in a homogenous manner across the different studies, but instead focus on different facets of internationalization speed.

In the seminal work of Vermeulen and Barkema (2002), the authors measure speed as the number of foreign subsidiaries a firm has established within a certain period of time. This conceptualization most strongly relates to the proposed dimension by Casillas and Acedo (2013), labeled speed of increased commitment of resources, which refers to entry mode commitment. Other studies on MNE internationalization speed have conceptualized speed differently and analyzed it in terms of increase in foreign-sales-to-total-sales within a certain period of time (Wagner, 2004; Tan and Mathews, 2015; Bonaglia et al., 2007). This measurement reflects the speed of international growth dimension according to Casillas and Acedo (2013) and the commitment speed dimension of Oviatt and McDougall (2005), which

are – despite their different terms – conceptually similar. This conceptualization has also been adopted by IE scholars analyzing the subsequent internationalization speed of INVs, as can be seen in the study of Morgan-Thomas and Jones (2009). In contrast, the applicability of the speed measurement by Vermeulen and Barkema (2002) that only considers FDI expansion of firms is less suitable for INVs. These firms often rely on non-equity or hybrid entry modes to pursue subsequent international expansion, which is why IE scholars suggest measuring speed as the increase of number of countries entered within a certain time span (Prashantham and Young, 2011). This measurement therefore reflects the country speed dimension highlighted by Oviatt and McDougall (2005).

The variety of measurements of internationalization speed used in previous empirical studies emphasizes the notion of speed as a multidimensional rather than a unidimensional construct. A unidimensional consideration of internationalization speed hinders scholarly understanding and makes findings of studies less comparable. This is particularly obvious when looking at results of studies analyzing the relationship between internationalization speed and firm performance. Studies in this area remain inconclusive, as it has been suggested that speed can either influence performance negatively (Vermeulen and Barkema, 2002), positively (Chang and Rhee, 2011), or in a non-linear way (Wagner, 2004).

The issue of omitted empirical analysis of speed as a multidimensional construct as well as inconclusive findings on the speed-performance relationship were addressed in a recent study by Chetty et al. (2014). The authors provide a multidimensional measurement of internationalization speed, which is tested by analyzing the relationship between speed and international performance. However, the speed measurement developed by Chetty et al. (2014) differs from the dimensions and measurements described above and relates directly to core ideas of speed as implied in the Uppsala model. Their formative measurement of internationalization speed consists of speed of learning and speed of commitment as

dimensions of internationalization speed. Their findings suggest that internationalization speed increases the international performance of firms. One drawback of measuring speed as a formative construct is that valuable information is lost on how individual speed dimensions impact an outcome variable or interact among each other. Gaining insights on the individual relationship is important, however, to understand whether all speed dimensions similarly contribute to international performance or whether certain dimensions are more effective than others (cf. Casillas and Acedo, 2013).

In order to overcome ambiguous findings regarding the speed-performance relationship (Vermeulen and Barkema, 2002; Wagner, 2004; Chetty et al., 2014) – potentially stemming from a different conceptualization of internationalization speed – further research is required. Consequently, this thesis addresses the issue of the prior limited consideration of speed as a multidimensional construct and contributes to closing the following research gap (cf. Oviatt and McDougall, 2005; Casillas and Acedo, 2013; Chetty et al., 2014):

Shortcoming 3: Lack of empirical consideration of speed of internationalization as a multidimensional construct hinders scholarly understanding of performance implications of internationalization speed during firms' subsequent stage of internationalization.

1.5 Aim, structure and empirical context of the thesis

Motivated by the shortcomings in current literature, the overall aim of this thesis is to shed light on the international expansion of firms, while taking into account institutional country differences, subsequent internationalization of INVs, and by focusing on speed of internationalization as a crucial component of this process. This study therefore aims to (1) contribute to INV research by providing a conceptual framework of the subsequent international expansion of INVs in light of the moderating impact of institutional distance.

Further, an empirical analysis aims to (2) untangle the relationship between different dimensions of internationalization speed and international performance of firms. Finally, this thesis (3) introduces a new concept, i.e. managerial misperception of country differences, and empirically identifies antecedents of misperception and its impact on a firm's host country performance.

In order to address the shortcomings of previous scholarly work and the overarching aim of this thesis, three papers written in a journal-article format are included in the thesis and will be presented in individual chapters.

Paper I presented in Chapter 2 is a conceptual work examining the international expansion of INVs once they internationalize. A comprehensive framework is provided, depicting the relationship of factors contributing to subsequent international expansion and the moderating impact of institutional distance on an INV's international expansion process. This conceptual work demonstrates that institutional forces play a significant and often neglected moderating role for internationalizing INVs. Paper I aims to advance current research and motivate future studies in the area of subsequent international expansion of INVs in order to understand how these firms develop over time. Findings have important implications for managers and scholars in understanding how the wider institutional environment shapes the international expansion of maturing INVs.

Paper II presented in Chapter 3 analyzes the impact of internationalization speed on international performance of firms along four dimensions. In particular, the dimensions of country, commitment, scope, and equity speed are considered. Using structural equation modelling to test the relationship between these speed dimensions and international performance shows a positive impact of country and commitment speed and a negative impact of equity speed. A group analysis separately comparing this impact for INVs and traditional exporters shows that INVs benefit to a greater extent from the positive effects of

country and commitment speed than do traditional exporters, and in contrast to expectations, show that equity speed positively impacts INVs international performance. These findings are of great importance to managers, as they highlight which speed dimensions are more desirable to achieve in order to increase international performance.

Paper III presented in Chapter 4 looks at managerial misperception of country differences and in contrast to Paper II does not distinguish between types of firms. It introduces the concept of managerial misperception of country differences, which describes the deviation of managers' perceived differences from actual differences between countries. While managerial perceptions of country differences receives increasing interest in recent IB literature, prior studies hardly consider to what degree managerial perceptions reflect actual distance specifications between countries. This paper theoretically derives and empirically tests antecedents and performance effects of managerial misperception. Using regression analysis it is shown that firm size and effective key partnerships in the host country are negatively associated with managerial misperception, while there is a positive impact of firms' international scope and cultural distance between home and host country. Additionally, a negative relationship between managerial misperception and firms' host country performance is found. This study shows that the concept of misperception is important and can be applied to a large variety of research questions and designs in IB research. The concept is particularly useful when studying decision-making processes and outcomes of decisions in internationalization processes.

The empirical context of this thesis is the German renewable-energy industry. This industry has been chosen for several reasons. First of all, firms in this industry are highly international given the global demand of renewable-energy products and services (Lehr et al., 2012; Baum et al., 2011a; Tan and Mathews, 2015; Bergmann, 2009). Second, previous studies have confirmed the suitability of this industry to study internationalization patterns of INVs and firms following

a more traditional approach to internationalization (Schwens et al., 2010; Baum et al., 2011a). Third, the renewable-energy industry is of relatively high importance to the German economy and has experienced significant growth in the last decade (Lehr et al., 2012; Benkenstein et al., 2009).

The research design underlying this thesis is a multi-stage process and sequential data collection was undertaken. Figure 1.1 graphically illustrates the different stages of data collection.

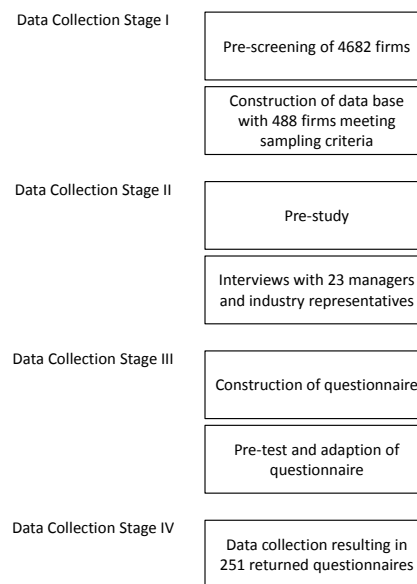


Figure 1.1: Data collection

Given the relatively young age of the German renewable-energy industry, no comprehensive database exists listing all firms with international operations. An extensive pre-screening was required to identify firms meeting the sample criteria of being a German-owned for-profit firm that operates internationally and derives its major revenue within the renewable-energy industry. Based on a variety of sources, including, among others, a database covering the German renewable-energy industry provided by a German governmental institution and membership registries of main industry associations, 4682 firms were screened. This resulted in 488 firms that met sampling criteria. Once firms were identified, a large pre-study was conducted by attending major trade fairs and industry events, where first insights were gained.

At these venues managers of firms were approached to inquire about potential interest in participating in the study. Subsequently, 23 managers and industry representatives were interviewed at participants' sites or over the phone in 2013, providing deep insights into firms' internationalization processes and industry particularities. This helped validate the research question, confirmed suitability of the industry, and assisted in developing the questionnaire for quantitative data collection. The questionnaire was developed based on established scales from previous IB and IE literature and aimed at capturing general information about the firm and respondent as well as specific information about the firm's internationalization process. The original items in English were translated into German. Forward and backward translation was used to increase validity of the questionnaire. The questionnaire was pre-tested and successively adapted by changing the order of questions, clarifying statements to avoid ambiguity, and validating items (cf. Podsakoff et al., 2003).

The questionnaire survey was conducted in 2014. All firms meeting the sample criteria were contacted personally either at industry events or via telephone to seek out the most suitable respondents for the study – which in many cases was the entrepreneur, CEO, or head of sales department, depending on the company structure – and to obtain consent for participation in the study. Confidentiality and anonymized data analysis was assured to the respondents. The respondents were provided with the option of completing and returning the standardized questionnaire either online, via e-mail (i.e., PDF document), via mail, or over the phone, depending on their personal preferences. This process resulted in an overall response rate of 51.4% (251 questionnaires).

This multi-stage sequential data collection provided rich qualitative and sound quantitative data that enabled empirical analyses of studies included in this thesis.

2 Paper I

Modelling the moderating impact of institutional distance on subsequent international new venture internationalization

Abstract

This study examines the internationalization process of international new ventures (INVs) after initial internationalization. A comprehensive framework is provided, depicting the relationship of factors contributing to the subsequent internationalization process and the moderating impact of institutional distance on an INV's international expansion process. This conceptual work demonstrates that institutional forces play a significant and often neglected moderating role for internationalizing INVs. The paper aims to advance current, and motivate future, research in the area of the subsequent internationalization process of INVs in order to understand how these firms develop over time. Findings have important implications for managers and scholars in understanding how the wider institutional environment shapes the international expansion process of maturing INVs.

2.1 Introduction

International business (IB) research has long focused on the internationalization of large multinational enterprises (MNEs) (Oviatt and McDougall, 1994). However, as part of the ongoing globalization process, more and more small- and medium-sized enterprises (SMEs) have engaged in the process of international expansion, which is increasingly reflected in academic literature (Oviatt and McDougall, 2005). In particular, the fast internationalization of international new ventures (INVs) – firms that internationalize shortly after inception – has received significant interest (Autio, 2005; Rialp et al., 2005; Keupp and Gassmann, 2009).

While the attention of IB scholars studying MNEs has mostly focused on the international expansion process over time, most of the INV literature focuses on the initial or even pre-internationalization stage (i.e., the time between foundation and first international market activity) (Oviatt and McDougall, 1994; Coviello and Munro, 1997; Brouthers and Nakos, 2004), whereas the subsequent stage remains rarely explored (Autio et al., 2000; Prashantham and Young, 2011; Almor et al., 2014; Hagen and Zucchella, 2014; Casillas and Acedo, 2013). After two decades of INV research it is time to fully explore the actual process of how INVs continue internationalizing after they have become INVs, and thus concentrate on the parameters that influence the subsequent international expansion process. Fortunately, an increasing number of researchers are starting to shift their attention to the post-entry phase, analyzing the decisive period of INVs' growth and survival in order to understand the subsequent development of maturing INVs (Prashantham and Young, 2011; Gabrielsson et al., 2014; Sleuwaegen and Onkelinx, 2014; Sui and Baum, 2014). Recent research has started exploring drivers, processes, and outcomes of subsequent international growth and has tried to untangle the relationship between factors relevant in the initial and subsequent stage of INVs' internationalization (Hagen and Zucchella, 2014; Nummela et al., 2014; Bloodgood, 2006). Similar to research on the initial internationalization period, studies on subsequent INV internationalization focus largely on firm-specific factors and fail to adequately address the

role of the wider environment of international markets. We argue that increasing internationalization of INVs exposes them to challenges from diverse institutional environments that ultimately impact the international expansion of these firms and that their response to these challenges needs to be reflected in future research. Despite the multiple applications of institutional theory – and institutional distance in particular – within IB and international entrepreneurship (IE) literature, it is surprising that both have seldom been acknowledged in INV studies (Bruton et al., 2010; Sui et al., 2012). Hence, it is important to broaden the perspective by shifting attention from firm-, industry-, and home-market related factors to the wider institutional environment in order to comprehend INVs' internationalization process in the long-term.

Previous research on INV initial internationalization has been somewhat heterogeneous, not only in the terminology used to describe a similar phenomenon, but also with definitions and context of analysis, making consolidation of definitions and findings difficult to compare (Oviatt and McDougall, 2005; Jones and Coviello, 2005). As INV scholars embark on the journey of exploring the subsequent stage of internationalization, it is important that the context and definitions of subsequent internationalization are clearly outlined in order to facilitate concise research in this emergent area.

The aim of this paper is therefore to consolidate existing research relevant to the subsequent internationalization of INVs, to develop a model to enhance knowledge in light of the moderating role of institutional distance, and to map out a path for fruitful future research.

In particular, this paper will draw on previously published IB and IE literature as well as institutional theory. The international expansion of INVs is conceptualized along three dominant dimensions: pace (i.e., speed of internationalization), pattern (i.e., market-entry mode), and scope (i.e., geographical spread of markets) (Vermeulen and Barkema, 2002; Khavul et al., 2010; Zahra and George, 2002). INV scholars have identified a multitude of

drivers helping INVs overcome the challenges of the liabilities of newness and foreignness (Stinchome, 1965) as well as the challenges related to a lack of resources needed to internationalize early in their lifecycle (Preece et al., 1999; Zucchella et al., 2007; Knight and Cavusgil, 1996). Certain firm- and market-level antecedents have been identified as unique to INVs' rapid internationalization, such as international experience and networking ability of the entrepreneur (Coviello and Munro, 1995; Madsen and Servais, 1997; Oviatt and McDougall, 1994), as well as small domestic markets (Evangelista, 2005), which will be included in the model to enhance the understanding of the most recent findings on the subsequent internationalization of INVs (Hagen and Zucchella, 2014; Prashantham and Young, 2011; Morgan-Thomas and Jones, 2009). A main contribution of this paper to current theoretical developments in the area of subsequent INV internationalization will be an analysis of the moderating role of institutional forces, which have been identified as having a significant impact on the relationship between antecedents and the internationalization process of INVs (Schwens et al., 2011; Kiss and Danis, 2008; Brouthers and Hennart, 2007; Scott, 2008).

After introducing a conceptual model of INV internationalization and discussing its implications, we will also outline repercussions for the subsequent international expansion of firms in light of institutional forces, which will present IE scholars with a robust baseline for further research.

2.2 Literature review

2.2.1 International new venture phenomenon

The INV phenomenon was first introduced in a seminal work by Oviatt and McDougall (1994) and describes firms that "from inception, seek to derive significant competitive advantage through the use of resources and the sale of outputs in multiple countries" (p. 49). This phenomenon challenged and criticized one of the most dominant internationalization theories

– the Uppsala internationalization process model – which, in contrast to INVs' internationalization, describes internationalization as an incremental process along the establishment chain (Johanson and Vahlne, 1977; Johanson and Vahlne, 2009). Research on INVs has gained momentum within internationalization literature based on empirical observations showing that a large number of new ventures internationalize shortly after inception, a phenomenon that contributed to the creation of IE as a new literature stream (Autio, 2005). While terminology to describe the phenomenon remains heterogeneous (Rasmussen and Madsen, 2002) and terms such as born-globals (Knight and Cavusgil, 1996), born-again global (Bell et al., 2001), and early internationalizing firms (Rialp et al., 2005) are used, this paper adopts the term INV.

In this section, we discuss the dominant literature on early internationalization of INVs, drawing on macro-economic and firm-level drivers, before elaborating on more recent approaches elucidating subsequent growth of INVs. Certain environmental factors facilitate rapid internationalization and help firms overcome pre-existing impediments to the process, among them rapid globalization, diminishing trade barriers, and technological progress – especially in the area of information technology and infrastructure (Madsen and Servais, 1997; Oviatt and McDougall, 2005; Zahra and George, 2002; Antoncic and Hisrich, 2000). Thus, information, knowledge, and goods can be transferred more easily within a firm and across borders, increasing the speed of internationalization (Zucchella et al., 2007). However, increased speed of knowledge transfer and a globalized business environment exacerbate the difficulty of protecting proprietary knowledge on an international level (Baum et al., 2011b). This problem is particularly relevant for high-technology products and goods with a short lifecycle that require fast and sufficiently large revenue to cover expenditures occurred during the research and development phase (Oviatt and McDougall, 1994; Oviatt et al., 1995; Autio, 2005; Schwens and Kabst, 2011). This circumstance explains why firms in knowledge-intensive industries internationalize at a fast pace and their existence contributes to the INV

phenomenon. Nevertheless, it should be emphasized that INVs are not restricted to these industries (Rialp et al., 2005). Because of globalization, firms that traditionally competed domestically and with domestic players now compete with international players in the domestic market. This development often results in a faster maturing domestic market and puts pressure on firms to internationalize in order to maintain growth rates (Khavul et al., 2010; Oviatt and McDougall, 2005). It can be expected that the INV phenomenon will increase in importance in the future, as the number of new ventures and SMEs that will internationalize beyond their domestic markets continues to increase (Shrader et al., 2000).

A large part of research on early internationalization of INVs is based on firm-level factors (Autio et al., 2000). The most central role in early internationalization is attributed to the entrepreneur and the entrepreneurial behavior of the firm (e.g., Kuivalainen et al., 2007; Oviatt and McDougall, 1994). More specifically, the entrepreneur's previous personal international experience, international market knowledge, risk-taking attitude, innovation capacity, and networking ability have been identified as important influencing factors in the internationalization process of an INV (Harris and Wheeler, 2005; Andersson, 2000; Coviello and Munro, 1997; Zahra and George, 2002). Knowledge can also be gained through experiential learning by incrementally increasing international commitment, which facilitates the internationalization process, lowering perceived risk of foreign markets (Johanson and Vahlne, 1977; Forsgren, 2002; Schwens and Kabst, 2011; Liesch et al., 2011). The role of international orientation and international growth strategy has also been a central element driving early internationalization. This implies that a firm strives to grow internationally and is willing to accept risks and proactively deal with problems faced when entering foreign markets (Baum et al., 2011a; McDougall et al., 1994). Additional and more in-depth overviews of factors impacting the initial internationalization stage can be found in several studies providing an excellent meta-analysis of the field (e.g., Rialp et al., 2005; Jones et al., 2011; Aspelund et al., 2007; Zucchella et al., 2007).

Given the significant advances in understanding rapid initial internationalization, scholars have recently begun exploring the subsequent growth of INVs after initial international activity. One of the first studies shifting its focus away from the pre-internationalization stage was conducted by Autio et al. (2000), showing that early initial internationalization also leads to increased subsequent growth. This work has sparked interest among INV scholars to understand how INVs develop over time and to identify antecedents and outcomes of further international growth (Gabrielsson et al., 2008; Prashantham and Young, 2011; Morgan-Thomas and Jones, 2009; Almor et al., 2014; Gabrielsson et al., 2014; Hurmerinta-Peltomäki, 2003). A recent qualitative study examined the drivers of the rapid internationalization behavior of INVs, including firm-specific factors, entrepreneurial characteristics, and environmental context (Hagen and Zucchella, 2014). Many factors identified by Hagen and Zucchella (2014) have also been recognized as relevant in the initial stage of INV internationalization, including resources, networks, business strategy, prior international experience of the entrepreneur, and global orientation, as well as external drivers stemming from increased globalization and industry-specific factors. The authors show that these factors increase subsequent growth of INVs (Hagen and Zucchella, 2014). Gabrielsson et al. (2014) specifically focused on the impact of factors stemming from the international entrepreneurial culture (Dimitratos et al., 2012), consisting of international motivation, market orientation, proactiveness, international learning, and networking as a way to explain the subsequent international growth of INVs. In contrast to some findings of a study by Hagen and Zucchella (2014), they show that certain characteristics associated with the entrepreneur can negatively influence the subsequent growth of INVs. In particular they find that international motivation, risk-taking attitude, market orientation, innovation propensity, and proactiveness have a negative impact on subsequent growth of INVs (Gabrielsson et al., 2014). Given that ambiguous findings exist, more research is required in this area to reconcile findings and to understand what contributes to a positive or negative impact for firm-level factors on subsequent international growth.

While the above-mentioned studies focus mainly on the antecedents of INVs' international growth, other studies focus more on outcomes of subsequent growth in terms of geographic spread. Results of these studies significantly challenge the basic born-global idea, arguing instead that many firms expand within the same geographic region first before expanding globally (Lopez et al., 2009; Freeman et al., 2012b; Hashai and Almor, 2004). Advocates of the born-regional position postulate that INVs internationalize shortly after inception and achieve significant returns from international activities, but that these returns are mainly generated in regional or psychically closed markets (Lopez et al., 2009). Work by Morgan-Thomas and Jones (2009) supports these findings, showing that rapidly internationalizing firms largely depend on one key foreign market from which most foreign sales are derived. Arguments reinforcing this notion can also be found in more traditional IB literature (Rugman and Verbeke, 2005; Johanson and Vahlne, 2009; Barkema and Drogendijk, 2007). Based on empirical analyses of large MNEs, these scholars show that firms have a clear preference for internationalizing within the same region, which reduces the need to adapt existing operating procedures, requires fewer resources, and reduces the liability of foreignness (Rugman and Verbeke, 2004; Rugman and Verbeke, 2007). Another argument explaining a regional internationalization preference is an inherent concept of the Uppsala internationalization process model, arguing that experiential knowledge is of utmost importance before firms proceed with further international expansion (Johanson and Vahlne, 2009), which seems to also hold true for INVs that need to accumulate organizational learning before pursuing further expansion (Gabrielsson et al., 2008). Prashantham and Young (2011) analyze the relationship between knowledge accumulation and post-entry speed, suggesting a direct impact of accumulated market and technological knowledge on internationalization speed of INVs. These findings indicate that INVs do not internationalize immediately on a large scale – despite internationalizing early and rapidly – but rather focus on a certain region or follow a specific expansion strategy (Sui et al., 2012; Hashai and Almor, 2004; Hashai, 2011). This expansion

process seems to increase survival chances of INVs, as has been demonstrated by Sleuwaegen and Onkelinx (2014), who find higher survival rates with start-ups pursuing a geographically focused international growth strategy than in start-ups operating on a broader global scope. From a practical viewpoint, this seems comprehensible given that internationalizing in a region of similar markets or within a free-trade area presents fewer challenges to INVs (cf. Gabrielsson et al., 2008; Sui et al., 2012).

While the above-mentioned studies have significantly contributed to our understanding of the drivers of INVs' subsequent international expansion process, they fall short of explicitly examining the role of the wider institutional environment. The important role of context and institutional environment in which a firm is embedded is highlighted by Nummela et al. (2014), who in several case studies analyze how the decision-making process within growing INVs changes over time. In addition, previous studies implicitly indicate that INVs seem to be constrained by psychic and institutional differences that significantly impact their international expansion process along the pace, pattern, and scope dimensions (Almor and Hashai, 2004; Almor, 2013; Nummela et al., 2014). Despite increasing globalization and assumed cultural convergence, large macro-environmental differences prevail. Recent research has suggested complementing INV theory with neo-institutional theory, thus widening the perspective from characteristics of the individual firm and its home market to the wider institutional context in which the international expansion process is embedded (e.g., Hilmerston and Jansson, 2012; Child et al., 2009; Schwens et al., 2011; Sui et al., 2012).

2.2.2 Institutional theory

Institutional theory describes the impact of the institutional environment on social and organizational behavior (Scott, 1995; DiMaggio and Powell, 1983) and is now frequently used in the IB literature to study entry mode behavior of firms (e.g., Brouthers, 2002; Meyer et al., 2009; Schwens et al., 2011; Kostova and Zaheer, 1999; Peng et al., 2008). The term "institutions" is used in a variety of contexts and remains ambiguous, as it can exist on

different levels – comprising the individual, organizational, field, and societal (Greenwood et al., 2008). Institutions can include legal frameworks, information systems, and regulatory regimes that influence societal transactions in the areas of politics, law, and society (Peng et al., 2008; Meyer et al., 2009). According to Scott's (2008) definition, "institutions are comprised of regulative, normative, and cultural-cognitive elements that, together with associated activities and resources, provide stability and meaning to social life" (p. 48). The first of the "three pillars of institutions" (Scott, 1995) is regulative, and refers to institutions that set rules and make laws, and monitor compliance with them in a society. The regulative pillar is assumed to be the most visible and the easiest to identify, as it often consists of formally written or unwritten – that is, conscious – codes of conduct. The normative pillar refers to values and norms of society upon which individuals or organizations are expected to act. The last, the cultural-cognitive pillar, refers to shared beliefs, common understandings, and cultural frameworks through which meaning is made. It focuses on how the external environment is interpreted and perceived subconsciously or "internally" (Scott, 2008). These three pillars help us to understand the ubiquity of institutions in an internationalization process and are strongly related to the neo-institutional concept of institutional distance.

Institutional distance refers to the differences among the three institutional pillars between two countries (Kostova and Zaheer, 1999). Similar to Johanson and Vahlne's (1977; 2009) claims on the importance of psychic distance, great institutional distance between home and host country increases the complexity of conducting business abroad (Meyer et al., 2009). The higher the institutional distance, the higher the risk and the more problems and business costs the firm might encounter and incur, which can only be controlled by adopting an efficient international expansion process (Schwens et al., 2011; Gaur and Lu, 2007). Overcoming market imperfections caused by a particular institutional environment and information asymmetry in a country is a primary goal of managers when selecting a market entry strategy (Meyer et al.,

2009). Kostova and Zaheer (1999) suggest that a greater institutional distance will increase an organization's difficulty in establishing and maintaining legitimacy in the host country.

Many scholars have researched the impact of institutional distance on entry mode strategies, with the intention of predicting the most suitable entry mode (e.g., Brouthers and Hennart, 2007; Schwens et al., 2011; Gaur and Lu, 2007; Xu and Shenkar, 2002). Thus, Xu and Shenkar (2002) have analyzed the issue of institutional distance more closely, differentiating between normative, regulative, and cognitive distance, and focusing on its impact on host country selection and foreign-market entry strategy. Generally, regard regulative distance as less impactful on market choice because differences can be more easily understood and incorporated into organizational routines. Other researchers have combined normative and cognitive distance into a single factor because of their similarities, investigating the impact of only regulative and normative distance (Gaur and Lu, 2007; Chao and Kumar, 2010). Likewise, Schwens et al. (2011) have distinguished between merely two types of institutional distance dimensions, formal and informal distance, whereby the first refers to political, legal, and economic rules and the latter to cultural and ideological differences. Despite studies using different terminology or factors for analyzing institutional distance, it is also important to consider whether institutional distance is analyzed as an independent or moderating variable on entry mode choice, speed, or performance as this might lead to different findings.

Most scholars have investigated the effects of institutional distance as an independent variable on entry modes and performance (e.g., Delios and Beamish, 1999; Gaur and Lu, 2007). However, studies reveal inconsistent findings and the research conducted in this area has been relatively inconclusive (see Brouthers and Hennart, 2007; Schwens et al., 2011). For example, Gaur and Lu (2007) suggest that a wholly owned subsidiary is preferred when regulative distance is high and high equity ownership in joint ventures is favored when the normative distance is large. Xu and Shenkar (2002) propose the opposite relationship. The findings of

Eden and Miller (2004) remain ambiguous, suggesting that high regulative distance will either cause firms to opt for a wholly owned subsidiary or very low equity ownership. These inconsistent findings show that the strategic choice of whether to enter a market with a non-equity, low-equity, or an equity mode cannot be solely predicted by applying institutional theory (Schwens et al., 2011). Schwens et al. (2011) focus on the moderating impact of institutional distance between international experience, proprietary know-how, strategic importance and equity-based entry modes of SMEs, rather than including institutional distance as an independent variable. However, their findings do not show a strong relationship between host country institutions and entry mode choice either. Chao and Kumar (2010) study the relationship between international diversity and firm performance, testing a moderating effect of regulative and normative distance. As hypothesized, they find that regulative distance negatively moderates the relationship between international diversity and performance, but results reveal a positive impact of normative distance on this relationship. While the latter relationship was unexpected, the authors elucidate that given their sample of highly international and very large firms with long international histories and high levels of international experience, normative distance might have a negative impact in the first years of international activity, but becomes less relevant in the long run. Thus this study is limited to large MNEs and results cannot be assumed to hold true for smaller INVs.

Despite these prior studies on the impact of institutional distance on entry mode strategies (e.g., Brouthers and Hennart, 2007; Schwens et al., 2011; Gaur and Lu, 2007; Xu and Shenkar, 2002), more research is required to understand the impact of institutional distance on other dimensions of the international expansion process of firms. A noteworthy conceptual work was done by Kiss and Danis (2008), who, instead of looking at entry mode decisions, analyzed the moderating impact of institutional contexts between INVs' networks and speed of internationalization. The study shows that the positive relationship between the number of strong and weak ties of the entrepreneur's network on internationalization speed is

moderated depending on the level of a country's institutional development. Their propositions are based on the assumption that different institutional contexts require different network tie strengths, pointing out that in countries of high institutional development, weak ties are more effective for achieving high internationalization speed, whereas in countries with low institutional development, strong ties are more efficient (Kiss and Danis, 2008).

The previously highlighted studies show the important role of institutional forces in the pace, pattern, and scope of an INV's international expansion process. These institutional forces are particularly relevant for INVs in their subsequent stage of internationalization when they expand into a broader set of countries with differing levels of institutional development. This reality requires firms to adapt their internationalization strategy and build in capabilities to account for differences stemming from the institutional environment. Understanding the underlying theories and concepts of the international expansion process of INVs is important and required in order to better comprehend the forces that impact the pace, pattern, and scope of the internationalization process and to what degree these three dimensions are impacted.

2.3 Conceptualization of the subsequent international expansion

The foregoing literature review has given a broad overview of significant factors of the international expansion of INVs and has highlighted the importance of the wider institutional environment. The conceptual framework presented in Figure 2.1 depicts the relationships between the triggering and moderating factors on the subsequent international expansion of INVs. We conceptualize the subsequent international expansion along three dominant dimensions: pace, pattern, and scope (Vermeulen and Barkema, 2002; Khavul et al., 2010; Zahra and George, 2002; Zahra et al., 2000; Kutschker et al., 1997).

Pace of internationalization describes the speed with which firms internationalize into different markets. Speed has been a core concept of the INV phenomenon and most commonly refers to the timespan between inception of a firm and its first international activities (Zahra et al., 2000; Knight and Cavusgil, 1996; Oviatt and McDougall, 1994). This definition, however, focuses on the pre-internationalization phase rather than the pace by which firms increase international activity over time. In the conceptual model here, pace is therefore conceptualized as post-entry speed, referring to the time since the firm's first international activity (Prashantham and Young, 2011; Morgan-Thomas and Jones, 2009; Vermeulen and Barkema, 2002). Speed of internationalization is a multidimensional construct and can be measured on different levels by juxtaposing a certain outcome against time (Oviatt and McDougall, 2005; Morgan-Thomas and Jones, 2009; Casillas and Acedo, 2013; Hurmerinta-Peltomäki, 2003). Thus speed can, for example, refer to the number of markets entered, the foreign turnover achieved, or the level of resources committed to entry modes within a given period of time (Casillas and Acedo, 2013; Oviatt and McDougall, 2005). The multidimensionality of pace as a construct is of lesser importance to the proposed conceptual model, as all dimensions indicate a rapid increase in international operations of a firm, but need to be reflected when empirically testing the proposed relationships (Chetty et al., 2014).

The second dimension considered is the *pattern* of international expansion, which refers to market entry modes chosen by a firm over time. Market entry modes are considered to be an important strategic decision during the internationalization process, as they have important implications in terms of the level of control of foreign-market activities and the level of resources committed to a market (Andersen, 1997; Brouthers and Hennart, 2007; Pan and Tse, 2000). There is no common agreement within the literature about how many different entry modes exist, but in general they can be distinguished between contractual and equity modes of entry (Hennart, 1988; Hennart, 1989; Pan and Tse, 2000). Entry modes considered in the international process theory include infrequent export, export via independent agents, joint

venture, sales subsidiaries, and production and manufacturing plants (Johanson and Wiedersheim-Paul, 1975; Johanson and Vahlne, 1977; Johanson and Vahlne, 2009). Entry mode decisions play a significant role in light of the institutional context, as previous research has shown that depending on the institutional distance, certain entry modes lead to better performance (Brouthers, 2002).

The third and last dimension considered in the internationalization expansion of a firm is *scope*. Scope refers to the geographic spread of firms over time and can be considered on two slightly different levels: either as the total number of markets a firm operates in (George et al., 2005; Casillas and Acedo, 2013) or as the number of geographic regions in which a firm maintains operations (Oviatt and McDougall, 2005; Vermeulen and Barkema, 2002). International operations enable a firm to diversify risk across different countries and regions in order to achieve higher returns (Kim et al., 1993). Broadening the international scope of a firm also facilitates acquisition of knowledge of institutionally distant markets, which can help create a competitive advantage. However, if a firm diversifies too much or too quickly, these actions could negatively impact a firm's profits (Hitt et al., 1997; Vermeulen and Barkema, 2002; Ruigrok et al., 2007; Sui and Baum, 2014). In addition to conceptualizing scope as the number of international markets, it could also be expressed as the degree of internationalization, referring to the percentage of sales generated in an international market or international region, compared to the total sales or domestic sales generated (Hitt et al., 1997; Sullivan, 1994).

The framework in Figure 2.1 is structured as a sequential model, starting with the antecedents as identified by INV scholars representing the independent variables, followed by the subsequent international expansion along its three dimensions, which represent the dependent variables. We acknowledge that the list of factors included in the model is by no means exhaustive, but rather focuses on the most prominent antecedents of the international

expansion process discussed in literature (cf. Hagen and Zucchella, 2014). Furthermore, only antecedents that are assumed to have a positive impact on firms' international expansion are considered. Although the graphical presentation in Figure 2.1 is highly simplified, the complexity of the individual relationships between antecedents and outcomes needs to be considered. The relationships will therefore be discussed subsequently. We will first start by consolidating literature to outline the drivers of subsequent international expansion of INVs. Afterwards the moderating impact of institutional distance will be discussed to understand its role during the subsequent international expansion of INVs. This will provide essential insights into the internationalization process of INVs.

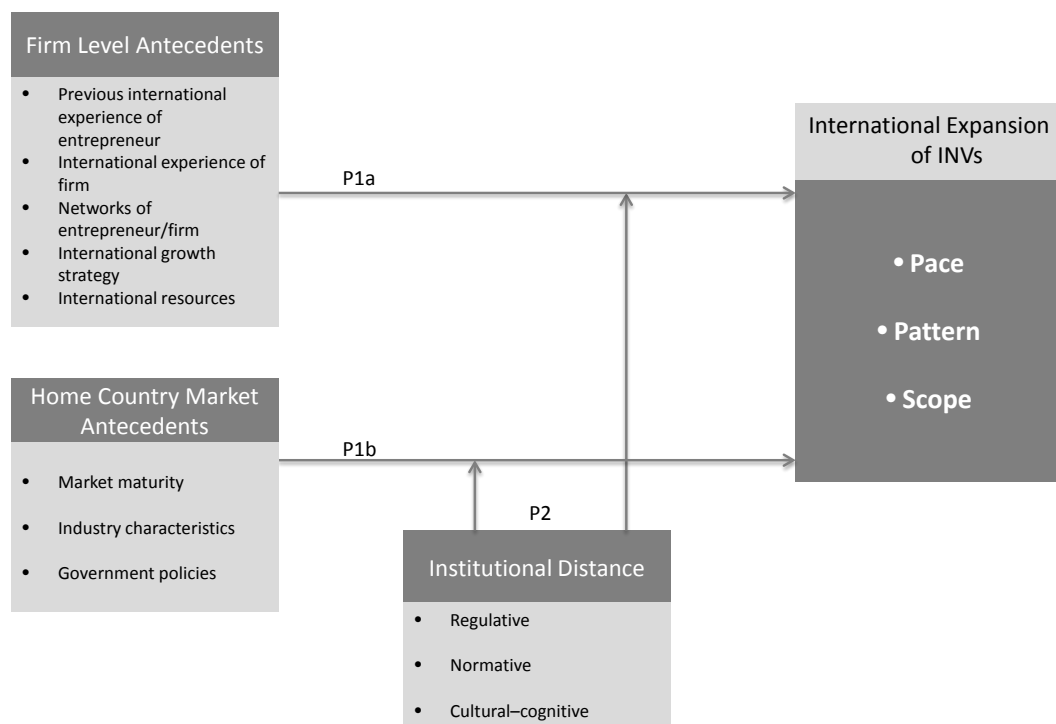


Figure 2.1: Conceptual model

Antecedents in the model are distinguished between firm-level factors and home country market factors and are partly based on insights gained from the framework presented by Hagen and Zucchella (2014). The overall impact of antecedents on pace, pattern, and scope is assumed to be positive (Hagen and Zucchella, 2014; Oviatt and McDougall, 2005; Zucchella et

al., 2007) and is illustrated by the two arrows of firm- and home country factors on the international expansion of INVs.

2.3.1 Firm-level antecedents

With regard to firm-level antecedents, we include two different dimensions of international experience that have been previously demonstrated to strongly impact the internationalization behavior of firms: *previous international experience of the entrepreneur* and the *international experience of the firm* (Harris and Wheeler, 2005; Reuber and Fischer, 1997; Eriksson et al., 1997; Johanson and Vahlne, 2009). The former is based on personal experience, and in particular the personal international experience within one or several markets where entrepreneurs gained country-specific knowledge (Reuber and Fischer, 1997; Lee and Park, 2008; Bloodgood et al., 1996). At the firm level, experience is shared by many actors who gain knowledge through international operations of their respective firm, representing the information and processes required to conduct further market activities as part of the internationalization process (Eriksson et al., 1997; Johanson and Vahlne, 2009; Prashantham and Young, 2011; Mjoen and Tallman, 1997). The impact of the entrepreneur's or top management team's previous international experience has been shown to positively impact pace, pattern, and scope of INVs' international operations (Zucchella et al., 2007; Almor and Hashai, 2004; Burgel and Murray, 1998; Bloodgood et al., 1996). Although this impact might prevail in the long run, we assume that despite a positive impact of previous international experience on pace, pattern, and scope, the impact will weaken in the later stage of internationalization compared to the early stage (cf. Nummela et al., 2014; Gabrielsson et al., 2014; Hashai, 2011). This is because previous international experience is often country specific. INVs might therefore internationalize more quickly initially and on a broader scale, but stay within a particular geographic region, where experience was gained and in which pace and pattern is increased (Morgan-Thomas and Jones, 2009; Freeman et al., 2012a; Rugman and Verbeke, 2005). In order to maintain a positive impact of previous international

experience in the long-term, INVs need to add internationally experienced managers to the top management team (Hagen and Zucchella, 2014; Nummela et al., 2014). Thus, in the long run, additional knowledge and experience of the firm is required to facilitate further international expansion. This is why we argue that in the subsequent stage an INV benefits in particular from firm-level experience gained through international operations during the early internationalization stage, as knowledge on procedures and how to internationalize will be obtained to successfully expand along the three dimensions of internationalization (Johanson and Vahlne, 2009; Hashai and Almor, 2004; Ruokonen and Saarenketo, 2009).

The role of *networks at the founder and firm level* is paramount for the international expansion process of INVs (Oviatt et al., 1995; Coviello, 2006; Gabrielsson et al., 2008). Networks help INVs overcome resource constraints by gaining access to new resources and reduce liability of foreignness due to enhanced knowledge obtained on the foreign market (Hagen and Zucchella, 2014; Gabrielsson et al., 2014; Kiss and Danis, 2008; Coviello, 2006). Through strong and weak ties with partners, firms obtain facilitated access to markets and valuable information that ultimately increases the pace and scope of INV internationalization (Jones and Coviello, 2005; Coviello and Munro, 1997; Autio et al., 2000; Zahra, 2005; Kiss and Danis, 2008; Musteen et al., 2010). The impact of networks on pattern is less easily established and might decisively depend on whether weak or strong ties prevail that can either lead to a preference of equity or non-equity entry modes (cf. Kiss and Danis, 2008; Bell, 1995; Freeman et al., 2006; Johanson and Vahlne, 2009; Peng, 2003).

Another important aspect positively affecting the international expansion of INVs is the *international growth strategy* (Chetty and Campbell-Hunt, 2004). Previous studies on initial and subsequent internationalization of INVs indicate that a well-executed international growth strategy is a prerequisite to rapidly expand across markets and achieve higher international sales (Autio et al., 1997; Baum et al., 2011a; Hagen and Zucchella, 2014). Firms with an

inherent international growth orientation are less risk averse and put greater emphasis on achieving rapid growth, high scope, and entry modes that might require a greater number of resources (Baum et al., 2011a; Knight and Cavusgil, 2004). Recent findings by Gabrielsson et al. (2014) might challenge the idea of a positive impact of firm-level attributes associated with international growth strategy on INVs subsequent growth, as they find a negative influence of international risk attitude and international market orientation on INV growth in the subsequent stage. However, given that their study specifically investigates the impact of international entrepreneurial culture on firm growth, the focus is different from the relationship proposed in our conceptual model (cf. Gabrielsson et al., 2014).

The final firm-level antecedent included in our model is the availability of *international resources* and refers to monetary and non-monetary resources, such as capabilities and expertise (Preece et al., 1999; Sapienza et al., 2006). While during the initial stage of internationalization the entrepreneur is seen as the main resource in the internationalization process, during the subsequent stage, a higher level of resources are required to increase scope, pattern, and pace of the international expansion process (Preece et al., 1999; Bloodgood et al., 1996).

Based on the discussion of antecedent factors of subsequent international growth of INVs, we derive the following overarching proposition:

Proposition 1a: Firm-level antecedents are positively related to pace, pattern, and scope of the subsequent international expansion of INVs.

2.3.2 Home country market antecedents

Antecedents relating to home country market factors represent external antecedents driving the subsequent international expansion of INVs. With regard to initial internationalization, many INV scholars have argued that small domestic markets increase the likelihood of expanding internationally at a fast pace (Evangelista, 2005; Coviello and Munro, 1995). Thus, it

has often been claimed that firms originating from smaller domestic markets tend to internationalize more quickly than do firms established in large domestic markets (Evangelista, 2005; Madsen and Servais, 1997; Gabrielsson et al., 2008). A similar impact can be found with firms operating in *domestic markets* that have reached *maturity*, which gives them an incentive to expand internationally (Winch and Bianchi, 2006; Evans et al., 2008a). In order to survive and expand the revenue base, INVs internationalize at a faster pace and explore new patterns. When regionally close markets show a similar degree of maturity, firms need to grow their business outside their geographic and cultural region and thus might also expand their scope. *Industry characteristics* also play an important role and describe the unique patterns of the industry such as the level of knowledge intensity or the maturity of technology (Oviatt and McDougall, 1994; Autio, 2005). Baum et al. (2011b) have shown that high knowledge intensity and differentiation of a firm's products are positively related to the likelihood of internationalizing at a fast pace. This is particularly relevant to high-technology products and goods with a short lifespan (Oviatt and McDougall, 1994; Oviatt et al., 1995; Autio, 2005), which is why we assume a positive impact of these industry factors on scope as well as on pattern, which need to be adapted depending on the product offered and the country context. Academic research also stresses the impact of *government policies* on the internationalization of an industry, such as subsidies, support programs, and legal regulations (Schwens et al., 2010; Lewis and Wiser, 2007; Bauer et al., 2011; Liesch et al., 2007). Lewis and Wiser (2007) have shown that a direct support mechanism, like export credit assistance, is particularly impactful on the internationalization of, for example, German renewable energy firms into developing countries. With government assistance, firms obtain additional resources that enable them to broaden their scope of internationalization (Preece et al., 1999), choose entry modes more carefully, and internationalize at a faster pace (cf. Gençtürk and Kotabe, 2001).

Summing up, we can conclude that the factors identified above ultimately impact pace, pattern, and scope of the subsequent international expansion of INVs and we can derive the following overarching proposition:

Proposition 1b: Home country market antecedents enhance the pace, pattern, and scope of the subsequent international expansion of INVs.

The above-mentioned relationships present the baseline model of subsequent international expansion of INVs as derived by consolidating previous literature. Given that firms internationalize on a broader scale in the subsequent stage of internationalization, institutional forces will play an increasingly important role, which will be discussed in the following section.

2.3.3 Moderating role of institutional distance

As highlighted previously, the institutional context, and in particular institutional distance, has a significant impact on the pace, pattern, and scope of a firm's internationalization process (Brouthers, 2002; Kiss and Danis, 2008; Kostova and Zaheer, 1999). The greater the institutional distance, the greater the complexity of conducting operations in these markets, which is often a result of information asymmetries involving market particularities (Meyer et al., 2009). Thus, if firms originating from countries with high levels of institutional development enter markets with low institutional development, the international expansion process needs to be adapted accordingly and firms might not be able to rely on existing capabilities and knowledge to enter these new markets in the same way as they have in the past (cf. Gaur and Lu, 2007; Schwens et al., 2011). This is why we can assume an overall negative moderating impact of high institutional distance between the antecedents-outcome relationship proposed earlier. Despite this proposed negatively moderating impact, the strength of the impact differs depending on the antecedent considered. We will elucidate the differing impacts of the antecedents included in the proposed model below.

Looking at previous international experience of the entrepreneur or top management team, it is assumed that country-specific knowledge has been obtained. If the INV ventures into countries where previous international experience was obtained by the entrepreneur, the negative moderating impact of institutional distance will be significantly lower given better knowledge about the underlying rules and norms dominating in the foreign market (cf. Hutzschenreuter and Horstkotte, 2013). This assumption also implies that if knowledge of a particular institutionally distant market has been obtained, other markets with a relatively similar institutional context can be entered more easily with regard to pace and pattern (cf. Schwens et al., 2011). This experience will ultimately also increase a firm's scope. However, if previous international experience was obtained in markets with an institutional context similar to the home country, the moderating impact of high institutional distance will be highly negative, due to a lack of knowledge about conducting business in institutionally different markets, ultimately reducing the speed of international expansion and scope in these markets. Given the higher risk and lower level of knowledge about these markets, entrepreneurs might tend to prefer market entry modes with low commitment (Brouthers and Nakos, 2004; Brouthers, 2002).

While there might be no clear-cut line when distinguishing between firm- and entrepreneur-level experience, international experience of the firm equates to general and experiential knowledge of internationalization. Experiential knowledge of the firm is gained through its international activities and ultimately reduces uncertainty of foreign operations (Johanson and Vahlne, 1977). Thus the greater the international experience of the firm, the more knowledge it has about international expansion and the lower the moderating impact of institutional distance on pace, pattern, and scope of internationalization (cf. Casillas and Moreno-Menéndez, 2014; Dow and Larimo, 2009). This lowered moderating impact, however, does not imply that the impact is eliminated, but rather that its negative impact is reduced. For the subsequent internationalization stage it can be concluded that institutional distance negatively

moderates the relationship between previous international experience of the entrepreneur more strongly with regard to pace, pattern, and scope than does the relationship between international experience of the firm and its international expansion.

Although we have proposed an overall negatively moderating impact of institutional distance on the relationship between networks and the subsequent international expansion of INVs, the relationship is multifaceted. Depending on the networks of the firm and its ties, the moderating impact stemming from the institutional context can vary significantly (Kiss and Danis, 2008). Given the complexities in institutionally distant markets, firms can significantly benefit from having networks, particularly strong ties with partners in the host country helping them to obtain valuable information on business processes and facilitate operations, which will assist in mitigating the negative effects of the institutional environment (cf. Bell, 1995; Autio et al., 2000; Johanson and Vahlne, 2009; Kiss and Danis, 2008; Hilmersson and Jansson, 2012) and thus lessening the moderating impact of institutional distance. The negative impact of institutional distance will, however, be much stronger if firms only possess networks with weak ties, which will ultimately lead to slower pace, entry mode commitment, and scope (cf. Kiss and Danis, 2008).

The moderating impact of institutional distance between the relationship of international growth strategy and availability of resources with regard to the subsequent international expansion of INVs is relatively straightforward. Although both antecedents impact pace, pattern, and scope positively, a higher institutional distance will negatively moderate the relationship, given an increased complexity of operating in these markets and a greater number of resources required. Thus, INVs are likely to internationalize at a slower pace, require greater resources for entry modes, and limit increases in their scope (cf. Peng et al., 2008; Meyer et al., 2009; Kostova et al., 2008).

Similar to firm-level antecedents, the relationship between home country market factors and the INV international expansion is also proposed to be negatively moderated by institutional distance. Home country market factors included in the model have triggering effects increasing international activity, but must usually be considered alongside firm-level factors to predict certain internationalization behavior of firms. If INVs increase pace, pattern, and scope dimensions due to a mature domestic market or industry-specific characteristics, the moderating impact of institutional differences is likely to be strongly negative (cf. Schwens et al., 2011). The negative impact arising from high levels of institutional distance can only be mitigated through firm-level factors such as networks and international experience.

With regard to government policies, the moderating impact of institutional distance greatly depends on the type of policy or subsidy considered. If credit assistance is provided, this might help firms to overcome financing obstacles in host countries. Similarly, export promotion programs might facilitate access to networks and knowledge, which in turn will weaken the general negative impact of institutional distance. Given that government policies are an external trigger of further international expansion, however, institutional distance will negatively moderate this relationship with regard to increasing pace, pattern, and scope.

The previous discussion shows a general tendency of institutional distance having a negatively moderating impact on the relationship between antecedents of subsequent growth and the subsequent international expansion of INVs. Although we acknowledge that individual relationships might be more complex, we derive the following overarching proposition:

Proposition 2: High institutional distance negatively moderates the relationship between firm-level antecedents and home country market factors and pace, pattern, and scope of the subsequent international expansion of INVs.

The moderating impact of institutional distance on INVs' subsequent international expansion described above requires further consideration with regard to the various dimensions of the institutional environment. It could be argued that the regulative, normative, and cultural-cognitive dimension have a differing moderating impact on the international expansion of INVs (cf. Chao and Kumar, 2010). Based on studies analyzing different dimensions of the institutional environment, we argue, however, that the moderating impact as proposed in our model will be negative along all three pillars (Xu and Shenkar, 2002). But because the regulative institutional environment is the most visible of the three dimensions and can be more easily identified, firms might be able to adapt their international expansion process more easily (cf. Scott, 2008). Thus the actual impact of institutional distance stemming from the regulative environment might be lower than the impact from the normative and cultural-cognitive dimensions, which are more implicit and more difficult to account for (Xu and Shenkar, 2002). We therefore propose:

Proposition 3: The moderating impact of institutional distance stemming from regulative differences is lower than the impact stemming from normative and cultural-cognitive differences.

Our proposed model highlights the most important factors driving the subsequent international expansion of INVs once they have started international operations. While factors depicted in the model are assumed to maintain their efficacy throughout the international expansion, the model does not display time dimensions or different growth stages in INV development. Taking into consideration that INVs develop over time, we argue that the moderating impact of institutional distance is strongest in the medium-to-long run of INVs' international growth. This is because the early stage of international expansion is driven by the entrepreneurs' previous international experience and personal network, often resulting in market entries where the entrepreneur is well connected and most experienced (cf. Johanson

and Vahlne, 2009). Thus, INVs might be able to enter institutionally distant markets or regions even in their early stage of internationalization and overcome hurdles stemming from different institutional contexts through previous experience and networks consisting of strong ties (Freeman et al., 2012a; Freeman et al., 2006; Williams and Gregoire, 2015). As the firm proceeds with further expansion, though, they will find that their previously gained knowledge is often country-specific, and that unfamiliarity with institutionally distant markets presents a high risk. This idea is supported by findings showing that INVs prefer to internationalize within the same geographic and cultural region in their early internationalization stages (Sui et al., 2012; Hashai and Almor, 2004). During the later international expansion stages, where INVs expand into geographically and culturally unrelated markets, institutional distance will have the strongest negative impact on the relationship between drivers of subsequent growth and subsequent international expansion. Once a firm has truly become global, gained international experience, and expanded its network in a variety of institutionally distant markets, the moderating impact of institutional distance will gradually weaken (Chao and Kumar, 2010). We therefore assume the relationship depicted in Figure 2.2 and propose:

Proposition 4: The strength of the moderating impact of institutional distance depends on the internationalization stage of INVs and can be depicted as an inverted U-shaped relationship between the moderating impact of institutional distance and time. This principle implies that in the early and late stages of INV international expansion, the relationship is weaker than in the medium-to-long run.

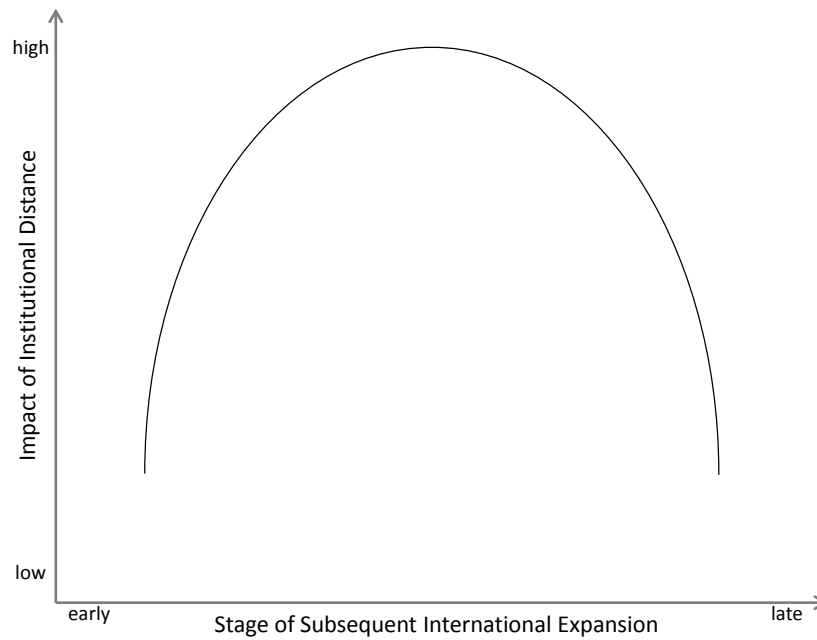


Figure 2.2: Impact of institutional distance over time

2.4 Future research and implications

The presented model helps to consolidate increasing literature of subsequent internationalization behavior of INVs by displaying the antecedents of pace, pattern, and scope of the international expansion. The propositions presented help to close a research gap by encompassing institutional forces, showing their vital role in the subsequent internationalization stage of INVs. Despite firms' quick and early internationalization and their overcoming of impediments to internationalization, institutional distance will significantly increase in importance the more an INV ventures out on a global scale. The propositions developed in our study entail several implications to be considered in future research.

2.4.1 Future research

First of all, future research should analyze our first set of propositions outlining the relationship between antecedents and pace, pattern, and scope of the subsequent international expansion of INVs. Given that our model entails multidimensional factors and includes multiple levels, the individual relationships should be empirically analyzed to

understand complex interactions among factors included. Depending on the international growth stage of an INV, the importance of antecedents might change over time. Thus it could be expected that home country market factors become less important in the later stage of INV internationalization. It has also been argued that INVs follow a rather similar growth pattern in their subsequent internationalization phase than is predicted by the Uppsala internationalization process model (cf. Hashai and Almor, 2004; Sui et al., 2012) and comparative studies could show whether INVs remain distinct from MNEs with regard to growth drivers and patterns in their subsequent stage of internationalization. Future research should analyze additional antecedents not considered in our conceptual model that might also exhibit a negative impact on the international expansion of INVs. Such antecedents may include for example static routines of INVs that prevent a more flexible adaption of internal and external processes necessary for further internationalization (Sapienza et al., 2006). Furthermore, weak institutions in the home country may also hinder INVs originating from these markets to access sources of financing or an educated labor force to pursue international expansion (Busenitz et al., 2000) and should be considered. In a similar vein, future research could also adopt additional concepts from institutional theory and for example analyze how isomorphic pressures in the home and host country can impact subsequent international expansion of INVs (cf. Meyer and Rowan, 1977).

Second, empirically testing our propositions regarding the impact of institutional distance might set certain challenges for future research. While measurements for antecedents and outcomes are widely available, measuring the institutional distance and contexts is less clear. Given that the institutional environment is complex and partly abstract, research in the area entails the danger of over-simplification (Bruton et al., 2010). This could be the case if institutional distance is measured using only one or a few items to reflect Scott's (1995) pillars (Brouthers, 2002; Delios and Beamish, 1999) or is simply relied upon as a proxy of the construct. Other more refined measurements of the institutional environment can provide a

more holistic view, mostly using measurement items from reports such as the Economic Freedom Index, Global Competitiveness Report, World Competitiveness Yearbook, Euromoney indices, Hofstede values or other country risk ratings (Gaur et al., 2007; He et al., 2013; Gaur and Lu, 2007; Demirbag et al., 2007). However, it is important for researchers to thoroughly consider which items of such reports are best suited to reflect the institutional environment, as this can vary significantly between industries considered.

Third, our model does not include performance implications of the subsequent international expansion process of INVs. The dimensions pace, pattern, and scope represent a strategic set along which managers can design the international expansion strategy, which will ultimately relate to international performance of INVs. It would be particularly interesting to analyze the interaction effects, to understand how the three dimensions should be combined in an INV's internationalization process in order to successfully internationalize. Thus, it could be argued that a fast pace and wide scope, as well a highly resource-committed pattern might negatively impact firm performance (cf. Coeurderoy and Murray, 2008; Sapienza et al., 2006; Ruigrok et al., 2007), as it can have destabilizing effects on INVs (Chetty and Campbell-Hunt, 2004). Current IB and IE research could be advanced by understanding how these dimensions should be combined to achieve the most beneficial outcome for a firm. This will provide valuable insights for managers to identify efficient internationalization strategies.

Finally, we argue that IE scholars could make a valuable contribution in analyzing performance implications by expanding our model and considering the institutional environment. Early work on INVs has highlighted the crucial role of the entrepreneur in the internationalization process of new ventures. With regard to the decision-making process, Nummela et al. (2014) show that in maturing INVs, this process is also highly personalized, mainly driven by the founder and other members of the management. In the same vein, Brouthers (2013) has argued that managers make strategic choices based on their subjective perception of institutional distance

and foreign-market risk. Therefore he argues that instead of considering the actual institutional distance between markets, managers develop internationalization strategies based on their personal perception of institutional distance. He further reasons that performance outcomes of these strategic decisions depend on the actual institutional context rather than the perceived distance. Given that IE scholars have a long tradition of analyzing the entrepreneurs' role within the firm (Oviatt and McDougall, 2005), they might considerably expand our understanding of whether internationalization decisions based on a correctly estimated institutional distance lead to better performance. Analyzing this "misperception" of institutional distance at the decision maker level might also provide guidelines about how to overcome misperception, particularly with regard to the less feasible pillars (i.e., normative and cultural-cognitive) of the institutional environment, which will ultimately contribute to recent advances of the application of institutional theory and help managers overcome hurdles set by differing institutional contexts.

2.4.2 Practical implications

Our paper contains important implications for entrepreneurs and managers of INVs with regard to subsequent international growth and reducing the negative impacts of institutional distance. First of all, managers need to be aware that the impact of institutional forces will increase in the long run. Although the entrepreneur might not perceive that institutional distance increases risk or presents greater challenges during the initial stages of internationalization, this perception is often related to previous personal international experience. However, as this experience is mostly country specific, the impact of institutional distance will be much stronger during subsequent stages of internationalization, when expanding on a broader scope. In order to reduce this impact, the entrepreneur can expand the management team, hire internationally experienced managers with particular market knowledge, or seek external advice (cf. Nummela et al., 2014). Furthermore, managers need to accumulate experience by expanding internationally to be well aware of the challenges arising

during the internationalization process, derive best practices, and expand capabilities that can help with future expansion (cf. Prashantham and Young, 2011). Third, the role of networks can play a crucial role in reducing negative influences stemming from differing institutional contexts and can lower information asymmetries (Kiss and Danis, 2008). Risk can be significantly lessened by broadening personal and firm-level networks, by actively participating in industry associations and events, and by hiring employees with large personal networks in the target region. Certain government assistance programs can also be helpful in reducing the negative impact of the institutional environment through credit assistance, export promotion, and bilateral governmental networks. Finally, managers need to take into account that if the international expansion process is mainly triggered by external drivers (i.e., market maturity and industry characteristics), the impact of institutional distance can be highly negative. Entrepreneurs need to ensure that their firm obtains sufficient firm-level capabilities to internationalize more rapidly and on a broader scope to avoid risky international expansion.

2.5 Conclusion

INV research has mostly neglected institutional forces in the expansion process of the firm by focusing on the antecedents and enabling factors of internationalization. Our proposed model helps to overcome these shortcomings by including institutional distance as a moderator of INV's international expansion and by shifting attention toward the subsequent stage of internationalization of maturing INVs. We show that institutional distance can act as a moderator, altering the impact of the antecedents on pace, pattern, and scope.

Despite the apparent limitation of our work due to its conceptual nature, we also indicate and discuss possible pathways for future research. By doing this we want to encourage researchers to focus their attention on more mature INVs and understand whether INVs remain a distinct set of firms when reaching a more mature stage and also investigate how their

internationalization process develops. The model provides a solid basis to explore the different facets of an INV's subsequent international expansion and, based on the discussion above, can also be a starting point to analyze which international expansion strategies lead to higher performance and thus help firms to remain competitive. The door for future research in the area of the subsequent internationalization of INVs remains wide open and further enquires are needed to advance this area of IE research.

References

- Almor T. (2013) Conceptualizing paths of growth for technology-based born-global firms originating in a small-population advanced economy. *International Studies of Management & Organization* 43: 56-78.
- Almor T and Hashai N. (2004) The competitive advantage and strategic configuration of knowledge-intensive, small- and medium-sized multinationals: A modified resource-based view. *Journal of International Management* 10: 479-500.
- Almor T, Tarba S and Margalit A. (2014) Maturing, technology-based, born-global companies: Surviving through mergers and acquisitions. *Management International Review* 54: 421-444.
- Andersen O. (1997) Internationalization and market entry mode: A review of theories and conceptual frameworks. *Management International Review* 37: 27-42.
- Andersson S. (2000) The internationalization of the firm from an entrepreneurial perspective. *International Studies of Management & Organization* 30: 63-92.
- Antoncic B and Hisrich RD. (2000) Intrapreneurship modeling in transition economies: A comparison of Slovenia and the United States. *Journal of Developmental Entrepreneurship* 5: 21-40.
- Aspelund A, Koed Madsen T and Moen Ø. (2007) A review of the foundation, international marketing strategies, and performance of international new ventures. *European Journal of Marketing* 41: 1423-1448.
- Autio E. (2005) Creative tension: The significance of Ben Oviatt's and Patricia McDougall's article 'Toward a theory of international new ventures'. *Journal of International Business Studies* 36: 9-19.
- Autio E, Sapienza HJ and Almeida JG. (2000) Effects of age at entry, knowledge intensity, and imitability on international growth. *Academy of management journal* 43: 909-924.
- Autio E, Yli-Renko H and Salonen A. (1997) International growth of young technology-based firms: A resource-based network model. *Journal of Enterprising Culture* 5: 57-73.
- Barkema HG and Drogendijk R. (2007) Internationalising in small, incremental or larger steps? *Journal of International Business Studies* 38: 1132-1148.
- Bauer K, Fischer T and Einsiedler A. (2011) dena-Marktanalyse 2011: Status der erneuerbaren Energien weltweit. Deutsche Energie-Agentur gmbH (dena).
- Baum M, Schwens C and Kabst R. (2011a) International as opposed to domestic new venturing: The moderating role of perceived barriers to internationalization. *International Small Business Journal* 31: 536-562.
- Baum M, Schwens C and Kabst R. (2011b) A typology of international new ventures: Empirical evidence from high-technology industries. *Journal of Small Business Management* 49: 305-330.
- Bell J. (1995) The internationalization of small computer software firms: A further challenge to "stage" theories. *European Journal of Marketing* 29: 60-75.
- Bell J, McNaughton R and Young S. (2001) 'Born-again global' firms: An extension to the 'born global' phenomenon. *Journal of International Management* 7: 173-189.
- Bloodgood JM. (2006) Venture adolescence: Internationalization and performance implications of maturation. *International Journal of Entrepreneurial Behavior & Research* 12: 67-85.
- Bloodgood JM, Sapienza HJ and Almeida JG. (1996) The internationalization of new high-potential U.S. ventures: Antecedents and outcomes. *Entrepreneurship: Theory & Practice* 20: 61-76.
- Brouthers KD. (2002) Institutional, cultural and transaction cost influences on entry mode choice and performance. *Journal of International Business Studies* 33: 203-221.
- Brouthers KD. (2013) A retrospective on: Institutional, cultural and transaction cost influences on entry mode choice and performance. *Journal of International Business Studies* 44: 14-22.

- Brouthers KD and Hennart J-F. (2007) Boundaries of the firm: Insights from international entry mode research. *Journal of Management* 33: 395-425.
- Brouthers KD and Nakos G. (2004) SME entry mode choice and performance: A transaction cost perspective. *Entrepreneurship: Theory & Practice* 28: 229-247.
- Bruton GD, Ahlstrom D and Li H-L. (2010) Institutional theory and entrepreneurship: Where are we now and where do we need to move in the future? *Entrepreneurship theory and practice* 34: 421-440.
- Burgel O and Murray GC. (1998) The international activities of British start-up companies in high-technology industries: Differences between internationalisers and non-internationalisers. In: P. D. Reynolds and W. D. Bygrave NMC, S. Manigart, C. M. Mason, G. Meyer and K. Shaver (eds) *Frontiers of entrepreneurship research*. Babson Park, MA: Babson College, 447-463.
- Busenitz LW, Gómez C and Spencer JW. (2000) Country institutional profiles: Unlocking entrepreneurial phenomena. *Academy of management journal* 43: 994-1003.
- Casillas JC and Acedo FJ. (2013) Speed of the internationalization process of the firm. *International Journal of Management Reviews* 15: 15-29.
- Casillas JC and Moreno-Menéndez AM. (2014) Speed of the internationalization process: The role of diversity and depth in experiential learning. *Journal of International Business Studies* 45: 85-101.
- Chao MC-H and Kumar V. (2010) The impact of institutional distance on the international diversity-performance relationship. *Journal of World Business* 45: 93-103.
- Chetty S and Campbell-Hunt C. (2004) A strategic approach to internationalization: A traditional versus a "born-global" approach. *Journal of International Marketing* 12: 57-81.
- Chetty S, Johanson M and Martín Martín O. (2014) Speed of internationalization: Conceptualization, measurement and validation. *Journal of World Business* 49: 633-650.
- Child J, Rodrigues SB and Frynas JG. (2009) Psychic distance, its impact and coping modes. *Management International Review* 49: 199-224.
- Coeurderoy R and Murray G. (2008) Regulatory environments and the location decision: Evidence from the early foreign market entries of new-technology-based firms. *Journal of International Business Studies* 39: 670-687.
- Coviello N and Munro H. (1997) Network relationships and the internationalisation process of small software firms. *International Business Review* 6: 361-386.
- Coviello NE. (2006) The network dynamics of international new ventures. *Journal of International Business Studies* 37: 713-731
- Coviello NE and Munro HJ. (1995) Growing the entrepreneurial firm: Networking for international market development. *European Journal of Marketing* 29 49 - 61.
- Delios A and Beamish PW. (1999) Ownership strategy of Japanese firms: Transactional, institutional, and experience influences. *Strategic Management Journal* 20: 915-933.
- Demirbag M, Tatoglu E and Glaister KW. (2007) Factors influencing perceptions of performance: The case of western FDI in an emerging market. *International Business Review* 16: 310-336.
- DiMaggio PJ and Powell WW. (1983) The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review* 48: 147-160.
- Dimitratos P, Voudouris I, Plakoyiannaki E, et al. (2012) International entrepreneurial culture—Toward a comprehensive opportunity-based operationalization of international entrepreneurship. *International Business Review* 21: 708-721.
- Dow D and Larimo J. (2009) Challenging the conceptualization and measurement of distance and international experience in entry mode choice research. *Journal of International Marketing* 17: 74-98.

- Eden L and Miller SR. (2004) Distance matters: Liability of foreignness, institutional distance and ownership strategy. *Advances in International Management* 16: 187-221.
- Eriksson K, Johanson J, Majkgard A, et al. (1997) Experiential knowledge and cost in the internationalization process. *Journal of International Business Studies* 28: 337-360.
- Evangelista F. (2005) Qualitative insights into the international new venture creation process. *Journal of International Entrepreneurship* 3: 179-198.
- Evans J, Bridson K, Byrom J, et al. (2008a) Revisiting retail internationalisation: Drivers, impediments and business strategy. *International Journal of Retail & Distribution Management* 36: 260-280.
- Forsgren M. (2002) The concept of learning in the Uppsala internationalization process model: A critical review. *International Business Review* 11: 257-277.
- Freeman S, Edwards R and Schroder B. (2006) How smaller born-global firms use networks and alliances to overcome constraints to rapid internationalization. *Journal of International Marketing* 14: 33-63.
- Freeman S, Giroud A, Kalfadellis P, et al. (2012a) Psychic distance and environment: Impact on increased resource commitment. *European Business Review* 24: 351-373.
- Freeman S, Hutchings K and Chetty S. (2012b) Born-globals and culturally proximate markets. *Management International Review* 52: 425-460.
- Gabrielsson M, Gabrielsson P and Dimitratos P. (2014) International entrepreneurial culture and growth of international new ventures. *Management International Review* 54: 445-471.
- Gabrielsson M, Kirpalani VHM, Dimitratos P, et al. (2008) Born globals: Propositions to help advance the theory. *International Business Review* 17: 385-401.
- Gaur AS, Delios A and Singh K. (2007) Institutional environments, staffing strategies, and subsidiary performance. *Journal of Management* 33: 611-636.
- Gaur AS and Lu JW. (2007) Ownership strategies and survival of foreign subsidiaries: Impacts of institutional distance and experience. *Journal of Management* 33: 84-110.
- Gençtürk EF and Kotabe M. (2001) The effect of export assistance program usage on export performance: A contingency explanation. *Journal of International Marketing* 9: 51-72.
- George G, Wiklund J and Zahra SA. (2005) Ownership and the internationalization of small firms. *Journal of Management* 31: 210-233.
- Greenwood R, Oliver C, Sahlin K, et al. (2008) The sage handbook of organizational institutionalism. London: SAGE Publications.
- Hagen B and Zucchella A. (2014) Born global or born to run? The long-term growth of born global firms. *Management International Review* 54: 497-525.
- Harris S and Wheeler C. (2005) Entrepreneurs' relationships for internationalization: Functions, origins and strategies. *International Business Review* 14: 187-207.
- Hashai N. (2011) Sequencing the expansion of geographic scope and foreign operations by born global firms. *Journal of International Business Studies* 42: 995-1015.
- Hashai N and Almor T. (2004) Gradually internationalizing 'born global' firms: An oxymoron? *International Business Review* 13: 465-483.
- He X, Brouthers KD and Filatotchev I. (2013) Resource-based and institutional perspectives on export channel selection and export performance. *Journal of Management* 39: 27-47.
- Hennart J-F. (1989) Can the "New Forms of Investment" substitute for the "Old Forms?" A transaction costs perspective. *Journal of International Business Studies* 20: 211-234.
- Hennart JF. (1988) A transaction costs theory of equity joint ventures. *Strategic Management Journal* 9: 361-374.
- Hilmersson M and Jansson H. (2012) International network extension processes to institutionally different markets: Entry modes and processes of exporting SMEs. *International Business Review* 21: 682-693.

- Hitt MA, Hoskisson RE and Kim H. (1997) International diversification: Effects on innovation and firm performance in product-diversified firms. *Academy of management journal* 40: 767-798.
- Hurmerinta-Peltomäki L. (2003) Time and internationalisation theoretical challenges set by rapid internationalisation. *Journal of International Entrepreneurship* 1: 217-236.
- Hutzschenreuter T and Horstkotte J. (2013) Performance effects of international expansion processes: The moderating role of top management team experiences. *International Business Review* 22: 259-277.
- Johanson J and Vahlne J-E. (1977) The internationalization process of the firm: A model of knowledge development and increasing foreign market commitments. *Journal of International Business Studies* 8: 23-32.
- Johanson J and Vahlne J-E. (2009) The Uppsala internationalization process model revisited: From liability of foreignness to liability of outsidership. *Journal of International Business Studies* 40: 1411-1431.
- Johanson J and Wiedersheim-Paul F. (1975) The internationalization of the firm - Four swedish cases. *Journal of Management Studies* 12: 305-323.
- Jones MV, Coviello N and Tang YK. (2011) International entrepreneurship research (1989–2009): A domain ontology and thematic analysis. *Journal of Business Venturing* 26: 632-659.
- Jones MV and Coviello NE. (2005) Internationalisation: Conceptualising an entrepreneurial process of behaviour in time. *Journal of International Business Studies* 36: 284-303.
- Keupp MM and Gassmann O. (2009) The past and the future of international entrepreneurship: A review and suggestions for developing the field. *Journal of Management* 35: 600-633.
- Khavul S, Pérez-Nordtvedt L and Wood E. (2010) Organizational entrainment and international new ventures from emerging markets. *Journal of Business Venturing* 25: 104-119.
- Kim WC, Hwang P and Burgers WP. (1993) Multinationals' diversification and the risk-return trade-off. *Strategic Management Journal* 14: 275-286.
- Kiss AN and Danis WM. (2008) Country institutional context, social networks, and new venture internationalization speed. *European Management Journal* 26: 388-399.
- Knight GA and Cavusgil ST. (1996) The born global firm: A challenge to traditional internationalization theory. In: Cavusgil ST and Madsen TK (eds). Greenwich: JAI Press, 11-26.
- Knight GA and Cavusgil ST. (2004) Innovation, organizational capabilities, and the born-global firm. *Journal of International Business Studies* 35: 124-141.
- Kostova T, Roth K and Dacin MT. (2008) Institutional theory in the study of multinational corporations: A critique and new directions. *Academy of Management Review* 33: 994-1006.
- Kostova T and Zaheer S. (1999) Organizational legitimacy under conditions of complexity: The case of the multinational enterprise. *The Academy of Management review* 24: 64-81.
- Kuivalainen O, Sundqvist S and Servais P. (2007) Firms' degree of born-globalness, international entrepreneurial orientation and export performance. *Journal of World Business* 42: 253-267.
- Kutschker M, Bäurle I and Schmid S. (1997) International evolution, international episodes, and international epochs: Implications for managing internationalization. *Management International Review* 37: 101-124.
- Lee H-U and Park J-H. (2008) The Influence of top management team international exposure on international alliance formation. *Journal of Management Studies* 45: 961-981.
- Lewis JI and Wiser RH. (2007) Fostering a renewable energy technology industry: An international comparison of wind industry policy support mechanisms. *Energy Policy* 35: 1844-1857.

- Liesch PW, Weerawardena J, Sullivan Mort G, et al. (2007) Introduction - The early and rapid internationalization of the firm. *Journal of World Business* 42: 232-235.
- Liesch PW, Welch LS and Buckley PJ. (2011) Risk and uncertainty in internationalisation and international entrepreneurship studies: Review and conceptual development. *Management International Review* 51: 851-873.
- Lopez LE, Kundu SK and Ciravegna L. (2009) Born global or born regional? Evidence from an exploratory study in the Costa Rican software industry. *Journal of International Business Studies* 40: 1228-1238.
- Madsen TK and Servais P. (1997) The internationalization of born globals: An evolutionary process? *International Business Review* 6: 561-583.
- McDougall P, Shane S and Oviatt BM. (1994) Explaining the formation of international new ventures: The limits of theories from international business research. *Journal of Business Venturing* 9: 469-487.
- Meyer JW and Rowan B. (1977) Institutionalized Organizations: Formal Structure as Myth and Ceremony. *American journal of sociology* 83: 340-363.
- Meyer KE, Estrin S, Bhaumik SK, et al. (2009) Institutions, resources, and entry strategies in emerging economies. *Strategic Management Journal* 30: 61-80.
- Mjoen H and Tallman S. (1997) Control and performance in international joint ventures. *Organization Science* 8: 257-274.
- Morgan-Thomas A and Jones MV. (2009) Post-entry internationalization dynamics: Differences between SME's in the development speed of their international sales. *International Small Business Journal* 27: 71-97.
- Musteen M, Francis J and Datta DK. (2010) The influence of international networks on internationalization speed and performance: A study of Czech SMEs. *Journal of World Business* 45: 197-205.
- Nummela N, Saarenketo S, Jokela P, et al. (2014) Strategic decision-making of a born global: A comparative study from three small open economies. *Management International Review* 54: 527-550.
- Oviatt BM and McDougall PP. (1994) Toward a theory of international new ventures. *Journal of International Business Studies* 25: 45-64.
- Oviatt BM and McDougall PP. (2005) Defining international entrepreneurship and modeling the speed of internationalization. *Entrepreneurship: Theory & Practice* 29: 537-554.
- Oviatt BM, McDougall PP and Loper M. (1995) Global start-ups: Entrepreneurs on a worldwide stage. *The Academy of Management Executive* 9: 30-44.
- Pan Y and Tse DK. (2000) The hierarchical model of market entry modes. *Journal of International Business Studies* 31: 535-554.
- Peng MW. (2003) Institutional transitions and strategic choices. *The Academy of Management review* 28: 275-296.
- Peng MW, Wang DYL and Jiang Y. (2008) An institution-based view of international business strategy: A focus on emerging economies. *Journal of International Business Studies* 39: 920-936.
- Prashantham S and Young S. (2011) Post-entry speed of international new ventures. *Entrepreneurship: Theory & Practice* 35: 275-292.
- Preece SB, Miles G and Baetz MC. (1999) Explaining the international intensity and global diversity of early-stage technology-based firms. *Journal of Business Venturing* 14: 259-281.
- Rasmussen ES and Madsen TK. (2002) The born global concept. *Paper presented at the 28th EIBA Conference 2002*. Athens, Greece.
- Reuber AR and Fischer E. (1997) The influence of the management team's international experience on the internationalization behaviors of SMEs. *Journal of International Business Studies* 28: 807-825.

- Rialp A, Rialp J and Knight GA. (2005) The phenomenon of early internationalizing firms: What do we know after a decade (1993-2003) of scientific inquiry? *International Business Review* 14: 147-166.
- Rugman AM and Verbeke A. (2004) A perspective on regional and global strategies of multinational enterprises. *Journal of International Business Studies* 35: 3-18.
- Rugman AM and Verbeke A. (2005) Towards a theory of regional multinationals: A transaction cost economics approach. *Management International Review* 45: 5-17.
- Rugman AM and Verbeke A. (2007) Liabilities of regional foreignness and the use of firm-level versus country-level data: A response to Dunning et al.(2007). *Journal of International Business Studies* 38: 200-205.
- Ruigrok W, Amann W and Wagner H. (2007) The internationalization-performance relationship at Swiss firms: A test of the S-shape and extreme degrees of internationalization. *Management International Review* 47: 349-368.
- Ruokonen M and Saarenketo S. (2009) The strategic orientations of rapidly internationalizing software companies. *European Business Review* 21: 17-41.
- Sapienza HJ, Autio E, George G, et al. (2006) A capabilities perspective on the effects of early internationalization on firm survival and growth *Academy of Management Review* 31: 914-933.
- Schwens C, Eiche J and Kabst R. (2011) The moderating impact of informal institutional distance and formal institutional risk on SME entry mode choice. *Journal of Management Studies* 48: 330-351.
- Schwens C and Kabst R. (2011) Internationalization of young technology firms: A complementary perspective on antecedents of foreign market familiarity. *International Business Review* 20: 60-74.
- Schwens C, Steinmetz H and Kabst R. (2010) Growth and internationalization: Renewable energy and new technology-based firms innovation and international corporate growth. In: Gerybadze A, Hommel U, Reiners HWW, et al. (eds). Springer Berlin Heidelberg, 113-123.
- Scott R. (2008) *Institutions and organizations - Ideas and interests*, Thousand Oaks: Sage Publications.
- Scott WR. (1995) *Institutions and organizations*: Thousand Oaks, SAGE.
- Shrader RC, Oviatt BM and McDougall PP. (2000) How new ventures exploit trade-offs among international risk factors: Lessons for the accelerated internationalization of the 21st century. *Academy of management journal* 43: 1227-1247.
- Sleuwaegen L and Onkelinx J. (2014) International commitment, post-entry growth and survival of international new ventures. *Journal of Business Venturing* 29: 106-120.
- Stinchome AL. (1965) Social structure and organizations. In: March J (ed) *Handbook of Organizations*. Chicago, IL: Rand McNally, 142-193.
- Sui S and Baum M. (2014) Internationalization strategy, firm resources and the survival of SMEs in the export market. *Journal of International Business Studies* 45: 821-841.
- Sui S, Yu Z and Baum M. (2012) Prevalence and longitudinal trends of early internationalisation patterns among Canadian SMEs. *International Marketing Review* 29: 519-535.
- Sullivan D. (1994) Measuring the degree of internationalization of a firm. *Journal of International Business Studies* 25: 325-342.
- Vermeulen F and Barkema H. (2002) Pace, rhythm, and scope: Process dependence in building a profitable multinational corporation. *Strategic Management Journal* 23: 637-653.
- Williams DW and Gregoire DA. (2015) Seeking commonalities or avoiding differences? Re-conceptualizing distance and its effects on internationalization decisions. *Journal of International Business Studies* 46: 253-284.
- Winch GW and Bianchi C. (2006) Drivers and dynamic processes for SMEs going global. *Journal of Small Business and Enterprise Development* 13: 73-88.

- Xu D and Shenkar O. (2002) Institutional distance and the multinational enterprise. *The Academy of Management review* 27: 608-618.
- Zahra SA. (2005) A theory of international new ventures: A decade of research. *Journal of International Business Studies* 36: 20-28.
- Zahra SA and George G. (2002) International entrepreneurship: The current status of the field and future research agenda. In: Hitt MA, Ireland RD, Camp SM, et al. (eds) *Strategic Entrepreneurship: Creating a New Mindset*. Oxford: Blackwell Publishing, 255-288.
- Zahra SA, Ireland RD and Hitt MA. (2000) International expansion by new venture firms: International diversity, mode of market entry, technological learning, and performance. *Academy of management journal* 43: 925-950.
- Zucchella A, Palamara G and Denicolai S. (2007) The drivers of the early internationalization of the firm. *Journal of World Business* 42: 268-280.

3 Paper II

The impact of internationalization speed along its multiple dimensions on firms'

international performance

A comparison between INVs and traditional exporters

Abstract

This study analyzes the impact of internationalization speed as a multidimensional construct on international performance of international new ventures (INVs) and traditional exporters. Building on previous literature, internationalization speed is conceptualized along four dimensions (i.e., country, commitment, scope and equity speed). Data collected on firm internationalization in the German renewable-energy industry is used to perform structural equation modelling to test derived hypotheses. Results show a positive impact of country and commitment speed and a negative impact of equity speed on international performance of firms. By way of a group analysis between INVs and traditional exporters, results additionally show how the speed-performance relationship differs depending on the type of firm considered. Thus, INVs benefit to a greater extent from the positive effects of country and commitment speed than do traditional exporters. In contrast to expectations, findings show that equity speed positively impacts INVs' international performance. This paper significantly contributes to increasing scholarly and managerial understanding of speed by providing insights into how each individual speed dimension impacts the international performance of a firm.

3.1 Introduction

In a globalized economy, international activities have become a crucial component of corporate strategy for a large number of firms. Regardless of their size, firms often internationalize to expand their markets and seek new profits (Contractor, 2007). Ever since international business (IB) research began as a field in the early 1960s, academics have constantly enhanced our knowledge about why and how firms internationalize (Buckley, 2002; Aharoni and Brock, 2010). As the world has become more interconnected, environmental forces more dynamic, and global competition more intense, firms have been required to develop sustainable internationalization strategies to remain competitive. This development has triggered questions for firms about whether and how internationalization activities translate into performance, and which strategies are most effective (e.g., Ruigrok and Wagner, 2003; Calof, 1993; Hsu and Boggs, 2003). While internationalization strategy is multi-faceted, one crucial component for managers is how fast a firm should expand internationally and whether this move will result in increased performance (Williams and Gregoire, 2015; Chetty et al., 2014; Vermeulen and Barkema, 2002).

The vital role of internationalization speed as a part of firms' internationalization process has been particularly emphasized by scholars exploring the international new venture (INV) phenomenon, which describes firms that internationalize shortly after inception (Oviatt and McDougall, 1994; Knight and Cavusgil, 1996; Casillas and Acedo, 2013). INV researchers most often define internationalization speed as the time span between inception of a firm and its first international activity (i.e., initial internationalization speed) (Autio et al., 2000). The rapid speed with which INVs internationalize challenges more traditional internationalization theories such as the Uppsala internationalization process model, which describes internationalization as an incremental process evolving over time (Johanson and Vahlne, 1977; Johanson and Vahlne, 2009; Autio, 2005).

INV research at its core is driven by the phenomenon of fast internationalization speed (Jones et al., 2011). Researchers have specifically analyzed what drives INVs to internationalize at young age, how they overcome challenges related to liability of newness and foreignness (Jones et al., 2011; Rialp et al., 2005), and how rapid internationalization speed impacts performance (Li et al., 2012a; Bloodgood, 2006). While these research questions are important, looking more closely at how researchers conceptualize internationalization speed in INV literature, it becomes clear that they mostly limit themselves to the early stages of INV development (Prashantham and Young, 2011; Morgan-Thomas and Jones, 2009; Autio et al., 2000). Conceiving of internationalization speed as initial speed neglects the subsequent stages of INV internationalization, which commences once the firm has started its first international operations (Autio et al., 2000). By limiting the definition of initial internationalization speed to the pre-internationalization stage, research results do not reflect the actual speed with which firms expand their operations globally (Casillas and Acedo, 2013). However, analyzing internationalization speed in the subsequent stages is important because it is a crucial period that determines the long-term survival and performance of INVs (Autio et al., 2000; Casillas and Acedo, 2013).

More traditional IB research analyzing the performance impact of internationalization speed for large multinational enterprises (MNEs) focuses implicitly on the subsequent internationalization phase and has uncovered important interdependencies relating to antecedents and outcomes (Vermeulen and Barkema, 2002; Wagner, 2004; Chang and Rhee, 2011). For MNE research, internationalization speed is broadened to include the speed of increase of international growth since a firm's first international operations (Vermeulen and Barkema, 2002). While this expanded focus is more complete as it encompasses the subsequent stage of internationalization, it remains limited in scope because it mostly equates speed of growth with foreign direct investment (FDI). This limitation makes it difficult to generalize results because they are only based on equity entry modes and unique features of

MNEs, such as their large size, age, and high level of resources. Thus, findings cannot be assumed to hold true for small and medium sized enterprises (SMEs), especially when these enterprises are INVs that display very different internationalization patterns (Oviatt and McDougall, 1997; Autio, 2005).

However, it is not only the time frame of internationalization speed that can differ when studying either the initial or the subsequent internationalization speed. Previous studies have also applied various measurements of internationalization speed that include the number of FDIs (e.g., Vermeulen and Barkema, 2002), number of countries entered (e.g., Prashantham and Young, 2011), and the ratio of foreign sales-to-total sales (e.g., Wagner, 2004). Nevertheless, each of these measurements only captures one dimension of internationalization speed. Some scholars have argued that speed is a multidimensional construct and should be conceptualized accordingly (Oviatt and McDougall, 2005; Casillas and Acedo, 2013; Chetty et al., 2014). Oviatt and McDougall (2005) as well as Casillas and Acedo (2013) therefore propose distinguishing internationalization speed broadly across the following dimensions: speed of entering new countries (i.e., country speed) and geographical regions (i.e., scope speed); speed of increase of international commitment, referring to increase of international sales or FDI; and speed of initial entry (i.e., initial internationalization speed). Even so, empirical study of the multidimensionality of internationalization speed is largely neglected in both MNE and INV research and therefore remains under-researched (Casillas and Acedo, 2013; Chetty et al., 2014; Acedo and Jones, 2007).

Conceptualizing internationalization speed across different dimensions can be particularly helpful by providing a more detailed picture of how internationalization speed impacts firm performance. To date, research on the speed-performance relationship remains inconclusive (Chetty et al., 2014). It has been put forward that speed can influence performance positively (Chang and Rhee, 2011), negatively (Vermeulen and Barkema, 2002), or can be described as an

inverted U-curve relationship (Wagner, 2004). Such ambiguous findings might be the result of using different unidimensional speed measurements. Acknowledging speed as a multidimensional construct and analyzing the individual speed dimensions with regard to performance within the same study could shed light on how each dimension separately impacts performance. Considering that the application of different measures of internationalization speed have led to inconclusive findings might suggest that not all speed dimensions have a similar impact on performance. Thus, some dimensions might have a positive impact, while others have a negative one. Furthermore, it could be argued that speed dimensions affect firm types such as MNEs and INVs differently, as both firm types have distinct sizes, structures, and approaches to rapid internationalization.

These considerations raise the research questions motivating this study: (1) How do different dimensions of internationalization speed impact international performance of a firm? And (2) Are their impacts similar for INVs and traditional exporters?

The present study embarks from previous conceptual work on speed of internationalization and employs internationalization speed as a multidimensional construct, as suggested by both Oviatt and McDougall (2005) and Casillas and Acedo (2013). This study will empirically analyze speed of internationalization along four different dimensions: (1) the speed of increase in terms of numbers of countries entered (i.e., country speed); (2) the pace of increase of foreign sales (i.e., commitment speed); (3) the velocity of the number of institutionally different regions entered (i.e., scope speed); and (4) the rapidity of increase of resources committed to entry modes (i.e., equity speed). Distinguishing speed along different dimensions will help clarify the individual impact of these speed dimensions on international performance. The speed dimensions used in this study refer to the subsequent stage of internationalization (i.e., time since first international market activity of a firm until present). This measurement contrasts with the pre-internationalization time dimension most INV scholars apply to the

speed construct (Autio et al., 2000). In framing the definition of speed in this way, this study addresses the deficit of research on subsequent internationalization in INV literature and sheds light on this internationalization period of INVs. However, this study also includes traditional exporters (i.e., firms that follow an incremental approach to internationalization) in the analysis in order to contribute to existing IB work on internationalization speed. By including INVs and traditional exporters within the same analysis, this study can assess whether internationalization speed across its multiple dimensions differently impacts the two firm types. This approach will help to consolidate ambiguous findings of the speed-performance relationship and bridge these findings across two distinct literature streams.

Theoretically this study is embedded within the IB field and its sub-field of international entrepreneurship (IE) research. For reasons of simplification however, the study distinguishes between IB and IE literature and defines IB research as work that has been carried out on larger MNEs and firms that internationalize in an incremental manner (cf. Johanson and Vahlne, 1977; Anderson and Gatignon, 1986; Dunning, 1988), which here will be subsumed under the term traditional exporters. The study defines IE literature as work conducted on INV internationalization (Oviatt and McDougall, 2005; Jones et al., 2011).

Empirically, the study uses the German renewable-energy industry as a research setting because the industry is highly international and includes INVs and traditional exporters (Schwens et al., 2010).

3.2 Speed of internationalization and performance

For a long time speed has been considered rather implicitly as an underlying notion describing the international expansion process of a firm (cf. Johanson and Vahlne, 1977; Eden, 2009; Casillas and Acedo, 2013). While this expansion is based on strategic questions faced by the management of a firm with regard to where and how to internationalize, the question of when

– the time-based dimension – has hardly been considered in IB research (Eden, 2009). The “when” question has been dealt with predominantly in IE research, which focuses on explaining internationalization of firms shortly after their inception. The rapid increase in the number of scholars investigating the INV phenomenon has pushed the topic of firms’ speed of internationalization to the top of the IE research agenda (Zahra and George, 2002; Keupp and Gassmann, 2009). This literature stream more prominently emphasizes the time dimension of the internationalization process than does IB research, but only considers speed as the time span from establishment of the firm to first international activity, rather than considering the speed of the internationalization process during the subsequent internationalization stage. Focusing on the international expansion process itself, speed expresses the relationship between certain internationalization targets achieved and the time it takes to achieve these targets (Chetty et al., 2014; Casillas and Acedo, 2013). Objectives to be achieved can include the number of countries entered, international sales growth, or foreign asset commitment (Casillas and Acedo, 2013; Weerawardena et al., 2015). Consequently, speed can be expressed across multiple dimensions (Oviatt and McDougall, 2005) and more precisely, is expressed as a quotient between a target (e.g., number of countries entered) and a certain period of time (e.g., time since first internationalization). The time period considered in past research includes the lifetime of a firm (cf. Chetty et al., 2014), the subsequent stage of internationalization (cf. Vermeulen and Barkema, 2002), or a specific time period (i.e., number of years) of interest (cf. Morgan-Thomas and Jones, 2009). The present work uses the subsequent stage of internationalization as the time dimension to conceptualize internationalization speed.

In order to gain a comprehensive understanding of internationalization speed, its role within a firm’s internationalization process, and its performance implications, it is necessary to consider research from both IB and IE literature in the following review, to both acknowledge advancements in this field and to account for differences between traditional exporters and

INVs. In past work, speed of internationalization has also been referred to as accelerated internationalization (e.g., Weerawardena et al., 2007), pace of internationalization (e.g., Vermeulen and Barkema, 2002), or rapid internationalization (e.g., Kalinic and Forza, 2012), all of which are synonymous for the purpose of this study and refer to the internationalization speed of firms.

3.2.1 Internationalization speed and performance in IB literature

Traditionally, IB research has analyzed many facets of why, how, and where MNEs internationalize (Eden, 2009). Speed of internationalization itself, as well as its performance implications, has received less attention (Vermeulen and Barkema, 2002; Casillas and Acedo, 2013). The first impactful work in the area of IB dealing specifically with internationalization speed and its impact on performance was undertaken by Vermeulen and Barkema (2002). In their seminal work, the authors investigate how speed, defined as the number “of foreign expansions a firm undertakes in a certain period of time” (Vermeulen and Barkema, 2002: p. 643), moderates the relationship between the number of a firm’s subsidiaries and profitability. The time span considered to measure speed was based on the number of years since a firm’s first international operation and therefore focuses on the subsequent internationalization stage of MNEs. Although their results show no direct relationship between internationalization speed and performance, they indicate that speed negatively moderates a firm’s profitability. However, they only consider speed in terms of FDI expansion and thus ignore international expansion through alternative entry modes. The aftermath of this study has sparked increased interest among IB scholars in assessing performance implications of internationalization speed. The study of Wagner (2004) builds partly on the work of Vermeulen and Barkema (2002) by analyzing the relationship between internationalization speed and operational performance. However, in contrast to the latter study, Wagner (2004) conceptualizes speed as the change in the degree of internationalization (DOI), measured as foreign sales-to-total sales (FSTS) ratio within a specified five-year period. Wagner (2004) reveals an inverted-U curve relationship

between speed and operational performance and provides evidence that operational performance acts as a mediator between internationalization speed and financial performance. Another study analyzing the relationship between speed and performance was conducted by Chang and Rhee (2011), who build upon the work of Vermeulen and Barkema (2002) and adopt a similar measure of internationalization speed: the increase in the number of manufacturing subsidiaries. However, taking into account firm-related as well as environmental-related factors that moderate the relationship between speed and performance, they show that FDI speed more strongly enhances performance in industries with high levels of global competition and for firms with greater resource endowments and capabilities (Chang and Rhee, 2011).

A more recent stream of IB research has also analyzed the internationalization speed of emerging-market firms. MNEs from these countries do not necessarily expand internationally as predicted by traditional internationalization theories, but rather grow large as they internationalize swiftly into different markets (Bonaglia et al., 2007). Thus, scholars have helped to identify how these firms leverage resources and experience in order to internationalize quickly (Tan and Mathews, 2015; Bonaglia et al., 2007). These researchers conceptualize internationalization speed as Wagner (2004) does by using the quotient of DOI and a certain period of time (Tan and Mathews, 2015).

The above-mentioned studies focus on large, established MNEs and their measures cannot be easily applied to smaller firms. Chetty et al. (2014) have put forward an alternative multidimensional measure of speed applicable to SMEs as a way to analyze the impact of speed on international performance. Building upon the underlying concepts of the Uppsala internationalization process model (Johanson and Vahlne, 1977), they conceptualize speed along two main dimensions: speed of learning and speed of commitment. The former consists of learning from repetition and diversity of international activities, and the latter of foreign

market commitment with regard to people, languages, and entry mode. The time span used for the measurement of speed is the age of firm, which therefore includes pre-internationalization and post-entry stages. Testing their proposed speed measurements on SMEs with regard to international performance, Chetty et al. (2014) find a positive impact of speed on performance.

3.2.2 Internationalization speed and performance in IE literature

In contrast to traditional IB literature, IE scholars have dealt extensively with rapid internationalization of INVs. However, fundamental differences exist with regard to the conceptualization of speed and time period analyzed. As mentioned previously, INV scholars focus to a large extent on the pre-internationalization stage – analyzing the initial internationalization speed – and few studies have been conducted on the subsequent internationalization of INVs (Prashantham and Young, 2011; Morgan-Thomas and Jones, 2009; Sleuwaegen and Onkelinx, 2014; Autio et al., 2000).

The majority of INV studies test internationalization speed as a dependent variable in order to explain why and how INVs internationalize early in their lifecycle (e.g., Pla-Barber and Escribá-Esteve, 2006; Musteen et al., 2010; Kiss and Danis, 2008; Acedo and Jones, 2007; Zhou et al., 2007; Ramos et al., 2011). Some scholarly work has also examined the effect of early entry as an independent variable on parameters such as survival, growth, and performance (Zhou and Wu, 2014; Li et al., 2012a; Zhou et al., 2012; Puig et al., 2014; Khavul et al., 2010). Conceptually, this relationship was extensively studied by Sapienza et al. (2006), who postulate possible interactions between a firm's initial internationalization speed and its performance, theorized as survival and growth. The authors propose that initial entry speed might negatively affect a firm's survival but positively impact its international growth. Furthermore, they highlight that this relationship might be impacted by factors such as firm age at time of first internationalization, international experience, and adaptability of resources (Sapienza et al., 2006). Empirical findings of the proposed relationship are mixed. Khavul et al. (2010) find

neither a direct impact of initial speed on performance, nor an indirect relationship employing entrainment as a mediator. Zhou and Wu (2014) study the relationship of initial speed on performance and distinguish performance along three dimensions: (1) sales growth, (2) profitability, and (3) innovation. In contrast to Khavul et al. (2010), they find a positive relationship between initial speed and sales growth, but not between initial speed and the two separate factors of profitability and innovation (Zhou and Wu, 2014). The findings also indicate that the relationship weakens in the long run with increasing age of a firm (Zhou and Wu, 2014). A study by Li et al. (2012a) also finds a positive impact of early internationalization speed and performance. However, instead of using time-to-internationalization (i.e., initial speed) as a measurement, they define early internationalization speed as the degree to which foreign operations have been established on a global scale within three years of a firm's founding (Li et al., 2012a).

While a high degree of interest in initial internationalization speed has understandably dominated the IE literature, researchers have recently turned their attention towards the subsequent stage of internationalization in order to understand how INVs grow globally after their first international activity (Autio et al., 2000; Preece et al., 1999; Sapienza et al., 2006; Gabrielsson et al., 2014; Hagen and Zucchella, 2014). Scholars have been particularly interested in examining the drivers of subsequent internationalization speed and the positively correlated links between initial speed and subsequent speed (e.g., Morgan-Thomas and Jones, 2009; Autio et al., 2000; Hagen and Zucchella, 2014). Achieving a better understanding of the subsequent stage of INV internationalization is crucial, as it plays a decisive role in the survival and performance of INVs in the long run (Autio et al., 2000; Prashantham and Young, 2011; Knight and Liesch, 2015). In a conceptual study, Prashantham and Young (2011) theorized a positive effect of knowledge accumulation on post-entry speed, defined as the number of countries entered and increase in foreign sales growth during the subsequent INV internationalization period. Furthermore, the authors discuss performance implications of

post-entry internationalization speed and postulate a curvilinear relationship, arguing that internationalizing too fast or too slow might negatively impact performance (Prashantham and Young, 2011). Empirical evidence for the proposed relationship is currently lacking and the link between subsequent speed and performance has scarcely been considered (cf. Almor et al., 2014). The study of Sleuwaegen and Onkelinx (2014) provides first insights on the subsequent speed-performance relationship. However, it focuses on survival chances rather than adopting a direct measurement of performance. The authors do not find a link between survival chances and subsequent internationalization speed, nor do they find a significant difference in terms of failure rate between INVs entering a large number of globally dispersed markets and firms with a geographically limited international focus. Consequently, INV scholars have yet to explore the impact of subsequent speed of internationalization on performance outcomes to gain a better understanding of maturing INVs.

3.3 Dimensions of internationalization speed and hypotheses development

Reviewing the literature on internationalization speed and its impact on performance has shown myriad conceptualizations of both constructs. Focusing on the conceptualization of speed of internationalization, two studies have significantly helped to advance understanding of the various dimensions constituting internationalization speed. First, Oviatt and McDougall (2005) identify three key dimensions of internationalization speed: (1) initial entry speed, (2) country scope, and (3) commitment. As initial speed has already been discussed, I want to draw attention to the latter two factors. On the one hand, *country scope* refers to the number of foreign markets entered, and on the other hand to how psychically distant these markets are from a firm's home country (Oviatt and McDougall, 2005). Thus, measuring these sub-dimensions against time expresses the velocity of an increased number of countries entered in general as well as the increase of cultural and institutional distant markets entered (Oviatt and McDougall, 2005). The dimension *commitment speed* refers to the pace of increase of foreign

revenue. The seminal work of Oviatt and McDougall (2005) was an important contribution, as it highlights for the first time the multidimensionality of internationalization speed as a construct, but lacks a detailed definition and discussion of how speed dimensions should be operationalized – which remains particularly unclear with regard to the country scope dimension.

A more detailed picture and definition of the multiple dimensions of internationalization speed is provided by Casillas and Acedo (2013). The authors specifically focus on speed of internationalization once firms have started international operations (i.e., subsequent internationalization speed). Based on a detailed analysis of internationalization speed, Casillas and Acedo (2013) propose three main dimensions of the speed construct: First, *speed of international growth* refers to the increase in proportions of a firm's sales derived from foreign markets within a specific time span. Second, *speed of increased commitment of resources abroad* relates to amplified commitment, such as number of employees and assets in foreign markets or entry modes chosen (i.e., equity modes) within a given period of time. Third, *speed of breadth of international markets* denotes the international scope that a firm achieves within a certain time span. The breadth or scope can relate to the number, differences, and distances between markets in which a firm operates and represents the geographical diversification of the firm. Comparing these speed dimensions with the dimensions proposed by Oviatt and McDougall (2005), many similarities can be found. If initial speed is left out, both studies broadly identify the following speed dimensions that are applied in this study: (1) country speed (i.e., pace of increase in number of countries entered within a certain time span); (2) commitment speed (i.e., pace of increase of FSTS ratio within a specific period of time); (3) scope speed (i.e., pace of increase of geographical scope in terms of institutional and cultural differences within a defined duration of time); and (4) equity speed (i.e., pace of increase of commitment in terms of equity entry modes chosen).

In addition to providing sound insights into different dimensions of internationalization speed, Casillas and Acedo (2013) also highlight the significance of future research analyzing performance implications resulting from different speed dimensions, a question which has so far been widely ignored. Thus, the authors argue that it is important to understand whether rapid internationalization – based on their multidimensional conceptualization – also leads to better performance. A first study by Chetty et al. (2014) found a positive relationship between internationalization speed and international performance using a multidimensional measurement of speed. While the contribution of their study is unique in that it analyzes the impact of speed as a multidimensional construct on performance, measurement is derived from the Uppsala internationalization process model and therefore is inconsistent with previous studies (cf. Casillas and Acedo, 2013; Oviatt and McDougall, 2005). Chetty et al. (2014) show how their identified speed dimensions contribute to internationalization speed as a formative construct. However, using a formative construct of internationalization speed hinders any insight on the individual relationship between each speed dimension and international performance. Another drawback of their speed measurement is that it blurs the pre-internationalization stage with the subsequent internationalization stage and therefore their results neither reflect performance implications of speed for the pre-internationalization stage nor for the subsequent internationalization stage of firms.

The present study therefore builds on prior IE literature by conceptualizing internationalization speed as including the subsequent stage of firm internationalization, which is also applicable to other firm types (i.e., traditional exporters). This study starts from the important question raised by Casillas and Acedo (2013) and aims to understand how each dimension of subsequent internationalization speed individually impacts performance. I argue that it is important to look at the impact of the individual speed dimensions on international performance, as each dimension of speed has unique characteristics that might differently impact international performance. Applying the dimensions *country speed*, *commitment*

speed, *scope speed*, and *equity speed* to international performance might have dissimilar implications, as discussed below.

3.3.1 Country speed

Internationalization speed referring to the velocity of the number of countries entered within a particular time span is often termed scope of internationalization (Oviatt and McDougall, 2005). However, in contrast to scope, entering a high number of countries does not necessarily imply that firms achieve high level of geographic scope. Country speed can be achieved by either swiftly entering a large number of markets within the same geographic and cultural region or across different geographic and institutional regions. Depending on how country speed is achieved, it can be argued that high country speed can have either a positive or a negative effect on performance.

When achieving fast country speed by quickly internationalizing into a very diverse set of markets in different regions, firms might face great challenges, as they need to adapt operational processes, require a higher level of resources, and experience greater liability of foreignness in institutionally different markets (Rugman and Verbeke, 2005). These challenges present a significant burden to firms and might ultimately negatively impact performance (Li, 2005), as costs of further internationalization might outweigh benefits (cf. Ruigrok et al., 2007).

In contrast, if firms achieve rapid country speed by internationalizing within the same region, these challenges are significantly lowered. Entering a large number of markets within the same region provides firms with several advantages and lowers risk because countries in the same region tend to have similar cultures and institutions (cf. Johanson and Vahlne, 2009; Kostova et al., 2008; Gupta et al., 2002). Hence, firms can benefit from experiential knowledge obtained in the region and enter new markets more rapidly in this region without significantly adapting operational procedures or lacking important knowledge of the internationalization process (cf.

Rugman and Verbeke, 2005; Lopez et al., 2009; Johanson and Vahlne, 1977). These tendencies might explain why previous empirical observations of IB and IE scholarly work have shown that a majority of firms have a preference for internationalizing within the same region (Lopez et al., 2009; Rugman and Verbeke, 2005; Hashai and Almor, 2004). It can be argued that when rapidly expanding within one region, fewer resources are required and risk is reduced, which ultimately result in higher performance. This notion is supported by Sleuwaegen and Onkelinx (2014), who find that geographically focused start-ups show a lower failure rate than do global start-ups. Furthermore, it has been shown that there is a positive relationship between a higher number of markets entered and increased performance (Tallman and Li, 1996).

After having outlined the two possible effects of country speed on performance, I argue that the positive effect is more likely to occur given the fact that a majority of firms internationalize predominantly in the same region (Lopez et al., 2009; Rugman and Verbeke, 2005; Hashai and Almor, 2004). Because of the positive relationship between a high number of markets entered and increased performance (Tallman and Li, 1996), it can be assumed that rapidly expanding into a high number of countries within the same region will contribute to an improvement in the international performance of the firm. I therefore hypothesize:

Hypothesis 1: Rapid international country speed increases international performance.

3.3.2 Commitment speed

The dimension commitment speed describes the rapidity in increase of the FSTS ratio within a certain timespan and has been a common measurement of internationalization speed if applied in a unidimensional way (e.g., Morgan-Thomas and Jones, 2009; Tan and Mathews, 2015). Given that this measure is based on a sales increase derived from foreign markets, its relationship to international performance can be easily determined.

A unique aspect of commitment speed compared to other speed dimensions is that it can also be increased without actually expanding into new markets; instead, firms can increase

commitment speed by penetrating existing foreign markets. When firms devote their resources and capabilities to increasing sales within existing markets instead of entering new ones, they can significantly benefit from experiential knowledge gained in these markets (cf. Johanson and Vahlne, 2009). This market-specific knowledge helps them improve efficiency of operations and processes as well as enlarge their customer base (Eriksson et al., 1997; Casillas and Moreno-Menéndez, 2014). As a result, it is argued that adjusted organizational structures and more efficient processes reduce costs and enable firms to better exploit benefits of international activities, which ultimately increases firm performance (Ruigrok et al., 2007).

Firms cannot infinitely increase foreign sales in existing markets and might therefore strive to increase commitment speed by entering new markets. However, previous findings in this domain have shown that firms tend to rely strongly on one key foreign market where the largest proportion of sales is derived, despite internationalizing into new markets (Morgan-Thomas and Jones, 2009). Increasing foreign sales in existing or new markets, and thereby increasing the FSTS ratio, has been found to positively improve firm performance (Khavul et al., 2010).

Thus, based on the findings of the literature mentioned above, it can be argued that high commitment speed can be achieved at relatively low risk and at the same time increases the FSTS ratio, which will ultimately impact international performance. I therefore hypothesize:

Hypothesis 2: Rapid international commitment speed increases international performance.

3.3.3 Scope speed

Scope speed is the pace of increase in the geographical spread of firms in light of institutional differences. Achieving high geographic scope is often desirable for firms as a way to diversify risk, achieve economies of scale, and increase international sales (Hitt et al., 1997). It is often assumed that this process is undertaken in an incremental manner and over a longer period of time (Johanson and Vahlne, 1977; Barkema and Drogendijk, 2007). Past research has

suggested that this is not only the case for traditional exporters, but also applies to some extent to INVs that – despite sometimes being referred to as born-globals (cf. Knight and Cavusgil, 1996; Rialp et al., 2005) – tend to be regionally operating firms and embrace global operations at a much later stage (Lopez et al., 2009; Hashai and Almor, 2004; Sui et al., 2012).

However, expanding rapidly instead of incrementally into regions with heterogeneous institutional environments can present a strong challenge to firms – especially smaller and younger ones – as it requires a high level of resources, new operational structures, and experience to adapt to market particularities (Sapienza et al., 2006; Johanson and Vahlne, 2009; Li et al., 2012b). The complexity of quickly entering institutionally different markets might reduce the positive effects stemming from global risk diversification, such as market fluctuations, a higher revenue base, and economies of scales (Hitt et al., 1997; Ruigrok et al., 2007). The main challenges associated with operations at high geographic scope can be attributed to the effects of increased institutional and psychic distance, which describes the differences between countries and regions in terms of regulation, business conventions, and culture (Johanson and Vahlne, 1977; Scott, 2008; Kostova et al., 2008). Firms have to account for such differences and need to adapt their operational procedures and structures accordingly (Brouthers, 2002; Chao and Kumar, 2010; Meyer et al., 2009). As this process requires time, institutional differences across countries and regions significantly impact the speed of internationalization (Kiss and Danis, 2008). Considering that high scope speed can only be achieved by entering regions with high institutional distance, firms might face severe challenges in mitigating the risks of a different institutional environment, which in turn could have destabilizing effects on the firm (Chetty and Campbell-Hunt, 2004). The findings of Barkema and Drogendijk (2007) support this notion, as they conclude that firms are constrained by cultural differences and cannot instantly expand into culturally distant markets. Thus, internationalizing at rapid speed into many different geographic regions might have significant negative impacts on firms' operations and lead to "over-internationalization" (Li et

al., 2012b). Ruigrok et al. (2007), for example, show that an extreme degree of internationalization has a negative impact on the performance levels of firms. I therefore hypothesize a similar relationship with regard to the impact of high scope speed on international performance:

Hypothesis 3: Rapid international scope speed decreases international performance.

3.3.4 Equity speed

Equity speed is the pace by which a firm increases its commitment with regard to the entry modes chosen. This dimension shows how quickly firms rely predominantly on FDI entry modes (Chetty et al., 2014), which require more resources than do non-equity entry modes (Pan and Tse, 2000). Thus, this dimension shares some commonalities of the speed concept applied by Vermeulen and Barkema (2002), who measured speed in terms of number of FDIs in foreign markets.

The choice of whether to use equity or non-equity modes when internationalizing in new markets depends on a myriad of macro-environmental factors (e.g., host country risk, political stability, trade relationships) and micro-level factors (e.g., firms' resources, products, management capabilities) (Pan and Tse, 2000). Nevertheless, equity entry modes are often associated with an increased control of firms' foreign operations, improved knowledge acquisition (e.g., market and customer knowledge), and a better exploitation of country-specific advantages that can eventually reduce costs and enhance the profitability of a firm (Anderson and Gatignon, 1986; Dunning, 1988; Brouthers and Nakos, 2004; Zahra et al., 2000).

Internationalizing mainly through equity entry modes is difficult to achieve for many firms, as it requires a large amount of capital that is tied up in foreign investments and is therefore less fungible (Sapienza et al., 2006). Furthermore, it is assumed that the willingness to commit a high level of resources to a foreign market requires experiential knowledge, which is often limited (Johanson and Vahlne, 2009). This is why Johanson and Vahlne (1977) regard

internationalization as a gradual process whereby firms start with non-equity modes before moving to equity modes. Although it has been shown that some firms – such as INVs – do not follow this incremental approach and instead choose FDIs or hybrid modes to enter a new market early in their lifecycle (Oviatt and McDougall, 1994), in the long run it is difficult to maintain internationalization at a rapid speed through equity entry modes. Resources, particularly for firms that face liabilities of size and newness, are scarce (Freeman et al., 2006) and thus rapidly creating legal entities in foreign countries ties up resources, the effects of which might significantly lower the positive impacts of equity entry modes (Barkema and Droghda, 2007), depending on the resource and capability endowments of a firm as well as the industry context (Chang and Rhee, 2011). Based on these insights as well as findings of past research that has indicated that equity speed can indirectly negatively influence firm performance (Vermeulen and Barkema, 2002), I hypothesize:

Hypothesis 4: Rapid international equity speed decreases international performance.

3.3.5 Differing impact of subsequent internationalization speed for INVs and traditional exporters

The hypotheses presented above include relationships proposed to hold true for traditional exporters as well as for INVs, and were derived from the literature for both types of firms. However, given that the types of firms considered in IB and IE literature are assumed to be distinct – especially with regard to their internationalization speed – it could be argued that the impact of subsequent internationalization speed on international performance might not be identical for both types of firms. The major differences between traditional exporters and INVs have been widely discussed in academia (e.g., Autio, 2005; Chetty and Campbell-Hunt, 2004; Schwens and Kabst, 2009; Johanson and Vahlne, 2009). Despite their dissimilarity of early and rapid internationalization, one of the most fundamental differences between INVs and traditional exporters is the role of the entrepreneur and top management within INVs. The internationalization process is facilitated by building on both the networks and the previously

obtained international experience of the top management team (Oviatt and McDougall, 2005; Bloodgood et al., 1996; Tuppura et al., 2008; De Clercq et al., 2012; Zhou et al., 2007). International experience of the entrepreneur partly substitutes for the experiential knowledge of firms, knowledge regarded as a key requirement for the international expansion of traditional exporters (Johanson and Vahlne, 1977).

The early internationalization of INVs “creates an imprint for adaptability to uncertain environments and internal receptivity for continual change” (Sapienza et al., 2006: p. 915). Due to the fact that firms need to adjust the configuration of their resources to undertake and expand international operations (Hitt et al., 1997), INVs benefit from learning advantages of newness and less-established routines to increase the speed of internationalization (Autio et al., 2000). This helps INVs to manage their scarce resources efficiently and expedites international expansion compared to traditional exporters. These advantages enable INVs to seize foreign-market opportunities more rapidly and successfully, which is eventually also expressed in increased international performance. This might be particularly true when rapidly internationalizing in a high number of markets (i.e., country speed) and swiftly increasing international sales (i.e., commitment speed). Traditional exporters might benefit less from high country speed and commitment speed than do INVs, as their organizational structures are more rigid and path dependencies hinder a flexible and efficient adaption to new routines and processes required for rapid internationalization (cf. Sapienza et al., 2006).

While on the one hand traditional exporters might benefit less from high country and scope speed, on the other hand they might also be less affected by the predicted negative impact of scope and equity speed on international performance. Traditional exporters, compared to INVs, are considered to suffer less from liabilities of newness and size and often possess a greater number of resources in terms of financial capital, human capital, and experiential organizational knowledge (cf. Buckley and Casson, 2009; Chetty and Campbell-Hunt, 2004).

Despite better resource endowments stemming from size and age of the firm, traditional exporters are also assumed to rely more strongly on domestic or regional markets, where most of their revenues are derived (Rugman and Verbeke, 2005; Chetty and Campbell-Hunt, 2004). Given that international expansion is an investment-intensive process, regardless of the speed by which it is undertaken, a lack of resources can significantly reduce survival chances of firms (Sapienza et al., 2006). Thus, it has been shown that traditional exporters have higher survival rates than do INVs (Sleuwaegen and Onkelinx, 2014). Due to these resource endowments, it is likely that traditional exporters can mitigate the negative impact of high scope speed and equity speed on international performance better than INVs can. Based on these considerations, I hypothesize the following differences between INVs and traditional exporters regarding the impact of subsequent internationalization speed on international performance:

Hypothesis 5a: The positive effects of subsequent internationalization speed on international performance are stronger for INVs than they are for traditional exporters.

Hypothesis 5b: The negative effects of subsequent internationalization speed on international performance are stronger for INVs than they are for traditional exporters.

3.4 Method

3.4.1 Sample and data collection

The empirical context of this study is the German renewable-energy industry and data is based on a large questionnaire survey conducted in 2014 on the internationalization process of firms. The data was collected as part of a larger research project. I focus on the renewable-energy industry because it is relatively young and shows a high degree of international operations stemming from a global demand of its products (cf. Lehr et al., 2012; Baum et al., 2011b; Tan and Mathews, 2015). Furthermore, the industry consists of more-traditional exporting firms as

well as INVs (cf. Baum et al., 2011b; Schwens et al., 2010). Both service and manufacturing firms are included within this study to best reflect the underlying structure of the industry.

Given the relatively young age of the industry and a variety of market players, no comprehensive database exists containing all German renewable-energy firms with international operations. In order to identify the population, an extensive pre-screening of the industry was conducted based on a large database covering the German renewable-energy industry provided by a government institution. This database also included firms that exclusively operate domestically as well as other industry actors that were not relevant to the purpose of this study (e.g., foreign firms, non-governmental and governmental organizations). In order to ensure that the database entailed all relevant firms we additionally checked membership registries of all major industry associations and clusters, as well as exhibitor's lists of trade fairs related to renewable energy. This led to screening 4682 firms that were assessed with regard to the following sample criteria: firms had to be (1) for profit; (2) German owned; (3) derive the majority of their revenues from the renewable-energy sector (e.g., solar, wind, bio energy); and (4) undertake business activities in at least one foreign market. While constraining the sample to one industry might limit generalizability of the findings, it also increases internal validity given that the internationalization process of firms can be strongly determined by industry and macro-environmental factors (Coviello and Jones, 2004; Coviello and Martin, 1999). Overall, 488 firms were identified that met all of the above-mentioned sample criteria and were therefore included in a database compiled for this study.

Prior to designing the questionnaire, an extensive pilot study was conducted interviewing 23 managers and industry representatives to understand the internationalization process of renewable-energy firms and industry particularities. Based on these insights, a standardized questionnaire was constructed using established scales from previous literature to obtain information about the organization, its internationalization process, and its performance

outcomes. As items were originally in English and the questionnaire in German, to ensure validity the questionnaire was forward and back translated several times with the help of research assistants. Furthermore, the questionnaire was pretested with 18 respondents from industry and academia using think-aloud protocols. During this process the questionnaire was continuously improved by clarifying statements and changing the order of questions to avoid ambiguity and to further validate items (Podsakoff et al., 2003). Mixing the order of dependent and independent questions to avoid respondents easily establishing relationships among the questions themselves helped to avoid the risk of common-method variance stemming from the questionnaire design (Podsakoff et al., 2003; Chang et al., 2010).

Based on the pilot study, it was decided that the respondents best placed to complete the questionnaire were chief executive officers, managing directors, or heads of business development or (international) sales departments, depending on the firm's size and structure. In order to identify the most suitable respondent to complete the questionnaire, potential respondents were approached in person either at trade fairs and industry events or via telephone, which also provided the opportunity to explain the aim of the study and respond to possible questions relating to the research project. Although the questionnaire was standardized with regard to its content, respondents were able to complete the questionnaire either online, via e-mail using a PDF document, mail, fax, or over the phone.

In total, 251 questionnaires were returned, which presents a response rate of 51.4% and contained responses from 150 INVs meeting the cut-off point of having internationalized within three years after inception (Madsen and Servais, 1997; Knight and Cavusgil, 2004). For the purposes of analyzing subsequent speed of internationalization, 230 questionnaires were suitable for analysis. On average, the firms included in this study are 12.4 years old, employ 117.2 employees, have been operating internationally for 8.4 years, and derive an FSTS of 44.2 from 10.4 foreign markets.

3.4.2 Measurement of variables

Independent variables

The literature review has indicated that manifold measurements for the conceptualization of internationalization speed exist. Chetty et al. (2014) highlight the problems related to using heterogeneous and unidimensional measurements of internationalization speed and have developed a multidimensional measurement of speed based on the main concepts of the original Uppsala model. Although some of the measurements of speed suggested in their work were adopted, the measurement applied to this study directly relates to the speed dimensions suggested by Oviatt and McDougall (2005) as well as Casillas and Acedo (2013) and exclusively refers to the subsequent internationalization stage. As mentioned previously, this study focuses specifically on the following speed dimensions: (1) country speed, (2) commitment speed, (3) scope speed, and (4) equity speed, and therefore applies four different measures of internationalization speed. Given that this study focuses on the subsequent internationalization stage of firms, all speed measures are based on the years of international operations measured by using the time span of a firm's first international market activity until present (i.e., year of data collection, 2014) (Vermeulen and Barkema, 2002). Respondents were therefore asked to indicate the year in which their firm first started international operations. The years of international operations is used as the denominator for measuring the four speed dimensions. The measurement of *country speed* was applied as suggested in previous conceptual work (Prashantham and Young, 2011; Casillas and Acedo, 2013) by using the sum of numbers of foreign markets a firm is operating in (cf. Chetty et al., 2014). Compared to empirical IB literature, which uses a similar measure and takes into account only markets where firms used FDI entry modes (cf. Vermeulen and Barkema, 2002; Chang and Rhee, 2011), in this study, countries where firms used non-equity modes (cf. Pan and Tse, 2000) are also considered. Data for this construct was obtained by asking respondents to name the number of foreign countries in which their firm operates. The measurement for

subsequent international *commitment speed* (Prashantham and Young, 2011) was adopted from Morgan-Thomas and Jones (2009), who use the ratio of total international sales to total turnover (i.e., FSTS) as a single indicator referring to the firm's past-year FSTS, which was provided by the respondents. In order to measure *scope speed* (Casillas and Acedo, 2013; Oviatt and McDougall, 2005), I build on earlier scholarly work examining the international spread or diversity of firms with regard to the number of regions entered (cf. Preece et al., 1999; Li et al., 2012b). In order to account not only for geographical spread, but also scope of institutionally different regions where firms operate, the cultural clusters identified by Gupta et al. (2002) are used. Respondents were asked to indicate all regions where their firm operates. Similar to measuring country speed, the sum of regions divided by years of international operations was used to measure scope speed (cf. Casillas and Acedo, 2013). The last speed dimension considered – *equity speed* – was operationalized using the measurement proposed by Chetty et al. (2014) and asks for the firm's most dominant entry mode used. Afterwards the information was dummy coded, assigning non-equity modes a value of 0 and equity modes a value of 1 (cf. Pan and Tse, 2000). The dominant mode choices were measured against the above-mentioned time dimension (cf. Chetty et al., 2014). Given that some information requested for the above-mentioned measurements is available from firms' reports, websites, and publicly available databases, the information provided by the respondents was cross-checked.

Dependent variables

International performance is the dependent variable in this study and has been predominantly conceptualized across several dimensions in previous studies (e.g., Brouthers and Nakos, 2004; Musteen et al., 2010). Similar to many studies focusing on performance of internationally operating firms, a subjective measure of international performance was used for several reasons. First, given that the sample includes many younger and smaller firms, financial data is

not publicly available as might be the case with larger and stock-listed MNEs (cf. Vermeulen and Barkema, 2002). Second, the pilot-study and pre-tests showed that managers are indeed reluctant to disclose financial data, despite the assured confidentiality of their responses. Including questions on absolute financial figures regarding international profit or sales would have likely led to a lower response rate and a significant rate of missing values (cf. Brouthers and Nakos, 2004; Contractor et al., 2005). Third, strategy research as well as internationalization literature has shown that subjective performance measures can be used successfully, as they provide a very accurate measure of performance (Venkatraman and Ramanujam, 1986; Yip et al., 2000). Using a subjective measure of international performance, respondents were asked on a five-point Likert scale to assess their level of satisfaction with the international performance of the firm over the last three years. Performance dimensions considered for this scale were adapted from previous literature on international performance (Brouthers and Nakos, 2004; Chetty et al., 2014; Jantunen et al., 2005; Musteen et al., 2010) and consist of foreign sales, market share, profitability, market access, reputation, access to know-how, and overall satisfaction. Thus, the measurement of international performance includes “hard” indicators that are measurable objectively with precise numeric values (e.g., foreign sales and profitability) and “soft” indicators that are rather subjective (e.g., access to know-how and reputation). Using hard and soft measures of performance is particularly helpful given that the analysis includes firms with different characteristics in terms of size and age, and including both measures allows us to capture firms that might strive for different performance indicators, which should be reflected accordingly (Trudgen and Freeman, 2014).

Control variables

In line with previous literature on the internationalization process of firms and performance, four control variables are included in this study that are assumed to affect performance: size, age, type of firm, and international experience of the top management team (Brouthers, 2002;

Chetty et al., 2014; Kuivalainen et al., 2007; Casillas et al., 2015). The *firm's size* was measured using its turnover by providing respondents with four different turnover categories (derived from pilot study) (Lu and Beamish, 2006). Size is thought to be an approximation of firm resources and therefore might impact the performance of a firm (Wagner, 2004). *Age* has often been seen as a proxy for firm resources, given that older firms often have greater resource levels and can rely on established structures and networks (Zhou et al., 2012). Age was included as a control variable in the analysis by counting the number of calendar years since firm foundation (Filatotchev et al., 2009). For the *type of firm*, I distinguishing between manufacturing and service firms to control for potential differences with regard to performance outcomes (Khavul et al., 2010). Manufacturing firms were dummy coded as 0 and service firms as 1 (Zhou et al., 2012). Finally, I also controlled for *previous international experience of top management team* (TMT), which is assumed to impact firm performance (Hutzschenreuter and Horstkotte, 2013) and is frequently applied as a control in internationalization literature (Musteen et al., 2010; Schwens and Kabst, 2011). I used two dichotomous measures and asked respondents whether TMT members worked and/or studied abroad before founding or joining the firm (Reuber and Fischer, 1997; Lee and Park, 2008).

All measurements of the various variables included in the study can be found in the Appendix of this study.

3.4.3 Analytical approach and measurement validity

Structural equation modeling (SEM) using maximum-likelihood estimation was employed to test hypotheses. This methodology is considered suitable for the aim of this study, because it includes two dependent variables, and because this methodology has been proven particularly useful in studies analyzing the speed of internationalization (e.g., Acedo and Jones, 2007; Chetty et al., 2014). SEM is a two-stage process that first tests the reliability and validity of the constructs; and second, calculates the hypothesized model itself (Byrne, 2010).

Correlation Matrix		Mean	S.D.	1	2	3	4	5	6	7	8	9
1.	Country Speed	1.59	2.74									
2.	Commitment Speed	8.82	12.03	.129								
3.	Scope Speed	.72	.63	.448**	.468**							
4.	Equity Speed	.09	.17	.050	.106	.287**						
5.	International Performance "Hard"	3.14	.89	.044	.064	-.026	-.121					
6.	International Performance "Soft"	3.79	.86	.146*	.213**	.171**	.105	.430**				
7.	Turnover	2.10	.96	.129	-.211**	-.052	-.030	.126	-.013			
8.	Age	12.35	9.54	-.143*	-.311**	-.341**	-.181**	.139*	-.126	.295**		
9.	International Experience of TMT	1.20	.79	.052	.169*	.098	.078	.116	.139*	.026	-.178**	
10.	Service	.72	.45	-.260**	-.012	-.198**	.118	-.011	.079	-.098	-.053	.061

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

Table 3.1: Correlation matrix

Table 3.1 shows the descriptive statistics and bivariate correlations of the independent, dependent, and control variables. All bivariate correlations stay below .7 and variance inflation factors calculated for the independent variables stay below 3 – with the highest being 1.73 – and hence no risk for multicollinearity has been identified (Hair et al., 2010). I conducted an exploratory principal-component factor analysis assessing convergent validity of multi-item constructs. Similarly to Brouthers and Nakos (2004), my results differentiate between two distinct international performance factors: “hard” factors (i.e., objective and financial) relating to turnover, market share, and profitability; and “soft” factors (i.e., subjective and non-financial) consisting of reputation and knowledge access. The items relating to market access and overall satisfaction of international activities revealed a high cross-loading and were therefore dropped from the analysis. Analyzing the items of latent constructs of the measurement model with regard to factor loadings, average variance explained, and reliability to test convergent validity shows validity for all constructs, with factor loadings above .80, average variance extracted higher than .60, and construct reliability above .75 (Fornell and Larcker, 1981; Hair et al., 2010). I also tested for discriminant validity by comparing the average variance extracted of each construct to the squared correlation estimate between constructs. Given that the average variance explained for each construct is higher than the squared correlation estimate between constructs provides good evidence of discriminant validity (Hair et al., 2010). Assessing the measurement model, which only includes latent

constructs of the hypothesized model, using goodness-of-fit statistics indicates a very good model fit, as the measurement model exceeds all cut-off points of the most relevant criteria (i.e., normed χ^2 [1.159]; GFI [.988]; CFI [.998]; RMSEA [.059]) suggested by Hair et al. (2010).

Because all measurements for this study are derived from a single questionnaire, common-method variance might be an issue (Podsakoff et al., 2003). However, as mentioned previously, several ex-ante procedures were used to avoid the risk of common-method variance by carefully designing the questionnaire with regard to the order of questions. Furthermore, dependent variables were measured on Likert scale items and are rather subjective while independent variables were calculated based on information provided by the respondent and are objective (Chang et al., 2010). In a large number of cases it was possible to verify information for the independent variables, as this information is often publicly available (see 3.4.2), a step that significantly reduces common-method variance (Chang et al., 2010). I therefore cross-checked information such as year of foundation, number of international export markets, and foreign turnover using published material of the respective firms as well as publicly available industry databases. Subsequently, I corrected inaccurate information mainly caused by typographical errors of the respondents. In addition to these ex-ante procedures to avoid common-method variance, Harman's single-factor test was also conducted using principle-component factor analysis with all items included in the model (largest variance explained by one factor was 22%), indicating that there is no concern of common-method variance in this study, as no single factor emerged or contributed to the majority of the covariance (Podsakoff et al., 2003).

These analyses indicate high measurement-model validity and therefore allowed me to proceed with testing the hypothesized model.

3.5 Results

Figure 3.1 illustrates the results for standardized coefficients of the hypothesized SEM for Hypotheses 1 to 4 (Model 1), whereas Figure 3.2 and Figure 3.3 report the results for Hypotheses 5a and 5b for INVs and traditional exporters (Model 2). Models were assessed using goodness-of-fit statistics that are illustrated in Table 3.2, showing a good fit of both models (Hair et al., 2010).

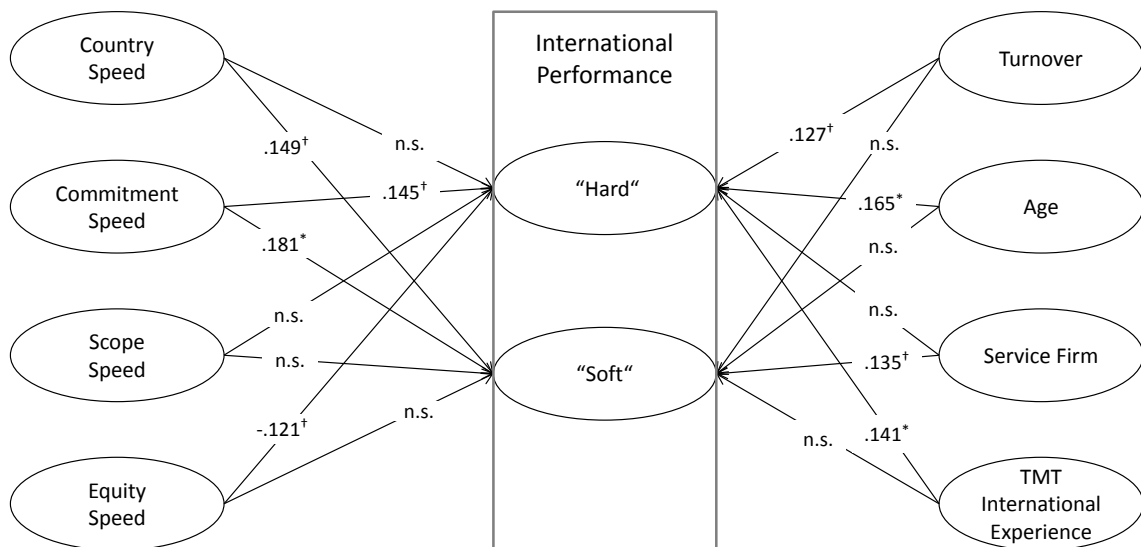


Figure 3.1: Structural equation modelling results for Model 1 (overall sample)

This is a simplified version of the actual SEM, which does not show error terms, indicator variables of the latent constructs, or covariances. *** $p \leq .001$; ** $p \leq .01$; * $p \leq .05$; [†] $p \leq .1$

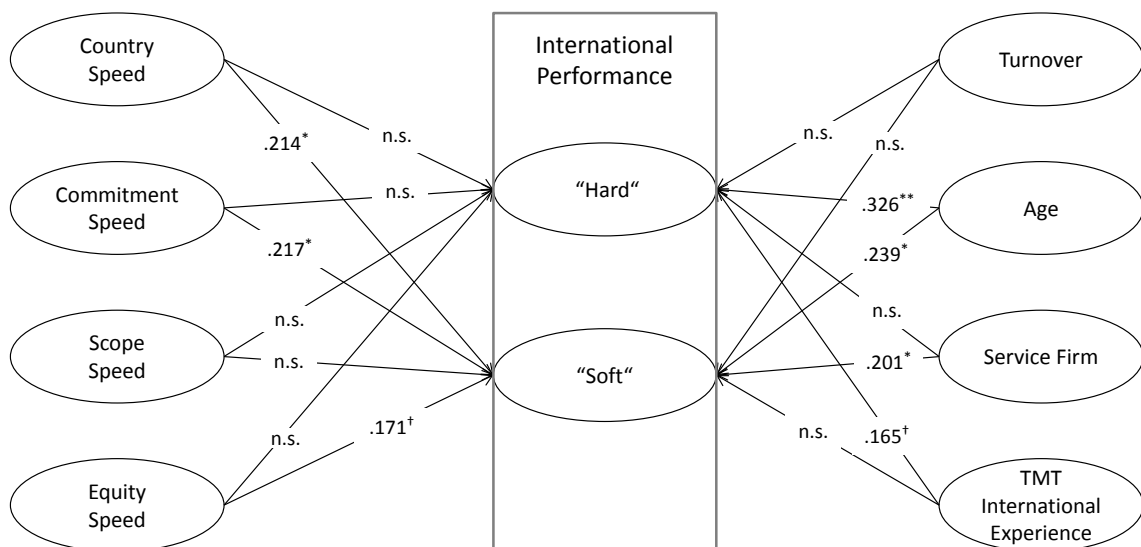


Figure 3.2: Structural equation modelling results for Model 2 (subsample INVs)

This is a simplified version of the actual SEM, which does not show error terms, indicator variables of the latent constructs, or covariances. *** $p \leq .001$; ** $p \leq .01$; * $p \leq .05$; [†] $p \leq .1$

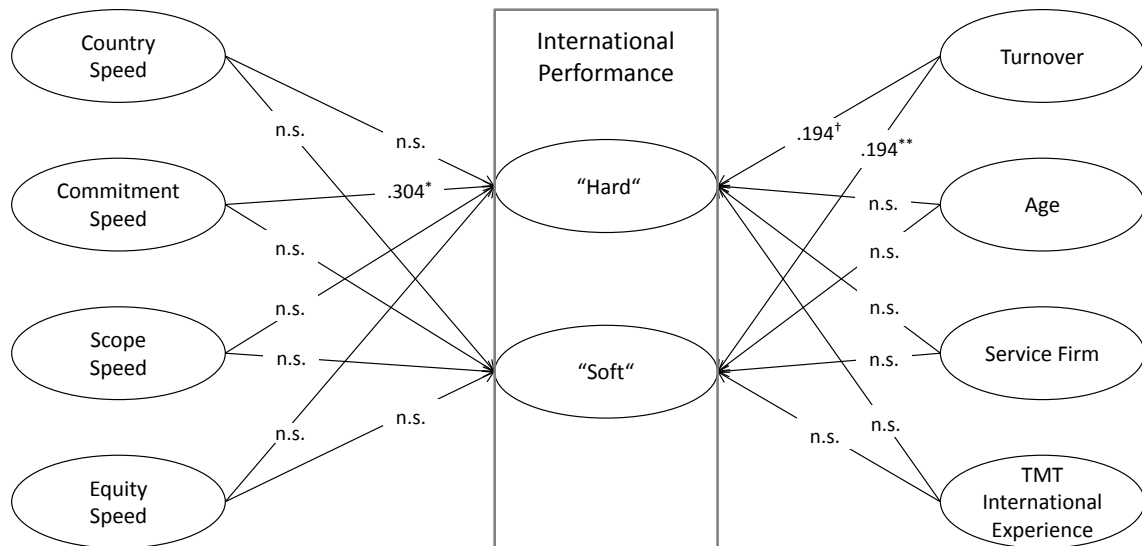


Figure 3.3: Structural equation modelling results for Model 2 (subsample traditional exporters)

This is a simplified version of the actual SEM, which does not show error terms, indicator variables of the latent constructs, or covariances. *** $p \leq .001$; ** $p \leq .01$; * $p \leq .05$; $^{\dagger} p \leq .1$

Model	Chi ²	df	CMIN/DF	GFI	CFI	RMSEA
Model 1: Overall sample	78.28	45	1.739	.950	.953	.057
Model 2: Subsamples	128.02	90	1.422	.922	.949	.043

Table 3.2: Goodness-of-fit statistics of models

Hypothesis 1 states that rapid country speed increases international performance. As Figure 3.1 illustrates, this hypothesis was weakly confirmed for high country speed increasing international performance (soft). Results also show that commitment speed was positively related to international performance (hard and soft) and thus supports Hypothesis 2. No significant relationship between scope speed and international performance was identified, and thus does not support Hypothesis 3. The hypothesized negative impact of equity speed on international performance (Hypothesis 4) was weakly supported.

In order to test Hypotheses 5a and 5b, a group split was undertaken by dividing firms along INVs ($n = 144$) and traditional exporters ($n = 86$). The group split was based on the dominant INV criterion requiring firms to have internationalized within three years after inception to be considered INVs (Madsen and Servais, 1997; Knight and Cavusgil, 2004). Before conducting SEM with the group split, equivalence of the measurement model across the two groups was

tested (Byrne, 2010). The results show that the measurement model is invariant across both groups. Figure 3.2 and Figure 3.3 provide evidence for Hypothesis 5a, which states that the positive effects of subsequent internationalization speed on international performance is larger for INVs than it is for traditional exporters. However, results show that equity speed of internationalization has a positive impact on international performance for INVs, indicating the opposite direction of Hypothesis 5b, which is therefore not supported.

3.6 Discussion and conclusion

The overarching objective of this study was to understand how multiple dimensions of speed impact international performance of a firm. Applying four different dimensions, as suggested by previous scholars (Oviatt and McDougall, 2005; Casillas and Acedo, 2013), shows the impact of country, commitment, scope, and equity speed on international performance based on a sample of 230 German renewable-energy firms. Results highlight that country and commitment speed in particular increase international performance, whereas equity speed indicates a negative performance impact, and scope speed a non-significant performance impact. These differences can be explained by considering that country speed and commitment speed are less risky and more easily achievable by a firm than are the other two dimensions (i.e., scope speed and equity speed). Analyzing INVs and traditional exporters separately, results show that internationalization speed impacts international performance slightly differently depending on the firm type. INVs seem to benefit more strongly from internationalization speed, showing that both country and commitment speed increase international performance, whereas traditional exporters only benefit from high commitment speed. In contrast to the Hypothesis 5b that INVs are more strongly affected by negative impacts of subsequent internationalization speed on international performance compared to traditional exporters, results show that equity speed actually positively contributes to international performance. This finding is somewhat counterintuitive given that INVs are

generally assumed to hold fewer resources and might struggle to adopt required governance structures to successfully expand through equity modes at high speed (cf. Sapienza et al., 2006; Pan and Tse, 2000). Although this discussion extends the scope of this study, it could be argued that because INVs strongly rely on networks, are more flexible, and are able to learn more quickly (cf. Zahra et al., 2000; De Clercq et al., 2012; Oviatt and McDougall, 1997; Autio et al., 2000), they also manage to leverage resources efficiently and benefit from expanding rapidly through equity modes, helping them to better control operations abroad and lower liabilities of foreignness. Findings of this study also show – in contrast to Hypothesis 3 – that scope speed is not significantly related to international performance, implying that entering markets with very heterogeneous institutional environments at a rapid pace has no significant effect on international performance. It should be pointed out that these results only refer to the relationship between rapid scope speed and performance and do not imply that spreading operations over a large geographical scope does not impact international performance.

This study contributes to existing literature in several ways. First, it contributes to the literature conceptualizing internationalization speed along multiple dimensions (cf. Casillas and Acedo, 2013; Prashantham and Young, 2011; Chetty et al., 2014). While the conceptualization of internationalization speed as a multidimensional construct has often been rather vague, conceptual, and rarely considered in empirical research (e.g., Oviatt and McDougall, 2005; Casillas and Acedo, 2013; Prashantham and Young, 2011), in this study I identify measurements for each speed dimension based on previous research using unidimensional measures and instead measure speed in a multidimensional way (cf. Chetty et al., 2014; Morgan-Thomas and Jones, 2009; Vermeulen and Barkema, 2002).

Second, this study is unique because it differentiates between dimensions of internationalization speed and thus assesses the individual impact of each speed dimension on international performance. Although Chetty et al. (2014) also analyze speed as a

multidimensional construct and its impact on international performance, their conceptualized speed measurement is formative. Using a formative construct helps to understand how each dimension of speed contributes to speed as an overall construct, but does not assist in identifying the individual impact of speed dimensions on an outcome variable such as international performance. Gaining insights on how individual dimensions of speed impact international performance is crucial in order to identify the more effective speed dimensions with regard to international performance and has important implications for scholars and managers alike.

Third, previous literature analyzing the impact of internationalization speed on performance has been heterogeneous, finding either no direct relationship (Vermeulen and Barkema, 2002), an inverted U-curve relationship (Wagner, 2004), or a positive relationship that depends on firms' resource endowments and other environmental factors (Chang and Rhee, 2011). Chetty et al. (2014) also find a positive relationship between speed and international performance. These differing findings might be the result of applying different measures for internationalization speed, which can understandably lead to different findings. Due to the fact that findings of this study include four different measurements of internationalization speed showing that some speed dimensions positively impact international performance and others negatively, it offers researchers first insights into why prior findings might be ambiguous and will thus contribute to more nuanced theorizing of these implications in IB research. However, it needs to be pointed out that findings of this study relate to international performance and thus cannot be directly compared to studies analyzing the overall performance of a firm (e.g., Vermeulen and Barkema, 2002; Khavul et al., 2010; Chang and Rhee, 2011).

Fourth, this study also broadens the context in which internationalization speed has been studied, as it includes firms with different characteristics, such as INVs, traditional exporters, young and old firms, small and large firms, and controls for these differences. Previous

research on internationalization speed is often limited, as it only takes into consideration firms meeting certain characteristics and thus limits the generalizability of results (cf. Wagner, 2004; Chetty et al., 2014; Chang and Rhee, 2011; Morgan-Thomas and Jones, 2009). Results of this study show that differences between INVs and traditional exporters persist in the subsequent internationalization phase, highlighting that INVs seem to achieve increased international performance stemming from country, commitment, and equity speed. In contrast, speed of commitment is the only speed dimension that increases international performance for traditional exporters. Results reinforce the importance that INV scholars dedicated to the speed of internationalization and might stimulate research on the multidimensionality of internationalization speed of traditional exporters given its significant implications for firms' international performance. This can substantially advance scholarly understanding of the impact of internationalization speed and lead to better theorizing in IB research.

Last, by adapting two different constructs reflecting international performance, this paper follows previous suggestions to implement performance measurements reflecting different firm characteristics (Trudgen and Freeman, 2014). Given that a heterogeneous set of firms was included in this study, measuring international performance along "hard" and "soft" indicators enabled me to account for these differences and achieve more generalizable findings.

This study also provides important implications for managers who want to implement an effective internationalization strategy. Results of this study show that firms aiming to rapidly expand internationally in order to increase international performance are advised to focus on increasing commitment speed. As mentioned earlier, this speed dimension involves the lowest risk compared to other speed dimensions and is most effective at increasing international performance. Especially for traditional exporters, this presents the best option to increase international performance through high speed. Managers of INVs, however, might also benefit from rapidly increasing the number of markets entered, increasing international sales, and

using equity entry modes to internationalize. These findings will help managers to better evaluate when and how rapidly to internationalize, which forms a crucial part of the overall internationalizations strategy. Managers can thereby align processes and focus on expanding capabilities that help achieve rapid internationalization speed across a particular dimension.

Despite these contributions, this study also presents some limitations with regard to the context and process of data collection. The study is based on data from a single country, a single industry, and is cross-sectional. While this design limits the generalizability of the results, a single country and single industry focus also provides the benefit of not having to control for potential influences stemming from the environment, such as institutional development, subsidies, and industry conditions. This design allowed for a strict focus on the relationship between subsequent speed and international performance.

I hope that this study will encourage future research in the area of internationalization speed. Scholars studying speed of internationalization should carefully consider the multidimensionality of the construct and precisely define the dimensions under study and further improve measurements of speed dimensions. Doing so will help other researchers gain further insights on the speed-performance relationship and might avoid inconsistent findings stemming from varied conceptions of internationalization speed. While this study analyzes only the direct impact of speed on international performance, future research could broaden the scope across countries and industries to include macro-environmental influences on the relationship. Future longitudinal studies could also help to understand whether variations in performance outcomes caused by differing internationalization speed arise over time. Furthermore, it would also be interesting to discover how INVs in particular develop with regard to internationalization speed in the subsequent stages and whether differences between INVs and traditional exporters remain apparent in the long run. Thus the door for future research in this area is wide open.

Appendix for Paper II

Construct	Indicator/Measurement	Sources
International performance	In the last three years... ...we have been very satisfied with the turnover we have achieved internationally. ...we have been very satisfied with meeting our international market-share objectives. ...we have been very satisfied with the profitability of our international operations. ...we have achieved good access to new markets. (dropped from analysis) ...our company image has improved due to international operations. ...our company's expertise has improved due to international operations. ...we have been very satisfied with our international operations as a whole. (dropped from analysis)	Adapted from Brouthers and Nakos (2004), Musteen et al. (2010), Jantunen et al. (2005), and Chetty et al. (2014)
Country speed	Number of foreign markets / Years of international operations	Adapted from Prashantham and Young (2011), Casillas and Acedo (2013), and Chetty et al. (2014)
Commitment speed	Percentage of foreign revenue / Years of international operations	Adapted from Morgan-Thomas and Jones (2009)
Scope speed	Numbers of cultural regions / Years of international operations	Adapted from Oviatt and McDougall (2005), Casillas and Acedo (2013), and Gupta et al. (2002)
Equity speed	Entry mode with foreign investment (y/n) / Years of international operations	Adapted from Chetty et al. (2014) and Pan and Tse (2000)
Overall Resources (control)	Turnover 1 (low) to 4 (high) Age (number of calendar years since foundation to 2014)	Adapted from Lu and Beamish (2006) Filatochev et al. (2009)
Type of firm (control)	Service (1) and manufacturing (0)	Adapted from Khavul et al. (2010)
International experience of top management team (control)	Before founding or joining this firm, did any member of the current management team... ...work abroad? (y/n) ...study abroad? (y/n)	Adapted from Reuber and Fischer (1997) and Lee and Park (2008)

References

- Acedo FJ and Jones MV. (2007) Speed of internationalization and entrepreneurial cognition: Insights and a comparison between international new ventures, exporters and domestic firms. *Journal of World Business* 42: 236-252.
- Aharoni Y and Brock DM. (2010) International business research: Looking back and looking forward. *Journal of International Management* 16: 5-15.
- Almor T, Tarba S and Margalit A. (2014) Maturing, technology-based, born-global companies: Surviving through mergers and acquisitions. *Management International Review* 54: 421-444.
- Anderson E and Gatignon H. (1986) Modes of foreign entry: A transaction cost analysis and propositions. *Journal of International Business Studies* 17: 1-26.
- Autio E. (2005) Creative tension: The significance of Ben Oviatt's and Patricia McDougall's article 'Toward a theory of international new ventures'. *Journal of International Business Studies* 36: 9-19.
- Autio E, Sapienza HJ and Almeida JG. (2000) Effects of age at entry, knowledge intensity, and imitability on international growth. *Academy of management journal* 43: 909-924.
- Barkema HG and Drogendijk R. (2007) Internationalising in small, incremental or larger steps? *Journal of International Business Studies* 38: 1132-1148.
- Baum M, Schwens C and Kabst R. (2011) A typology of international new ventures: Empirical evidence from high-technology industries. *Journal of Small Business Management* 49: 305-330.
- Bloodgood JM. (2006) Venture adolescence: Internationalization and performance implications of maturation. *International Journal of Entrepreneurial Behavior & Research* 12: 67-85.
- Bloodgood JM, Sapienza HJ and Almeida JG. (1996) The internationalization of new high-potential U.S. ventures: Antecedents and outcomes. *Entrepreneurship: Theory & Practice* 20: 61-76.
- Bonaglia F, Goldstein A and Mathews JA. (2007) Accelerated internationalization by emerging markets' multinationals: The case of the white goods sector. *Journal of World Business* 42: 369-383.
- Brouthers KD. (2002) Institutional, cultural and transaction cost influences on entry mode choice and performance. *Journal of International Business Studies* 33: 203-221.
- Brouthers KD and Nakos G. (2004) SME entry mode choice and performance: A transaction cost perspective. *Entrepreneurship: Theory & Practice* 28: 229-247.
- Buckley PJ. (2002) Is the international business research agenda running out of steam? *Journal of International Business Studies* 33: 365-373.
- Buckley PJ and Casson MC. (2009) The Internalisation Theory of the Multinational Enterprise: A Review of the Progress of a Research Agenda after 30 Years. *Journal of International Business Studies* 40: 1563-1580.
- Byrne BM. (2010) *Structural equation modeling with AMOS: Basic concepts, applications, and programming*, New York, NY: Routledge.
- Calof JL. (1993) The mode choice and change decision process and its impact on international performance. *International Business Review* 2: 97-120.
- Casillas JC and Acedo FJ. (2013) Speed of the internationalization process of the firm. *International Journal of Management Reviews* 15: 15-29.
- Casillas JC, Barbero JL and Sapienza HJ. (2015) Knowledge acquisition, learning, and the initial pace of internationalization. *International Business Review* 24: 102-114.
- Casillas JC and Moreno-Menéndez AM. (2014) Speed of the internationalization process: The role of diversity and depth in experiential learning. *Journal of International Business Studies* 45: 85-101.
- Chang S-J and Rhee JH. (2011) Rapid FDI expansion and firm performance. *Journal of International Business Studies* 42: 979-994.

- Chang S-J, van Witteloostuijn A and Eden L. (2010) From the editors: Common method variance in international business research. *Journal of International Business Studies* 41: 178-184.
- Chao MC-H and Kumar V. (2010) The impact of institutional distance on the international diversity–performance relationship. *Journal of World Business* 45: 93-103.
- Chetty S and Campbell-Hunt C. (2004) A strategic approach to internationalization: A traditional versus a "born-global" approach. *Journal of International Marketing* 12: 57-81.
- Chetty S, Johanson M and Martín Martín O. (2014) Speed of internationalization: Conceptualization, measurement and validation. *Journal of World Business* 49: 633-650.
- Contractor F. (2007) Is international business good for companies? The evolutionary or multi-stage theory of internationalization vs. the transaction cost perspective. *Management International Review* 47: 453-475.
- Contractor FJ, Hsu C-C and Kundu SK. (2005) Explaining export performance: A comparative study of international new ventures in Indian and Taiwanese software industry. *Management International Review* 45: 83-110.
- Coviello NE and Jones MV. (2004) Methodological issues in international entrepreneurship research. *Journal of Business Venturing* 19: 485-508.
- Coviello NE and Martin KAM. (1999) Internationalization of service SMEs: An integrated perspective from the engineering consulting sector. *Journal of International Marketing* 7: 42-66.
- De Clercq D, Sapienza HJ, Yavuz RI, et al. (2012) Learning and knowledge in early internationalization research: Past accomplishments and future directions. *Journal of Business Venturing* 27: 143-165.
- Dunning JH. (1988) The eclectic paradigm of international production: A restatement and some possible extensions. *Journal of International Business Studies* 19: 1-31.
- Eden L. (2009) Letter from the editor-in-chief: Time in international business. *Journal of International Business Studies* 40: 535-538.
- Eriksson K, Johanson J, Majkgard A, et al. (1997) Experiential knowledge and cost in the internationalization process. *Journal of International Business Studies* 28: 337-360.
- Filatotchev I, Liu XH, Buck T, et al. (2009) The export orientation and export performance of high-technology SMEs in emerging markets: The effects of knowledge transfer by returnee entrepreneurs. *Journal of International Business Studies* 40: 1005-1021.
- Fornell C and Larcker DF. (1981) Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research* 18: 39-50.
- Freeman S, Edwards R and Schroder B. (2006) How smaller born-global firms use networks and alliances to overcome constraints to rapid internationalization. *Journal of International Marketing* 14: 33-63.
- Gabrielsson M, Gabrielsson P and Dimitratos P. (2014) International entrepreneurial culture and growth of international new ventures. *Management International Review* 54: 445-471.
- Gupta V, Hanges PJ and Dorfman P. (2002) Cultural clusters: Methodology and findings. *Journal of World Business* 37: 11-15.
- Hagen B and Zucchella A. (2014) Born global or born to run? The long-term growth of born global firms. *Management International Review* 54: 497-525.
- Hair JF, Black WC, Babin BJ, et al. (2010) *Multivariate data analysis: A global perspective*, Upper Saddle River, N.J.: Pearson Prentice Hall.
- Hashai N and Almor T. (2004) Gradually internationalizing 'born global' firms: An oxymoron? *International Business Review* 13: 465-483.

- Hitt MA, Hoskisson RE and Kim H. (1997) International diversification: Effects on innovation and firm performance in product-diversified firms. *Academy of management journal* 40: 767-798.
- Hsu CC and Boggs DJ. (2003) Internationalization and performance: Traditional measures and their decomposition. *Multinational Business Review* 11: 23-50.
- Hutzschenreuter T and Horstkotte J. (2013) Performance effects of international expansion processes: The moderating role of top management team experiences. *International Business Review* 22: 259-277.
- Jantunen A, Puumalainen K, Saarenketo S, et al. (2005) Entrepreneurial orientation, dynamic capabilities and international performance. *Journal of International Entrepreneurship* 3: 223-243.
- Johanson J and Vahlne J-E. (1977) The internationalization process of the firm: A model of knowledge development and increasing foreign market commitments. *Journal of International Business Studies* 8: 23-32.
- Johanson J and Vahlne J-E. (2009) The Uppsala internationalization process model revisited: From liability of foreignness to liability of outsidership. *Journal of International Business Studies* 40: 1411-1431.
- Jones MV, Coviello N and Tang YK. (2011) International entrepreneurship research (1989–2009): A domain ontology and thematic analysis. *Journal of Business Venturing* 26: 632-659.
- Kalinic I and Forza C. (2012) Rapid internationalization of traditional SMEs: Between gradualist models and born globals. *International Business Review* 21: 694-707.
- Keupp MM and Gassmann O. (2009) The past and the future of international entrepreneurship: A review and suggestions for developing the field. *Journal of Management* 35: 600-633.
- Khavul S, Pérez-Nordtvedt L and Wood E. (2010) Organizational entrainment and international new ventures from emerging markets. *Journal of Business Venturing* 25: 104-119.
- Kiss AN and Danis WM. (2008) Country institutional context, social networks, and new venture internationalization speed. *European Management Journal* 26: 388-399.
- Knight GA and Cavusgil ST. (1996) The born global firm: A challenge to traditional internationalization theory. In: Cavusgil ST and Madsen TK (eds). Greenwich: JAI Press, 11-26.
- Knight GA and Cavusgil ST. (2004) Innovation, organizational capabilities, and the born-global firm. *Journal of International Business Studies* 35: 124-141.
- Knight GA and Liesch PW. (2015) Internationalization: From incremental to born global. *Journal of World Business* (in press).
- Kostova T, Roth K and Dacin MT. (2008) Institutional theory in the study of multinational corporations: A critique and new directions. *Academy of Management Review* 33: 994-1006.
- Kuivalainen O, Sundqvist S and Servais P. (2007) Firms' degree of born-globalness, international entrepreneurial orientation and export performance. *Journal of World Business* 42: 253-267.
- Lee H-U and Park J-H. (2008) The Influence of top management team international exposure on international alliance formation. *Journal of Management Studies* 45: 961-981.
- Lehr U, Lutz C and Edler D. (2012) Green jobs? Economic impacts of renewable energy in Germany. *Energy Policy* 47: 358-364.
- Li L. (2005) Is regional strategy more effective than global strategy in the US service industries? *MIR: Management International Review* 45: 37-57.
- Li L, Qian G and Qian Z. (2012a) Early internationalization and performance of small high-tech "born-globals". *International Marketing Review* 29: 536-561.

- Li L, Qian G and Qian Z. (2012b) The performance of small and medium-sized technology-based enterprises: Do product diversity and international diversity matter? *International Business Review* 21: 941-956.
- Lopez LE, Kundu SK and Ciravegna L. (2009) Born global or born regional? Evidence from an exploratory study in the Costa Rican software industry. *Journal of International Business Studies* 40: 1228-1238.
- Lu J and Beamish P. (2006) SME internationalization and performance: Growth vs. profitability. *Journal of International Entrepreneurship* 4: 27-48.
- Madsen TK and Servais P. (1997) The internationalization of born globals: An evolutionary process? *International Business Review* 6: 561-583.
- Meyer KE, Estrin S, Bhaumik SK, et al. (2009) Institutions, resources, and entry strategies in emerging economies. *Strategic Management Journal* 30: 61-80.
- Morgan-Thomas A and Jones MV. (2009) Post-entry internationalization dynamics: Differences between SME's in the development speed of their international sales. *International Small Business Journal* 27: 71-97.
- Musteen M, Francis J and Datta DK. (2010) The influence of international networks on internationalization speed and performance: A study of Czech SMEs. *Journal of World Business* 45: 197-205.
- Oviatt BM and McDougall PP. (1994) Toward a theory of international new ventures. *Journal of International Business Studies* 25: 45-64.
- Oviatt BM and McDougall PP. (1997) Challenges for internationalization process theory: The case of international new ventures. *Management International Review* 37: 85-99.
- Oviatt BM and McDougall PP. (2005) Defining international entrepreneurship and modeling the speed of internationalization. *Entrepreneurship: Theory & Practice* 29: 537-554.
- Pan Y and Tse DK. (2000) The hierarchical model of market entry modes. *Journal of International Business Studies* 31: 535-554.
- Pla-Barber J and Escribá-Esteve A. (2006) Accelerated internationalisation: Evidence from a late investor country. *International Marketing Review* 23: 255-278.
- Podsakoff PM, MacKenzie SB, Jeong-Yeon L, et al. (2003) Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology* 88: 879-903.
- Prashantham S and Young S. (2011) Post-entry speed of international new ventures. *Entrepreneurship: Theory & Practice* 35: 275-292.
- Preece SB, Miles G and Baetz MC. (1999) Explaining the international intensity and global diversity of early-stage technology-based firms. *Journal of Business Venturing* 14: 259-281.
- Puig F, González-Loureiro M and Ghauri P. (2014) Internationalisation for survival: The case of new ventures. *Management International Review* 54: 653-673.
- Ramos E, Acedo FJ and Gonzalez MR. (2011) Internationalisation speed and technological patterns: A panel data study on Spanish SMEs. *Technovation* 31: 560-572.
- Reuber AR and Fischer E. (1997) The influence of the management team's international experience on the internationalization behaviors of SMEs. *Journal of International Business Studies* 28: 807-825.
- Rialp A, Rialp J and Knight GA. (2005) The phenomenon of early internationalizing firms: What do we know after a decade (1993-2003) of scientific inquiry? *International Business Review* 14: 147-166.
- Rugman AM and Verbeke A. (2005) Towards a theory of regional multinationals: A transaction cost economics approach. *Management International Review* 45: 5-17.
- Ruigrok W, Amann W and Wagner H. (2007) The internationalization-performance relationship at Swiss firms: A test of the S-shape and extreme degrees of internationalization. *Management International Review* 47: 349-368.

- Ruigrok W and Wagner H. (2003) Internationalization and performance: An organizational learning perspective. *Management International Review* 43: 63-83.
- Sapienza HJ, Autio E, George G, et al. (2006) A capabilities perspective on the effects of early internationalization on firm survival and growth *Academy of Management Review* 31: 914-933.
- Schwens C and Kabst R. (2009) How early opposed to late internationalizers learn: Experience of others and paradigms of interpretation. *International Business Review* 18: 509-522.
- Schwens C and Kabst R. (2011) Internationalization of young technology firms: A complementary perspective on antecedents of foreign market familiarity. *International Business Review* 20: 60-74.
- Schwens C, Steinmetz H and Kabst R. (2010) Growth and internationalization: Renewable energy and new technology-based firms innovation and international corporate growth. In: Gerybadze A, Hommel U, Reiners HWW, et al. (eds). Springer Berlin Heidelberg, 113-123.
- Scott R. (2008) *Institutions and organizations - Ideas and interests*, Thousand Oaks: Sage Publications.
- Sleuwaegen L and Onkelinx J. (2014) International commitment, post-entry growth and survival of international new ventures. *Journal of Business Venturing* 29: 106-120.
- Sui S, Yu Z and Baum M. (2012) Prevalence and longitudinal trends of early internationalisation patterns among Canadian SMEs. *International Marketing Review* 29: 519-535.
- Tallman S and Li J. (1996) Effects of international diversity and product diversity on the performance of multinational firms. *Academy of management journal* 39: 179-196.
- Tan H and Mathews JA. (2015) Accelerated internationalization and resource leverage strategizing: The case of Chinese wind turbine manufacturers. *Journal of World Business* 50: 417-427.
- Trudgen R and Freeman S. (2014) Measuring the performance of born-global firms throughout their development process: The roles of initial market selection and internationalisation speed. *Management International Review* 54: 551-579.
- Tuppura A, Saarenketo S, Puumalainen K, et al. (2008) Linking knowledge, entry timing and internationalization strategy. *International Business Review* 17: 473-487.
- Venkatraman N and Ramanujam V. (1986) Measurement of business performance in strategy research: A comparison of approaches. *The Academy of Management review* 11: 801-814.
- Vermeulen F and Barkema H. (2002) Pace, rhythm, and scope: Process dependence in building a profitable multinational corporation. *Strategic Management Journal* 23: 637-653.
- Wagner H. (2004) Internationalization speed and cost efficiency: Evidence from Germany. *International Business Review* 13: 447-463.
- Weerawardena J, Mort GS, Liesch PW, et al. (2007) Conceptualizing accelerated internationalization in the born global firm: A dynamic capabilities perspective. *Journal of World Business* 42: 294-306.
- Weerawardena J, Mort GS, Salunke S, et al. (2015) The role of the market sub-system and the socio-technical sub-system in innovation and firm performance: A dynamic capabilities approach. *Journal of the Academy of Marketing Science* 43: 221-239.
- Williams DW and Gregoire DA. (2015) Seeking commonalities or avoiding differences? Re-conceptualizing distance and its effects on internationalization decisions. *Journal of International Business Studies* 46: 253-284.
- Yip GS, Biscarri JG and Monti JA. (2000) The role of the internationalization process in the performance of newly internationalizing firms. *Journal of International Marketing* 8: 10-35.
- Zahra SA and George G. (2002) International entrepreneurship: The current status of the field and future research agenda. In: Hitt MA, Ireland RD, Camp SM, et al. (eds) *Strategic Entrepreneurship: Creating a New Mindset*. Oxford: Blackwell Publishing, 255-288.

- Zahra SA, Ireland RD and Hitt MA. (2000) International expansion by new venture firms: International diversity, mode of market entry, technological learning, and performance. *Academy of management journal* 43: 925-950.
- Zhou L, Aiqi Wu and Barnes BR. (2012) The effects of early internationalization on performance outcomes in young international ventures: The mediating role of marketing capabilities. *Journal of International Marketing* 20: 25-45.
- Zhou L and Wu A. (2014) Earliness of internationalization and performance outcomes: Exploring the moderating effects of venture age and international commitment. *Journal of World Business* 49: 132-142.
- Zhou L, Wu W-p and Luo X. (2007) Internationalization and the performance of born-global SMEs: The mediating role of social networks. *Journal of International Business Studies* 38: 673-690.

4 Paper III

Managerial misperception of differences between home and host countries –

An empirical study on antecedents and performance effect

Abstract

This study introduces the concept of managerial misperception of country differences – the deviation of managers' perceived differences from actual differences between countries – and empirically examines antecedents and performance effect. Using data from 186 managerial assessments on differences between home and host countries, we find that larger firms and those with effective key partnerships in the host country reduce misperception, while firms with greater international scope and cultural distance between countries increase managerial misperception. Furthermore, we find a negative relationship between managerial misperception and host country performance, suggesting that the concept of misperception is highly relevant for IB research and practice.

4.1 Introduction

Differences between countries are the fundamental elements of international business (IB) research and practice (Shenkar, 2001; Zaheer et al., 2012; Aharoni and Brock, 2010). Often referred to as the “distance” between countries, differences in characteristics such as language, culture, politics, or rule of law are accordingly of special interest in this field of business research (Håkanson and Ambos, 2010; Hutzschenreuter et al., 2015). Concepts of distance include cultural distance (e.g., Kogut and Singh, 1988), institutional distance (e.g., Xu and Shenkar, 2002), and psychic distance (e.g., Johanson and Vahlne, 1977), to name some of the most prominent. Although these concepts vary in their scope, they all illustrate differences between countries and have been found to impact various aspects of firms’ international operations (Berry et al., 2010; Dow and Larimo, 2009; Child et al., 2009). For example, it has been shown that they significantly influence firm performance in international markets (e.g., Evans and Mavondo, 2002; Dikova, 2009), entry mode decisions (e.g., Hennart and Larimo, 1998; Harzing, 2003; Tihanyi et al., 2005), market choices (e.g., Ellis, 2008; Pogrebnyakov and Maitland, 2011), headquarter-subsidary relationships (e.g., Baaij and Slangen, 2013; Dellestrand and Kappen, 2012), and cross-border inter-organizational relations (e.g., Luo, 2002; Barkema and Vermeulen, 1997).

Most empirical studies in the field use exogenous measures of country differences and rely on indices from sources such as the World Economic Forum and Hofstede’s World Value Survey to operationalize distance between countries (e.g., Berry et al., 2010; Dow and Karunaratna, 2006; Kogut and Singh, 1988), but in recent years an increasing number of studies have challenged the use of exogenous measures and have shifted to using primary measures of distance (e.g., Brouthers, 2002; Evans and Mavondo, 2002; Dow, 2009; Håkanson et al., 2016) to capture individual managers’ perceptions of environmental differences (Dow and Larimo, 2009). As Brouthers (2013) points out, the choice between external measures or perception-based measures depends on what is being studied. He distinguishes between *actual* and

perceived institutional distance, suggesting that when analyzing the impact of country differences on managers' decision-making, perceived measures are more suitable as indicators of distance, since managers base their decisions on perceptions of the environment and not necessarily on actual conditions. When studying outcomes, though, exogenous measures are more appropriate, as they reflect actual environmental conditions.

The debate on the usefulness of actual versus perceived distance measures implies that actual and perceived differences between countries differ in reality (Håkanson and Ambos, 2010; O'Grady and Lane, 1996). Because a manager's rationality is bounded (Simon, 1955; Simon, 1957), there will hardly ever be perfect perceptions of a host country environment and its distance from a given home country, i.e. perceptions that exactly reflect the host country's environment and its differences from the home country. We refer to this deviation as managerial misperception. Because perceptions of country differences will directly influence managerial decision-making (Dow and Larimo, 2009), differences in perception that widely deviate from actual differences make poor decision-making more likely and may consequently influence performance outcomes. Taking this into account, it is important for IB research and practice to focus on the antecedents and effects of deviations between perceived and actual country differences. As Håkanson and Ambos (2010: p. 208) state, studies on these misjudgments are "badly needed" in order to understand the associated consequences of misperceptions for internationalizing firms and to move research in the field forward.

As a first step in this direction, in this paper we empirically analyze the concept of managers' misperception of country differences between home and host country. Drawing on extant literature on distance between countries and cognitive approaches in IB research, we propose antecedents of managers' misperception on an individual, organizational, inter-organizational, and environmental level. Furthermore, we argue that high degrees of misperception may lead to inadequate decision-making and may therefore hinder firms' ability to seize the full market

potential in a given host country. We therefore also hypothesize a negative relationship between managerial misperception and a firm's performance in a given host country. To test our hypotheses we use 186 cases of managerial assessments of differences between home and host countries from a data set of internationalizing firms in the renewable-energy industry.

Our study contributes to IB literature in two ways: first, we introduce to IB research the concept of managerial misperception. While the concept of perceived distance has inherently recognized that there are differences between actual and perceived distance, there is – to the best of our knowledge – no empirical study on the gap between the two. Despite our hypotheses-testing approach, we consider this study to be somewhat explorative in nature and a starting point for future research on managerial misperception of country differences. The concept of managerial misperception of country differences adds new insights to the use and usefulness of concepts of country differences employed in IB research and will be particularly useful when studying decision-making processes as well as the outcomes of those decisions. It may furthermore help to better explain the divergence between predicted and actual internationalization choices and decision-making (Benito et al., 2009; Brouthers and Hennart, 2007).

Second, by considering managerial misperception and its antecedents, we contribute to the growing interest in micro-level phenomena, such as managerial decision-making, in contemporary IB research (Buckley et al., 2007; Aharoni et al., 2011; Nadkarni et al., 2011; Maitland and Sammartino, 2015). While the concept of the manager as a bounded rational decision maker is an underlying assumption in most theoretical approaches in IB research, this field of research has long suffered from an ignorance of managerial decision-making or has even fully ignored the manager's role in internationalization processes (Aharoni et al., 2011). Current IB studies therefore increasingly draw on social psychology and cognitive research to understand how perceptions are formed and how they influence managerial

internationalization decisions (e.g., Williams and Gregoire, 2015; Baack et al., 2015; Child et al., 2009; Håkanson et al., 2016). Our study contributes to this emerging field by providing an initial explanation of the origins of misperception in order to trigger future research on this interesting concept. This not only contributes to IB research, but also to IB practice, as it helps managers to avoid misperception and its consequences.

4.2 Theory and hypotheses

Assessing the characteristics of host countries and their differences to a given home country is an integral part of internationalization processes. Grounded in behavioral approaches (Simon, 1955; Cyert and March, 1964), Aharoni (1966) and scholars of the Uppsala school (e.g. Johanson and Vahlne, 1977; Johanson and Wiedersheim-Paul, 1975) acknowledged early on that internationalization decisions and accompanying assessments of given conditions are always subject to a decision maker's cognitive capabilities and available information resources (Håkanson and Ambos, 2010). As human beings, managers are subject to bounded rationality: they possess a limited capacity of knowledge, memory, and attention (Simon, 1955; Simon, 1957). Bounded rationality increases the cost of acquiring, accumulating, and applying knowledge and information (Baer et al., 2013) because it restricts managers' ability to absorb information and process complex problems (Cyert and March, 1964). The perception and evaluation of a given host country environment and its differences to the home country are subject to these restrictions (Nadkarni et al., 2011), and therefore a manager's perception will never be entirely accurate. The degree of misperception – the extent of deviation between actual and perceived differences – will most likely vary from manager to manager. In the next section we derive antecedents of managerial misperception and hypothesize their effects as well as the effect of misperception on a firm's performance in a given country.

4.2.1 Antecedents of managerial misperception of country differences

To identify antecedents of managerial misperception, we rely on two literature streams: literature on antecedents of distance perceptions between countries and, to complement the research on distance perceptions, broader IB research that analyzes how to operate in foreign markets.

Studies investigating antecedents of perceived distance focus on how such factors impact the *extent* of perceived distance, e.g., under what conditions managers perceive the differences between two countries as being rather high or low. These studies work from the assumption that identified antecedents influence cognitive processes, including an individual's capacity to obtain, process, and interpret information, which in turn shapes distance perceptions. They further argue that low perceptions of distance are the result of a person's capacity to correctly assess and interpret information, and therefore obtain accurate knowledge of a given host country environment (Evans et al., 2008b; Håkanson and Ambos, 2010). Thus, the cognitive categorization of the extent of distance (i.e., high or low) is mostly intertwined with the quality of this perception. However, such studies do not consider to what degree perceptions are accurate, i.e. whether they reflect the actual differences between countries. In this study we go one step further and test antecedents of the accuracy of managerial perceptions; in other words, managerial misperception. We build on prior studies of perceived distance, combine them with broader IB research, and derive hypotheses on antecedents of manager's misperception.

To date, there have been relatively few studies investigating the antecedents of perceived distance. Notable exceptions are the works of Dow (2009); Dow and Larimo (2009); Evans et al. (2008b); Håkanson and Ambos (2010); Sousa and Bradley (2006); and Williams and Gregoire (2015). When trying to categorize the factors we study, four categories emerge: antecedents that reside on the individual, the organizational, the inter-organizational, and the environmental level.

First, factors residing on the individual level refer to characteristics of the manager, such as his or her international experience in general, fluency in a host country's language, prior knowledge of the host country, knowledge of (or affiliation with) a host country's religion, and prior travel or living experience in a host country (Dow, 2009; Sousa and Bradley, 2006). These factors can broadly be categorized as a manager's prior international experience. Because such experience may induce learning effects (Hutzschenreuter and Horstkotte, 2013), which lower a manager's misperception of a given host country, we include a manager's international experience as our first antecedent in the model.

Second, researchers have been interested in antecedents on the organizational level, including centralization of decision-making, exposure to foreign-market particularities, and prior foreign-market analysis (Evans et al., 2008b; Schwens and Kabst, 2011). Combined with broader IB literature, we consider two variables that have been of special interest in prior studies: a firm's size as a proxy for its resource endowment and a firm's international scope. Child et al. (2009), for example, describe how firm size can influence the way decision makers perceive and cope with country distance, arguing that smaller firms lack the resources to properly assess host countries' environments. With regard to scope, we argue that broad international activities spread across heterogeneous geographical areas limit a manager's capacity to evaluate every single country and therefore impact his or her misperception. Accordingly, we hypothesize effects of a firm's size and its international scope on managerial misperception.

Third, research has found inter-organizational level factors to be important in affecting perceptions of country characteristics (Schwens and Kabst, 2011). Prior IB research has extensively emphasized that inter-organizational relationships – and especially key partnerships in host countries – are crucial sources of knowledge and information that will most likely influence the accuracy of a manager's assessment of a given country and its differences to a home country (cf. Child et al., 2009; Jonsson and Lindbergh, 2010; Kiss and

Danis, 2010). We therefore investigate the role of effective key partnerships in the host country as they affect the degree of managerial misperception.

Lastly, on the environmental level, prior studies have looked at how actual differences between countries, as well as certain characteristics of the host country, impact distance perceptions such as cultural distance, geographic distance, and differences in economic development (Dow, 2009; Håkanson and Ambos, 2010; Sousa and Bradley, 2006; Dow and Larimo, 2009). We argue that cultural distance should be of special importance for misperception, because high cultural distance increases the difficulty of understanding and learning about a country, which in turn fosters misunderstandings (cf. Sousa and Bradley, 2006). We therefore reason that cultural distance not only influences the extent of distance perceptions but most likely increases the extent of misperception.

Next, we outline how these factors may influence managerial misperception when making assessments of country differences by either supporting or hampering information acquisition, processing, and interpretation.

4.2.2 Individual level: Manager's international experience

The manager's international experience has been identified as an influential factor in various aspects of a firm's internationalization process (Reuber and Fischer, 1997; Erramilli, 1991). In particular, the Uppsala internationalization model emphasizes that tacit knowledge gained through direct experience is paramount to successful international expansion (Johanson and Vahlne, 1977; Johanson and Vahlne, 2009). A manager's international experience improves the manager's information-processing ability (Hutzschenreuter and Horstkotte, 2013) and provides tacit knowledge on how to manage and deal with the complexity of international operations. Recurring use of such knowledge in differing contexts enables feedback loops to assess, modify, and create new knowledge (Maitland and Sammartino, 2015). Previous international experience gained through professional or private activity in different foreign environments

therefore provides the manager with a better ability to find, process, and interpret information on new conditions, as well as to deal with the inherent complexity of assessing host country conditions (cf. Reuber and Fischer, 1997). A manager's international experience will consequently affect his or her ability to accurately estimate country differences and reduce misperception. Hence, we hypothesize:

Hypothesis 1: There is a negative relationship between a manager's international experience and his or her misperception of differences between home and host country: the higher the personal international experience, the lower a manager's misperception of country differences.

4.2.3 Organizational level: Firm's size and international scope

On the organizational level, we consider two firm characteristics that have been found to be important factors influencing internationalization processes in general, and can be assumed to foster or hamper a manager's cognitive processes and the resulting accuracy of managerial perceptions: first, a firm's size as a proxy for resources, including knowledge, available for strategic action; and second, a firm's international scope – that is, the degree of geographic heterogeneity in a company's international market portfolio (e.g., Acedo and Florin, 2006).

Firm size

Prior research in strategic and international management considers firm size to be a proxy for a firm's available resources because the two are strongly associated with each other in practice (e.g., Bonaccorsi, 1992; Clement, 1999; Audia and Greve, 2006). Researchers have found that an organization's resource endowment is highly important for long-term success and survival in international markets (Mudambi and Zahra, 2007; Tan and Peng, 2003), especially in high-risk situations and volatile environments, where a greater endowment allows for increased strategic options and better adaptation to environmental demands (Sui and Baum, 2014; Sapienza et al., 2006). In addition, prior studies show that firm size is associated

with higher comprehensiveness and more-structured strategic decision-making (Fredrickson and Iaquinto, 1989; Child, 1972).

In the complex process of assessing a host country's environment and differences between home and host country, managers in larger firms can better access organizational resources and absorb knowledge and information for their strategic choices without collecting and acquiring it themselves. The resources of a larger firm not only allow access to a broad information and knowledge base that inform a manager's perception and judgment, but also free a manager's valuable time and capacity (Elbanna and Child, 2007). These freed resources can then be used to add to this knowledge base, which will further foster the accuracy of a manager's perception of the host country's environment and of differences between home and host country.

A firm's size also provides better access to outside information because its financial resources allow the firm to hire consultants or employ boundary spanners ("buying knowledge") (Haunschild and Beckman, 1998). Smaller firms, by contrast, often lack a resource endowment that includes large knowledge stocks or allows for knowledge procurement (LiPuma et al., 2013). We therefore argue that a larger company size leads to a better and more informed assessment of institutional differences between home and host country by the manager in charge. Accordingly, we propose:

Hypothesis 2: There is a negative relationship between a firm's size and a manager's misperception of differences between home and host country: the larger a company, the lower a manager's misperception of country differences.

International scope

International scope refers to the degree of a firm's internationalization in terms of international geographic areas, such as Germanic Europe or Southern Asia (Li et al., 2012b;

Hashai, 2011). A high scope signifies a broad geographical dispersion of internationalization activities, which implies high heterogeneity in a firm's international portfolio (Khavul et al., 2010; Vermeulen and Barkema, 2002). We argue that the higher a firm's international scope, the higher should be a manager's misperception of differences between his or her home country and a host country. The more heterogeneous the geographic areas in a firm's portfolio, the more information on characteristics of regions and countries that have to be collected, processed, and evaluated for an accurate perception of differences between the home country and each individual country (Ghoshal and Bartlett, 1990; Lin, 2012; Hitt et al., 1997). Considering the accuracy of managers' perceptions as a function of time, effort, and cognitive capacity they can afford to put into supervising and monitoring operations in a single country, a high international scope will imply relatively little time and cognitive capacity to learn about the countries in a firm's portfolio in depth (Arrow, 1974; Baer et al., 2013; Kumar, 2009).

Some studies consider a firm's international scope as a proxy of a firm's international experience, which might result in the assumption that the higher a firm's scope and experience, the lower a manager's misperception should be. However, these studies mostly consider scope as the number of countries a firm operates in rather than broader regions. Given that firms often choose market entries that are similar to previous ones (cf. Johanson and Vahlne, 1977), there may be associated learning effects. For our study, we consider scope in terms of international geographic areas and look at entire regions, such as Sub-Saharan Africa or Latin America, which include relatively similar countries. We therefore follow Barkema and Drogendijk (2007) and argue that learning effects do not necessarily apply when countries are very different from one another, which is exactly the case across heterogeneous geographic areas. Therefore, the more countries and regions included within a firm's portfolio, the *less* information and knowledge with regard to a single country that is available to a manager. In turn, he or she will have a higher misperception of this country's environment,

and, accordingly, the differences between the host and home country. We therefore hypothesize:

Hypothesis 3: There is a positive relationship between a company's international scope and a manager's misperception of differences between home and host country: the higher a company's international scope, the higher a manager's misperception of country differences.

4.2.4 Inter-organizational level: Effective key partnerships in the host country

Besides the individual and organizational level, we consider influences on managerial distance misperception on the inter-organizational level, that is, on the level of partnerships with other firms (Yli-Renko et al., 2002; Aulakh et al., 1996). We believe that effective partnerships with host country firms offer a strong source of host country-related knowledge that would otherwise be difficult to access for the foreign firm, and which thereby lower managerial misperceptions of country differences. Research on international inter-organizational relationships has shown that effective partnerships in the host country are a crucial success factor for firms operating abroad (Oehme and Bort, 2015; Gomez and Sanchez, 2005; Makino and Delios, 1996) because host country partner firms provide country- and market-specific knowledge (Ellis, 2000; Yli-Renko et al., 2001). Absorbing knowledge from a native source is especially valuable because of its first-hand nature (Jonsson and Lindbergh, 2010; Lu and Beamish, 2006). The ongoing relation to the partner firm not only taps into a deep and profound base of knowledge, but also provides an opportunity for interpretation and explanation whenever needed (Li et al., 2010). Because knowledge and information about national and other characteristics are often complex and tacit in nature, and therefore especially difficult to assess and interpret by a manager (Eriksson et al., 1997), a host country key partner can act as a boundary spanner and translator. An effective relationship to a host country partner firm is therefore a valuable source of knowledge and information both qualitatively and quantitatively (Hitt et al., 2000; Yan and Gray, 1994). In addition to the direct knowledge and information provided by a host country partner firm, the relationship itself and

the interaction and communication with each other helps managers learn about differences between home and host country and leads to a better understanding of these differences (Griffith et al., 2006; Tsang, 2002). Accordingly, an effective key partnership in the host country will lead to a better and more informed assessment of differences between home and host country. Therefore, we propose:

Hypothesis 4: There is a negative relationship between a firm's effective key partnership in the host country and the manager's misperception of differences between home and host country: the better the relationship to a firm's key partner, the lower the manager's misperception of country differences.

4.2.5 Environmental level: Cultural distance

On the environmental level, we focus on cultural distance as a factor that indicates the associated complexity of operating in a given foreign market and of assessing its characteristics (Hutzschenreuter and Horstkotte, 2013; Kogut and Singh, 1988). We assume that the higher the cultural distance between the home and host country – that is, the more heterogeneity there is between the culture of the home and host country – the more complex business operations become in the host market for the internationalizing firm (Johanson and Vahlne, 1977; Evans et al., 2008b). With increasing cultural distance, it will be more difficult for a foreign individual to identify, assess, and interpret information about a host country (Zeng et al., 2013; Hutzschenreuter and Horstkotte, 2013; Sousa and Bradley, 2006; Dow and Larimo, 2009) because every cultural setting requires a specific cognitive understanding of how a given context works in order to access and interpret knowledge and information. Lacking a respective cognitive basis prevents a thorough understanding of host market characteristics (Johanson and Vahlne, 1977; Zeng et al., 2013). In contrast, commonalities between cultures help a foreign individual to interact, communicate, and interpret the behavior of host country individuals and firms; to acquire knowledge from them; and to achieve a better understanding of the country's environmental context (Håkanson and Ambos, 2010). Accordingly, we argue

that with increasing cultural distance, the manager's ability to accurately evaluate differences between the home and host country decreases, a decrease that positively affects the manager's misperception of country differences. This is why we hypothesize:

Hypothesis 5: There is a positive relationship between cultural distance and a manager's misperception of differences between home and host country: the higher the cultural distance, the higher a manager's misperception of country differences.

4.2.6 Misperception and its impact on host country performance

Prior IB research has shown that firms need to adapt their internationalization strategies, such as the entry mode chosen or retail strategy pursued, according to host countries' environments and the differences between home and host market (Kostova et al., 2008; Meyer et al., 2009). Furthermore, it has been demonstrated that strategies that are properly adapted to a host country's environment will increase the firm's performance outcomes (Brouthers, 2002).

Given that such strategy implementations depend on managers' decisions – which are based on perceptions – scholars have concluded that managers' perceptions of country differences impact firm performance (e.g., Evans and Mavondo, 2002; Sousa and Lengler, 2009). Accordingly, managerial misperception of differences between home and host country should also impact a firm's performance in a given host country. Managers exhibiting a high degree of misperception will take less informed – and probably inapt – decisions (e.g., choice of market entry mode, partners, or retail strategy). If a chosen and implemented strategy based on misperceived country differences is not adequately adapted to the host country's actual environment, performance outcomes are likely to be inferior (cf. Brouthers, 2013; Evans et al., 2008b). This effect will occur with both over- and underestimation of differences. Underestimation may, for example, prevent managers from detecting subtle but important differences (Evans and Mavondo, 2002; O'Grady and Lane, 1996) and conversely,

overestimation may lead to excessively careful, unnecessarily costly, and essentially inappropriate decision-making.

Therefore, we hypothesize that a more accurate judgment of differences between the home and host country will lead to more effective international strategies that will ultimately improve firm performance (cf. Håkanson and Ambos, 2010). Given that misperception indicates the degree to which managers' perceived country differences correspond to the actual environmental circumstances, we argue that lower levels of misperception lead to improved firm performance in the host country. Therefore, we posit:

Hypothesis 6: There is a negative relationship between a manager's misperception of country differences between home and host country and a firm's host country performance: the higher a manager's misperception of country differences, the lower the firm's performance in the host country.

Figure 4.1 graphically presents the empirical model of our study and summarizes our hypotheses.

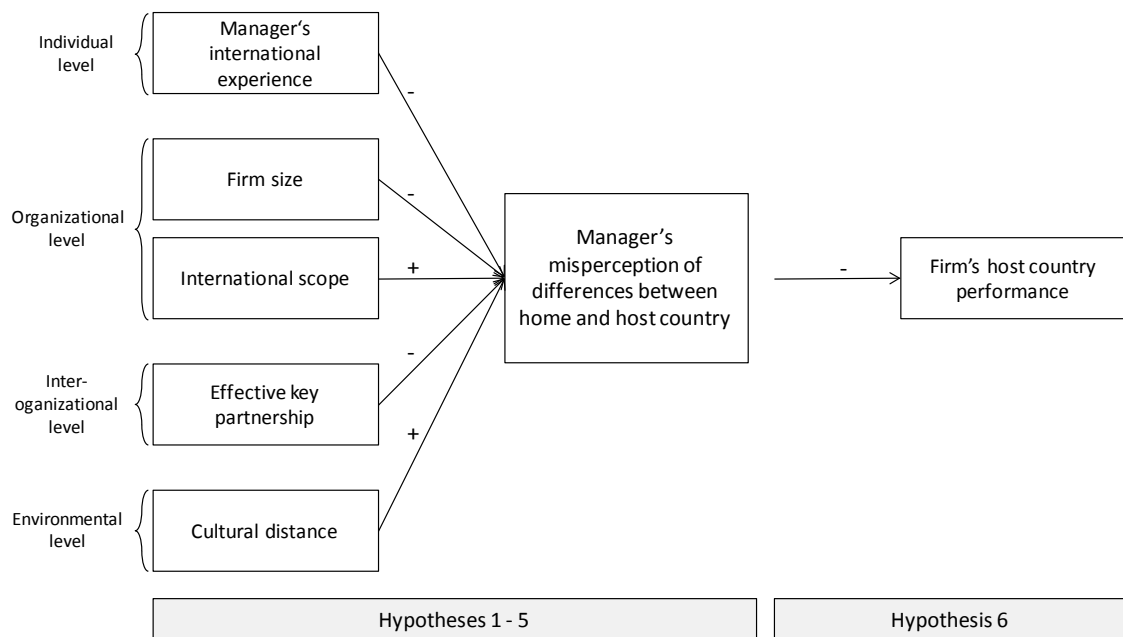


Figure 4.1: Empirical model

4.3 Data and method

4.3.1 Sample and data collection

To test our hypotheses, we collected data via a large survey questionnaire in the renewable-energy industry in Germany in 2014. This data collection was part of a larger research project on internationalization processes. The German renewable-energy industry proved to be particularly relevant to our research project, given its high degree of international activity and the global demand for renewable-energy technology – both in institutionally close as well as distant economies (cf. Lehr et al., 2012; Tan and Mathews, 2015).

In order to maintain sufficient homogeneity, firms had to meet the following criteria to be included in the sample: (1) be for-profit; (2) be German owned; (3) derive the majority of their revenues from the renewable-energy sector (e.g., solar, wind, bio energy); and (4) undertake business activities in at least one foreign market. We identified 488 firms that met these sample criteria.

To gain insight into industry particularities before designing the questionnaire, an extensive pilot study was undertaken by interviewing 23 managers and industry representatives in 2013. We then used this knowledge to proceed with our main data collection and constructed a questionnaire in German, containing established scales from previous literature. Independent research assistants translated original items from English to German and back several times to ensure validity. Subsequently, we conducted a pre-test with 18 respondents from industry and academia. This helped improve the structure of the questionnaire and to further clarify statements to avoid ambiguity and validate items (Podsakoff et al., 2003). The questionnaire consisted of multiple items relating for example to general information about the firm and its internationalization process, the respondent, and the host country. For the host country questions, respondents were asked to choose a market entry of their firm for which they were personally responsible and answer all host country related questions with regard to this

country. Our approach ensured that respondents could rely on first-hand experience and that their answers were true to their experiences.

Our respondents were chief executive officers, managing directors, and heads of business development or international sales departments. Depending on the firm's structure, managers in these positions were key decisions makers for their firm's international activities, which was the most important respondent criterion. All firms in our database were contacted personally to identify the most suitable respondent in the respective firm (i.e., the manager who is responsible for international operations and expansions) and to explain the objective of our study. Potential respondents were provided with the opportunity to complete the questionnaire either online, via e-mail using a PDF document, mail, fax, or over the phone. On average respondents had 12.76 years of experience in international business and had worked 6.94 years for their respective firm. These numbers validate the suitability of the selected respondents, as they suggest a high level of knowledge (Poppo et al., 2008; Schilke and Cook, 2015). The 251 returned questionnaires represent a response rate of 51.4%, and 186 cases were ultimately included in the analysis. We had to exclude a relatively high number of questionnaires because we take secondary data into account to construct the misperception variable (see main variables section), which was only available for a certain number of countries. After deleting cases with countries where no secondary data was available, our sample included market entries in 43 different countries. Firms in our sample are on average 17.74 years old, employ 134 people, and derive 45% of their revenue abroad in about 12 different countries.

4.3.2 Measurement of variables

For the exact formulation and measurement of the individual items please refer to Appendices 1 and 2. Because *misperception* is used as a dependent variable to test Hypotheses 1 through 5 and as an independent variable to test Hypothesis 6, we included it under "main variables,"

together with host market performance, which is the dependent variable used to test Hypothesis 6.

Main variables

Misperception of country differences is a composite construct that measures the deviation of a manager's perceived country differences from actual differences. Before calculating the misperception construct, both perceived and actual country differences had to be measured independently. In order to operationalize actual country differences, we subtracted the host country item values from the home country values (cf. Dow and Karunaratna, 2006; Chao and Kumar, 2010). The items selected to calculate the actual country differences were based on previous research that relied on secondary measures extracted from report data from sources that included the World Economic Forum (i.e., Global Competitiveness Report), IMD (i.e., World Competitiveness Yearbook), and the Hofstede Value Survey. To best encompass factors reflecting the environment of a country, we identified items that can be broadly classified along the three institutional pillars described by Scott (2008): (1) regulative, (2) normative, and (3) cultural-cognitive. The selected items equally well reflect country differences defined as "psychic distance," since the conceptualization of the two constructs is largely consistent (Dow and Larimo, 2009). In order to select the most suitable items to reflect countries' environments, we reviewed the dominant literature and based our item choice on previous work from Gaur and Lu (2007), Chao and Kumar (2010), and Dow and Larimo (2009). We also included items that were deemed most relevant to the renewable-energy industry. In doing so, we respond to recent calls to avoid oversimplification of distance measurements and to account for industry particularities (Caprar et al., 2015; Brouthers, 2013; Dow and Larimo, 2009). Based on the Global Competitiveness Report and the World Competitiveness Yearbook, we selected six items representing the regulative institutional environment and seven items reflecting the normative institutional environment. For the cultural-cognitive pillar we relied on Hofstede's (2010) cultural dimensions (cf. Berry et al., 2010; Gaur et al., 2007), including

one item for each of the five cultural dimensions (power distance, masculinity, individualism, uncertainty avoidance, and long-term orientation). This led to a total of 18 variables that were included to measure the actual environment of a country. All values obtained were converted to a five-point Likert scale to assure homogeneity across report values. Each item value for a host country variable was matched with the home country value and then subtracted. The absolute value provided the measurement for the actual country differences along a particular variable (cf. Dow and Karunaratna, 2006). The formula for the actual country difference on one variable representing either the regulative, normative, or cultural-cognitive institutional pillar can be expressed as follows:

$$D_{Angj} = |(D_{Ang} - D_{Anj})|$$

D_{Angj} indicates the actual (A) difference between Germany (g) and a given host country (j) of one specific variable (n) out of the 18 variables reflecting a country's environment. D_{Ang} represents the n -variable score for Germany, whereas D_{Anj} represents the n -variable score for the host country.

The process for operationalizing perceived country differences was relatively similar to measuring actual country differences, with the main difference being the data sources (i.e., primary vs. secondary data). As for the normative and regulative items, we used the same measurements as the report data and included the identical formulation of report items in our questionnaire. Managers were asked to indicate on a five-point Likert scale how they perceive a country's environment in terms of a specific item for both home and host country. The normative and regulative country differences were then calculated in the same manner as the actual country differences. In order to operationalize the five Hofstede dimensions for the cultural-cognitive pillar, we adopted the measurement provided by Furrer et al. (2000). The authors used a four-item scale for each cultural dimension based on a description provided in Hofstede's work (1991). Similar to Furrer et al. (2000), we calculated an index of the average

scores of each cultural dimension. The score for each dimension was used to subtract the home from the host country value, taking the absolute value to obtain the perceived cultural difference between countries for each cultural dimension. Overall, the formula used to calculate the perceived country differences can be expressed as follows:

$$D_{Pngj} = |(D_{Png} - D_{Pnj})|$$

D_{Pngj} indicates the perceived (P) difference between Germany (g) and a given host country (j) of a specific variable (n). D_{Png} represents the manager's n -variable score for Germany, whereas D_{Pnj} represents the manager's n -variable score for the host country.

In order to measure a manager's misperception of country differences, the individual item values for the actual and perceived country differences items were subtracted. The absolute value of this subtraction represents managerial misperception with regard to a specific item. The sum of all absolute values of misperception between actual and perceived differences resulted in a unique composite score, expressing the overall misperception of the manager. This process is algebraically expressed by the following formula:

$$\text{Manager's misperception of country differences} = \sum_{n=1-18} (|D_{Angj} - D_{Pngj}|)$$

The firm's *performance in the host country* is included as a dependent variable in Hypothesis 6. We adapted a scale from He et al. (2013). This four-item scale consists of five-point Likert scale items requiring the respondent to evaluate the firm's market performance in terms of profitability, sales growth, export performance, and achievement of the firm's strategic objectives. The values for each item were summed and averaged to derive the host market performance construct (Cronbach's $\alpha = 0.89$).

Independent variables

International experience of the manager has been of great interest in IB studies, and in particular in the area of international entrepreneurship (cf. Reuber and Fischer, 1997; Oviatt and McDougall, 1994). We adapted a measurement of Musteen et al. (2010), asking the

respondent how many years he or she has been working internationally, which is a suitable reflection of the manager's international experience (cf. Fernhaber et al., 2008; Li et al., 2012a; Mudambi and Zahra, 2007).

We adopted the most dominant measurement of *firm size* by using the natural logarithm of number of worldwide employees (e.g., Brouthers and Brouthers, 2001; Gaur and Lu, 2007; Chao and Kumar, 2010; Zahra et al., 2000), and data was cross-checked with external sources.

International scope represents the geographic dispersion of a firm's international operations (Khavul et al., 2010). Similar to previous research (e.g., Li et al., 2012a; Khavul et al., 2010), we used different geographic areas for our measurement based on cultural clusters identified by Gupta et al. (2002). Respondents were provided with a list of these areas and were asked to indicate the regions their firm operates in. Regions where a firm was present were coded 1 and regions without presence, 0. The values were subsequently summed up to provide an index of a firm's international scope.

We measured *effective key partnerships* by using the established scale of Krishnan et al. (2006). This scale contains five items reflecting partnership goal achievement in general, and both the respondent and the partner firm's satisfaction with the overall performance of the relationship. The values were summed and averaged (Cronbach's $\alpha = 0.93$).

In order to measure *cultural distance*, we used the Kogut and Singh's (1988) composite index. Since its introduction, this index has gained wide acceptance in IB literature (Shenkar, 2012; Caprar et al., 2015) and has been applied to a large number of cross-country studies (e.g., Brouthers and Brouthers, 2001; Hutzschenreuter and Voll, 2007; Tihanyi et al., 2005). In order to measure cultural distance we relied on Hofstede's (2010) Value Survey data and included power distance, masculinity, individualism, uncertainty avoidance, and long-term orientation as dimensions of culture. The data was retrieved from Hofstede's websites (www.geert-

hofstede.com and www.geerthofstede.nl) and the cultural scores were applied to the Kogut and Singh (1988) formula.

Control variables

The description of control variables included in our analysis is structured in two sections. We will first outline the measurements of the control variables used for Hypotheses 1 through 5 before explaining the operationalization of the control variables used to test Hypothesis 6. The first set of control variables was used to account for any potential influences on the manager's misperception of country differences. First, we controlled for the firm's *international intensity* (Fernhaber et al., 2008) by using the ratio of the firm's foreign sales to total sales (Delios and Beamish, 1999; Fernhaber et al., 2008), as well as the firm's *number of years of international operations* (Brouthers and Brouthers, 2001; Chao and Kumar, 2010; Coeurderoy et al., 2012). As both variables are associated with international experience of the firm, assumed to influence distance perceptions (Evans et al., 2008b), we controlled for such potential effects on managerial perceptions. Although we used a one-industry sample to test our hypotheses, the renewable-energy industry can be very heterogeneous depending on the technology it is based on. Therefore we controlled for *sub-industries* (cf. Coeurderoy and Murray, 2008; Filatotchev et al., 2009) and created dummy variables (solar, wind, biogas, and others). Moreover, international operations can vary depending on the *type of firm*, which is why we controlled for this effect by differentiating between service (coded as 1) and manufacturing (coded as 0) firms (Brouthers, 2002).

Hypothesis 6 was tested using several control variables because host market performance can be subject to a large variety of influences (Shrader, 2001). The operationalization of the first two control variables, *firm size* and *international intensity*, has already been described above. Controlling for *firm size*, as a proxy for a firm's resources, helped to account for performance effects based on different levels of resource endowments among the sample firms (Dikova, 2009; Gaur et al., 2007). *International intensity* was included as a control variable, as it has

been found to influence the international performance of a firm and provides information on how important international operations are to a firm (Lu and Beamish, 2006; Ruigrok et al., 2007). We also used *firm age* as a control variable, given that age may be an indicator of a firm's experience and managerial competences when conducting business domestically and internationally (Li et al., 2012b; Acedo and Florin, 2006) and might therefore impact performance outcomes. We measured age in its logarithmic form using the difference between year of foundation and year of survey (2014). Because the *mode of market entry* can influence a firm's performance in the host country (Brouthers, 2002; He et al., 2013; Hutzschenreuter and Horstkotte, 2013), we also controlled for this influence. We asked respondents to indicate the selected market entry mode in the host country and dummy coded the different entry modes to obtain a binary measure, using 0 to indicate non-equity entry modes and 1 to indicate equity entry modes based on the criteria outlined by Pan and Tse (2000). Finally, we controlled for market opportunities arising from a country's economic conditions (Shrader, 2001). We adapted the five-item scale used by Agarwal and Ramaswami (1992) to measure *market potential*. We asked respondents to assess the host country's market potential in terms of growth potential and acceptance of renewable energy on a five-point Likert scale. The construct showed a good reliability (Cronbach's $\alpha = 0.75$).

4.3.3 Validity and modeling approach

In addition to assessing reliability via Cronbach's alpha levels for our Likert-type multiple-item scales, internal validity was further assessed by conducting a principal-component factor analysis using Direct Oblimin rotation procedure (cf. Hair et al., 2010). Table 4.1 provides information on the correlations of the independent, dependent, and control variables included in our models. No risk of multi-collinearity was identified, given that all bivariate correlations stay below 0.7 and the highest variance inflation factor is 2.00 (cf. Hair et al., 2010). Common-method variance did not present a risk in our analysis, as variables were derived from heterogeneous sources (Chang et al., 2010; Podsakoff et al., 2003).

We employed ordinary least squares regressions to test our hypotheses. Because respondents were free to report on one of their host countries, and companies may have entered identical host countries, interdependency with regard to host countries may be present (cf. Abdi and Aulakh, 2012). To account for this potential non-interdependency we employed cluster-robust standard errors identified by the host country in our regression analysis.

We addressed the concern of endogeneity that might be entailed in two relationships of our models: first, it could be reflected in reverse causality in the relationship between effective key partnerships, where an effective key partnership could be a result of a low degree of misperception. Second, a manager's decision to enter a particular country could be an underlying unobserved factor that impacts both a manager's misperception of this country as well as the performance in this country, such as the decision to enter a particular country in the first place. In order to account for these potential endogeneity concerns we conducted endogeneity tests with instrument variables. First, for effective key partnerships we used the relationship's strength as an instrument variable, which is correlated with the effectiveness of the partnership, but not with a manager's misperception. The variable was measured with two items stating: "We have a very close relationship with this partner firm" and "We communicate very often with this partner firm," adapted from Reagans and McEvily (2003). Second, for misperception we used international scope as an instrument variable, which is associated with misperception (see the first model), but not necessarily associated with the performance in a specific market as reflected in a missing correlation of the two. The measurement of international scope is described above. Both the Durbin and the Wu-Hausman statistics were not significant in the two cases. We further checked for endogeneity while clustering the error terms of cases that are related to a common country. Again, the robust score tests did not show any significant effects. Accordingly, endogeneity should not be a concern in our models.

Correlation Matrix		Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.	Misperception	13.77	5.14																
2.	Firm's host country performance	3.18	0.97	- 0.14															
3.	Manager's international experience	12.76	8.09	0.15*	0.05														
4.	Firm size	134.05	435.62	- 0.12	0.07	0.03													
5.	International scope	4.12	2.52	0.15*	0.00	0.14	0.46**												
6.	Effective key partnership	3.50	0.84	- 0.17	0.59**	0.04	0.08	- 0.04											
7.	Cultural distance	1.53	0.83	0.32**	- 0.09	0.05	- 0.10	0.09	- 0.08										
8.	Firm age	17.74	23.02	- 0.07	- 0.09	0.02	0.42**	0.41**	- 0.01	- 0.02									
9.	International intensity	44.79	30.66	0.07	0.28**	0.24**	0.08	0.23**	0.19*	0.21**	0.03								
10.	Years of international operations	9.64	11.61	0.04	- 0.07	0.18*	0.30**	0.35**	- 0.05	0.03	0.61**	0.15*							
11.	Sub industry – Solar	0.45	0.50	0.03	- 0.05	- 0.05	- 0.03	0.12	- 0.06	0.08	- 0.11	0.10	- 0.16*						
12.	Sub industry - Wind	0.30	0.46	- 0.14	0.02	0.02	- 0.04	- 0.17*	0.01	- 0.03	- 0.01	- 0.18*	- 0.06	- 0.60**					
13.	Sub industry - Bio	0.20	0.40	0.07	0.09	- 0.04	0.07	0.07	0.06	- 0.05	0.29**	0.06	0.32**	- 0.46**	- 0.33**				
14.	Sub industry – Others	0.04	0.20	0.11	- 0.10	0.17*	0.01	- 0.05	- 0.01	- 0.02	- 0.27**	0.03	- 0.11	- 0.19**	- 0.14	- 0.11			
15.	Type of firm (service)	0.68	0.47	- 0.07	0.05	- 0.17*	- 0.16*	- 0.36**	0.12	0.03	- 0.12	- 0.04	- 0.16*	- 0.07	0.23**	- 0.11	- 0.14		
16.	Entry mode (equity)	0.48	0.50	0.02	- 0.18*	0.05	0.19**	- 0.06	- 0.07	0.02	0.02	- 0.03	- 0.03	0.12	0.09	- 0.22**	- 0.05	0.12	
17.	Market potential	3.66	0.69	0.07	0.12	0.04	0.13	0.12	0.09	0.25**	0.02	0.09	0.11	0.01	- 0.02	0.00	0.01	0.08	- 0.03

n=186, * p ≤ 0.05 (2-tailed), ** p ≤ 0.01 (2-tailed)

Table 4.1: Correlation matrix

4.4 Results

Table 4.2 illustrates the coefficient (Coef.) and standard error (S.E.) results for the OLS analysis testing Hypotheses 1 to 5, whereas Table 4.3 reports results for Hypothesis 6. In both Table 4.2 and Table 4.3, Model 1 displays the base model, including only the control variables, while Model 2 shows coefficient results adding the independent variables to the control variables. All models testing our hypotheses are significant and indicate a good fit of our data to the statistical model (cf. Hair et al., 2010).

Results of OLS regression:		Model 1		Model 2	
Antecedents of Misperception		Coef.	S.E.	Coef.	S.E.
International intensity		0.01	0.01	-0.01	0.01
Years of international operations		0.01	0.02	-0.01	0.02
Sub industry - Wind		-1.13	0.61	-0.83	0.61
Sub industry - Bio		0.37	1.08	1.18	1.10
Sub industry - Others		2.42	2.49	2.73	2.45
Type of firm (service)		-0.24	0.74	0.48	0.63
Manager's international experience				0.08	0.06
Firm size				-0.58 **	0.21
International scope				0.42 *	0.20
Effective key partnership				-0.84 *	0.42
Cultural distance				1.71 *	0.71
Constant		13.65 ***	1.03	13.40 ***	2.19
R ²		0.03		0.20	
Adjusted R ²		0.00		0.15	
F value		1.23		2.78 **	
n=186, * p ≤ 0.05 (2-tailed), ** p ≤ 0.01 (2-tailed), *** p ≤ 0.001 (2-tailed)					

Table 4.2: Results OLS regression – Antecedents of misperception

Hypothesis 1 states that managers' international experience lowers their misperception of differences between countries. Results in Table 4.2 show no statistically significant relationship and thus reject our first hypothesis. In contrast, Hypothesis 2, stating that a larger firm size lowers a manager's misperception, is supported, as indicated by a significant negative relationship of firm size ($b = -0.58$, $p \leq 0.01$) on misperception. Similarly, Hypothesis 3 is

supported, showing a significant positive relationship of a firm's international scope ($b = 0.42$, $p \leq 0.05$) on a manager's misperception. Results further support Hypothesis 4, and show that an effective relationship to a firm's key partner lowers a manager's misperception, as indicated by a significant negative relationship of an effective key partnership ($b = -0.84$, $p \leq 0.05$) on misperception. Hypothesis 5, proposing a positive relationship between cultural distance and a manager's misperception of country differences is also supported ($b = 1.71$, $p \leq 0.05$).

Results of OLS regression: Firm's Host Country Performance	Model 1		Model 2	
	Coef.	S.E.	Coef.	S.E.
Firm size	0.09	0.04	0.07	0.04
Firm age	-0.16 *	0.09	-0.16	0.09
International intensity	0.01 ***	0.00	0.01 ***	0.00
Entry mode (equity)	-0.37 **	0.12	-0.36 **	0.11
Market potential	0.10	0.11	0.12	0.10
Misperception			-0.15 *	0.08
Constant	2.69 ***	0.47	2.66 ***	0.49
R ²	0.14		0.16	
Adjusted R ²	0.11		0.13	
F value	7.57 ***		7.37 ***	

n=186, * $p \leq 0.05$ (2-tailed), ** $p \leq 0.01$ (2-tailed), *** $p \leq 0.001$ (2-tailed)

Table 4.3: Results OLS regression – Firm's host country performance

Hypothesis 6 posits a negative impact of a manager's misperception of differences between home and host country on a firm's host country performance. Results in Table 4.3 support the hypothesized relationship, showing a significant negative relationship of misperception ($b = -0.15$, $p \leq 0.05$) on a firm's host country performance.

4.5 Discussion and conclusion

The objective of this paper was to introduce and examine the concept of managers' misperceptions of differences between home and host country, which we define as the deviation of differences between countries as perceived by a manager and the actual

differences between countries. We began with the assumption that managerial assessments of differences between home and host countries are never perfect reflections of actual environmental conditions because of an individual's bounded rationality (Cyert and March, 1964; Baer et al., 2013). Drawing on prior literature on distance between countries, as well as cognitive approaches in IB research (e.g., Baack et al., 2015; Williams and Gregoire, 2015; Håkanson and Ambos, 2010), we theoretically derived and empirically tested the antecedents of managerial misperceptions on the individual, organizational, inter-organizational, and environmental level, as well as the impact of managerial misperception on a firm's host country performance.

Our results show that firms' size and effective key partnerships negatively impact managers' misperception of country differences, whereas firms' international scope and cultural distance have positive effects. We further find that lower misperception is significantly associated with improved host country performance, which underlines the relevance of the construct.

In contrast to our expectations, our results do not show any significant relationship between managers' international experience and their misperception of country differences. While a substantial amount of research stresses the importance of managers' personal international experience with regard to internationalization behavior and success of firms (e.g., Reuber and Fischer, 1997; Oviatt and McDougall, 1994; Hutzschenreuter and Horstkotte, 2013), this factor also produces inconsistent results (cf. Maitland and Sammartino, 2015) and often displays low effect size in the context of distance perceptions (cf. Baack et al., 2015). Accordingly, the missing effect of managers' international experience on the accuracy of their perceptions is not completely surprising. We have to consider, though, that the non-significant relationship could also be attributed to other individual-level and international experience factors not considered in our model, such as country-specific experience (cf. Reuber and Fischer, 1997;

Lee and Park, 2008) or personal characteristics such as age, level of education, or linguistic abilities (Hambrick and Mason, 1984; Wiersema and Bantel, 1992; Herrmann and Datta, 2006).

4.5.1 Contribution

Our work on the analysis of managers' misperception of home and host country differences contributes to extant literature in several ways. First of all, it introduces the concept to IB literature and for the first time empirically considers the gap between actual and perceived country differences. In doing so, we provide a new path for fruitful future research that enables to analyze managers' misjudgments in internationalization processes, which is "badly needed" according to Håkanson and Ambos (2010: p. 208). We also contribute to an understanding of the associated consequences of such misperceptions for internationalizing firms and help advance research in the field. In this way the study also responds to an increasing research interest in individual level and cognitive influences of managers' actions on the internationalization behavior of firms, which is our second contribution to IB research. Examining the concept of misperception more closely would enable scholars to provide concrete insights for managers on how to avoid misperception and to assist them in improving informed decision-making processes. Given that misperceptions of differences between countries may lead to inadequate decision-making, it will very likely reduce performance outcomes. We are therefore convinced that misperception will potentially have good explanatory power when analyzing internationalization processes of firms. We further believe that the initial exploration of antecedents of managerial misperception may serve as a solid starting point to explore the concept and its origins. We additionally provide a comprehensive measurement of the concept that meticulously juxtaposes actual report data with managers' perception data.

4.5.2 Limitations and future research

Despite these contributions, measuring and analyzing a new construct is not without limitations and significant challenges. First, we had to rely on established scales to measure

cultural dimensions that somewhat deviate from Hofstede's original measurement (cf. Furrer et al., 2000). Doing so, however, provided us with the opportunity to assess culture in a more general sense, rather than only referring to work-related culture (cf. Hofstede, 2010). Despite the multiple – and still to be overcome – obstacles to measuring culture (cf. Caprar et al., 2015), we believe that our adopted measurement suitably reflects the cultural aspect of country differences. We strongly encourage future research in this area to continue refining our proposed measurement of misperception and enlarge its applicability.

Second, our list of antecedents is of course not exhaustive. We covered heterogeneous categories of impact factors on multiple levels. Still, it was beyond the scope of this study to include a more comprehensive list of factors. Therefore, the antecedents of misperception should be more thoroughly investigated in future research. Furthermore, as briefly discussed above for the case of managers' international experience, the investigated factors might warrant further attention. Also, potentially underlying indicators, such as actual flows of knowledge and information, have not been directly taken into account, and should be addressed in future studies. It might therefore also be useful to employ both qualitative and quantitative approaches to identify and further test factors that influence managerial misperceptions of differences between countries.

Third, as in every empirical study, we have to consider limitations in our research approach and design. The cross-sectional nature of our data might be a source of concern. Perceptions of distance, for example, may change over time and they may become more accurate the longer a firm operates in a given country (Baack et al. 2015). Future empirical research could therefore benefit from longitudinal designs to explore these relationships in more detail. Additionally, we only look at managers from one country (Germany) within one industry (renewable-energy). While restricting the sample to one industry and one home country may limit the generalizability of findings, it also increases internal validity, given that

internationalization processes can vary significantly across industries and may be strongly influenced by macro-environmental factors in the home country (Coviello and Jones, 2004). Still, future research should consider other home countries as well as other industries to verify the generalizability of the results.

Aside from the implications that arise from the above-mentioned limitations, we would like to highlight two additional avenues for future research. First, the non-significant effect of managers' international experience on misperception should be examined further. As outlined above, additional individual-level factors deserve more attention. Furthermore, the increasing volume of literature on managers' mental models in internationalization processes (e.g., Maitland and Sammartino, 2015) might be a fruitful way to further consider individual-level factors. Another theoretical approach to investigate in this area is research on the use of heuristics in decision-making (Kahneman and Tversky, 1979), which postulates that heuristics create systematic biases that result in inaccurate assessments (Slovic et al., 1977). Second, building on extant studies (e.g., Evans and Mavondo, 2002) that investigate the impact of high and low distance perceptions (independent from actual conditions), it would be interesting to explore differences among over- and underestimation of distance as well as respective antecedents and effects. Prior research has shown that higher distance perceptions may lead to improved performance ("distance paradox"). Given the results of our study, we suggest that the positive effect of high distance perceptions found in prior research may be contingent on the relationship between actual and perceived differences. For example, if distance is actually very low but is perceived as high, and then a great deal of resources are invested to account for this (such as initiating costly safeguards in partnerships), these investments are unlikely to foster performance. Instead, they might hurt performance, as they are overly costly, complex, and not adapted to given requirements. On the other hand, when actual high distance is also perceived as high – implying a low misperception – performance will most likely also be high.

Accordingly, an investigation of distinct antecedents and performance effects of over- and underestimation of distance seems a fruitful research area for future research in IB studies.

4.5.3 Practical implications and concluding remarks

Besides contributing to scholarly work in the field, our study also entails important practical implications for managers. Specifically, we show that misperception can significantly hamper firms' host country performance. Practitioners should therefore be aware of this impact and dedicate resources and undertake measures to best obtain accurate knowledge about the foreign market and its differences to the home market. Also, managers of firms that score low on one of the antecedents, for example organizational size (which is obviously hard to change) should fully embrace the other antecedents, by, for instance, putting special effort into making relationships with host country partners work. Compensation for a lack of endowment that cannot be attained easily if not given – such as large size – has already been observed in prior IB research and practice on international new ventures, where young firms that internationalize early counterbalance their inherent disadvantages by being especially efficient on dimensions such as networks (e.g., Coviello, 2006; Oviatt and McDougall, 2005).

In conclusion, we believe that the concept of managerial misperception provides new avenues to increase scholarly understanding, especially when analyzing the impact of country differences and perceptions of these differences as they relate to the internationalization behavior of firms. We therefore hope to encourage more research on this topic, especially with regard to conceptual refinements and improved measurements. The relationship between a manager's misperception of differences between home and host country and a firm's performance in this host country is relatively straightforward, and we are therefore confident that this relationship can be easily replicated. The same applies for the relationship between misperception and its antecedents. We believe that the concept may prove valuable with regard to various research questions on managerial decision-making and outcomes of decisions in IB research.

Appendices for Paper III

Appendix 1: Measurement items for managerial misperception

Measurement items to capture managers' misperception of country differences	
Original items	Source of items
Values of the following items were obtained for both Germany and the selected host country. Furthermore each item was used to capture actual environmental circumstances of countries as well as respondents' perceptions (on five point Likert-scale)	Number in parentheses indicates the item number in the respective report
Items related to regulative country environment:	<i>Adapted from Scott (2008) and Gaur & Lu (2007)</i>
To what extent does anti-monopoly policy promote competition?	Global Competitiveness Report 2014-2015 (6.03)
Intellectual property rights are adequately enforced.	IMD World Competitiveness Yearbook 2014 (4.3.22)
How efficient is the legal framework for private businesses in settling disputes?	Global Competitiveness Report 2014-2015 (1.10)
How would you characterize corporate activity?	Global Competitiveness Report 2014-2015 (6.02)
The legal and regulatory framework encourages the competitiveness of enterprises.	IMD World Competitiveness Yearbook 2014 (2.3.08)
Technological regulation supports business development and innovation.	IMD World Competitiveness Yearbook 2014 (4.2.20)
Items related to normative country environment:	<i>Adapted from Gaur & Lu (2007) and Chao & Kumar (2010)</i>
Adaptability of government policy to changes in the economy is high.	IMD World Competitiveness Yearbook 2014 (2.3.09)
Transparency of government policy is satisfactory.	IMD World Competitiveness Yearbook 2014 (2.3.11)
Bureaucracy hinders business activity.	IMD World Competitiveness Yearbook 2014 (2.3.13)
Bribing and corruption do exist.	IMD World Competitiveness Yearbook 2014 (2.3.13)
Ethical practices are implemented in companies.	IMD World Competitiveness Yearbook 2014 (3.4.02)
Health, safety & environmental concerns are adequately addressed by management.	IMD World Competitiveness Yearbook 2014 (3.4.09)
Qualified engineers are available in your labor market.	IMD World Competitiveness Yearbook 2014 (4.2.15)

Measurement items to capture managers' misperception of country differences (cont'd)

Original items	Source of items
Items related to cultural-cognitive country environment	<i>Adapted from Berry et al. (2010) and Dow & Larimo (2009)</i>
Power distance	Hofstede World Value Survey
Inequalities among people are both expected and desired.	Adapted from Furrer et al. (2000)
Less powerful people should be dependent on the more powerful.	Adapted from Furrer et al. (2000)
Inequalities among people should be minimized.	Adapted from Furrer et al. (2000)
There should be, and there is to some extent, interdependencies between less and more powerful people.	Adapted from Furrer et al. (2000)
Masculinity	Hofstede World Value Survey
Money and material things are important.	Adapted from Furrer et al. (2000)
Men are supposed to be assertive, ambitious, and tough.	Adapted from Furrer et al. (2000)
Dominant values in society are the caring for others and preservation.	Adapted from Furrer et al. (2000)
Both men and women are allowed to be tender and to be concerned with relationships.	Adapted from Furrer et al. (2000)
Individualism	Hofstede World Value Survey
Everyone grows up to look after him/herself and his/her immediate family only.	Adapted from Furrer et al. (2000)
People are identified independently of the groups they belong to.	Adapted from Furrer et al. (2000)
An extended family member should be protected by other member in exchange for loyalty.	Adapted from Furrer et al. (2000)
People are identified by their position in the social networks to which they belong.	Adapted from Furrer et al. (2000)
Uncertainty avoidance	Hofstede World Value Survey
High stress and subjective feeling of anxiety are frequent among people.	Adapted from Furrer et al. (2000)
Fear of ambiguous situations and of unfamiliar risks is normal.	Adapted from Furrer et al. (2000)
Uncertainty is a normal feature of life and each day is accepted as it comes.	Adapted from Furrer et al. (2000)
Emotions should not be shown.	Adapted from Furrer et al. (2000)
Long term orientation	Hofstede World Value Survey
Willingness to subordinate oneself for a purpose is normal.	Adapted from Furrer et al. (2000)
People should be perseverant toward long-term results.	Adapted from Furrer et al. (2000)
Traditions should be respected.	Adapted from Furrer et al. (2000)
Social obligations should be respected regardless of cost.	Adapted from Furrer et al. (2000)

Appendix 2: Measurement items (other variables)

Construct & Measurement Items	Adapted from original sources of items:
Firm's host country performance During the last three years the selected export market... ...has been very profitable. ...has achieved a rapid sales growth. ...has very satisfactory export performance. ...has achieved our company's initial strategic objective.	He, Brouthers & Filatotchev (2013)
Manager's international experience Number of years the manager worked internationally	Fernhaber et al. (2008), Li et al. (2012a), and Mudambi & Zahra (2007)
Firm size Number full-time employees	Brouthers & Brouthers (2001) and Gaur & Lu (2007)
International scope Please indicate all regions in which your firm is currently operating in (e.g., via export or subsidiary): (1) Anglo cultures, (2) Latin Europe, (3) Nordic Europe, (4) Germanic Europe, (5) Eastern Europe, (6) Latin America, (7) Sub-Sahara Africa, (8) Arab cultures, (9) Southern Asia, (10) Confucian Asia	Khavul et al. (2010) and Gupta et al. (2002)
Effective key partnership To what extent do you agree with the following statements? The objectives for which the collaboration was established are being met. Our firm is satisfied with the financial performance of the collaboration. Our foreign partner firm seems to be satisfied with the financial performance of the collaboration. Our firm is satisfied with the overall performance of the collaboration. Our foreign partner seems to be satisfied with the overall performance of the collaboration.	Krishnan et al. (2006)
Cultural distance Kogut and Singh formula using dimensions and values from the Hofstede Value Survey for: (1) power distance, (2) masculinity, (3) individualism, (4) uncertainty avoidance, (5) long term orientation	Kogut & Singh (1988) and www.geerthofstede.nl
Firm age Number of years since foundation of firm until 2014 (year of data collection)	Zahra et al. (2000), Casillas et al. (2015), Li et al. (2012b), and Acedo & Florin (2006)
International intensity Ratio of foreign sales to total sales	Delios & Beamish (1999) and Fernhaber et al. (2008)
Years of international operations Number of years since a firm's first international activity until 2014 (year of data collection)	Brouthers & Brouthers (2001) and Chao & Kumar (2010)
Sub-Industry Dummy coded: Solar, wind, biogas, others	Filatotev et al. (2009) and Coeurderoy & Murry (2008)
Type of firm Dummy coded: Service (1) and manufacturing (0)	Brouthers (2002)
Entry mode in host country Please indicate the entry mode used to enter the host market: (1) Subsidiary, (2) manufacturing plant, (3) project planning, (4) sales office, (5) strategic alliance, (6) joint venture, (7) licensing, (8) sales representative, (9) direct export, (10) others (please name) Answers dummy coded: equity entry mode (1) and non-equity entry mode (0)	Pan & Tse (2000) and Hutzschenreuter & Horstkotte (2013)
Market potential In the selected host market, what do you think is... ...the market potential for renewable-energies? ...the growth potential of renewable-energies? ...the general acceptability of renewable-energies? ...the attitude of the government toward the renewable-energy industry? ...the attitude of the government toward foreign firms in general?	Agarwal & Ramaswami (1992)

References

- Abdi M and Aulakh PS. (2012) Do country-level institutional frameworks and interfirm governance arrangements substitute or complement in international business relationships? *Journal of International Business Studies* 43: 477-497.
- Acedo FJ and Florin J. (2006) An entrepreneurial cognition perspective on the internationalization of SMEs. *Journal of International Entrepreneurship* 4: 49-67.
- Agarwal S and Ramaswami SN. (1992) Choice of foreign market entry mode: Impact of ownership, location and internalization factors. *Journal of International Business Studies* 23: 1-27.
- Aharoni Y. (1966) *The foreign investment decision process*, Boston, Mass. : Harvard Business School Press.
- Aharoni Y and Brock DM. (2010) International business research: Looking back and looking forward. *Journal of International Management* 16: 5-15.
- Aharoni Y, Tihanyi L and Connelly BL. (2011) Managerial decision-making in international business: A forty-five-year retrospective. *Journal of World Business* 46: 135-142.
- Arrow KJ. (1974) *The limits of organization*, New York: WW Norton&Company.
- Audia PG and Greve HR. (2006) Less likely to fail: Low performance, firm size, and factory expansion in the shipbuilding industry. *Management Science* 52: 83-94.
- Aulakh PS, Kotabe M and Sahay A. (1996) Trust and performance in cross-border marketing partnerships: A behavioral approach. *Journal of International Business Studies* 27: 1005-1032.
- Baack DW, Dow D, Parente R, et al. (2015) Confirmation bias in individual-level perceptions of psychic distance: An experimental investigation. *Journal of International Business Studies* 46: 938-959.
- Baaij MG and Slangen AHL. (2013) The role of headquarters-subsidiary geographic distance in strategic decisions by spatially disaggregated headquarters. *Journal of International Business Studies* 44: 941-952.
- Baer M, Dirks KT and Nickerson JA. (2013) Microfoundations of strategic problem formulation. *Strategic Management Journal* 34: 197-214.
- Barkema HG and Drogendijk R. (2007) Internationalising in small, incremental or larger steps? *Journal of International Business Studies* 38: 1132-1148.
- Barkema HG and Vermeulen F. (1997) What differences in the cultural backgrounds of partners are detrimental for international joint ventures? *Journal of International Business Studies* 28: 845-864.
- Benito GRG, Petersen B and Welch LS. (2009) Towards More Realistic Conceptualisations of Foreign Operation Modes. *Journal of International Business Studies* 40: 1455-1470.
- Berry H, Guillén MF and Zhou N. (2010) An institutional approach to cross-national distance. *Journal of International Business Studies* 41: 1460-1480.
- Bonaccorsi A. (1992) On the relationship between firm size and export intensity. *Journal of International Business Studies* 23: 605-635.
- Brouthers KD. (2002) Institutional, cultural and transaction cost influences on entry mode choice and performance. *Journal of International Business Studies* 33: 203-221.
- Brouthers KD. (2013) A retrospective on: Institutional, cultural and transaction cost influences on entry mode choice and performance. *Journal of International Business Studies* 44: 14-22.
- Brouthers KD and Brouthers LE. (2001) Explaining the national cultural distance paradox. *Journal of International Business Studies* 32: 177-189.
- Brouthers KD and Hennart J-F. (2007) Boundaries of the firm: Insights from international entry mode research. *Journal of Management* 33: 395-425.

- Buckley PJ, Devinney TM and Louviere JJ. (2007) Do Managers Behave the Way Theory Suggests? A Choice-Theoretic Examination of Foreign Direct Investment Location Decision-Making. *Journal of International Business Studies* 38: 1069-1094.
- Caprar DV, Devinney TM, Kirkman BL, et al. (2015) Conceptualizing and measuring culture in international business and management: From challenges to potential solutions. *Journal of International Business Studies* 46: 1011-1027.
- Chang S-J, van Witteloostuijn A and Eden L. (2010) From the editors: Common method variance in international business research. *Journal of International Business Studies* 41: 178-184.
- Chao MC-H and Kumar V. (2010) The impact of institutional distance on the international diversity–performance relationship. *Journal of World Business* 45: 93-103.
- Child J. (1972) Organizational structure, environment and performance: The role of strategic choice. *Sociology* 6: 1-22.
- Child J, Rodrigues SB and Frynas JG. (2009) Psychic distance, its impact and coping modes. *Management International Review* 49: 199-224.
- Clement MB. (1999) Analyst forecast accuracy: Do ability, resources, and portfolio complexity matter? *Journal of Accounting and Economics* 27: 285-303.
- Coeurderoy R, Cowling M, Licht G, et al. (2012) Young firm internationalization and survival: Empirical tests on a panel of ‘adolescent’ new technology-based firms in Germany and the UK. *International Small Business Journal* 30: 472-492.
- Coeurderoy R and Murray G. (2008) Regulatory environments and the location decision: Evidence from the early foreign market entries of new-technology-based firms. *Journal of International Business Studies* 39: 670-687.
- Coviello NE. (2006) The network dynamics of international new ventures. *Journal of International Business Studies* 37: 713-731
- Coviello NE and Jones MV. (2004) Methodological issues in international entrepreneurship research. *Journal of Business Venturing* 19: 485-508.
- Cyert RM and March JG. (1964) *A behavioral theory of the firm*: Englewood Cliffs, N.J : Prentice-Hall.
- Delios A and Beamish PW. (1999) Ownership strategy of Japanese firms: Transactional, institutional, and experience influences. *Strategic Management Journal* 20: 915-933.
- Dellestrand H and Kappen P. (2012) The effects of spatial and contextual factors on headquarters resource allocation to MNE subsidiaries. *Journal of International Business Studies* 43: 219-243.
- Dikova D. (2009) Performance of foreign subsidiaries: Does psychic distance matter? *International Business Review* 18: 38-49.
- Dow D. (2009) Factors influencing perceptions of psychic distance. 51st Annual Meeting of the Academy of International Business. San Diego.
- Dow D and Karunaratna A. (2006) Developing a multidimensional instrument to measure psychic distance stimuli. *Journal of International Business Studies* 37: 578-602.
- Dow D and Larimo J. (2009) Challenging the conceptualization and measurement of distance and international experience in entry mode choice research. *Journal of International Marketing* 17: 74-98.
- Elbanna S and Child J. (2007) The influence of decision, environmental and firm characteristics on the rationality of Strategic Decision-Making*. *Journal of Management Studies* 44: 561-591.
- Ellis PD. (2000) Social ties and foreign market entry. *Journal of International Business Studies* 31: 443-469.
- Ellis PD. (2008) Does psychic distance moderate the market size-entry sequence relationship? *Journal of International Business Studies* 39: 351-369.
- Eriksson K, Johanson J, Majkgard A, et al. (1997) Experiential knowledge and cost in the internationalization process. *Journal of International Business Studies* 28: 337-360.

- Erramilli MK. (1991) The experience factor in foreign market entry behavior of service firms. *Journal of International Business Studies* 22: 479-501.
- Evans J and Mavondo FT. (2002) Psychic distance and organizational performance: An empirical examination of international retailing operations. *Journal of International Business Studies* 33: 515-532.
- Evans J, Mavondo FT and Bridson K. (2008b) Psychic distance: Antecedents, retail strategy implications, and performance outcomes. *Journal of International Marketing* 16: 32-63.
- Fernhaber SA, Gilbert BA and McDougall PP. (2008) International entrepreneurship and geographic location: An empirical examination of new venture internationalization. *Journal of International Business Studies* 39: 267-290.
- Filatotchev I, Liu XH, Buck T, et al. (2009) The export orientation and export performance of high-technology SMEs in emerging markets: The effects of knowledge transfer by returnee entrepreneurs. *Journal of International Business Studies* 40: 1005-1021.
- Fredrickson JW and Iaquinto AL. (1989) Inertia and creeping rationality in strategic decision processes. *Academy of management journal* 32: 516-542.
- Furrer O, Liu BS-C and Sudharshan D. (2000) The relationships between culture and service quality perceptions: Basis for cross-cultural market segmentation and resource allocation. *Journal of Service Research* 2: 355-371.
- Gaur AS, Delios A and Singh K. (2007) Institutional environments, staffing strategies, and subsidiary performance. *Journal of Management* 33: 611-636.
- Gaur AS and Lu JW. (2007) Ownership strategies and survival of foreign subsidiaries: Impacts of institutional distance and experience. *Journal of Management* 33: 84-110.
- Ghoshal S and Bartlett CA. (1990) The multinational corporation as an interorganizational network. *Academy of Management Review* 15: 603-626.
- Gomez C and Sanchez JI. (2005) HR's strategic role within MNCs: Helping build social capital in Latin America. *The International Journal of Human Resource Management* 16: 2189-2200.
- Griffith DA, Myers MB and Harvey MG. (2006) An investigation of national culture's influence on relationship and knowledge resources in interorganizational relationships between Japan and the United States. *Journal of International Marketing* 14: 1-32.
- Gupta V, Hanges PJ and Dorfman P. (2002) Cultural clusters: Methodology and findings. *Journal of World Business* 37: 11-15.
- Hair JF, Black WC, Babin BJ, et al. (2010) *Multivariate data analysis: A global perspective*, Upper Saddle River, N.J.: Pearson Prentice Hall.
- Håkanson L and Ambos B. (2010) The antecedents of psychic distance. *Journal of International Management* 16: 195-210.
- Håkanson L, Ambos B, Schuster A, et al. (2016) The psychology of psychic distance: Antecedents of asymmetric perceptions. *Journal of World Business* 51: 308-318.
- Hambrick DC and Mason PA. (1984) Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review* 9: 193-206.
- Harzing A-W. (2003) The role of culture in entry-mode studies: From neglect to myopia? . In: Joseph L. C. Cheng and Hitt MA (eds) *Managing multinationals in a knowledge economy: Economics, culture*. Emerald Group Publishing Limited, 75-127.
- Hashai N. (2011) Sequencing the expansion of geographic scope and foreign operations by born global firms. *Journal of International Business Studies* 42: 995-1015.
- Haunschild PR and Beckman CM. (1998) When Do Interlocks Matter?: Alternate Sources of Information and Interlock Influence. *Administrative Science Quarterly* 43: 815-844.
- He X, Brouthers KD and Filatotchev I. (2013) Resource-based and institutional perspectives on export channel selection and export performance. *Journal of Management* 39: 27-47.

- Hennart J-F and Larimo J. (1998) The impact of culture on the strategy of multinational enterprises: Does national origin affect ownership decisions? *Journal of International Business Studies* 29: 515-538.
- Herrmann P and Datta DK. (2006) CEO experiences: Effects on the choice of FDI entry mode. *Journal of Management Studies* 43: 755-778.
- Hitt MA, Dacin MT, Levitas E, et al. (2000) Partner selection in emerging and developed market contexts: Resource-based and organizational learning perspectives. *Academy of management journal* 43: 449-467.
- Hitt MA, Hoskisson RE and Kim H. (1997) International diversification: Effects on innovation and firm performance in product-diversified firms. *Academy of management journal* 40: 767-798.
- Hofstede G. (1991) *Cultures and organizations: Software of the mind*, London: New York : McGraw-Hill.
- Hofstede GH. (2010) *Cultures and organizations : software of the mind : intercultural cooperation and its importance for survival*, New York: New York : McGraw-Hill.
- Hutzschenreuter T and Horstkotte J. (2013) Performance effects of international expansion processes: The moderating role of top management team experiences. *International Business Review* 22: 259-277.
- Hutzschenreuter T, Kleindienst I and Lange S. (2015) The concept of distance in international business research: A review and research agenda. *International Journal of Management Reviews Online Version*
- Hutzschenreuter T and Voll JC. (2007) Performance effects of “added cultural distance” in the path of international expansion: The case of German multinational enterprises. *Journal of International Business Studies* 39: 53-70.
- Johanson J and Vahlne J-E. (1977) The internationalization process of the firm: A model of knowledge development and increasing foreign market commitments. *Journal of International Business Studies* 8: 23-32.
- Johanson J and Vahlne J-E. (2009) The Uppsala internationalization process model revisited: From liability of foreignness to liability of outsidership. *Journal of International Business Studies* 40: 1411-1431.
- Johanson J and Wiedersheim-Paul F. (1975) The internationalization of the firm - Four swedish cases. *Journal of Management Studies* 12: 305-323.
- Jonsson S and Lindbergh J. (2010) The impact of institutional impediments and information and knowledge exchange on SMEs’ investments in international business relationships. *International Business Review* 19: 548-561.
- Kahneman D and Tversky A. (1979) Prospect Theory: An Analysis of Decision under Risk. *Econometrica* 47: 263-291.
- Khavul S, Pérez-Nordtvedt L and Wood E. (2010) Organizational entrainment and international new ventures from emerging markets. *Journal of Business Venturing* 25: 104-119.
- Kiss A and Danis W. (2010) Social networks and speed of new venture internationalization during institutional transition: A conceptual model. *Journal of International Entrepreneurship* 8: 273-287.
- Kogut B and Singh H. (1988) The Effect of National Culture on the Choice of Entry Mode. *Journal of International Business Studies* 19: 411-432.
- Kostova T, Roth K and Dacin MT. (2008) Institutional theory in the study of multinational corporations: A critique and new directions. *Academy of Management Review* 33: 994-1006.
- Krishnan R, Martin X and Noorderhaven NG. (2006) When does trust matter to alliance performance? *Academy of management journal* 49: 894-917.
- Kumar MVS. (2009) The relationship between product and international diversification: The effects of short-run constraints and endogeneity. *Strategic Management Journal* 30: 99-116.

- Lee H-U and Park J-H. (2008) The Influence of top management team international exposure on international alliance formation. *Journal of Management Studies* 45: 961-981.
- Lehr U, Lutz C and Edler D. (2012) Green jobs? Economic impacts of renewable energy in Germany. *Energy Policy* 47: 358-364.
- Li JJ, Poppo L and Zhou KZ. (2010) Relational mechanisms, formal contracts, and local knowledge acquisition by international subsidiaries. *Strategic Management Journal* 31: 349-370.
- Li L, Qian G and Qian Z. (2012a) Early internationalization and performance of small high-tech "born-globals". *International Marketing Review* 29: 536-561.
- Li L, Qian G and Qian Z. (2012b) The performance of small and medium-sized technology-based enterprises: Do product diversity and international diversity matter? *International Business Review* 21: 941-956.
- Lin W-T. (2012) Family ownership and internationalization processes: Internationalization pace, internationalization scope, and internationalization rhythm. *European Management Journal* 30: 47-56.
- LiPuma JA, Newbert SL and Doh JP. (2013) The effect of institutional quality on firm export performance in emerging economies: A contingency model of firm age and size. *Small Business Economics* 40: 817-841.
- Lu J and Beamish P. (2006) SME internationalization and performance: Growth vs. profitability. *Journal of International Entrepreneurship* 4: 27-48.
- Luo Y. (2002) Contract, cooperation, and performance in international joint ventures. *Strategic Management Journal* 23: 903-919.
- Maitland E and Sammartino A. (2015) Managerial cognition and internationalization. *Journal of International Business Studies* 46: 733-760.
- Makino S and Delios A. (1996) Local knowledge transfer and performance: Implications for alliance formation in Asia. *Journal of International Business Studies* 27: 905-927.
- Meyer KE, Estrin S, Bhaumik SK, et al. (2009) Institutions, resources, and entry strategies in emerging economies. *Strategic Management Journal* 30: 61-80.
- Mudambi R and Zahra SA. (2007) The survival of international new ventures. *Journal of International Business Studies* 38: 333-352.
- Musteen M, Francis J and Datta DK. (2010) The influence of international networks on internationalization speed and performance: A study of Czech SMEs. *Journal of World Business* 45: 197-205.
- Nadkarni S, Herrmann P and Perez PD. (2011) Domestic mindsets and early international performance: The moderating effect of global industry conditions. *Strategic Management Journal* 32: 510-531.
- O'Grady S and Lane HW. (1996) The psychic distance paradox. *Journal of International Business Studies* 27: 309-333.
- Oehme M and Bort S. (2015) SME internationalization modes in the German biotechnology industry: The influence of imitation, network position, and international experience. *Journal of International Business Studies* 46: 629-655.
- Oviatt BM and McDougall PP. (1994) Toward a theory of international new ventures. *Journal of International Business Studies* 25: 45-64.
- Oviatt BM and McDougall PP. (2005) Defining international entrepreneurship and modeling the speed of internationalization. *Entrepreneurship: Theory & Practice* 29: 537-554.
- Pan Y and Tse DK. (2000) The hierarchical model of market entry modes. *Journal of International Business Studies* 31: 535-554.
- Podsakoff PM, MacKenzie SB, Jeong-Yeon L, et al. (2003) Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology* 88: 879-903.

- Pogrebnyakov N and Maitland CF. (2011) Institutional distance and the internationalization process: The case of mobile operators. *Journal of International Management* 17: 68-82.
- Poppo L, Zhou KZ and Ryu S. (2008) Alternative origins to interorganizational trust: An interdependence perspective on the shadow of the past and the shadow of the future. *Organization Science* 19: 39-55.
- Reagans R and McEvily B. (2003) Network structure and knowledge transfer: The effects of cohesion and range. *Administrative Science Quarterly* 48: 240-267.
- Reuber AR and Fischer E. (1997) The influence of the management team's international experience on the internationalization behaviors of SMEs. *Journal of International Business Studies* 28: 807-825.
- Ruigrok W, Amann W and Wagner H. (2007) The internationalization-performance relationship at Swiss firms: A test of the S-shape and extreme degrees of internationalization. *Management International Review* 47: 349-368.
- Sapienza HJ, Autio E, George G, et al. (2006) A capabilities perspective on the effects of early internationalization on firm survival and growth *Academy of Management Review* 31: 914-933.
- Schilke O and Cook KS. (2015) Sources of alliance partner trustworthiness: Integrating calculative and relational perspectives. *Strategic Management Journal* 36: 276-297.
- Schwens C and Kabst R. (2011) Internationalization of young technology firms: A complementary perspective on antecedents of foreign market familiarity. *International Business Review* 20: 60-74.
- Scott R. (2008) *Institutions and organizations - Ideas and interests*, Thousand Oaks: Sage Publications.
- Shenkar O. (2001) Cultural distance revisited: Towards a more rigorous conceptualization and measurement of cultural differences. *Journal of International Business Studies* 32: 519-535.
- Shenkar O. (2012) Cultural distance revisited: Towards a more rigorous conceptualization and measurement of cultural differences. *Journal of International Business Studies* 43: 1-11.
- Shrader RC. (2001) Collaboration and performance in foreign markets: The case of young high-technology manufacturing firms. *Academy of management journal* 44: 45-60.
- Simon HA. (1955) A behavioral model of rational choice. *The Quarterly Journal of Economics* 69: 99-118.
- Simon HA. (1957) *Models of man; social and rational*, Oxford, England: Wiley.
- Slovic P, Fischhoff B and Lichtenstein S. (1977) Behavioral decision theory. *Annual review of psychology* 28: 1-39.
- Sousa CMP and Bradley F. (2006) Cultural Distance and psychic distance: Two peas in a pod? *Journal of International Marketing* 14: 49-70.
- Sousa CMP and Lengler J. (2009) Psychic distance, marketing strategy and performance in export ventures of Brazilian firms. *Journal of Marketing Management* 25: 591-610.
- Sui S and Baum M. (2014) Internationalization strategy, firm resources and the survival of SMEs in the export market. *Journal of International Business Studies* 45: 821-841.
- Tan H and Mathews JA. (2015) Accelerated internationalization and resource leverage strategizing: The case of Chinese wind turbine manufacturers. *Journal of World Business* 50: 417-427.
- Tan J and Peng MW. (2003) Organizational slack and firm performance during economic transitions: two studies from an emerging economy. *Strategic Management Journal* 24: 1249-1263.
- Tihanyi L, Griffith DA and Russell CJ. (2005) The effect of cultural distance on entry mode choice, international diversification, and MNE performance: A meta-analysis. *Journal of International Business Studies* 36: 270-283.

- Tsang EWK. (2002) Acquiring knowledge by foreign partners from international joint ventures in a transition economy: Learning-by-doing and learning myopia. *Strategic Management Journal* 23: 835-854.
- Vermeulen F and Barkema H. (2002) Pace, rhythm, and scope: Process dependence in building a profitable multinational corporation. *Strategic Management Journal* 23: 637-653.
- Wiersema MF and Bantel KA. (1992) Top management team demography and corporate strategic change. *Academy of management journal* 35: 91-121.
- Williams DW and Gregoire DA. (2015) Seeking commonalities or avoiding differences? Re-conceptualizing distance and its effects on internationalization decisions. *Journal of International Business Studies* 46: 253-284.
- Xu D and Shenkar O. (2002) Institutional distance and the multinational enterprise. *The Academy of Management review* 27: 608-618.
- Yan A and Gray B. (1994) Bargaining power, management control, and performance in United States-China joint ventures: A comparative case study. *The Academy of Management Journal* 37: 1478-1517.
- Yli-Renko H, Autio E and Sapienza HJ. (2001) Social capital, knowledge acquisition, and knowledge exploitation in young technology-based firms. *Strategic Management Journal* 22: 587-613.
- Yli-Renko H, Autio E and Tontti V. (2002) Social capital, knowledge, and the international growth of technology-based new firms. *International Business Review* 11: 279-304.
- Zaheer S, Schomaker MS and Nachum L. (2012) Distance without direction: Restoring credibility to a much-loved construct. *Journal of International Business Studies* 43: 18-27.
- Zahra SA, Ireland RD and Hitt MA. (2000) International expansion by new venture firms: International diversity, mode of market entry, technological learning, and performance. *Academy of management journal* 43: 925-950.
- Zeng Y, Shenkar O, Lee S-H, et al. (2013) Cultural differences, MNE learning abilities, and the effect of experience on subsidiary mortality in a dissimilar culture: Evidence from Korean MNEs. *Journal of International Business Studies* 44: 42-65.

5 Conclusion to thesis

Each chapter, containing individual papers in journal-article format, addresses a particular shortcoming of extant literature and contributes to closing existing research gaps. While each study outlines its individual contribution and implications, the present chapter provides an overarching conclusion. Insights gained through individual papers are summarized and show how the entirety of the thesis contributes to scholarly understanding of the international expansion process of firms regarding antecedents, speed, and performance implications. Furthermore, theoretical contributions as well as managerial implications are discussed.

This thesis sheds light on the subsequent international expansion process of INVs and shows the moderating role of institutional distance between antecedents and subsequent international expansion of these firms. Furthermore, it emphasizes the important role of internationalization speed as a multidimensional construct on international performance of both INVs and firms following a more traditional approach to internationalization. Finally, this thesis also introduces the concept of managerial misperception of country differences and identifies antecedents of misperception as well as its impact on firms' host country performance. These three aspects directly relate to the three shortcomings of extant literature that were highlighted in the introduction and were consequently addressed throughout the different papers.

The first two shortcomings presented in this thesis relate to the impact of country differences (e.g., institutional distance) on international operations of firms. While the first shortcoming highlights the need to extend current knowledge on the impact of country differences by considering managers' misperception, the second shortcoming relates to the lack of consideration of institutional theory in IE research.

Paper III addresses the first shortcoming presented, by introducing the concept of managerial misperception of country differences, which is described as the deviation of managers'

perceptions of country differences to the actual difference between home and host countries (cf. Håkanson and Ambos, 2010; Brouthers, 2013). The paper first identifies antecedents of managerial misperceptions theoretically, before empirically testing relationships. In this context antecedents are found on individual, organizational, inter-organizational, and environmental levels. Results of OLS regression show that firms' size and effective key partnerships have a negative impact on managers' misperception of country differences, whereas firms' international scope and cultural distance have positive effects. However, no significant relationship is identified regarding the impact of managers' international experience. Furthermore, the paper also analyzes how managers' misperception of country differences influences host country performance of firms. Results indicate that lower misperception is associated with better host country performance, highlighting the significance of the construct. By addressing Shortcoming 1 in Paper III, the importance and usefulness of the construct of managerial misperception is demonstrated and pathways for future use of this concept are provided.

The second shortcoming provided in the introduction is based on the argument that current IE literature fails to adequately consider the role of the institutional environment in the subsequent international expansion process of INVs (Bruton et al., 2010; Sui et al., 2012). This issue is addressed in Paper I, which provides a comprehensive framework depicting how the relationship of firm- and home country market-level drivers of internationalization and the actual international expansion along pace, pattern, and scope dimensions is moderated by institutional distance. This conceptual work shows the importance of considering institutional distance in the subsequent international expansion of INVs. It shows that greater institutional distance significantly lowers the impact of firm- and market-level antecedents, which in the case of low institutional distance would drive the international expansion of INVs. The paper points out that the impact of institutional distance increases in importance during the medium-to-long run of INVs' international expansion. However, it likely plays a less important

role in the late stage of internationalization, when INVs have become truly global. The paper argues that considering the role of institutional distance will help scholars to better understand why firms prefer to internationalize on a regional rather than on a global scale. It provides insights on how the impact of institutional distance can be lowered by expanding existing capabilities and acquiring new ones necessary for further internationalization. Implications of the paper corroborate findings of the born-regional argument (Lopez et al., 2009; Sui and Baum, 2014; Hashai and Almor, 2004), showing that institutional environments constrain INVs and prevent them from becoming born-global in a literal sense. The paper strongly encourages future research to help overcome shortcomings of previous literature by empirically considering institutional forces in the analysis of subsequent INV internationalization.

The third shortcoming identified in the thesis introduction is that extant literature significantly lacks empirical considerations of internationalization speed as a multidimensional construct and its impact on international performance (Casillas and Acedo, 2013; Chetty et al., 2014). In order to address this shortcoming, Paper II first conceptualizes speed of internationalization on four different dimensions: (1) country speed, (2) commitment speed, (3) scope speed, and (4) equity speed. Subsequently, it analyzes how individual dimensions of internationalization speed impact international performance of firms. Results based on data from INVs and traditional exporters show that country and commitment speed increase international performance, while equity speed decreases performance of firms. An individual group analysis shows that the positive effects of country speed and commitment speed are stronger for INVs than for traditional exporters. This implies that INVs benefit to a larger extent from rapid internationalization in terms of number of countries entered and increased commitment than do firms following a traditional approach to internationalization. Furthermore the analysis shows that INVs can improve international performance by increasing equity speed. Firms that internationalize later in their lifecycle can enhance international performance by rapidly

increasing international sales (i.e., commitment speed). This contribution is important, as it provides considerable insights into which speed dimension increases international performance of the firm.

Taking into account propositions of Paper I, outlining the negatively moderating impact of institutional distance during the subsequent internationalization of INVs, and complementing these propositions with findings from Paper II, it could be argued that increasing a firm's international geographic scope by entering institutionally distant countries not only presents significant challenges to INVs, but does not contribute to increased international performance either. These findings might question to some extent the goal of becoming a truly born-global firm. Furthermore, findings provide an additional explanation as to why firms prefer to internationalize regionally instead of globally (Lopez et al., 2009; Hashai and Almor, 2004; Rugman and Verbeke, 2005).

5.1 Theoretical contribution

From a theoretical perspective, this thesis contributes to IE and IB literature by shedding light on the subsequent international expansion of INVs, which has received little attention to date (Sui et al., 2012; Hagen and Zucchella, 2014; Hashai and Almor, 2004), as well as expanding knowledge on institutional distance and managerial misperception of country differences (cf. Håkanson and Ambos, 2010). For example, the focus of current research has been expanded by acknowledging the role of institutional forces that are of high importance during the subsequent stages of internationalization. Embracing institutional theory in current IE theorizing can significantly advance IE research by including factors residing in the wider institutional environment that alter international operations of INVs, which cannot be explained by considering firm-level and home country factors alone. Institutional theory

therefore helps to overcome a shortcoming in current IE literature and thus gaining a more holistic picture of forces impacting subsequent international expansion of INVs.

In the context of analyzing the impact of country differences on internationalization processes, this thesis also examined the role of managers' misperception of these differences. This work significantly contributes to extant research on a theoretic level by first introducing the concept of managers' misperception of country differences and, for the first time, considering the deviation between perceived and actual country differences empirically. This concept enables researchers to understand consequences of managers' misjudgments of country differences when operating internationally and in particular shows its impact on host country performance. This newly introduced concept adds knowledge to an increasing research interest on analyzing individual-level and cognitive influences of managers' actions on international operations of firms (e.g., Williams and Gregoire, 2015; Baack et al., 2015). Analyzing misperception of country differences of managers can be particularly useful to enhance informed decision-making processes by understanding what factors lead to high misperception and how they can be avoided. When country differences are more accurately perceived, decisions made regarding market entry and operation strategies can also be more adequate, which will likely help to better seize a host country's market potential and ultimately increase performance in this market. Given that this thesis does not only theoretically introduce the concept of managers' misperception of country differences, but also tests antecedent and outcome effects empirically, it develops a measurement of the construct for the first time. The measurement items of the construct have been carefully chosen to best reflect the institutional environment of countries and to juxtapose "actual" and "perceived" values against each other to derive a suitable misperception measurement.

Finally, a significant contribution to extant literature stems from the fact that this thesis acknowledges speed of internationalization as a multidimensional construct. Previous research

has predominantly analyzed speed unidimensionally. Much valuable information is lost using this conceptualization and hinders a more nuanced perspective of drivers and outcomes of internationalization speed. By distinguishing between four different dimensions of internationalization speed, this thesis significantly contributes to previous literature and follows the call by several scholars to empirically analyze speed as a multidimensional construct (Chetty et al., 2014; Casillas and Acedo, 2013). The results of this thesis show that empirical consideration of multiple dimensions of speed helps to gain deeper insights on how each dimension impacts international performance of firms. Thus, these results reinforce the need to distinguish between different dimensions of internationalization speed and might help to avoid ambiguous findings in this area, which will contribute to more thorough theorizing of speed in the IB context focusing not only on INVs but also on traditional exporters.

5.2 Practical implications

Overall, results of this thesis contain important implications for managers with regard to the international expansion process of firms. Particularly for entrepreneurs or managers of INVs, results suggest that they need to prepare for increasing difficulties stemming from differing host-market conditions during further international expansion. While entrepreneurs might not initially perceive difficulties in expanding operations, subsequent growth will present greater challenges as firms need to learn, restructure existing processes, and build and extend capabilities that foster international growth. This is of considerable importance when expanding into distant markets, as INVs need to, for example, expand staff by hiring managers with significant international experience, seek external advice, or expand existing networks to overcome impediments stemming from institutional differences. With regard to performance implications of internationalization speed, managers informed by results of this thesis will be able to identify the most beneficial speed dimension that contributes to increased international performance. Thus, for example, results show that rapidly increasing the

international scope of operations does not increase international performance and it might therefore not be worthwhile to commit resources to achieving high scope speed as a way to increase international performance. Results further show that managers of INVs might benefit from achieving high-equity speed, while firms having followed a more traditional approach to internationalization might not be able to increase international performance by achieving rapid speed along this dimension. Overall, results of this thesis might therefore help managers to take more informed decisions and achieve superior performance during their subsequent stage of international growth. The importance of informed decision-making is also stressed by findings regarding managers' misperceptions of country differences. Results imply that misperceiving country differences between the home and the host country can substantially hamper a firm's host country performance. Hence, it is crucial for managers to dedicate resources that assist in obtaining accurate knowledge on differences between home and host countries and that they pay close attention to antecedents causing misperception. This is to ensure that they collect and correctly process information on country differences before deriving a market entry and operation strategy, which in turn will help to seize the full host market potential. One way to achieve such an outcome would be to establish effective relationships with partners in the host country. By taking findings from this thesis into account managers will be able to make more informed decisions, successfully expand internationally, and achieve superior performance outcomes in international markets.

5.3 Concluding remarks

While this thesis contributes to shortcomings of previous literature and provides important implications for managers, it is not without limitations. The most relevant limitation is that empirical findings are based on cross-sectional data derived from a single industry and country. Therefore findings might be more relevant to German renewable-energy firms and not generalizable to other industries and countries. While such limitations need to be

considered, this thesis helps contribute to an in-depth understanding of subsequent internationalization of firms regarding antecedents, speed, and performance implications. This work addresses several shortcomings of extant research, but acknowledges the need for additional considerations in future research. Studying subsequent internationalization of firms, in particular with regard to considering the role of the institutional environment of host countries as well as internationalization speed along its several dimensions, provides many avenues for future research to be explored.

References

- Abdi M and Aulakh PS. (2012) Do country-level institutional frameworks and interfirm governance arrangements substitute or complement in international business relationships? *Journal of International Business Studies* 43: 477-497.
- Acedo FJ and Florin J. (2006) An entrepreneurial cognition perspective on the internationalization of SMEs. *Journal of International Entrepreneurship* 4: 49-67.
- Acedo FJ and Jones MV. (2007) Speed of internationalization and entrepreneurial cognition: Insights and a comparison between international new ventures, exporters and domestic firms. *Journal of World Business* 42: 236-252.
- Agarwal S and Ramaswami SN. (1992) Choice of foreign market entry mode: Impact of ownership, location and internalization factors. *Journal of International Business Studies* 23: 1-27.
- Aharoni Y. (1966) *The foreign investment decision process*, Boston, Mass. : Harvard Business School Press.
- Aharoni Y and Brock DM. (2010) International business research: Looking back and looking forward. *Journal of International Management* 16: 5-15.
- Aharoni Y, Tihanyi L and Connelly BL. (2011) Managerial decision-making in international business: A forty-five-year retrospective. *Journal of World Business* 46: 135-142.
- Almor T. (2013) Conceptualizing paths of growth for technology-based born-global firms originating in a small-population advanced economy. *International Studies of Management & Organization* 43: 56-78.
- Almor T and Hashai N. (2004) The competitive advantage and strategic configuration of knowledge-intensive, small- and medium-sized multinationals: A modified resource-based view. *Journal of International Management* 10: 479-500.
- Almor T, Tarba S and Margalit A. (2014) Maturing, technology-based, born-global companies: Surviving through mergers and acquisitions. *Management International Review* 54: 421-444.
- Andersen O. (1993) On the internationalization process of firms: A critical analysis. *Journal of International Business Studies* 24: 209-231.
- Andersen O. (1997) Internationalization and market entry mode: A review of theories and conceptual frameworks. *Management International Review* 37: 27-42.
- Anderson E and Gatignon H. (1986) Modes of foreign entry: A transaction cost analysis and propositions. *Journal of International Business Studies* 17: 1-26.
- Andersson S. (2000) The internationalization of the firm from an entrepreneurial perspective. *International Studies of Management & Organization* 30: 63-92.
- Andersson S, Evers N and Kuivalainen O. (2014) International new ventures: Rapid internationalization across different industry contexts. *European Business Review* 26: 390-405.
- Antoncic B and Hisrich RD. (2000) Intrapreneurship modeling in transition economies: A comparison of Slovenia and the United States. *Journal of Developmental Entrepreneurship* 5: 21-40.
- Arrow KJ. (1974) *The limits of organization*, New York: WW Norton&Company.
- Aspelund A, Koed Madsen T and Moen Ø. (2007) A review of the foundation, international marketing strategies, and performance of international new ventures. *European Journal of Marketing* 41: 1423-1448.
- Audia PG and Greve HR. (2006) Less likely to fail: Low performance, firm size, and factory expansion in the shipbuilding industry. *Management Science* 52: 83-94.
- Aulakh PS, Kotabe M and Sahay A. (1996) Trust and performance in cross-border marketing partnerships: A behavioral approach. *Journal of International Business Studies* 27: 1005-1032.

- Autio E. (2005) Creative tension: The significance of Ben Oviatt's and Patricia McDougall's article 'Toward a theory of international new ventures'. *Journal of International Business Studies* 36: 9-19.
- Autio E, Sapienza HJ and Almeida JG. (2000) Effects of age at entry, knowledge intensity, and imitability on international growth. *Academy of management journal* 43: 909-924.
- Autio E, Yli-Renko H and Salonen A. (1997) International growth of young technology-based firms: A resource-based network model. *Journal of Enterprising Culture* 5: 57-73.
- Baack DW, Dow D, Parente R, et al. (2015) Confirmation bias in individual-level perceptions of psychic distance: An experimental investigation. *Journal of International Business Studies* 46: 938-959.
- Baaij MG and Slangen AHL. (2013) The role of headquarters-subsidiary geographic distance in strategic decisions by spatially disaggregated headquarters. *Journal of International Business Studies* 44: 941-952.
- Baer M, Dirks KT and Nickerson JA. (2013) Microfoundations of strategic problem formulation. *Strategic Management Journal* 34: 197-214.
- Barkema HG and Drogendijk R. (2007) Internationalising in small, incremental or larger steps? *Journal of International Business Studies* 38: 1132-1148.
- Barkema HG and Vermeulen F. (1997) What differences in the cultural backgrounds of partners are detrimental for international joint ventures? *Journal of International Business Studies* 28: 845-864.
- Bauer K, Fischer T and Einsiedler A. (2011) dena-Marktanalyse 2011: Status der erneuerbaren Energien weltweit. Deutsche Energie-Agentur gmbH (dena).
- Baum M, Schwens C and Kabst R. (2011a) International as opposed to domestic new venturing: The moderating role of perceived barriers to internationalization. *International Small Business Journal* 31: 536-562.
- Baum M, Schwens C and Kabst R. (2011b) A typology of international new ventures: Empirical evidence from high-technology industries. *Journal of Small Business Management* 49: 305-330.
- Bell J. (1995) The internationalization of small computer software firms: A further challenge to "stage" theories. *European Journal of Marketing* 29: 60-75.
- Bell J, McNaughton R and Young S. (2001) 'Born-again global' firms: An extension to the 'born global' phenomenon. *Journal of International Management* 7: 173-189.
- Benito GRG, Petersen B and Welch LS. (2009) Towards More Realistic Conceptualisations of Foreign Operation Modes. *Journal of International Business Studies* 40: 1455-1470.
- Benkenstein M, Thom M, Weiß J, et al. (2009) Internationalisierung von Dienstleistungen: Ein Handbuch für Unternehmen aus dem Bereich erneuerbare Energien. Rostock/Berlin: Exportpotenziale von Dienstleistungen im Bereich Erneuerbare Energien.
- Bergmann S. (2009) Erschließung von Auslandsmärkten durch Dienstleistungen im Bereich Erneuerbare Energien. Analyse anhand einer Unternehmensbefragung. Berlin: Institut für Ökologische Wirtschaftsforschung.
- Berry H, Guillén MF and Zhou N. (2010) An institutional approach to cross-national distance. *Journal of International Business Studies* 41: 1460-1480.
- Bloodgood JM. (2006) Venture adolescence: Internationalization and performance implications of maturation *International Journal of Entrepreneurial Behavior & Research* 12: 67-85.
- Bloodgood JM, Sapienza HJ and Almeida JG. (1996) The internationalization of new high-potential U.S. ventures: Antecedents and outcomes. *Entrepreneurship: Theory & Practice* 20: 61-76.
- Bonaccorsi A. (1992) On the relationship between firm size and export intensity. *Journal of International Business Studies* 23: 605-635.
- Bonaglia F, Goldstein A and Mathews JA. (2007) Accelerated internationalization by emerging markets' multinationals: The case of the white goods sector. *Journal of World Business* 42: 369-383.

- Brewer PA. (2007) Operationalizing psychic distance: A revised approach. *Journal of International Marketing* 15: 44-66.
- Brouthers KD. (2002) Institutional, cultural and transaction cost influences on entry mode choice and performance. *Journal of International Business Studies* 33: 203-221.
- Brouthers KD. (2013) A retrospective on: Institutional, cultural and transaction cost influences on entry mode choice and performance. *Journal of International Business Studies* 44: 14-22.
- Brouthers KD and Brouthers LE. (2001) Explaining the national cultural distance paradox. *Journal of International Business Studies* 32: 177-189.
- Brouthers KD and Hennart J-F. (2007) Boundaries of the firm: Insights from international entry mode research. *Journal of Management* 33: 395-425.
- Brouthers KD and Nakos G. (2004) SME entry mode choice and performance: A transaction cost perspective. *Entrepreneurship: Theory & Practice* 28: 229-247.
- Bruton GD, Ahlstrom D and Li H-L. (2010) Institutional theory and entrepreneurship: Where are we now and where do we need to move in the future? *Entrepreneurship theory and practice* 34: 421-440.
- Buckley PJ. (2002) Is the international business research agenda running out of steam? *Journal of International Business Studies* 33: 365-373.
- Buckley PJ and Casson M. (1976) *The future of the multinational enterprise*: Macmillan London.
- Buckley PJ and Casson MC. (2009) The Internalisation Theory of the Multinational Enterprise: A Review of the Progress of a Research Agenda after 30 Years. *Journal of International Business Studies* 40: 1563-1580.
- Buckley PJ, Devinney TM and Louviere JJ. (2007) Do Managers Behave the Way Theory Suggests? A Choice-Theoretic Examination of Foreign Direct Investment Location Decision-Making. *Journal of International Business Studies* 38: 1069-1094.
- Burgel O and Murray GC. (1998) The international activities of British start-up companies in high-technology industries: Differences between internationalisers and non-internationalisers. In: P. D. Reynolds and W. D. Bygrave NMC, S. Manigart, C. M. Mason, G. Meyer and K. Shaver (eds) *Frontiers of entrepreneurship research*. Babson Park, MA: Babson College, 447-463.
- Busenitz LW, Gómez C and Spencer JW. (2000) Country institutional profiles: Unlocking entrepreneurial phenomena. *Academy of management journal* 43: 994-1003.
- Byrne BM. (2010) *Structural equation modeling with AMOS: Basic concepts, applications, and programming*, New York, NY: Routledge.
- Calof JL. (1993) The mode choice and change decision process and its impact on international performance. *International Business Review* 2: 97-120.
- Caprar DV, Devinney TM, Kirkman BL, et al. (2015) Conceptualizing and measuring culture in international business and management: From challenges to potential solutions. *Journal of International Business Studies* 46: 1011-1027.
- Casillas JC and Acedo FJ. (2013) Speed of the internationalization process of the firm. *International Journal of Management Reviews* 15: 15-29.
- Casillas JC, Barbero JL and Sapienza HJ. (2015) Knowledge acquisition, learning, and the initial pace of internationalization. *International Business Review* 24: 102-114.
- Casillas JC and Moreno-Menéndez AM. (2014) Speed of the internationalization process: The role of diversity and depth in experiential learning. *Journal of International Business Studies* 45: 85-101.
- Chang S-J and Rhee JH. (2011) Rapid FDI expansion and firm performance. *Journal of International Business Studies* 42: 979-994.
- Chang S-J, van Witteloostuijn A and Eden L. (2010) From the editors: Common method variance in international business research. *Journal of International Business Studies* 41: 178-184.

- Chao MC-H and Kumar V. (2010) The impact of institutional distance on the international diversity–performance relationship. *Journal of World Business* 45: 93-103.
- Chetty S and Campbell-Hunt C. (2004) A strategic approach to internationalization: A traditional versus a "born-global" approach. *Journal of International Marketing* 12: 57-81.
- Chetty S, Johanson M and Martín Martín O. (2014) Speed of internationalization: Conceptualization, measurement and validation. *Journal of World Business* 49: 633-650.
- Child J. (1972) Organizational structure, environment and performance: The role of strategic choice. *Sociology* 6: 1-22.
- Child J, Rodrigues SB and Frynas JG. (2009) Psychic distance, its impact and coping modes. *Management International Review* 49: 199-224.
- Clarke JE, Tamaschke R and Liesch PW. (2013) International experience in international business research: A conceptualization and exploration of key themes. *International Journal of Management Reviews* 15: 265-279.
- Clement MB. (1999) Analyst forecast accuracy: Do ability, resources, and portfolio complexity matter? *Journal of Accounting and Economics* 27: 285-303.
- Coeurderoy R, Cowling M, Licht G, et al. (2012) Young firm internationalization and survival: Empirical tests on a panel of 'adolescent' new technology-based firms in Germany and the UK. *International Small Business Journal* 30: 472-492.
- Coeurderoy R and Murray G. (2008) Regulatory environments and the location decision: Evidence from the early foreign market entries of new-technology-based firms. *Journal of International Business Studies* 39: 670-687.
- Contractor F. (2007) Is international business good for companies? The evolutionary or multi-stage theory of internationalization vs. the transaction cost perspective. *Management International Review* 47: 453-475.
- Contractor FJ, Hsu C-C and Kundu SK. (2005) Explaining export performance: A comparative study of international new ventures in Indian and Taiwanese software industry. *Management International Review* 45: 83-110.
- Coviello N and Munro H. (1997) Network relationships and the internationalisation process of small software firms. *International Business Review* 6: 361-386.
- Coviello NE. (2006) The network dynamics of international new ventures. *Journal of International Business Studies* 37: 713-731
- Coviello NE and Jones MV. (2004) Methodological issues in international entrepreneurship research. *Journal of Business Venturing* 19: 485-508.
- Coviello NE and Martin KAM. (1999) Internationalization of service SMEs: An integrated perspective from the engineering consulting sector. *Journal of International Marketing* 7: 42-66.
- Coviello NE and Munro HJ. (1995) Growing the entrepreneurial firm: Networking for international market development. *European Journal of Marketing* 29 49 - 61.
- Cyert RM and March JG. (1964) *A behavioral theory of the firm*: Englewood Cliffs, N.J : Prentice-Hall.
- De Clercq D, Sapienza HJ, Yavuz RI, et al. (2012) Learning and knowledge in early internationalization research: Past accomplishments and future directions. *Journal of Business Venturing* 27: 143-165.
- Delios A and Beamish PW. (1999) Ownership strategy of Japanese firms: Transactional, institutional, and experience influences. *Strategic Management Journal* 20: 915-933.
- Dellestrand H and Kappen P. (2012) The effects of spatial and contextual factors on headquarters resource allocation to MNE subsidiaries. *Journal of International Business Studies* 43: 219-243.

- Demirbag M, Tatoglu E and Glaister KW. (2007) Factors influencing perceptions of performance: The case of western FDI in an emerging market. *International Business Review* 16: 310-336.
- Dikova D. (2009) Performance of foreign subsidiaries: Does psychic distance matter? *International Business Review* 18: 38-49.
- DiMaggio PJ and Powell WW. (1983) The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review* 48: 147-160.
- Dimitratos P, Voudouris I, Plakoyiannaki E, et al. (2012) International entrepreneurial culture—Toward a comprehensive opportunity-based operationalization of international entrepreneurship. *International Business Review* 21: 708-721.
- Dow D. (2009) Factors influencing perceptions of psychic distance. *51st Annual Meeting of the Academy of International Business*. San Diego.
- Dow D and Karunaratna A. (2006) Developing a multidimensional instrument to measure psychic distance stimuli. *Journal of International Business Studies* 37: 578-602.
- Dow D and Larimo J. (2009) Challenging the conceptualization and measurement of distance and international experience in entry mode choice research. *Journal of International Marketing* 17: 74-98.
- Dunning JH. (1980) Towards an eclectic theory of international production: Some empirical tests. *Journal of International Business Studies* 11: 9-31.
- Dunning JH. (1988) The eclectic paradigm of international production: A restatement and some possible extensions. *Journal of International Business Studies* 19: 1-31.
- Dunning JH. (1993) *Multinational enterprises and the global economy*, Wokingham, England: Addison-Wesley.
- Dunning JH. (2000) The eclectic paradigm as an envelope for economic and business theories of MNE activity. *International Business Review* 9: 163-190.
- Eden L. (2009) Letter from the editor-in-chief: Time in international business. *Journal of International Business Studies* 40: 535-538.
- Eden L and Miller SR. (2004) Distance matters: Liability of foreignness, institutional distance and ownership strategy. *Advances in International Management* 16: 187-221.
- Elbanna S and Child J. (2007) The influence of decision, environmental and firm characteristics on the rationality of Strategic Decision-Making*. *Journal of Management Studies* 44: 561-591.
- Ellis PD. (2000) Social ties and foreign market entry. *Journal of International Business Studies* 31: 443-469.
- Ellis PD. (2008) Does psychic distance moderate the market size-entry sequence relationship? *Journal of International Business Studies* 39: 351-369.
- Eriksson K, Johanson J, Majkgard A, et al. (1997) Experiential knowledge and cost in the internationalization process. *Journal of International Business Studies* 28: 337-360.
- Erramilli MK. (1991) The experience factor in foreign market entry behavior of service firms. *Journal of International Business Studies* 22: 479-501.
- Evangelista F. (2005) Qualitative insights into the international new venture creation process. *Journal of International Entrepreneurship* 3: 179-198.
- Evans J, Bridson K, Byrom J, et al. (2008a) Revisiting retail internationalisation: Drivers, impediments and business strategy. *International Journal of Retail & Distribution Management* 36: 260-280.
- Evans J and Mavondo FT. (2002) Psychic distance and organizational performance: An empirical examination of international retailing operations. *Journal of International Business Studies* 33: 515-532.
- Evans J, Mavondo FT and Bridson K. (2008b) Psychic distance: Antecedents, retail strategy implications, and performance outcomes. *Journal of International Marketing* 16: 32-63.

- Fernhaber SA, Gilbert BA and McDougall PP. (2008) International entrepreneurship and geographic location: An empirical examination of new venture internationalization. *Journal of International Business Studies* 39: 267-290.
- Filatotchev I, Liu XH, Buck T, et al. (2009) The export orientation and export performance of high-technology SMEs in emerging markets: The effects of knowledge transfer by returnee entrepreneurs. *Journal of International Business Studies* 40: 1005-1021.
- Fornell C and Larcker DF. (1981) Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research* 18: 39-50.
- Forsgren M. (2002) The concept of learning in the Uppsala internationalization process model: A critical review. *International Business Review* 11: 257-277.
- Fredrickson JW and Iaquinto AL. (1989) Inertia and creeping rationality in strategic decision processes. *Academy of management journal* 32: 516-542.
- Freeman S, Edwards R and Schroder B. (2006) How smaller born-global firms use networks and alliances to overcome constraints to rapid internationalization. *Journal of International Marketing* 14: 33-63.
- Freeman S, Giroud A, Kalfadellis P, et al. (2012a) Psychic distance and environment: Impact on increased resource commitment. *European Business Review* 24: 351-373.
- Freeman S, Hutchings K and Chetty S. (2012b) Born-globals and culturally proximate markets. *Management International Review* 52: 425-460.
- Furrer O, Liu BS-C and Sudharshan D. (2000) The relationships between culture and service quality perceptions: Basis for cross-cultural market segmentation and resource allocation. *Journal of Service Research* 2: 355-371.
- Gabrielsson M, Gabrielsson P and Dimitratos P. (2014) International entrepreneurial culture and growth of international new ventures. *Management International Review* 54: 445-471.
- Gabrielsson M, Kirpalani VHM, Dimitratos P, et al. (2008) Born globals: Propositions to help advance the theory. *International Business Review* 17: 385-401.
- Gaur AS, Delios A and Singh K. (2007) Institutional environments, staffing strategies, and subsidiary performance. *Journal of Management* 33: 611-636.
- Gaur AS and Lu JW. (2007) Ownership strategies and survival of foreign subsidiaries: Impacts of institutional distance and experience. *Journal of Management* 33: 84-110.
- Gençtürk EF and Kotabe M. (2001) The effect of export assistance program usage on export performance: A contingency explanation. *Journal of International Marketing* 9: 51-72.
- George G, Wiklund J and Zahra SA. (2005) Ownership and the internationalization of small firms. *Journal of Management* 31: 210-233.
- Ghoshal S and Bartlett CA. (1990) The multinational corporation as an interorganizational network. *Academy of Management Review* 15: 603-626.
- Glaister A, Liu Y, Sahadev S, et al. (2014) Externalizing, internalizing and fostering commitment: The case of born-global firms in emerging economies. *Management International Review* 54: 473-496.
- Gomez C and Sanchez JI. (2005) HR's strategic role within MNCs: Helping build social capital in Latin America. *The International Journal of Human Resource Management* 16: 2189-2200.
- Greenwood R, Oliver C, Sahlin K, et al. (2008) The sage handbook of organizational institutionalism. London: SAGE Publications.
- Griffith DA, Myers MB and Harvey MG. (2006) An investigation of national culture's influence on relationship and knowledge resources in interorganizational relationships between Japan and the United States. *Journal of International Marketing* 14: 1-32.
- Gupta V, Hanges PJ and Dorfman P. (2002) Cultural clusters: Methodology and findings. *Journal of World Business* 37: 11-15.
- Hagen B and Zucchella A. (2014) Born global or born to run? The long-term growth of born global firms. *Management International Review* 54: 497-525.

- Hair JF, Black WC, Babin BJ, et al. (2010) *Multivariate data analysis: A global perspective*, Upper Saddle River, N.J.: Pearson Prentice Hall.
- Håkanson L and Ambos B. (2010) The antecedents of psychic distance. *Journal of International Management* 16: 195-210.
- Håkanson L, Ambos B, Schuster A, et al. (2016) The psychology of psychic distance: Antecedents of asymmetric perceptions. *Journal of World Business* 51: 308-318.
- Hambrick DC and Mason PA. (1984) Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review* 9: 193-206.
- Harris S and Wheeler C. (2005) Entrepreneurs' relationships for internationalization: Functions, origins and strategies. *International Business Review* 14: 187-207.
- Harzing A-W. (2003) The role of culture in entry-mode studies: From neglect to myopia? . In: Joseph L. C. Cheng and Hitt MA (eds) *Managing multinationals in a knowledge economy: Economics, culture*. Emerald Group Publishing Limited, 75-127.
- Hashai N. (2011) Sequencing the expansion of geographic scope and foreign operations by born global firms. *Journal of International Business Studies* 42: 995-1015.
- Hashai N and Almor T. (2004) Gradually internationalizing 'born global' firms: An oxymoron? *International Business Review* 13: 465-483.
- Haunschild PR and Beckman CM. (1998) When Do Interlocks Matter?: Alternate Sources of Information and Interlock Influence. *Administrative Science Quarterly* 43: 815-844.
- He X, Brouthers KD and Filatotchev I. (2013) Resource-based and institutional perspectives on export channel selection and export performance. *Journal of Management* 39: 27-47.
- Hennart J-F. (1989) Can the "New Forms of Investment" substitute for the "Old Forms?" A transaction costs perspective. *Journal of International Business Studies* 20: 211-234.
- Hennart J-F and Larimo J. (1998) The impact of culture on the strategy of multinational enterprises: Does national origin affect ownership decisions? *Journal of International Business Studies* 29: 515-538.
- Hennart JF. (1988) A transaction costs theory of equity joint ventures. *Strategic Management Journal* 9: 361-374.
- Herrmann P and Datta DK. (2006) CEO experiences: Effects on the choice of FDI entry mode. *Journal of Management Studies* 43: 755-778.
- Hilmersson M and Jansson H. (2012) International network extension processes to institutionally different markets: Entry modes and processes of exporting SMEs. *International Business Review* 21: 682-693.
- Hitt MA, Dacin MT, Levitas E, et al. (2000) Partner selection in emerging and developed market contexts: Resource-based and organizational learning perspectives. *Academy of management journal* 43: 449-467.
- Hitt MA, Hoskisson RE and Kim H. (1997) International diversification: Effects on innovation and firm performance in product-diversified firms. *Academy of management journal* 40: 767-798.
- Hofstede G. (1991) *Cultures and organizations: Software of the mind*, London: New York : McGraw-Hill.
- Hofstede GH. (2010) *Cultures and organizations : software of the mind : intercultural cooperation and its importance for survival*, New York: New York : McGraw-Hill.
- Hsu CC and Boggs DJ. (2003) Internationalization and performance: Traditional measures and their decomposition. *Multinational Business Review* 11: 23-50.
- Hurmerinta-Peltomäki L. (2003) Time and internationalisation theoretical challenges set by rapid internationalisation. *Journal of International Entrepreneurship* 1: 217-236.
- Hutzschenreuter T and Horstkotte J. (2013) Performance effects of international expansion processes: The moderating role of top management team experiences. *International Business Review* 22: 259-277.

- Hutzschenreuter T, Kleindienst I and Lange S. (2015) The concept of distance in international business research: A review and research agenda. *International Journal of Management Reviews* Online Version
- Hutzschenreuter T and Voll JC. (2007) Performance effects of “added cultural distance” in the path of international expansion: The case of German multinational enterprises. *Journal of International Business Studies* 39: 53-70.
- Hymer S. (1976) *The international operations of national firms: A study of direct foreign investment*, Boston: MIT Press.
- Jantunen A, Puumalainen K, Saarenketo S, et al. (2005) Entrepreneurial orientation, dynamic capabilities and international performance. *Journal of International Entrepreneurship* 3: 223-243.
- Johanson J and Vahlne J-E. (1977) The internationalization process of the firm: A model of knowledge development and increasing foreign market commitments. *Journal of International Business Studies* 8: 23-32.
- Johanson J and Vahlne J-E. (2009) The Uppsala internationalization process model revisited: From liability of foreignness to liability of outsidership. *Journal of International Business Studies* 40: 1411-1431.
- Johanson J and Wiedersheim-Paul F. (1975) The internationalization of the firm - Four swedish cases. *Journal of Management Studies* 12: 305-323.
- Jones MV. (1999) The internationalization of small high-technology firms. *Journal of International Marketing* 7: 15-41.
- Jones MV, Coviello N and Tang YK. (2011) International entrepreneurship research (1989–2009): A domain ontology and thematic analysis. *Journal of Business Venturing* 26: 632-659.
- Jones MV and Coviello NE. (2005) Internationalisation: Conceptualising an entrepreneurial process of behaviour in time. *Journal of International Business Studies* 36: 284-303.
- Jonsson S and Lindbergh J. (2010) The impact of institutional impediments and information and knowledge exchange on SMEs’ investments in international business relationships. *International Business Review* 19: 548-561.
- Kahneman D and Tversky A. (1979) Prospect Theory: An Analysis of Decision under Risk. *Econometrica* 47: 263-291.
- Kalinic I and Forza C. (2012) Rapid internationalization of traditional SMEs: Between gradualist models and born globals. *International Business Review* 21: 694-707.
- Keupp MM and Gassmann O. (2009) The past and the future of international entrepreneurship: A review and suggestions for developing the field. *Journal of Management* 35: 600-633.
- Khavul S, Pérez-Nordtvedt L and Wood E. (2010) Organizational entrainment and international new ventures from emerging markets. *Journal of Business Venturing* 25: 104-119.
- Kim WC, Hwang P and Burgers WP. (1993) Multinationals' diversification and the risk-return trade-off. *Strategic Management Journal* 14: 275-286.
- Kiss A and Danis W. (2010) Social networks and speed of new venture internationalization during institutional transition: A conceptual model. *Journal of International Entrepreneurship* 8: 273-287.
- Kiss AN and Danis WM. (2008) Country institutional context, social networks, and new venture internationalization speed. *European Management Journal* 26: 388-399.
- Knight GA and Cavusgil ST. (1996) The born global firm: A challenge to traditional internationalization theory. In: Cavusgil ST and Madsen TK (eds). Greenwich: JAI Press, 11-26.
- Knight GA and Cavusgil ST. (2004) Innovation, organizational capabilities, and the born-global firm. *Journal of International Business Studies* 35: 124-141.
- Knight GA and Liesch PW. (2015) Internationalization: From incremental to born global. *Journal of World Business* (in press).

- Kogut B and Singh H. (1988) The Effect of National Culture on the Choice of Entry Mode. *Journal of International Business Studies* 19: 411-432.
- Kostova T, Roth K and Dacin MT. (2008) Institutional theory in the study of multinational corporations: A critique and new directions. *Academy of Management Review* 33: 994-1006.
- Kostova T and Zaheer S. (1999) Organizational legitimacy under conditions of complexity: The case of the multinational enterprise. *The Academy of Management review* 24: 64-81.
- Krishnan R, Martin X and Noorderhaven NG. (2006) When does trust matter to alliance performance? *Academy of management journal* 49: 894-917.
- Kuivalainen O, Sundqvist S and Servais P. (2007) Firms' degree of born-globalness, international entrepreneurial orientation and export performance. *Journal of World Business* 42: 253-267.
- Kumar MVS. (2009) The relationship between product and international diversification: The effects of short-run constraints and endogeneity. *Strategic Management Journal* 30: 99-116.
- Kutschker M, Bäurle I and Schmid S. (1997) International evolution, international episodes, and international epochs: Implications for managing internationalization. *Management International Review* 37: 101-124.
- Lee H-U and Park J-H. (2008) The Influence of top management team international exposure on international alliance formation. *Journal of Management Studies* 45: 961-981.
- Lehr U, Lutz C and Edler D. (2012) Green jobs? Economic impacts of renewable energy in Germany. *Energy Policy* 47: 358-364.
- Lewis JI and Wiser RH. (2007) Fostering a renewable energy technology industry: An international comparison of wind industry policy support mechanisms. *Energy Policy* 35: 1844-1857.
- Li JJ, Poppo L and Zhou KZ. (2010) Relational mechanisms, formal contracts, and local knowledge acquisition by international subsidiaries. *Strategic Management Journal* 31: 349-370.
- Li L. (2005) Is regional strategy more effective than global strategy in the US service industries? *MIR: Management International Review* 45: 37-57.
- Li L, Qian G and Qian Z. (2012a) Early internationalization and performance of small high-tech "born-globals". *International Marketing Review* 29: 536-561.
- Li L, Qian G and Qian Z. (2012b) The performance of small and medium-sized technology-based enterprises: Do product diversity and international diversity matter? *International Business Review* 21: 941-956.
- Liesch PW, Weerawardena J, Sullivan Mort G, et al. (2007) Introduction - The early and rapid internationalization of the firm. *Journal of World Business* 42: 232-235.
- Liesch PW, Welch LS and Buckley PJ. (2011) Risk and uncertainty in internationalisation and international entrepreneurship studies: Review and conceptual development. *Management International Review* 51: 851-873.
- Lin W-T. (2012) Family ownership and internationalization processes: Internationalization pace, internationalization scope, and internationalization rhythm. *European Management Journal* 30: 47-56.
- LiPuma JA, Newbert SL and Doh JP. (2013) The effect of institutional quality on firm export performance in emerging economies: A contingency model of firm age and size. *Small Business Economics* 40: 817-841.
- Lopez LE, Kundu SK and Ciravegna L. (2009) Born global or born regional? Evidence from an exploratory study in the Costa Rican software industry. *Journal of International Business Studies* 40: 1228-1238.
- Lu J and Beamish P. (2006) SME internationalization and performance: Growth vs. profitability. *Journal of International Entrepreneurship* 4: 27-48.

- Luo Y. (2002) Contract, cooperation, and performance in international joint ventures. *Strategic Management Journal* 23: 903-919.
- Madsen TK and Servais P. (1997) The internationalization of born globals: An evolutionary process? *International Business Review* 6: 561-583.
- Maitland E and Sammartino A. (2015) Managerial cognition and internationalization. *Journal of International Business Studies* 46: 733-760.
- Makino S and Delios A. (1996) Local knowledge transfer and performance: Implications for alliance formation in Asia. *Journal of International Business Studies* 27: 905-927.
- Mathews JA and Zander I. (2007) The international entrepreneurial dynamics of accelerated internationalisation. *Journal of International Business Studies* 38: 387-403.
- McDougall P, Shane S and Oviatt BM. (1994) Explaining the formation of international new ventures: The limits of theories from international business research. *Journal of Business Venturing* 9: 469-487.
- Meyer JW and Rowan B. (1977) Institutionalized Organizations: Formal Structure as Myth and Ceremony. *American journal of sociology* 83: 340-363.
- Meyer KE, Estrin S, Bhaumik SK, et al. (2009) Institutions, resources, and entry strategies in emerging economies. *Strategic Management Journal* 30: 61-80.
- Mjoen H and Tallman S. (1997) Control and performance in international joint ventures. *Organization Science* 8: 257-274.
- Morgan-Thomas A and Jones MV. (2009) Post-entry internationalization dynamics: Differences between SME's in the development speed of their international sales. *International Small Business Journal* 27: 71-97.
- Mudambi R and Zahra SA. (2007) The survival of international new ventures. *Journal of International Business Studies* 38: 333-352.
- Musteen M, Francis J and Datta DK. (2010) The influence of international networks on internationalization speed and performance: A study of Czech SMEs. *Journal of World Business* 45: 197-205.
- Nadkarni S, Herrmann P and Perez PD. (2011) Domestic mindsets and early international performance: The moderating effect of global industry conditions. *Strategic Management Journal* 32: 510-531.
- Nummela N, Saarenketo S, Jokela P, et al. (2014) Strategic decision-making of a born global: A comparative study from three small open economies. *Management International Review* 54: 527-550.
- Nummela N, Saarenketo S and Puumalainen K. (2004) A global mindset--A prerequisite for successful internationalization? *Canadian Journal of Administrative Sciences* 21: 51-64.
- O'Grady S and Lane HW. (1996) The psychic distance paradox. *Journal of International Business Studies* 27: 309-333.
- Oehme M and Bort S. (2015) SME internationalization modes in the German biotechnology industry: The influence of imitation, network position, and international experience. *Journal of International Business Studies* 46: 629-655.
- Oesterle M-J and Wolf J. (2011) 50 years of management international review and IB/IM research an inventory and some suggestions for the field's development. *Management International Review* 51: 735-754.
- Oviatt BM and McDougall PP. (1994) Toward a theory of international new ventures. *Journal of International Business Studies* 25: 45-64.
- Oviatt BM and McDougall PP. (1997) Challenges for internationalization process theory: The case of international new ventures. *Management International Review* 37: 85-99.
- Oviatt BM and McDougall PP. (2005) Defining international entrepreneurship and modeling the speed of internationalization. *Entrepreneurship: Theory & Practice* 29: 537-554.
- Oviatt BM, McDougall PP and Loper M. (1995) Global start-ups: Entrepreneurs on a worldwide stage. *The Academy of Management Executive* 9: 30-44.

- Pan Y and Tse DK. (2000) The hierarchical model of market entry modes. *Journal of International Business Studies* 31: 535-554.
- Peng MW. (2003) Institutional transitions and strategic choices. *The Academy of Management review* 28: 275-296.
- Peng MW, Wang DYL and Jiang Y. (2008) An institution-based view of international business strategy: A focus on emerging economies. *Journal of International Business Studies* 39: 920-936.
- Pla-Barber J and Escribá-Esteve A. (2006) Accelerated internationalisation: Evidence from a late investor country. *International Marketing Review* 23: 255-278.
- Podsakoff PM, MacKenzie SB, Jeong-Yeon L, et al. (2003) Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology* 88: 879-903.
- Pogrebnnyakov N and Maitland CF. (2011) Institutional distance and the internationalization process: The case of mobile operators. *Journal of International Management* 17: 68-82.
- Poppo L, Zhou KZ and Ryu S. (2008) Alternative origins to interorganizational trust: An interdependence perspective on the shadow of the past and the shadow of the future. *Organization Science* 19: 39-55.
- Prashantham S and Young S. (2011) Post-entry speed of international new ventures. *Entrepreneurship: Theory & Practice* 35: 275-292.
- Preece SB, Miles G and Baetz MC. (1999) Explaining the international intensity and global diversity of early-stage technology-based firms. *Journal of Business Venturing* 14: 259-281.
- Puig F, González-Loureiro M and Ghauri P. (2014) Internationalisation for survival: The case of new ventures. *Management International Review* 54: 653-673.
- Ramos E, Acedo FJ and Gonzalez MR. (2011) Internationalisation speed and technological patterns: A panel data study on Spanish SMEs. *Technovation* 31: 560-572.
- Rasmussen ES and Madsen TK. (2002) The born global concept. *Paper presented at the 28th EIBA Conference 2002*. Athens, Greece.
- Reagans R and McEvily B. (2003) Network structure and knowledge transfer: The effects of cohesion and range. *Administrative Science Quarterly* 48: 240-267.
- Reid S. (1983) Firm internationalization, transaction costs and strategic choice. *International Marketing Review* 1: 44-56.
- Rennie MW. (1993) Born global. *McKinsey Quarterly* 4: 45-52.
- Reuber AR and Fischer E. (1997) The influence of the management team's international experience on the internationalization behaviors of SMEs. *Journal of International Business Studies* 28: 807-825.
- Rialp A, Rialp J and Knight GA. (2005) The phenomenon of early internationalizing firms: What do we know after a decade (1993-2003) of scientific inquiry? *International Business Review* 14: 147-166.
- Rugman AM and Verbeke A. (2004) A perspective on regional and global strategies of multinational enterprises. *Journal of International Business Studies* 35: 3-18.
- Rugman AM and Verbeke A. (2005) Towards a theory of regional multinationals: A transaction cost economics approach. *Management International Review* 45: 5-17.
- Rugman AM and Verbeke A. (2007) Liabilities of regional foreignness and the use of firm-level versus country-level data: A response to Dunning et al.(2007). *Journal of International Business Studies* 38: 200-205.
- Ruigrok W, Amann W and Wagner H. (2007) The internationalization-performance relationship at Swiss firms: A test of the S-shape and extreme degrees of internationalization. *Management International Review* 47: 349-368.
- Ruigrok W and Wagner H. (2003) Internationalization and performance: An organizational learning perspective. *Management International Review* 43: 63-83.

- Ruokonen M and Saarenketo S. (2009) The strategic orientations of rapidly internationalizing software companies. *European Business Review* 21: 17-41.
- Sapienza HJ, Autio E, George G, et al. (2006) A capabilities perspective on the effects of early internationalization on firm survival and growth *Academy of Management Review* 31: 914-933.
- Schilke O and Cook KS. (2015) Sources of alliance partner trustworthiness: Integrating calculative and relational perspectives. *Strategic Management Journal* 36: 276-297.
- Schwens C, Eiche J and Kabst R. (2011) The moderating impact of informal institutional distance and formal institutional risk on SME entry mode choice. *Journal of Management Studies* 48: 330-351.
- Schwens C and Kabst R. (2009) How early opposed to late internationalizers learn: Experience of others and paradigms of interpretation. *International Business Review* 18: 509-522.
- Schwens C and Kabst R. (2011) Internationalization of young technology firms: A complementary perspective on antecedents of foreign market familiarity. *International Business Review* 20: 60-74.
- Schwens C, Steinmetz H and Kabst R. (2010) Growth and internationalization: Renewable energy and new technology-based firms innovation and international corporate growth. In: Gerybadze A, Hommel U, Reiners HWW, et al. (eds). Springer Berlin Heidelberg, 113-123.
- Scott R. (2008) *Institutions and organizations - Ideas and interests*, Thousand Oaks: Sage Publications.
- Scott WR. (1995) *Institutions and organizations*: Thousand Oaks, SAGE.
- Shenkar O. (2001) Cultural distance revisited: Towards a more rigorous conceptualization and measurement of cultural differences. *Journal of International Business Studies* 32: 519-535.
- Shenkar O. (2012) Cultural distance revisited: Towards a more rigorous conceptualization and measurement of cultural differences. *Journal of International Business Studies* 43: 1-11.
- Shrader RC. (2001) Collaboration and performance in foreign markets: The case of young high-technology manufacturing firms. *Academy of management journal* 44: 45-60.
- Shrader RC, Oviatt BM and McDougall PP. (2000) How new ventures exploit trade-offs among international risk factors: Lessons for the accelerated internationalization of the 21st century. *Academy of management journal* 43: 1227-1247.
- Simon HA. (1955) A behavioral model of rational choice. *The Quarterly Journal of Economics* 69: 99-118.
- Simon HA. (1957) *Models of man; social and rational*, Oxford, England: Wiley.
- Sleuwaegen L and Onkelinx J. (2014) International commitment, post-entry growth and survival of international new ventures. *Journal of Business Venturing* 29: 106-120.
- Slovic P, Fischhoff B and Lichtenstein S. (1977) Behavioral decision theory. *Annual review of psychology* 28: 1-39.
- Sousa CMP and Bradley F. (2006) Cultural Distance and psychic distance: Two peas in a pod? *Journal of International Marketing* 14: 49-70.
- Sousa CMP and Lengler J. (2009) Psychic distance, marketing strategy and performance in export ventures of Brazilian firms. *Journal of Marketing Management* 25: 591-610.
- Stinchome AL. (1965) Social structure and organizations. In: March J (ed) *Handbook of Organizations*. Chicago, IL: Rand McNally, 142-193.
- Sui S and Baum M. (2014) Internationalization strategy, firm resources and the survival of SMEs in the export market. *Journal of International Business Studies* 45: 821-841.
- Sui S, Yu Z and Baum M. (2012) Prevalence and longitudinal trends of early internationalisation patterns among Canadian SMEs. *International Marketing Review* 29: 519-535.
- Sullivan D. (1994) Measuring the degree of internationalization of a firm. *Journal of International Business Studies* 25: 325-342.

- Tallman S and Li J. (1996) Effects of international diversity and product diversity on the performance of multinational firms. *Academy of management journal* 39: 179-196.
- Tan H and Mathews JA. (2015) Accelerated internationalization and resource leverage strategizing: The case of Chinese wind turbine manufacturers. *Journal of World Business* 50: 417-427.
- Tan J and Peng MW. (2003) Organizational slack and firm performance during economic transitions: two studies from an emerging economy. *Strategic Management Journal* 24: 1249-1263.
- Tihanyi L, Griffith DA and Russell CJ. (2005) The effect of cultural distance on entry mode choice, international diversification, and MNE performance: A meta-analysis. *Journal of International Business Studies* 36: 270-283.
- Trudgen R and Freeman S. (2014) Measuring the performance of born-global firms throughout their development process: The roles of initial market selection and internationalisation speed. *Management International Review* 54: 551-579.
- Tsang EWK. (2002) Acquiring knowledge by foreign partners from international joint ventures in a transition economy: Learning-by-doing and learning myopia. *Strategic Management Journal* 23: 835-854.
- Tuppura A, Saarenketo S, Puumalainen K, et al. (2008) Linking knowledge, entry timing and internationalization strategy. *International Business Review* 17: 473-487.
- Venkatraman N and Ramanujam V. (1986) Measurement of business performance in strategy research: A comparison of approaches. *The Academy of Management review* 11: 801-814.
- Vermeulen F and Barkema H. (2002) Pace, rhythm, and scope: Process dependence in building a profitable multinational corporation. *Strategic Management Journal* 23: 637-653.
- Vernon R. (1966) International investment and international trade in the product cycle. *The Quarterly Journal of Economics* 80: 190-207.
- Wagner H. (2004) Internationalization speed and cost efficiency: Evidence from Germany. *International Business Review* 13: 447-463.
- Weerawardena J, Mort GS, Liesch PW, et al. (2007) Conceptualizing accelerated internationalization in the born global firm: A dynamic capabilities perspective. *Journal of World Business* 42: 294-306.
- Weerawardena J, Mort GS, Salunke S, et al. (2015) The role of the market sub-system and the socio-technical sub-system in innovation and firm performance: A dynamic capabilities approach. *Journal of the Academy of Marketing Science* 43: 221-239.
- Welch DE and Welch LS. (1996) The internationalization process and networks: A strategic management perspective. *Journal of International Marketing* 4: 11-28.
- Welch LS and Luostarinen R. (1988) Internationalization: Evolution of a concept. *Journal of General Management* 14: 34-55.
- Wiersema MF and Bantel KA. (1992) Top management team demography and corporate strategic change. *Academy of management journal* 35: 91-121.
- Williams DW and Gregoire DA. (2015) Seeking commonalities or avoiding differences? Re-conceptualizing distance and its effects on internationalization decisions. *Journal of International Business Studies* 46: 253-284.
- Williamson OE. (1979) Transaction-cost economics: The governance of contractual relations. *Journal of Law and Economics* 22: 233-261.
- Winch GW and Bianchi C. (2006) Drivers and dynamic processes for SMEs going global. *Journal of Small Business and Enterprise Development* 13: 73-88.
- Wright RW. (1970) Trends in international business research. *Journal of International Business Studies* 1: 109-123.
- Xu D and Shenkar O. (2002) Institutional distance and the multinational enterprise. *The Academy of Management review* 27: 608-618.

- Yan A and Gray B. (1994) Bargaining power, management control, and performance in United States-China joint ventures: A comparative case study. *The Academy of Management Journal* 37: 1478-1517.
- Yip GS, Biscarri JG and Monti JA. (2000) The role of the internationalization process in the performance of newly internationalizing firms. *Journal of International Marketing* 8: 10-35.
- Yiu D and Makino S. (2002) The choice between joint venture and wholly owned subsidiary: An institutional perspective. *Organization Science* 13: 667-683.
- Yli-Renko H, Autio E and Sapienza HJ. (2001) Social capital, knowledge acquisition, and knowledge exploitation in young technology-based firms. *Strategic Management Journal* 22: 587-613.
- Yli-Renko H, Autio E and Tontti V. (2002) Social capital, knowledge, and the international growth of technology-based new firms. *International Business Review* 11: 279-304.
- Zaheer S, Schomaker MS and Nachum L. (2012) Distance without direction: Restoring credibility to a much-loved construct. *Journal of International Business Studies* 43: 18-27.
- Zahra SA. (2005) A theory of international new ventures: A decade of research. *Journal of International Business Studies* 36: 20-28.
- Zahra SA and George G. (2002) International entrepreneurship: The current status of the field and future research agenda. In: Hitt MA, Ireland RD, Camp SM, et al. (eds) *Strategic Entrepreneurship: Creating a New Mindset*. Oxford: Blackwell Publishing, 255-288.
- Zahra SA, Ireland RD and Hitt MA. (2000) International expansion by new venture firms: International diversity, mode of market entry, technological learning, and performance. *Academy of management journal* 43: 925-950.
- Zeng Y, Shenkar O, Lee S-H, et al. (2013) Cultural differences, MNE learning abilities, and the effect of experience on subsidiary mortality in a dissimilar culture: Evidence from Korean MNEs. *Journal of International Business Studies* 44: 42-65.
- Zhou L, Aiqi Wu and Barnes BR. (2012) The effects of early internationalization on performance outcomes in young international ventures: The mediating role of marketing capabilities. *Journal of International Marketing* 20: 25-45.
- Zhou L and Wu A. (2014) Earliness of internationalization and performance outcomes: Exploring the moderating effects of venture age and international commitment. *Journal of World Business* 49: 132-142.
- Zhou L, Wu W-p and Luo X. (2007) Internationalization and the performance of born-global SMEs: The mediating role of social networks. *Journal of International Business Studies* 38: 673-690.
- Zucchella A, Palamara G and Denicolai S. (2007) The drivers of the early internationalization of the firm. *Journal of World Business* 42: 268-280.