Most multinational enterprises (MNEs) pursue growth and aim to expand their international portfolios of operating locations. Often, however, they face important limits to growth. This dissertation studies several such limits and aims to restore balance in the international business literature by addressing some of the biases built over time. Firms' home-country activities may act as a limiting factor in their international expansion trajectory, but have received little attention to date. One of the dissertation chapters reveals that a firm’s domestic footprint, in combination with domestic environmental uncertainties, shapes its cross-cultural expansion strategy and may limit the complexity it adds to its portfolio. The subsequent chapter indicates that behavioral factors have an important bearing on international portfolio growth decisions, more so than hitherto assumed. It finds that the net growth of an MNE’s country portfolio in the face of cultural and economic diversity within that portfolio hinges on cues as to how well the MNE is performing relative to its own past performance and the current performance of its peers. The last chapter indicates that firms’ domestic activities not only shape their internationalization moves; the reverse also holds true. Emerging economy firms seem to benefit domestically from cross-border acquisitions only under certain circumstances, most notably when they are already characterized by a relatively high degree of internationalization. The chapters thus collectively study the linkages between a firm’s domestic and international activities and shed new light on the various limits that firms face in their international growth trajectories.

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Multinational Enterprises and Limits to International Growth: Links between Domestic and Foreign Activities in a Firm’s Portfolio
Multinational Enterprises and Limits to International Growth: Links between Domestic and Foreign Activities in a Firm's Portfolio

Multinationale Ondernemingen en Grenzen aan Internationale Groei: Verbanden tussen Binnenlandse en Buitenlandse Activiteiten in Portfolios van Bedrijven

Thesis

to obtain the degree of Doctor from the Erasmus University Rotterdam
by command of the rector magnificus

Prof.dr. R.C.M.E. Engels

and in accordance with the decision of the Doctorate Board.

The public defence shall be held on Thursday, 7th February 2019 at 13:30 hrs

by

Guus Hendriks
born in Nijmegen, the Netherlands
PREFACE

It is March 2013 and I hastily scour the corridors of VŠE University of Economics in Prague. I am desperately looking for some place quiet and away from the unusually rowdy bunch of students that swarm my ‘alma mater’. Why did they need to pick exactly this day to organize a career fair in this otherwise tranquil building? On a day packed with meetings at work, I am spending my lunch break to have a Skype meeting with Pursey Heugens and Arjen Slangen about a Ph.D. project to which I applied. Having worked for a couple of companies over the past two-and-a-half years, this is a great opportunity for me to make my way back into academia, the world that intrigued me ever since I embarked upon undergraduate studies in my hometown of Nijmegen. I chose this site mainly because my WiFi login details are still valid and it is at the same time fairly close to but also far enough from work. Seeing no alternative, I settle for the remote stairwell at Rajská budova, or Paradise building, and try to make myself comfortable on the toughest possible concrete riddled with pebbles in many shapes and sizes. If only there was a way to block the sunlight from blinding my eyes. I open my laptop and connect to Skype...

Now, five years later, I hold this dissertation in my hands. It is the product of four-and-a-half years of hard work, worry, determination, and as I dare to see it, even some moments of inspiration. The Ph.D. trajectory has been different in so many ways than I had imagined when I ran down those corridors back in Prague. It provides and demands a great deal of flexibility. You somehow master the technique of imagining what it is like to go and live in five countries at the same time. But it is also a trajectory that has allowed me to travel to Copenhagen, Paris, Vancouver, València, Reading, another time to València, once more to Vancouver, once again to Reading, New Orleans, Anaheim, Cambridge, Dubai, Atlanta and one more time to Copenhagen. Apart from teaching me that it can be quite pleasant to revisit places, the Ph.D. journey has allowed me to develop myself in so many ways. It is a true privilege to be able to study interesting phenomena, discuss findings and pass knowledge on to others.

I owe my gratitude to my advisors Pursey and Arjen who have provided me with all the resources needed to strengthen my skills and find my way as an IB scholar. I would have never guessed beforehand that I needed to think about such issues as installing a trophy cabinet; the perfect evidence that we have worked together as a great team. In a similar vein, I would like to thank my colleagues at the Department of Strategic Management and
Entrepreneurship for all the valuable discussions, support and feedback. It has been a great experience to be part of such a vibrant Ph.D. community and my thanks go out to Ilaria, Radina, Michael, Stefan, Omar, Ron, Saeedeh, Lance, Somendra, Taghi, Thijs, Jitse, Joe and all the others I have come to know during my time at the department. Special thanks go to Emre and Krishnan, my partners in crime from day one. I am sure that we keep in touch and will always look back on great memories together. I would also like to thank ERIM and Erasmus Trustfonds for the financial support, without which a research visit to the University of Cambridge would not have been possible. It has been a dream come true to spend time at this truly inspirational institution and I thank Jochem and the Ph.D. community there for their great hospitality.

I would not have gotten this far without the fantastic support received outside the workplace as well. There is no way to describe what you mean to me, Viktorija, and without you I certainly would not have made it. Of course, I am grateful to my parents Riek and Erik, my sister Nienke, Marlon and their girls for our shared time together, which certainly helps me to recharge the batteries. Likewise, I thank my close friends Koen and Rick for all of our memories and our shared laughs every time we meet. And I would like to thank Ana with whom I could reflect on the same Ph.D. experience. Collectively, you all provided a great deal of support, with this dissertation as its result.

Now it is time to explore the corridors of a new university. Thanks to my experiences over the last five years, it is a new challenge that I look forward to and one that I approach with confidence.

Guus Hendriks
Leiden, May 2018
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CHAPTER 1

INTRODUCTION
1.1 Multinational Enterprises and International Growth

International growth by multinational enterprises (MNEs) has been extensively studied in the international business (IB) literature. Over the 50-odd years since the inception of the field, scholars have addressed many different aspects of such growth strategies, such as speed and selection in the internationalization process (Johanson & Vahlne, 1977), or foreign entry strategies (Anderson & Gatignon, 1986). IB scholars are in a unique position to shed light on the broader phenomenon of firms’ internationalization, as they draw on IB-specific theories of the multinational enterprise (Buckley & Casson, 1976; Kogut & Zander, 1993). However, possibly because of the specific focus of such theories, certain biases developed over time in the IB literature, which this dissertation aims to address in an attempt to restore balance in that literature.

First, the chapters in this dissertation address a bias in the IB literature towards the foreign activities of MNEs, in line with several recent studies (Asmussen, 2009; Hejazi, 2007). The focus on such questions as why multinationals exist, how they enter foreign markets, and how they expand internationally, may have prompted the field to overlook that many MNEs still perform the bulk of their activities in their respective home countries (Oh & Rugman, 2014; Rugman & Verbeke, 2007). As such, home-country contexts may leave important traces on the internationalization patterns of firms (Cuervo-Cazurra, 2011; Luo & Wang, 2012; Guler & Guillen, 2010). This dissertation suggests that it is important to study a firm’s domestic footprint and aims to consider how it interacts with domestic environmental uncertainties and subsequently shapes internationalization strategies. In a similar vein, little is known about the reverse side of that relationship, namely how internationalization moves affect a firm’s domestic activities, even though many such moves are made with the domestic market in mind (Meyer, 2015; Williamson & Raman, 2011; Gubbi, Aulakh, Ray, Sarkar, & Chittoor, 2010).

Second, the IB literature tended to be characterized by a bias towards individual events in relation to (de)internationalization, until recent studies emphasized the relevance of interdependencies in firm portfolios (Nachum & Song, 2011; Hutzschenreuter & Matt, 2017; Hutzschenreuter & Voll, 2008). This dissertation aims to contribute to that literature stream by looking at the relationship between a firm’s domestic footprint and additions to portfolios, as well as the understudied link between portfolio characteristics and decision makers’ chosen adjustments of such a portfolio. Both the focus on
firms’ domestic activities and their country portfolios allows this dissertation to paint a more complete picture of firms’ international growth strategies and the possible limits they face in their expansion trajectory.

1.2 RESEARCH QUESTIONS

This dissertation thus aims to find answers to the following general research questions:

*How do firms’ domestic activities and domestic environments shape their international growth strategies?*

*How do characteristics of a portfolio, and evaluations of that portfolio, influence the growth direction taken by a firm?*

*How do international expansion moves affect firms’ domestic activities?*

1.3 DISSERTATION OVERVIEW

To study these research questions, this dissertation is divided in three chapters. Chapter 2 addresses the first question, Chapter 3 the second and the last question is attended to in Chapter 4.

1.3.1. HOW A FIRM’S DOMESTIC FOOTPRINT AND DOMESTIC ENVIRONMENTAL UNCERTAINTIES JOINTLY SHAPE ADDED CULTURAL DISTANCES

Chapter 2 presents a study which addresses firms’ domestic footprint and the ways in which it shapes their internationalization strategies. This study finds that an MNE’s decision to add cultural distance to its portfolio depends to a considerable degree on attention devoted to its home country, in relation to the importance of that market and several types of domestic uncertainties. Many of the largest MNEs worldwide still perform a substantial share of their activities in their domestic markets and are thus said to have a sizeable domestic footprint. This chapter draws on the attention-based view and resource dependency theory to argue that such footprints likely lead senior executives to devote more attention to their home market, which goes at the expense of the attention devoted to internationalization as represented by
smaller amounts of cultural distance added to a firm’s portfolio. However, this relationship is contingent upon two types of domestic uncertainties about local resource contributions. More endogenous types, such as policy uncertainty, lead executives to devote even more headquarters attention domestically, whereas the exogenous domestic demand uncertainty that cannot be influenced leads firms to allocate relatively more headquarters attention to foreign expansions to hedge against that uncertainty. Robust support for this framework is found in a sample of the world’s largest retailers, which covers the period 2000-2007, thereby indicating that a firm’s domestic footprint and domestic uncertainties jointly shape international expansion strategies.

1.3.2. COUNTRY PORTFOLIO DIVERSITY, PERFORMANCE FEEDBACK AND FIRMS’ PORTFOLIO GROWTH STRATEGIES

The study presented in Chapter 3 equally applies a portfolio perspective, but jointly considers country entry and exit to better understand MNEs’ net portfolio growth strategies. This chapter finds that the net growth of an MNE’s country portfolio in the face of cultural and economic diversity within that portfolio hinges on cues as to how well the MNE is performing relative to its own past performance and the current performance of its peers. It thereby indicates that behavioral factors have an important bearing on international portfolio growth decisions. In a panel data analysis of all foreign entry and exit decisions made by 186 retailers from 24 home countries over the period 2001–2007, such firms are found to restrict growth as a function of portfolio diversity. Their performance relative to historical and social aspirations is important, however. This study suggests that decision makers are more willing to undertake radical strategic actions when their firm’s performance is below aspirations, as they further restrict growth in response to portfolio diversity. When their firm’s performance is above aspirations, decision makers are not as concerned about problems associated with portfolio diversity, and are less inclined to restrict growth as a function of that diversity. Building on performance feedback theory, this study thus suggests that changes to a firm’s country portfolio are shaped by the extant level of diversity in that portfolio and feedback on how well it is managed.
1.3.3. When do cross-border acquisitions increase the domestic productivity of emerging market multinationals?

The third chapter similarly aims to better map the conditions that influence growth decisions, but looks at domestic productivity growth after cross-border acquisitions by emerging market multinationals. It aims to better understand an ‘upgrading paradox’ and draws on new internalization theory, and the concept of resource recombination in particular, to build a theoretical framework that focuses on firms’ ability to recombine and meld knowledge, despite possible recombination barriers to growth. This chapter suggests that firms characterized by low-to-medium degrees of internationalization rely more extensively on formal structures and procedures to facilitate recombination efforts, which is likely to stifle the entrepreneurial activity that is needed for complex resource bundling processes. Firms characterized by medium-to-high degrees of internationalization likely build expertise and increasingly realize that rules should be interpreted as guidelines, so that they rely on better developed recombination capabilities that can be used to successfully upgrade the domestic asset base. Moreover, this chapter argues that recombination processes are co-shaped by characteristics of the acquisition itself, firm-specific aspects, as well as home-environment characteristics, and considers the moderating roles of relative acquisition size, whether a firm is state-owned, and the magnitude of domestic institutional voids. In a sample of 382 cross-border acquisitions by manufacturing firms from 13 emerging economies, strong and consistent support is found for the suggested hypotheses.

1.4 Joint contributions

Table 1 summarizes the key aspects of each of the three studies. Further insight into how the chapters are linked can be drawn from Figure 1, albeit in more abstract terms. That is, the chapters collectively study the linkages between a firm’s domestic and international activities, whereby the latter could either refer to characteristics of its country portfolio or to international expansion moves with the aim of accessing resources for home use. Whereas Chapter 2 addresses the link between a firm’s domestic footprint and additions to that firm’s country portfolio, Chapter 3 studies how foreign entry and exit decisions are shaped by the characteristics of such a portfolio. Chapter 4 links back to a firm’s domestic activities, as it studies how cross-border acquisitions allow that firm to grow domestic productivity.
Four themes are central to this dissertation. First, the chapters shed more light on the various limits that firms face in their international growth trajectories, whether it relates to domestic activities that exhaust scarce attention (Chapter 2), cognitive constraints in relation to the management of portfolio diversity (Chapter 3), or internal recombination barriers to growth (Chapter 4). IB research is uniquely positioned to study firms’ internationalization or various sub-aspects of such processes, which may inadvertently direct attention away from the factors that limit or even prevent firms from internationalizing. Having addressed three limits to international growth, and shown in what way they exert important effects, this dissertation aims to spark further research in this area.

Second, this dissertation highlights the important role that a firm’s home country plays for its internationalization decisions; a role that IB studies only recently started to explore in greater detail (Cuervo-Cazurra, 2011; Estrin, Meyer, Nielsen, & Nielsen, 2016; Hutzschenreuter & Gröne, 2009; Lee & Weng, 2013; Shinkle & Kriauciunas, 2010; Wang, Hong, Kafouros, & Wright, 2012). As Chapters 2 and 3 indicate, MNEs’ domestic activities are often sizeable and their home environments may leave important traces on such firms’ pattern of internationalization. Even though this stream in the IB literature has considered various home-country characteristics, a firm’s domestic footprint has typically been omitted as an explanatory factor when studies aimed to explain firms’ behavior outside their home market. Future IB studies are recommended to study in more detail what role a firm’s domestic footprint plays in internationalization processes, in addition to characteristics of their home environments. Moreover, other research opportunities relate to
studying how internationalization may shape changes of such footprints; an area in some measure addressed by Chapter 4.

Third, this dissertation promotes a portfolio perspective similar to that taken by recent IB studies (Hutzschenreuter & Matt, 2017; Hutzschenreuter, Voll, & Verbeke, 2011; Chan, Makino, & Isobe, 2006; Belderbos & Zou, 2009). Activities in a portfolio, including entries into new businesses and exits from existing ones, are likely to be interrelated, which calls for a broader perspective on the operations of MNEs, which themselves can be conceptualized as portfolios of operating locations (Nachum & Song, 2011). Whereas Chapter 4 contrasts the international part of an MNE’s portfolio with its domestic segment, Chapter 2 and 3 consider the country portfolios of retail firms and adjustments to it in the form of additions or net growth changes. Since Chapter 3 for example shows that managerial responses on performance feedback take the form of a wider reflection on the entire portfolio of corporate activities, we thus contribute to those recent studies. More research is needed, however, to better understand the scope of activities in an MNE’s portfolio, as well as the interaction between business line and country segments in such a portfolio.

Fourth, this dissertation develops a behavioral perspective of firms’ management of country portfolios, thereby contributing to recent IB studies that started to explore the relevance of performance feedback (Lin, 2014; Lages, Jap, & Griffith, 2008) and attention (Bouquet, Morrison, & Birkinshaw, 2009; Bouquet & Birkinshaw, 2008) for the activities of MNEs. Perhaps because its origins can be traced back to economics-based theories (Hymer, 1976; Buckley & Casson, 1976), the field of IB has not embraced behavioral perspectives as much as adjacent fields have done (cf. Gavetti, 2012; Desai, 2016; Gavetti, Greve, Levinthal, & Ocasio, 2012). This dissertation suggests that attention, aspirations, and the direction of aspirational performance gaps in particular, matter for firms’ international growth decisions. By taking those factors in consideration, the field of IB could benefit from behavioral theory’s insights and come to a more complete explanation for inter-firm and intertemporal differences in managerial tendencies to pursue positive or negative international growth, as reflected by additions to a portfolio or net portfolio contraction.
| Study 1  
(Chapter 2) | Key concepts | Theoretical lens | Empirical setting | Data and methods | Main findings |
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<td>Attention-based view; Resource dependence theory</td>
<td>Retail industry</td>
<td>Foreign entries by 218 firms from 17 home countries over 2000-2007 period (1,095 observations)</td>
<td>A firm’s domestic footprint and domestic uncertainties jointly shape cross-cultural expansion strategies, different uncertainty types moderate the relationship in different ways</td>
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| Study 2  
(Chapter 3) | Country portfolio diversity; portfolio growth; foreign entries and exits; performance relative to aspirations | Behavioral theory (performance feedback) | Retail industry | Foreign entry and exit decisions of 186 firms from 24 home countries over 2001-2007 period (752 observations) | The evolution of a firm’s country portfolio is shaped by its extant level of diversity and feedback on how well that diversity is managed |
| Study 3  
(Chapter 4) | Domestic productivity growth; cross-border acquisitions; firm’s degree of internationalization; recombination barriers and capabilities | New internalization theory (resource recombination) | Manufacturing firms from emerging markets | 382 cross-border acquisitions by firms from 13 emerging economies | The relationship between a firm’s degree of internationalization and its growth of domestic productivity following a cross-border acquisition is U-shaped and moderated by factors that shape recombination barriers and capabilities |
CHAPTER 2

HOW A FIRM’S DOMESTIC FOOTPRINT AND DOMESTIC ENVIRONMENTAL UNCERTAINTIES JOINTLY SHAPE ADDED CULTURAL DISTANCES

ABSTRACT

Even though many firms conduct most of their business domestically, international management research has remained remarkably silent on the role of a firm’s domestic footprint in its internationalization strategy. We shed light on that role by exploring how the size of a firm’s domestic footprint influences the cultural distance that the firm adds to its country portfolio when expanding internationally. Integrating resource dependence theory and the attention-based view, we hypothesize that a firm’s domestic footprint has a negative relationship with added cultural distance (ACD), and that domestic policy uncertainty strengthens this relationship whereas domestic demand uncertainty weakens it. We find robust support for our hypotheses in a sample of the world's largest retailers covering the period 2000-2007, indicating that a firm’s domestic footprint and domestic environmental uncertainties jointly shape cross-cultural expansion strategies. Our findings suggest that ACDs reflect headquarters executives’ desire to avoid ineffective foreign expansions, hinting at possible biases in studies of the performance effects of distance.¹

¹ This study has been published as: Hendriks, G., Slangen, A.H.L., & Heugens, P.P.M.A.R. How a firm’s domestic footprint and domestic environmental uncertainties jointly shape added cultural distances: The roles of resource dependence and headquarters attention. Journal of Management Studies, 55(6): 883-909.
2.1 INTRODUCTION

Despite ever growing levels of international trade and foreign direct investment, most firms, including many of the world’s largest ones, still perform the bulk of their activities in their home country and can therefore be said to have a large domestic footprint (Asmussen, 2009; Carpenter and Fredrickson, 2001; Hejazi, 2007). In the most comprehensive firm-level analysis of geographic footprints to date, Oh and Rugman (2014) found that the 804 firms that appeared on Fortune’s Global 500 list over the period 1999-2008 on average realized 54% of their sales domestically, a percentage comparable to that reported for the largest British firms (Rugman and Verbeke, 2007). Like other scholars (Carpenter and Fredrickson, 2001; Yip, Rugman and Kudina, 2006), Oh and Rugman also found substantial variation across their sample firms, with more than a quarter of them even realizing all of their sales domestically.

Even though the domestic footprint of many firms has been shown to be sizeable, this footprint has been largely omitted as an explanatory factor from the substantial body of research that has aimed to explain firms’ behavior outside their home market (for a review, see Dunning and Lundan, 2008). This is unfortunate because the observed variation in domestic footprints around their sizeable mean provides an excellent opportunity to explore their role in firms’ international strategies. One of the few extant studies of this role found that the domestic footprint of exporters from Wisconsin and Illinois was negatively associated with the amount of resources they committed to their existing foreign markets (Cavusgil, 1984). Whether a firm’s domestic footprint also influences its decisions regarding expansion into new foreign markets is still unclear, however.

We aim to start filling this lacuna by exploring the effect of a firm’s domestic footprint on the so-called ‘added cultural distance’ (ACD), defined as the total cultural distance that an internationalizing firm adds to its country portfolio in a given time period (Hutzschenreuter and Voll, 2008; Hutzschenreuter, Voll and Verbeke, 2011). While international management (IM) research on cultural distance has traditionally focused on the cultural distance to individual countries (e.g., Kogut and Singh, 1988; Vaara, Sarala, Stahl and Björkman, 2012), ACD accounts for the fact that firms may enter multiple countries in the same time period. This more comprehensive approach is warranted because firms may implement expansion projects for different countries around the same time and because an individual project, such as the acquisition of a multinational competitor, may involve multiple countries. Furthermore, whereas the cultural distance to a country entered
has traditionally been calculated relative to a firm’s home country, in ACD studies that distance is calculated relative to the culturally closest country in the firm’s extant country portfolio, which is seldom the firm’s home country. The reasoning behind this approach is that the culturally closest operating location is generally the main source of cultural knowledge for a new foreign entry (Barkema, Bell and Pennings, 1996) and therefore the most appropriate reference point (Hutzschenreuter and Voll, 2008; Hutzschenreuter et al., 2011). Of the four main forms of distance (Ghemawat, 2001), cultural distance is the hardest to interpret and cope with (cf. Kostova and Zaheer, 1999: 70), suggesting that decisions on ACD may have particularly large consequences and therefore need to be made carefully. Indeed, ACD has been shown to strongly hinder further international expansion (Hutzschenreuter et al., 2011).

Integrating resource dependence theory (RDT) (e.g., Campling and Michelson, 1998; Drees and Heugens, 2013; Pfeffer and Salancik, 1978) and the attention-based view (ABV) (e.g., Bouquet, Morrison and Birkinshaw, 2009; Ocasio, 1997; Yu, Engleman and Van de Ven, 2005), we argue that firms with a larger domestic footprint are generally more dependent on domestic resources, causing the senior management of such firms to focus more of their attention on strategizing for the domestic market. As a result, these executives can devote less attention to strategy formation for international expansions and will therefore likely resort to formulating expansion strategies characterized by lower ACD. We therefore hypothesize a negative relationship between a firm’s domestic footprint and ACD.

Furthermore, we propose that this relationship is contingent upon two types of domestic uncertainties concerning local resource contributions. Specifically, we distinguish between domestic uncertainty about governmental policies and domestic uncertainty about industry demand. We argue that whereas headquarters executives often can steer the outcome of the former type of uncertainty somewhat, they usually cannot steer the outcome of the latter type. We therefore propose that domestic policy uncertainty causes firms with a larger domestic footprint to allocate even more headquarters attention domestically to resolve such uncertainty favorably, whereas domestic demand uncertainty causes them to allocate relatively more headquarters attention to foreign expansions to increase the chance that these expansions become successful hedges against that uncertainty. We therefore hypothesize that domestic policy uncertainty strengthens the negative relationship between a firm’s domestic footprint and ACD, whereas domestic demand uncertainty weakens it.
Measuring the domestic sales footprint of a sample of the world’s largest retailers and empirically relating that footprint to the cultural distance annually added by these firms over the period from 2000 to 2007, we find support for our hypotheses across a range of ACD measures and additional analyses. Overall, our findings suggest that ACDs reflect headquarters executives’ desire to avoid ineffective foreign expansions and, hence, that ACDs are self-selected. This insight has important implications, since it raises the possibility that studies of the performance effects of distance obtained biased results, given that these studies implicitly assumed that cross-national distance decisions are made without consideration of their performance consequences (cf. Shaver, 1998).

Our study makes several noteworthy contributions. First, inspired by Hillman, Withers and Collin’s observation that “there is much promise in integrating other theoretical lenses with RDT” (2009: 1416), we merge RDT with the ABV, resulting in a novel framework that explains how a firm’s domestic footprint shapes its cross-cultural expansion strategy. RDT and the ABV fit well with each other since resource dependencies need to be managed and thus logically require managerial attention, and since extant applications of both theories share a focus on the behavior of senior executives (Drees and Heugens, 2013; Bouquet et al., 2009). Second, whereas prior studies have shown that a firm’s domestic footprint is often substantial (e.g., Asmussen, 2009; Oh and Rugman, 2014), we are the first to explore its role in a firm’s internationalization strategy. Third, by showing that different types of domestic uncertainties moderate the effect of a firm’s domestic footprint on ACD in different ways, we add to the growing body of IM research on the role of home-country uncertainties (e.g., Tallman, 1988; Lee and Makhija, 2009; Holburn and Zelner, 2010). Finally, we make a methodological contribution to research on ACD by utilizing several complementary measures of the concept and showing that they yield results that are highly similar to those obtained for Hutzschenreuter et al.’s (2011) Hofstede-based measure.

2.2 THEORY AND HYPOTHESES

2.2.1. How a Firm’s Domestic Footprint Influences ACD

According to RDT, all firms depend to some degree on resources owned or controlled by external actors (Drees and Heugens, 2013; Hillman et al., 2009; Pfeffer and Salancik, 1978). Such resources encompass any tangible, financial, technological, and human means and any endorsements that firms may receive from external market and non-market actors, including governmental protection and approval, inputs from suppliers and alliance partners, and
payments by buyers (Kotter, 1979; Pfeffer and Salancik, 1978). A firm’s dependence on external resources in a given environment is determined by the firm’s vulnerability to a reduction in the provision of such resources. The more a firm’s performance would suffer from such a reduction, the greater its dependence on the resources concerned (Drees and Heugens, 2013; Pfeffer and Salancik, 1978). All else equal, the larger a firm’s domestic footprint, the more of its business it conducts domestically and, hence, the more it will likely suffer from a reduction in the resources it receives from domestic actors. That is, the larger a firm’s domestic footprint, the more dependent on domestic resources it will likely be.

According to the ABV, firms’ behavior is contingent on managerial attention, which has been defined as “the noticing, encoding, interpreting, and focusing of time and effort by organizational decision-makers on both (a) issues; the available repertoire of categories for making sense of the environment: problems, opportunities, and threats; and (b) answers: the available repertoire of action alternatives: proposals, routines, projects, programs, and procedures” (Ocasio, 1997: 189, emphasis in original). Firms have only a limited amount of managerial attention at their disposal at a given point in time for two reasons. First, individual managers have limited cognitive abilities and therefore a limited attention span (Ocasio, 1997). Second, new managers are hard to attract in the short run and need to be trained before their attention capacity can be fully utilized (Penrose, 1959; Hutzschenreuter et al., 2011). Consequently, managerial attention spent on some business areas generally goes at the expense of the managerial attention available for other areas (Barnett, 2008; Ocasio, 1997, 2011).

The distribution of managerial attention over different business areas is particularly relevant at the corporate level, since the attentional focus of managers operating at that level will likely have implications for a firm’s strategic direction and, hence, its long-term performance (Ocasio, 1997; Joseph and Ocasio, 2012; Eggers and Kaplan, 2009). Several studies have therefore used the ABV to explore the antecedents and performance implications of the way in which headquarters executives distribute their attention across businesses, particularly in an international context (Bouquet and Birkinshaw, 2008; Bouquet et al., 2009; Bouquet, Barsoux and Levy, 2015). A key finding has been that headquarters executives tend to allocate more of their attention to businesses located in countries on which their firm is more dependent for resources (Bouquet and Birkinshaw, 2008; Bouquet et al., 2015).
Since firms with a larger domestic footprint are generally more dependent on resources from their home country (as per RDT), and since firms that are more dependent on resources from a given country tend to allocate more headquarters attention to that country (as per the ABV), firms with a larger domestic footprint will likely allocate more headquarters attention domestically. Specifically, in such firms headquarters executives will likely spend a greater share of their time and cognitive capacity on strategizing for the domestic market. Among other things, they will likely be more involved in discussions with the national management team, domestic site visits, and interactions with key domestic actors such as suppliers, buyers, unions, and politicians. Consequently, firms with a larger domestic footprint will likely allocate less headquarters attention to the development of strategies for foreign expansions. As explained below, such firms will therefore likely add less cultural distance to their country portfolio when they expand internationally.

To successfully add high levels of cultural distance to their country portfolio, firms generally need to engage in extensive and complex forms of resource recombination, defined as the act of integrating a firm's extant resources with newly-accessed foreign ones (Hutzschenreuter and Voll, 2008; Hutzschenreuter, Voll and Verbeke, 2011; Verbeke and Asmussen, 2016). Consequently, the development of an effective expansion strategy involving high ACD generally demands much attention from headquarters executives. Specifically, they will likely need to put much time and effort into identifying which of their firm's extant resources from which corporate units can be successfully exploited in which potential target countries, and which complementary resources need to be accessed locally (Meyer, Mudambi and Narula, 2011). This process will likely require headquarters executives to evaluate and interpret a host of quantitative and qualitative data, engage in extensive discussions among themselves and with external advisors, and make repeated field visits to get personally acquainted with local stakeholders and their standards and habits. The chance that headquarters executives are able to attend to these activities thoroughly is lower for firms with a larger domestic footprint, since such a footprint entails a greater attentional focus on domestic strategizing. To avoid spending too little attention on strategy formation for planned international expansions and thereby lower the chance that such expansions fail, headquarters executives of firms with a larger domestic footprint will likely resort to expansion strategies that they can successfully mold with less time and effort; that is, strategies characterized by lower ACD. Consequently:
Hypothesis 1: A firm’s domestic footprint is negatively related to added cultural distance.

2.2.2. The Moderating Role of Domestic Uncertainties about Resource Contributions

Although firms with a larger domestic footprint will likely be more dependent on domestic resources and therefore more vulnerable to reductions in the provision of those resources, the likelihood of such reductions is not the same for all countries. The reason is that countries are characterized by different levels of uncertainties about the continuation of local resource contributions to firms (Dunning and Lundan, 2008; Miller, 1993). The higher these uncertainties in a given home country, the more threatening the resource dependence embodied in a firm’s domestic footprint and, hence, the more that footprint necessitates managerial action aimed at dealing with the domestic uncertainties.

According to RDT, senior managers have two main options for dealing with uncertainties about actors’ resource contributions: they can attempt to actively influence the outcome of such uncertainties or diversify them away (Drees and Heugens, 2013; Pfeffer and Salancik, 1978). The relative attractiveness of these two options will likely depend on the nature of the uncertainty surrounding local actors’ resource contributions. Whereas some forms of uncertainty are partly endogenous in that their outcome can be steered somewhat by individual firms, others are exogenous, meaning that the way in which they materialize is beyond individual firms’ sphere of influence (Mascarenhas, 1982; Folta, 1998). Hence, firms will likely attempt to influence the outcome of endogenous uncertainties about resource contributions, whereas they will diversify away exogenous uncertainties about such contributions (Campling and Michelson, 1998; Casciaro and Piskorski, 2005).

Perhaps the two most important macro-level uncertainties about resource contributions to firms are policy uncertainty and demand uncertainty (Brouthers and Dikova, 2010; Hill, Hwang and Kim, 1990; Miller, 1993). Policy uncertainty reflects the ease with which a given branch of a country’s government can undo existing policies or implement new ones (Delios and Henisz, 2003; Holburn and Zelner, 2010) and, hence, the chance that individual or groups of firms at some point lose governmental resources such as permits, subsidies, legal freedom, or protection from foreign
competition. Such uncertainty is a function of the degree to which power over policy change is concentrated in a single government branch rather than dispersed across branches (Henisz, 2000; Holburn and Zelner, 2010). Demand uncertainty, on the other hand, reflects the volatility of demand in a given national industry (Miller, 1993; Dunning and Lundan, 2008) and, thus, the chance that firms in the industry experience temporal reductions in demand at a given point in time and, accordingly, a lower inflow of monetary resources. As explained below, since domestic policy uncertainty is often partly endogenous whereas domestic demand uncertainty is generally exogenous, these two uncertainties about domestic resource contributions will likely have opposing effects on the degree to which a firm’s domestic footprint channels headquarters attention to the domestic market and, thereby, on the degree to which that footprint constrains ACD.

Policy uncertainty is often partly endogenous (Henisz and Delios, 2004; Henisz and Zelner, 2003), since policymakers’ preferences about governmental resource contributions to firms often can be somewhat influenced by headquarters executives through political activities such as lobbying, ad hoc coalition building, participation in industry bodies, and informal networking with politicians (Hillman and Hitt, 1999; Hillman, Keim and Schuler, 2004). By undertaking such activities, firms aim to resolve uncertainties about governmental resource contributions in their favor. As Hillman and colleagues state in their review of RDT, “firms actively seek to ‘create’ their environment by trying to shape government regulations that produce a more favorable environment” (2009: 1411). This is particularly true for large firms, such as the ones in our sample, as their political activities have been found to be more extensive than those of small firms (for reviews, see Hillman et al., 2004; Lux, Crook and Woehr, 2011). Large U.S. retailers, for example, aim to shape U.S. legislation to their advantage by participating in the Retail Industry Leaders Association (RILA). Soon after President Trump took office, several CEOs of RILA member firms met him at the Oval Office to inform him “about the important role the retail industry plays in our national economy” and stress “the importance of taking a thoughtful approach to tax reform” (RILA, 2017a), which might involve the introduction of a tax on foreign-sourced goods. As stated by the association’s president, “RILA will work with industry partners and policymakers alike to ensure that any legislation omits this harmful border adjustable tax” (RILA, 2017b).

Corporate political activities usually require substantial attention from senior management, since they typically require repeated face-to-face meetings with lobbyists, politicians, and potential corporate coalition partners, and subtle managerial discourse (Schuler, 1996). The higher the
policy uncertainty in a home country, we argue, the more a firm’s domestic footprint will cause headquarters executives to attend to that country in an attempt to steer the outcome of the uncertainty about governmental resource contributions. The reason is twofold. First, the higher the domestic policy uncertainty, the more the power over policy change is concentrated in a single government branch and, hence, the greater the clarity about which officials best to target with corporate political activities. Consequently, the higher the domestic policy uncertainty, the higher the chance that firms will succeed in their use of domestic political activities to obtain additional governmental resources (Holburn and Vanden Bergh, 2004; Schaffer, 1995). Securing such additional resources is generally more beneficial to firms with a larger domestic footprint, since the performance of such firms generally hinges more on domestic resources. Second, the greater the concentration of political power within a single government branch, the lower the countervailing power of other government branches and, hence, the higher the chance that firms will encounter unfavorable policy changes if they abstain from domestic political activities (Henisz, 2000; Delios and Henisz, 2003). The loss of domestic resources associated with such policy changes is generally more detrimental to firms with a larger domestic footprint, since the performance of such firms usually hinges more on continued access to domestic resources.

Since domestic policy uncertainty will likely cause firms with a larger domestic footprint to allocate even more headquarters attention domestically, such uncertainty will likely leave them with even less headquarters attention for the development of strategies for international expansions. Domestic policy uncertainty will therefore likely cause the senior management of such firms to resort to expansion strategies that can be successfully molded with even less time and effort; that is, strategies characterized by even lower ACD. Put differently:

Hypothesis 2a: Domestic policy uncertainty strengthens the negative relationship between a firm’s domestic footprint and added cultural distance.

By contrast, domestic uncertainty about industry demand is generally exogenous, since the way in which that demand materializes is largely determined by macroeconomic factors such as economic growth, inflation, and interest rates, and therefore generally beyond individual firms’ sphere of influence (Oxelheim and Wihlborg, 1987). Although firms can respond to temporal reductions in domestic demand \textit{ex post} through ‘push’ measures such as sales promotion and extra advertising, and thereby mitigate domestic revenue losses (Blattberg, Briesch and Fox, 1995; Jedidi, Mela and Gupta,
1999), they are generally unable to influence upfront the way in which domestic demand uncertainty materializes. Corporate-level executives are therefore unlikely to spend their limited attention on attempting to steer the outcome of such uncertainty.

Even though firms are generally unable to influence the way in which domestic demand uncertainty materializes, they do have an option at their disposal for effectively dealing with such uncertainty upfront. Specifically, they can diversify it away through foreign expansions, since foreign sales tend to provide a hedge against potential drops in domestic demand (Lee and Makhija, 2009; Kim, Hwang and Burgers, 1993). The higher the domestic demand uncertainty, the higher the chance that such drops in domestic customers’ resource contributions occur and, hence, the stronger a firm’s desire to turn new international expansions into successful hedges. The stronger that desire, the more strongly headquarters executives will be inclined to allocate their attention to planned international expansions rather than to the domestic market. This managerial inclination to attend relatively more to planned international expansions as a function of domestic demand uncertainty will likely be stronger, the larger a firm’s domestic footprint. The reason is that firms with a larger domestic footprint are more dependent on domestic customers’ monetary resources and will therefore likely suffer more from decreases in the inflow of such resources if domestic demand uncertainty materializes unfavorably. For such firms it is therefore even more important to turn new international expansions into successful hedges in order to diversify away domestic demand uncertainty. Domestic demand uncertainty will thus weaken the inclination of firms with a larger domestic footprint to allocate more headquarters attention domestically and, hence, their inclination to resort to expansion strategies that can be successfully molded with less headquarters attention. Therefore:

Hypothesis 2b: Domestic demand uncertainty weakens the negative relationship between a firm’s domestic footprint and added cultural distance.

2.3 METHODOLOGY
2.3.1 DATA COLLECTION AND SAMPLE
To test our hypotheses, we compiled a dataset containing all foreign market entries made by the world’s largest retailers over the period 2000-2007. The data on these entries were derived from Deloitte’s annual Global Powers of Retailing reports published over 2002-2009. Each report contains a ranking of the world's largest retailers based on their worldwide sales in a given year,
and lists the national sales markets of those retailers in that year. The 2002, 2003, and 2004 reports list the national sales markets of the world’s largest 200 retailers, whereas the subsequent editions list these markets for the world’s largest 250 retailers. Where possible, we verified the listed sales markets in firms’ annual reports. In the few cases where we encountered inconsistencies, we used the annual report data rather than Deloitte’s data.

We selected the world’s largest retailers as our research objects for several reasons. First, customer preferences in the retail industry differ substantially across national cultures (Ghemawat, 2001; De Mooij and Hofstede, 2002). In this industry, the formation of expansion strategies characterized by high ACD will therefore likely require much more headquarters attention than the formation of expansion strategies characterized by low ACD. Consequently, retailers’ ACD decisions will likely be sensitive to the amount of attention that their senior executives can devote to strategy formation for international expansions. That is, retailers’ ACD decisions are likely to vary as a function of the domestic footprint of these firms. Second, by focusing on retailers, we keep constant the motive for international expansion, since retailers mostly enter foreign countries for market-seeking reasons (Dawson, 2007; Williams, 1992). Third, hypothesis 2a is based on the assumption that domestic policy uncertainty stimulates firms to undertake domestic political activities, especially when their domestic footprint is large. This assumption is plausible for the retailing industry, and especially for large firms in that industry, since retailers have been found to undertake substantial political activities in their home countries (Harrison, 2000; Hill, Kelly, Lockhart and Van Ness, 2013). Hill et al. (2013), for instance, found that the amount of lobbying in the U.S. retail industry is comparable to that in the U.S. tobacco and defense industries, both of which are politically sensitive industries. Fourth, by focusing on retailers from around the world, we were able to construct a dataset that not only includes multiple host countries but also multiple home countries, allowing us to examine whether and how domestic uncertainties moderate the effect of a firm’s domestic footprint on its ACD decisions.

The population of our study consists of all retailers that appear on at least one of Deloitte’s annual lists published between 2002 and 2009. While the vast majority of firms feature on each of these lists, some firms appear on fewer of them, owing to bankruptcies, acquisitions, and the expansion of the list from 200 to 250 firms in 2005. Our analyses are therefore performed on an unbalanced panel of 218 firms and their internationalization decisions over a period of up to seven years, corresponding to a sample of 1095 firm-year observations. 249 observations represent cases where a firm expanded
internationally and thus added cultural distance to its country portfolio in a given year, with 43.8% of them representing expansions into multiple countries. The expanding firms originated from 17 home countries. The other 895 observations represent cases where a firm did not expand internationally in a given year. As explained below, we included these cases in our analyses in order to avoid sample selection bias.

The Deloitte reports also served as the source of data on the net profits annually realized by each sample firm, the retailing formats they used, and the level of domestic competition they faced from other retailers. Additional firm-level data were obtained from Thomson One Financial, Compustat, and firms’ annual reports. Annual data on the characteristics of the firms’ home countries were obtained from Henisz’s POLCON database, Euromonitor’s *Passport GMID* database, and the World Bank’s *World Development Indicators* and *Worldwide Governance Indicators* databases.

### 2.3.2. Dependent Variable

To determine ACD, defined here as the total cultural distance that a firm adds to its country portfolio in a given year, we followed the procedure developed by Hutzschenreuter and colleagues (Hutzschenreuter and Voll, 2008; Hutzschenreuter et al., 2011). For every firm we determined the cultural distances to the countries that it entered during our sample window, and summed the cultural distances to any countries that it entered in the same year. When a firm entered only one country in a given year, the cultural distance to that country constitutes the ACD. To identify the cultural distance to a country entered, we calculated the cultural distances between that country and each of the countries in the firm’s extant portfolio and selected the smallest of these distances. We did so because, as stated earlier, the culturally closest operating location is generally the main source of cultural knowledge for a new foreign entry and therefore the most appropriate reference point. To calculate countries’ cultural distances from each of the countries in a firm’s extant portfolio, we used an extended version of Kogut and Singh’s (1988) index that not only encompasses Hofstede’s (1980) four original dimensions but also the two more recently identified dimensions of pragmatism and indulgence (Hofstede, Hofstede and Minkov, 2010).

To assess whether the regression results for our Hofstede-based ACD measure also hold for other cultural aspects, we used a similar measurement approach to calculate the linguistic and religious distances added by a firm annually, using Dow and Karunaratna’s (2006) data. The correlation of these measures of added linguistic distance (ALD) and added religious distance
(ARD) with our ACD measure were 0.74 and 0.70, respectively, while their mutual correlation was 0.81.

2.3.3. MAIN INDEPENDENT VARIABLES

Like earlier studies, we measure a firm’s domestic footprint in a given year by the ratio of the firm’s domestic annual sales to total annual sales (Carpenter and Fredrickson, 2001; Oh and Rugman, 2014; Rugman and Verbeke, 2007). We determined a firm’s domestic sales by subtracting its foreign sales from its total sales. The data on firms’ total and foreign annual sales were obtained from their annual reports, Thomson One, and Compustat.

Domestic policy uncertainty is operationalized through Henisz’s (2000) POLCONIII index. This index measures on a zero-to-one scale the level of political constraints on policy changes in a given country in a given year based on data on: (i) the number of independent government branches (i.e., executive and lower and upper legislative) with veto power over policy changes, (ii) the homogeneity of the political party composition across the executive and legislative branches, and (iii) the heterogeneity of this composition within each legislative branch. We obtained the annual POLCONIII scores of the home countries of the sample firms from the 2013 release of Henisz’s POLCON database. Consistent with earlier research (Henisz, 2000; Holburn and Zelner, 2010), we multiplied these scores by -1, so that higher (i.e., less negative) scores indicate lower political constraints and, hence, higher policy uncertainty.

To measure domestic demand uncertainty, we derived conditional variances from time series data on countries’ annual consumption over the period 1990-2007, using generalized autoregressive conditional heteroskedasticity (GARCH) models (Bollerslev, 1986; Folta and O’Brien, 2004). These time series data were obtained from Euromonitor’s Passport GMID database. We fitted a separate GARCH model to the time series for each home country, using an M[1,1] specification (Folta and O’Brien, 2004; Lee and Makhija, 2009). That is, we estimated GARCH-in-mean models in which we set to 1 both the number of lags for the squared error terms and the number of past variances to be included in the computation of the current variance. The conditional variances resulting from GARCH models capture the uncertainty that is not predictable about any trend that may exist for each period in the time series (Folta and O’Brien, 2004; Lee and Makhija, 2009).

To test hypotheses 2a and 2b, we interacted a firm’s domestic footprint with domestic policy uncertainty and domestic demand uncertainty,
respectively. All three variables were first mean centered in order to reduce multicollinearity concerns (Aiken and West, 1991).

2.3.4. Control Variables

To rule out alternative explanations for our findings, we control for several firm and home and host-country characteristics. We control for a firm’s multinational diversity by entering the number of foreign countries in its portfolio in a given year (Barkema and Vermeulen, 1998; Tallman and Li, 1996). We do so to exclude the possibility that a firm’s domestic footprint is negatively related to ACD because firms with a larger domestic footprint are internationally less diversified and therefore have a narrower cross-cultural experience base from which they can draw (Barkema and Vermeulen, 1998). Similarly, we control for a firm’s product diversity by entering the number of retail formats in its portfolio (Gonzalez-Benito, Munoz-Gallego and Kopalle, 2005). The annual data on the number of foreign countries and retail formats in a firm’s portfolio were obtained from the Deloitte reports, which list the national markets served by the sample firms in different years and the retail formats they used from a total of 13. We control for a firm’s annual foreign sales because extant foreign operations may also require headquarters attention and therefore also cause headquarters’ executives to resort to expansion strategies characterized by lower ACD. Likewise, country exits may require headquarters attention as well. We therefore control for the number of countries that a firm exited in a given year (Chan, Makino and Isobe, 2006), using the Deloitte reports as our data source. We also include a dummy variable coded 1 for firms listed in a given annual edition of either the Franchise Times’ Top 200 or Franchise Direct’s Top 100 of the largest global franchises, and 0 otherwise (El Akremi, Perrigot and Piot-Lepetit, 2015; Lawrence and Kaufmann, 2011). We enter this variable to account for the possibility that firms that make extensive use of franchisees face lower cultural barriers in foreign countries and are therefore inclined to add higher cultural distances to their country portfolios than firms predominantly relying on equity modes (Erramilli, Agarwal and Dev, 2002). Since global brand reputation is perhaps the most important downstream asset in the retail industry (Ailawadi and Keller, 2004) and since it may facilitate expansions involving high ACD, we also enter a dummy variable coded 1 for firms listed in a given annual edition of either Interbrand’s Best 100 Global Brands or BrandFinance’s Best 25 Global Retail Brands, and 0 otherwise (Johansson, Dimotfe and Mazvancheryl, 2012). Moreover, since cross-cultural expansion has been found to be more challenging for grocery retailers than for other types of retailers (Burt, Dawson and Sparks, 2004), we enter a dummy variable coded 1 for grocery retailers and 0 otherwise. We also enter
a dummy variable coded 1 for U.S.-based retailers because 40.6% of the international expansions in our sample were undertaken by such retailers.

Besides controlling for the characteristics of firms, we also control for a range of characteristics of their home countries. We control for the size and growth rate of a firm’s domestic market by entering the natural logarithm of total annual domestic consumption and the year-on-year growth of that consumption. The data on both variables were obtained from Euromonitor’s Passport GMID database. We control for the quality of the formal institutions in each home country by entering home countries’ annual scores on the World Bank’s rule of law indicator (e.g., Liu, Feils and Scholnick, 2011), and for the intensity of peer competition in each home country by entering the number of retailers from Deloitte’s lists that were active in a given home country in a given year.

Finally, we control for three characteristics of the countries entered, notably the size and growth rate of their market, and their institutional quality. For firms entering multiple countries in a given year, market size is the average of the market sizes of the countries entered, and market growth and institutional quality are market size-weighted averages. The data on these host-country characteristics were obtained from the same sources as their home-country counterparts.

2.3.5. Estimation Method

To avoid selection bias stemming from the fact that firms only add cultural distance to their country portfolio when they expand internationally, we test our hypotheses using Heckman’s (1979) two-stage procedure, with the first stage predicting the likelihood of international expansion and the second stage the ACD characterizing such expansion. Following Wooldridge’s (1995) approach appropriate for panel data, we estimate, in the first stage, a probit model with a dependent variable coded 1 if a firm entered at least one foreign country in a given year and 0 if it did not. This model contains all of the independent variables described above, except for those measuring the characteristics of the countries entered, since these variables have missing values if a firm did not expand internationally in a given year. The first-stage model also contains two additional independent variables, i.e. a firm’s age and its profitability, since these variables may also influence the likelihood of international expansion (Guillen, 2002; Hitt, Tihanyi, Miller and Connelly, 2006). A firm’s age was measured by the number of years elapsed since the firm’s founding, whereas its profitability was measured by its annual return on sales. The first-stage model yielded a so-called inverse Mills ratio, which
was included as a correction term for selection bias in our second-stage ordinary least squares regressions of the ACD associated with international expansion. We executed Heckman’s procedure in STATA 13 and clustered the standard errors in both stages by firm. Since it takes time to execute foreign expansions and add cultural distance, we lagged all time-varying independent variables by one year.

2.4. RESULTS

The regression results for the first-stage probit model are displayed in the Appendix. They show that competition at home from other large retailers increases the likelihood of international expansion and thus acts as a ‘push’ factor in retailers’ internationalization decisions, whereas the size and growth rate of the domestic market decrease the likelihood of international expansion and thus act as home-country ‘pull’ factors. In addition, retailers with more foreign countries in their portfolio and those with a reputable brand are more likely to expand internationally, whereas those selling groceries are less likely to do so. Interestingly, neither a firm’s domestic footprint nor the interactions between that footprint and domestic policy and demand uncertainty exert significant influences on the likelihood of international expansion.

Table I reports the bivariate correlations and descriptive statistics for the variables included in the second-stage models. Except for the correlation between the indicators of a firm’s product diversity and whether a firm is a grocery retailer \(r=0.70\), all other correlations between the independent variables are lower than 0.6, suggesting the absence of multicollinearity in our regression models. This was confirmed by the fact that the variation inflation factors (VIFs) of all variables in all models reported in Tables II and III were well below the commonly-accepted multicollinearity threshold of 10, with the highest VIF being 4.66 (Hair, Black, Babin, Anderson and Tatham, 2006).

Table II shows the results of the first set of OLS regression analyses that we ran to test our hypotheses. Model 2 tests hypothesis 1, which predicted that a firm’s domestic footprint would be negatively related to ACD. This hypothesis is supported, since the regression coefficient of a firm’s domestic footprint is significantly negative in Model 2 \(p<0.01\). Models 3 and 5 test hypothesis 2a, which proposed that domestic policy uncertainty
Table I: Descriptive statistics and correlations

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<th>Variable</th>
<th>Mean</th>
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<th>17</th>
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<td>1. ACD</td>
<td>0.59</td>
<td>0.80</td>
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<td>2. ALD</td>
<td>0.54</td>
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<td>0.74</td>
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<td>3. ARD</td>
<td>0.20</td>
<td>0.24</td>
<td>0.70</td>
<td>0.81</td>
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<tr>
<td>4. Firm’s domestic footprint</td>
<td>0.75</td>
<td>0.27</td>
<td>-0.17</td>
<td>-0.28</td>
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<tr>
<td>5. Domestic policy uncertainty</td>
<td>-0.43</td>
<td>0.08</td>
<td>0.06</td>
<td>0.02</td>
<td>0.03</td>
<td>-0.17</td>
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<tr>
<td>6. Domestic demand uncertainty</td>
<td>0.77</td>
<td>0.80</td>
<td>0.04</td>
<td>0.17</td>
<td>0.12</td>
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<tr>
<td>7. Firm’s multinational diversity</td>
<td>12.2</td>
<td>12.0</td>
<td>0.13</td>
<td>0.45</td>
<td>0.35</td>
<td>-0.40</td>
<td>-0.09</td>
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</tr>
<tr>
<td>8. Firm’s product diversity</td>
<td>2.65</td>
<td>2.05</td>
<td>-0.02</td>
<td>-0.02</td>
<td>-0.02</td>
<td>-0.08</td>
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<tr>
<td>9. Firm’s total foreign sales</td>
<td>46.26</td>
<td>87.34</td>
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<td>10. Country exits by firm</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>11. Firm is large franchisor</td>
<td>0.08</td>
<td>0.27</td>
<td>0.13</td>
<td>0.10</td>
<td>0.09</td>
<td>-0.30</td>
<td>0.02</td>
<td>0.04</td>
<td>0.11</td>
<td>0.11</td>
<td>0.10</td>
<td>0.09</td>
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<tr>
<td>12. Firm has a reputable brand</td>
<td>0.48</td>
<td>0.50</td>
<td>-0.02</td>
<td>0.04</td>
<td>0.02</td>
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<td>-0.23</td>
<td>0.02</td>
<td>0.22</td>
<td>0.08</td>
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</tr>
<tr>
<td>13. Firm is grocery retailer</td>
<td>0.24</td>
<td>0.43</td>
<td>-0.09</td>
<td>0.12</td>
<td>0.09</td>
<td>0.11</td>
<td>0.45</td>
<td>0.12</td>
<td>-0.01</td>
<td>0.70</td>
<td>0.46</td>
<td>-0.02</td>
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</tr>
<tr>
<td>14. Firm is U.S. retailer</td>
<td>0.41</td>
<td>0.49</td>
<td>-0.18</td>
<td>0.36</td>
<td>0.26</td>
<td>0.42</td>
<td>0.30</td>
<td>-0.57</td>
<td>0.30</td>
<td>-0.46</td>
<td>0.06</td>
<td>-0.18</td>
<td>0.15</td>
<td>0.11</td>
<td>0.27</td>
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</tr>
<tr>
<td>15. Domestic market size</td>
<td>13.5</td>
<td>1.18</td>
<td>-0.16</td>
<td>0.25</td>
<td>0.18</td>
<td>0.45</td>
<td>-0.41</td>
<td>0.47</td>
<td>-0.20</td>
<td>0.50</td>
<td>0.07</td>
<td>0.09</td>
<td>0.10</td>
<td>0.15</td>
<td>-0.42</td>
<td>0.52</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>16. Domestic market growth</td>
<td>0.06</td>
<td>0.06</td>
<td>0.08</td>
<td>0.12</td>
<td>0.05</td>
<td>-0.17</td>
<td>-0.04</td>
<td>0.21</td>
<td>0.10</td>
<td>0.01</td>
<td>-0.03</td>
<td>0.23</td>
<td>-0.02</td>
<td>0.01</td>
<td>-0.02</td>
<td>0.23</td>
<td>-0.29</td>
<td></td>
<td></td>
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<tr>
<td>17. Domestic rule of law</td>
<td>1.50</td>
<td>0.26</td>
<td>-0.07</td>
<td>-0.02</td>
<td>0.02</td>
<td>0.14</td>
<td>0.00</td>
<td>0.15</td>
<td>-0.00</td>
<td>-0.03</td>
<td>0.06</td>
<td>0.05</td>
<td>0.03</td>
<td>0.06</td>
<td>0.07</td>
<td>0.08</td>
<td>0.04</td>
<td>-0.02</td>
<td></td>
</tr>
<tr>
<td>18. Domestic peer competition</td>
<td>70.6</td>
<td>36.1</td>
<td>-0.17</td>
<td>-0.31</td>
<td>-0.24</td>
<td>0.42</td>
<td>-0.40</td>
<td>0.51</td>
<td>-0.25</td>
<td>-0.52</td>
<td>0.08</td>
<td>-0.12</td>
<td>-0.14</td>
<td>0.16</td>
<td>-0.36</td>
<td>0.52</td>
<td>0.57</td>
<td>-0.21</td>
<td>0.12</td>
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<tr>
<td>19. Host-country market size</td>
<td>11.2</td>
<td>1.50</td>
<td>0.27</td>
<td>0.35</td>
<td>0.35</td>
<td>-0.12</td>
<td>-0.04</td>
<td>0.19</td>
<td>0.21</td>
<td>0.06</td>
<td>0.03</td>
<td>-0.00</td>
<td>0.01</td>
<td>-0.02</td>
<td>0.02</td>
<td>-0.02</td>
<td>0.13</td>
<td>-0.04</td>
<td>0.08</td>
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<tr>
<td>20. Host-country market growth</td>
<td>0.53</td>
<td>0.80</td>
<td>0.19</td>
<td>0.29</td>
<td>0.23</td>
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<td>-0.00</td>
<td>0.18</td>
<td>0.20</td>
<td>-0.08</td>
<td>-0.09</td>
<td>0.09</td>
<td>0.07</td>
<td>-0.06</td>
<td>-0.12</td>
<td>-0.14</td>
<td>-0.09</td>
<td>0.21</td>
<td>0.12</td>
</tr>
<tr>
<td>21. Host-country rule of law</td>
<td>0.04</td>
<td>0.07</td>
<td>0.04</td>
<td>0.07</td>
<td>0.03</td>
<td>0.02</td>
<td>0.01</td>
<td>-0.06</td>
<td>-0.09</td>
<td>-0.10</td>
<td>-0.09</td>
<td>-0.05</td>
<td>-0.02</td>
<td>-0.12</td>
<td>0.15</td>
<td>0.16</td>
<td>0.03</td>
<td>0.05</td>
<td></td>
</tr>
<tr>
<td>22. Inverse Mills ratio</td>
<td>1.21</td>
<td>0.98</td>
<td>-0.14</td>
<td>-0.36</td>
<td>-0.31</td>
<td>0.46</td>
<td>0.31</td>
<td>-0.14</td>
<td>-0.39</td>
<td>0.03</td>
<td>-0.13</td>
<td>-0.22</td>
<td>-0.16</td>
<td>-0.33</td>
<td>0.25</td>
<td>0.12</td>
<td>0.05</td>
<td>-0.07</td>
<td>-0.10</td>
</tr>
</tbody>
</table>

Correlations greater than |0.12| are significant at p<0.05, while those greater than |0.16| are significant at p <0.01
Table II: Second-stage OLS regression analyses of ACD

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm’s domestic footprint (H1)</td>
<td>-</td>
<td>-0.30 (.09)**</td>
<td>-0.32 (.09)**</td>
<td>-0.29 (.09)**</td>
<td>-0.29 (.09)**</td>
</tr>
<tr>
<td>Firm’s domestic footprint x Domestic policy uncertainty (H2a)</td>
<td>-</td>
<td>-</td>
<td>-0.12 (.06)†</td>
<td>-</td>
<td>-0.13 (.06)†</td>
</tr>
<tr>
<td>Firm’s domestic footprint x Domestic demand uncertainty (H2b)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.16 (.07)*</td>
<td>0.16 (.07)*</td>
</tr>
</tbody>
</table>

- Domestic policy uncertainty: 0.24 (.10)*
- Domestic demand uncertainty: 0.07 (.04)†
- Firm’s multinational diversity: 0.07 (.10)
- Firm’s product diversity: -0.04 (.11)
- Firm’s total foreign sales: 0.08 (.07)
- Country exits by firm: 0.02 (.03)
- Firm is large franchisor: 0.23 (.07)**
- Firm has a reputable brand: -0.03 (.12)
- Firm is grocery retailer: -0.51 (.21)*
- Firm is U.S. retailer: 0.10 (.24)
- Domestic market size: -0.50 (.26)†
- Domestic market growth: 0.02 (.05)
- Domestic rule of law: 0.07 (.15)
- Domestic peer competition: 0.01 (.26)
- Host-country market size: 0.11 (.03)**
- Host-country market growth: 0.02 (.03)
- Host-country rule of law: -0.02 (.02)
- Inverse Mills ratio: -0.04 (.15)

- Number of observations: 249
- Number of firms: 97
- Number of home countries: 17
- R²: 0.19
- Wald χ²: 58.4***

Intercept included but not shown; robust standard errors in parentheses;
† p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001 (two-tailed)
strengthens the negative relationship between a firm’s domestic footprint and ACD. This hypothesis is also supported, since the coefficient of the interaction between a firm’s domestic footprint and domestic policy uncertainty is significantly negative in both models \((p<0.05)\). Figure 1 displays how a firm’s domestic footprint is related to ACD at relatively low and relatively high levels of domestic policy uncertainty, i.e. at uncertainty levels one standard deviation below and above the sample mean, respectively. Consistent with our hypothesis, the figure shows that a firm’s domestic footprint is negatively related to ACD for both low and high levels of domestic policy uncertainty, but even more so for high levels.

Hypothesis 2b stated that domestic demand uncertainty weakens the negative relationship between a firm’s domestic footprint and ACD. This hypothesis also receives support, as the interaction between a firm’s domestic footprint and domestic demand uncertainty is significantly positive in both Model 4 and Model 5 \((p<0.05)\). Figure 2 shows that the relationship between a firm’s domestic footprint and ACD is indeed substantially less negative for levels of domestic demand uncertainty one standard deviation above its sample mean than for those one standard deviation below that mean.\(^4\) Table III shows the results of the second-stage OLS regressions that we ran to test the validity of our hypotheses for ALD and ARD. For both alternative dependent variables, we continue to find support for our hypotheses \((p<0.05)\).\(^5\)

![Figure 1: Effect of a firm's domestic footprint on ACD at low and high levels of domestic policy uncertainty](image)

Figure 1: Effect of a firm’s domestic footprint on ACD at low and high levels of domestic policy uncertainty
2.4.1. Additional analyses

To assess the robustness of the above results, we performed several additional analyses. First, we excluded U.S. firms from our first and second-stage samples, since such firms make up more than 40% of the observations in both samples. Second, we replaced our POLCONIII-based measure of domestic policy uncertainty by the standard deviation of a home country’s relative political extraction (RPE) score over the previous five years. This RPE score reflects a domestic government’s effectiveness in collecting taxes and using the proceeds to accomplish goals. Fluctuations in that effectiveness over time, as measured by the standard deviation of a country’s annual RPE score, imply policy uncertainty for firms (Feng, 2001; Organski and Kugler, 1980). Third, we created market size-weighted measures of a firm’s domestic footprint and the three forms of added distance. Specifically, we multiplied a firm’s domestic footprint by the natural logarithm of domestic consumption and multiplied the cultural, linguistic, and religious distances to a country entered by the natural logarithm of the country’s consumption level. The data source for countries’ annual consumption levels was Euromonitor’s Passport GMID database. Finally, we used the same source to gather data on the annual domestic market share of our sample firms and used that share as an alternative weight in the measure of a firm’s domestic footprint. Since the
### Table III: Second-stage OLS regression analyses of ALD and ARD

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
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<tbody>
<tr>
<td>Firm’s domestic footprint (H1)</td>
<td>-0.15 (.07)**</td>
<td>-0.09 (.03)**</td>
<td>-0.15 (.07)**</td>
<td>-0.09 (.03)**</td>
</tr>
<tr>
<td>Firm’s domestic footprint x Domestic policy uncertainty (H2a)</td>
<td>-</td>
<td>-0.06 (.04)*</td>
<td>-0.02 (.01)*</td>
<td>-0.06 (.04)*</td>
</tr>
<tr>
<td>Firm’s domestic footprint x Domestic demand uncertainty (H2b)</td>
<td>-</td>
<td>-</td>
<td>0.03 (.02)*</td>
<td>0.02 (.01)*</td>
</tr>
<tr>
<td>Domestic policy uncertainty</td>
<td>0.15 (.06)*</td>
<td>0.07 (.02)*</td>
<td>0.13 (.07)*</td>
<td>0.07 (.03)*</td>
</tr>
<tr>
<td>Domestic demand uncertainty</td>
<td>0.07 (.03)*</td>
<td>0.02 (.01)*</td>
<td>0.08 (.04)*</td>
<td>0.02 (.01)*</td>
</tr>
<tr>
<td>Firm’s multinational diversity</td>
<td>0.05 (.05)</td>
<td>0.01 (.02)</td>
<td>0.05 (.05)</td>
<td>0.01 (.03)</td>
</tr>
<tr>
<td>Firm’s product diversity</td>
<td>-0.14 (.07)*</td>
<td>-0.04 (.03)</td>
<td>-0.14 (.07)*</td>
<td>-0.04 (.03)</td>
</tr>
<tr>
<td>Firm’s total foreign sales</td>
<td>-0.00 (.03)</td>
<td>-0.01 (.02)</td>
<td>-0.01 (.03)</td>
<td>-0.01 (.02)</td>
</tr>
<tr>
<td>Country exits by firm</td>
<td>-0.00 (.03)</td>
<td>-0.01 (.01)</td>
<td>-0.01 (.03)</td>
<td>-0.01 (.01)</td>
</tr>
<tr>
<td>Firm is large franchisor</td>
<td>0.05 (.03)</td>
<td>0.03 (.02)*</td>
<td>0.05 (.03)</td>
<td>0.03 (.01)*</td>
</tr>
<tr>
<td>Firm has a reputable brand</td>
<td>0.05 (.05)</td>
<td>0.01 (.02)</td>
<td>0.04 (.05)</td>
<td>0.01 (.02)</td>
</tr>
<tr>
<td>Firm is grocery retailer</td>
<td>-0.12 (.12)</td>
<td>-0.05 (.05)</td>
<td>0.12 (.12)</td>
<td>-0.05 (.05)</td>
</tr>
<tr>
<td>Firm is U.S. retailer</td>
<td>-0.24 (.15)</td>
<td>-0.06 (.07)</td>
<td>-0.24 (.15)</td>
<td>-0.07 (.07)</td>
</tr>
<tr>
<td>Domestic market size</td>
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<td>-0.07 (.15)</td>
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<tr>
<td>Domestic market growth</td>
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<td>-0.02 (.02)</td>
<td>-0.01 (.03)</td>
<td>-0.02 (.02)</td>
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<td>Domestic rule of law</td>
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<td>0.06 (.04)†</td>
<td>0.09 (.08)</td>
<td>0.06 (.04)†</td>
</tr>
<tr>
<td>Domestic peer competition</td>
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<td>-0.03 (.09)</td>
<td>-0.06 (.22)</td>
<td>-0.03 (.09)</td>
</tr>
<tr>
<td>Host-country market size</td>
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<td>0.06 (.01)**</td>
<td>0.10 (.03)**</td>
<td>0.06 (.01)**</td>
</tr>
<tr>
<td>Host-country market growth</td>
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<td>0.01 (.03)</td>
<td>-0.01 (.01)</td>
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<tr>
<td>Host-country rule of law</td>
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<td>-0.00 (.02)</td>
<td>-0.02 (.01)*</td>
</tr>
<tr>
<td>Inverse Mills ratio</td>
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<td>-0.03 (.05)</td>
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<tr>
<td>Number of observations</td>
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<tr>
<td>Number of firms</td>
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<td>97</td>
<td>97</td>
<td>97</td>
</tr>
<tr>
<td>Number of home countries</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>R²</td>
<td>0.33</td>
<td>0.30</td>
<td>0.33</td>
<td>0.30</td>
</tr>
<tr>
<td>Wald χ²</td>
<td>95.8***</td>
<td>76.9***</td>
<td>99.0***</td>
<td>75.9***</td>
</tr>
</tbody>
</table>

Intercept included but not shown; robust standard errors in parentheses; † p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001 (two-tailed)
data on these shares were only available as of 2003, our first-stage sample was reduced to 618 observations and our second-stage sample to 157 observations. As summarized in Table IV, the regression results for all of these subsample analyses and alternative measurement approaches also yield substantial support for our hypotheses.

Table IV: Summary reports of additional analyses

<table>
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<tr>
<th></th>
<th>ACD</th>
<th>ALD</th>
<th>ARD</th>
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</thead>
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<td>Excluding U.S. firms¹</td>
<td>Hypothesis 1</td>
<td>Supported</td>
<td>Supported</td>
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<tr>
<td></td>
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<td>(p &lt; 0.05)</td>
<td>(p &lt; 0.05)</td>
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<tr>
<td></td>
<td>Hypothesis 2a</td>
<td>Supported</td>
<td>Marginally supported</td>
</tr>
<tr>
<td></td>
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<td>(p &lt; 0.05)</td>
<td>(p &lt; 0.10)</td>
</tr>
<tr>
<td></td>
<td>Hypothesis 2b</td>
<td>Supported</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
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<td>(p &lt; 0.05)</td>
<td>(p &lt; 0.05)</td>
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<tr>
<td>Measuring domestic policy uncertainty by the standard deviation of a home country’s RPE score</td>
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<td>Supported</td>
<td>Supported</td>
</tr>
<tr>
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<td>(p &lt; 0.01)</td>
<td>(p &lt; 0.05)</td>
</tr>
<tr>
<td></td>
<td>Hypothesis 2a</td>
<td>Supported</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(p &lt; 0.05)</td>
<td>(p &lt; 0.05)</td>
</tr>
<tr>
<td></td>
<td>Hypothesis 2b</td>
<td>Supported</td>
<td>Marginally supported</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(p &lt; 0.05)</td>
<td>(p &lt; 0.05)</td>
</tr>
<tr>
<td>Using market size-weighted measures of ACD, ALD, ARD, and a firm’s domestic footprint</td>
<td>Hypothesis 1</td>
<td>Supported</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(p &lt; 0.01)</td>
<td>(p &lt; 0.05)</td>
</tr>
<tr>
<td></td>
<td>Hypothesis 2a</td>
<td>Supported</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(p &lt; 0.05)</td>
<td>(p &lt; 0.05)</td>
</tr>
<tr>
<td></td>
<td>Hypothesis 2b</td>
<td>Supported</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(p &lt; 0.05)</td>
<td>(p &lt; 0.05)</td>
</tr>
<tr>
<td>Using a firm’s domestic market share as a weight in the measure of a firm’s domestic footprint²</td>
<td>Hypothesis 1</td>
<td>Supported</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(p &lt; 0.01)</td>
<td>(p &lt; 0.05)</td>
</tr>
<tr>
<td></td>
<td>Hypothesis 2a</td>
<td>Supported</td>
<td>Marginally supported</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(p &lt; 0.05)</td>
<td>(p &lt; 0.10)</td>
</tr>
<tr>
<td></td>
<td>Hypothesis 2b</td>
<td>Supported</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(p &lt; 0.001)</td>
<td>(p &lt; 0.05)</td>
</tr>
</tbody>
</table>

¹ 598 observations remaining for stage 1 and 148 for stage 2; ² 618 observations remaining for stage 1 and 157 for stage 2. For those analyses where the level of support for hypotheses 2a and 2b depended on whether the interaction terms were included separately or together, the most conservative level of support is reported.
2.5. DISCUSSION AND CONCLUSION

2.5.1. CONTRIBUTIONS AND IMPLICATIONS

It is well known that the value-adding activities of most large firms are regionally concentrated rather than globally spread (Rugman and Verbeke, 2004, 2007; Verbeke and Asmussen, 2016). Less well known is that the concentration of firms’ activities in their home region is explained to a large extent by their sizeable domestic footprint (Asmussen, 2009; Oh and Rugman, 2014; Osegowitsch and Sammartino, 2008). Perhaps because of scholars’ unawareness of this fact, the role of a firm’s domestic footprint in its internationalization strategy has not been studied previously. To uncover that role, we examined the relationship between a firm’s domestic footprint and its annual decisions on ACD, and how this relationship is moderated by domestic environmental uncertainties. Our finding that firms tend to add less cultural distance to their sales market portfolio when they have a larger domestic sales footprint indicates that the geographic focus of a firm’s downstream activities plays a key role in its cross-cultural expansion strategy. Furthermore, by showing that the impact of a firm’s domestic footprint on ACD critically depends on domestic environmental uncertainties, we contribute to the growing body of IM research on the role of home-country uncertainties (Tallman, 1988; Lee and Makhija, 2009; Holburn and Zelner, 2010; Sahaym, Trevino and Steensma, 2012; Tan and Chintakananda, 2016). Specifically, the opposing moderating effects of domestic policy uncertainty and domestic demand uncertainty make clear that, when considered in combination with a firm’s domestic footprint, not all domestic uncertainties shape its internationalization in the same way. Domestic policy uncertainty, on the one hand, seems to encourage firms with a larger domestic footprint to ‘fight’ more for their domestic market because such partly endogenous uncertainty seems to induce them to allocate even more headquarters attention domestically, causing them to add even less cultural distance to their country portfolio. Domestic demand uncertainty, on the other hand, seems to trigger a ‘flight’ response from them because such generally exogenous uncertainty seems to stimulate the allocation of headquarters attention to international expansions, causing a firm’s domestic footprint to constrain the addition of cultural distance to a lesser extent.

Our finding that a firm’s domestic footprint has a negative relationship with ACD and that this relationship is moderated by domestic environmental uncertainties provides support for our theoretical framework, which uniquely combines insights from RDT and the ABV. Specifically, a firm’s dependence on domestic resources and environmental uncertainties about
the provision of these resources seem to jointly determine the distribution of headquarters attention between strategizing for the domestic market and strategizing about foreign expansions and, thereby, the ACD characterizing foreign expansion strategies. These insights suggest that domestic resource dependencies, and the managerial attention they require, have noteworthy consequences for internationalization strategies and should therefore be given greater consideration in IM research (cf. Xia, Ma, Lu and Yiu, 2014). Our finding that a firm’s domestic footprint negatively affects ACD but not the likelihood of international expansion suggests that domestic resource dependence does not keep firms from expanding internationally per se, but rather leads them to opt for expansion strategies that are culturally more conservative. More specifically, our results suggest that headquarters executives tailor the content of their foreign expansion plans to the attention they can allocate to shaping these plans. Indirectly, our study thus also sheds some light on the process of international strategy formulation, which so far largely remains a black box (Maitland and Sammartino, 2015).

Overall, our findings suggest that ACDs reflect senior managers’ desire to avoid ineffective foreign expansions and, hence, that ACDs are self-selected. This insight has important implications for the stream of IM research on the performance effects of ACD and other forms of cross-national distance. Studies within that stream have explored how the performance of multinational firms as a whole is affected by ACD (Hutzschenreuter and Voll, 2008) and how the performance of individual foreign investments such as acquisitions and joint ventures is affected by the destination country’s cultural distance (for reviews, see Stahl and Voight, 2008; Tihanyi, Griffith and Russell, 2005) as well as its regulatory and economic distance (e.g., Gaur and Lu, 2007; Tsang and Yip, 2007). A substantial portion of these studies found that distance has negative performance effects. However, they did not control or correct empirically for the possibility that firms purposively select the cross-national distance associated with foreign expansion so as to avoid poor performance, a possibility for which we find supporting evidence. Consequently, they may have obtained biased estimates of the performance effects of distance, in that they might have obtained no distance effect at all had they empirically incorporated our insight that firms self-select the distance associated with foreign expansion (cf. Shaver, 1998). To rule out the possible presence of biases caused by distance self-selection, future studies of the performance consequences of distance are recommended to implement Heckman’s (1979) two-stage procedure. This procedure involves first regressing the distances observed in a sample on their likely strategic determinants to generate a correction term for distance self-selection, and then entering this correction term in the regression model used for
estimating the performance effect of distance. The use of this procedure may shed new light on the performance effects of various types of cross-national distances.

Finally, our study contributes to the measurement of added distances in the sphere of culture by complementing Hutzschenreuter and colleagues’ Hofstede-based ACD measure with novel measures of ALD and ARD. Our finding that our hypotheses also hold for the latter two measures adds to the internal validity of our study, and shows the promise of moving from a singular to a multifaceted measurement approach towards added distance.

2.5.2. Limitations and Research Suggestions

Several caveats apply to our work. First, as in several prior studies (e.g., Chan, Finnegan and Sternquist, 2011; Dawson, 2007), Deloitte’s Global Powers of Retailing reports were an important source of data for our study, even though we could not verify the reliability of these data for all of our observations. However, since we identified only some minor inconsistencies in the cases where we could verify the Deloitte data in firms’ annual reports, we believe these data to be sufficiently reliable.

Second, owing to data restrictions, we only explored the moderating effects of uncertainties about resource provisions by domestic government branches and domestic customers. However, firms may also be dependent on other domestic actors such as alliance partners, and the provision of resources by those actors may also be characterized by uncertainties (Drees and Heugens, 2013; Pfeffer and Salancik, 1978). Such uncertainties may also influence how strongly a firm’s domestic footprint curbs its cross-cultural expansion leaps. Moreover, firms in general and retailers in particular are often also dependent on foreign suppliers and other foreign actors, and the uncertainties associated with the provision of resources by such actors may also influence a firm’s internationalization strategy (Connelly, Ketchen and Hult, 2013). Future studies may attempt to shed light on these possibilities.

Third, we tested our hypotheses on a sample of retailers, which predominantly internationalize to seek new markets. Although this enabled us to keep constant the motive for internationalization, the downside is that we do not know whether our results are generalizable to Dunning’s (1998) other internationalization motives. When the aim of a foreign expansion is to gain access to natural resources, for instance, firms with a larger domestic footprint may allocate more rather than less headquarters attention to that expansion, since they may have a stronger desire to secure access to the
resources as a way of protecting their domestic sales empire. Moreover, our sample firms had an average operating history of over 50 years and an average domestic footprint of 0.75, suggesting that they have long been focused mainly on their home market. International new ventures (INVs), on the other hand, are internationally oriented from the outset and therefore usually have a substantially lower domestic footprint (Oviatt and McDougall, 1994; Knight and Cavusgil, 2004; Prashantham & Dhanaraj, 2010). The domestic footprint of such ventures may therefore show a different relationship with ACD. Future studies could explore these possibilities by analyzing other samples of firms.

Consistent with our focus on market-seeking firms, we focused on the domestic footprint of firms in terms of their sales. A firm’s domestic sales footprint mainly captures the domestic concentration of a firm’s downstream activities and not so much that of its upstream activities, whose domestic concentration is better accounted for in a firm’s domestic asset footprint (Rugman and Verbeke, 2004). Although the average domestic asset footprint has been found to be similar to the average domestic sales footprint (Hejazi, 2007; Oh and Rugman, 2014), the two types of footprints may channel headquarters executives’ attention to the domestic market to different degrees, and may therefore exert differential limiting effects on ACD. Future studies could explore this possibility.

We also encourage scholars to extend the scope of our analyses to other forms of added distance (cf. Hutzschenreuter, Kleindienst and Lange, 2014) and to other aspects of internationalization, such as the pace with which firms expand (Gao and Pan, 2010) and their choice of expansion mode (Slangen, 2011). Such extensions would contribute to the development of a more holistic view of the role of a firm’s domestic footprint in its internationalization strategy.

NOTES
1 Moreover, decisions on the use of these ‘push’ measures are unlikely to require the attention of headquarters executives, since such marketing decisions are usually at the discretion of lower-level managers (Aylmer, 1970; Picard, Boddewyn and Grosse, 1998). The same applies to analyses of the growth potential of an uncertain domestic market. Such analyses are usually carried out by the domestic management team rather than by corporate-level executives (Alfoldi, Clegg and McGaughey, 2012; Schilit, 1987).
2 For 14.9% of the observations, the ACD score equals the cultural distance from the entrant’s home country. These observations represent first foreign expansions by firms into single countries.
3 We did not use data from the GLOBE study because these data were only available for about half of the sample of international expansions.
As suggested by an anonymous reviewer, we also explored the existence of non-linear direct and moderating effects of domestic demand uncertainty. We did not find empirical support for such effects.

For all three dependent variables, we also explored the existence of a three-way interaction between a firm’s domestic footprint and the two domestic uncertainties. We did not find empirical support for such an interaction.

The detailed results of these analyses are available from us upon request.

Besides using the size of the domestic market and a firm’s domestic market share as weights in the measurement of a firm’s domestic footprint, we also explored whether the first two variables moderated the effect of a firm’s (unweighted) domestic footprint. We found that they did not, indicating that the negative effect of a firm’s domestic footprint on ACD does not vary with the size of the domestic market or with a firm’s domestic market share. We obtained similar results when we used ALD and ARD as dependent variables.

APPENDIX

First-stage probit regression of the likelihood of international expansion

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm’s domestic footprint</td>
<td>-0.26 (.16)</td>
</tr>
<tr>
<td>Firm’s domestic footprint x Domestic policy uncertainty</td>
<td>-0.01 (.11)</td>
</tr>
<tr>
<td>Firm’s domestic footprint x Domestic demand uncertainty</td>
<td>0.13 (.09)</td>
</tr>
<tr>
<td>Domestic policy uncertainty</td>
<td>0.01 (.15)</td>
</tr>
<tr>
<td>Domestic demand uncertainty</td>
<td>0.00 (.10)</td>
</tr>
<tr>
<td>Firm’s multinational diversity</td>
<td>0.91 (.17)***</td>
</tr>
<tr>
<td>Firm’s product diversity</td>
<td>0.25 (.17)</td>
</tr>
<tr>
<td>Firm’s total foreign sales</td>
<td>0.09 (.11)</td>
</tr>
<tr>
<td>Country exits by firm</td>
<td>0.03 (.09)</td>
</tr>
<tr>
<td>Firm is large franchisor</td>
<td>0.02 (.13)</td>
</tr>
<tr>
<td>Firm has a reputable brand</td>
<td>0.37 (.17)***</td>
</tr>
<tr>
<td>Firm is grocery retailer</td>
<td>-0.84 (.24)***</td>
</tr>
<tr>
<td>Firm is U.S. retailer</td>
<td>-0.64 (.37)†</td>
</tr>
<tr>
<td>Firm’s age</td>
<td>-0.30 (.17)†</td>
</tr>
<tr>
<td>Firm’s profitability</td>
<td>0.01 (.08)</td>
</tr>
<tr>
<td>Domestic market size</td>
<td>-1.07 (.33)***</td>
</tr>
<tr>
<td>Domestic market growth</td>
<td>-0.22 (.10)***</td>
</tr>
<tr>
<td>Domestic rule of law</td>
<td>0.03 (.18)</td>
</tr>
<tr>
<td>Domestic peer competition</td>
<td>1.48 (.41)***</td>
</tr>
</tbody>
</table>

Number of observations: 1,095
Number of firms: 218
Number of home countries: 26
Log likelihood: -332.9
Wald χ²: 82.6***

Intercept included but not shown; robust standard errors in parentheses; † p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001 (two-tailed)
CHAPTER 3

COUNTRY PORTFOLIO DIVERSITY, PERFORMANCE FEEDBACK AND FIRMS’ PORTFOLIO GROWTH STRATEGIES

ABSTRACT

The activities of multinational enterprises can be conceptualized as a portfolio of national operating locations. Such a portfolio is inherently characterized by diversity, given the existence of contextual differences across countries. Taking a behavioral perspective, we explore how contextual diversity in a firm’s country portfolio shapes changes in that portfolio in terms of foreign entries and exits. We argue that such diversity poses coordination challenges stemming from constraints to managerial cognitive capacity. In response to a greater number of distress signals that surface as the result of such challenges, decision makers will likely restrict growth to keep them in check. We therefore hypothesize a negative relationship between country portfolio diversity and net portfolio growth as measured by the difference between the number of countries entered and exited. We also argue that managers’ sensitivity to distress signals differs across firms, depending on how well a firm is performing compared to managers’ aspirations. Specifically, we use performance feedback theory to argue that performance below historical and social aspirations will strengthen managers’ tendency to restrict net portfolio growth as a function of portfolio diversity whereas performance above these two types of aspirations will weaken that tendency. Using measures of cultural and economic portfolio diversity, we find support for our hypotheses in a panel data analysis of all foreign entries and exits by 186 retailers from 24 home countries over the period 2001–2007. Our findings indicate that behavioral factors have a greater influence on the management of international portfolios than hitherto assumed.²

² This study is conducted in collaboration with Pursey Heugens and Arjen Slangen
3.1 INTRODUCTION

Often operating a range of businesses that are complementary to varying degrees, firms can be conceptualized as portfolios of activities (Henderson, 1970; Hedley, 1977; Bergh and Lawless, 1998). Prior research has demonstrated that firms typically aim to expand their portfolios in order to achieve growth and, thereby, scale, rendering portfolio growth the default strategy for most firms (cf. Bettis & Hall, 1981; Dawson, 2001; Eisenhardt & Schoonhoven, 1990). At times, however, firms deviate from that strategy by adjusting their portfolio of activities downwards, for instance when they face significant performance challenges (Bergh and Lawless, 1998). Portfolio management thus involves the simultaneous consideration of expansion and divestment decisions, as illustrated by the following quote by Wal-Mart’s CEO Doug McMillon: “Actively managing our portfolio of assets is essential to maintaining a healthy business. Closing stores is never an easy decision, but it is necessary to keep the company strong and positioned for the future. [...] So we are committed to growing, but we are being disciplined about it” (Wal-Mart, 2016).

An inherent characteristic of a portfolio of operations is that it contains diversity. This is especially true for portfolios of national operations, since countries tend to have distinct cultural and economic contexts (Nachum & Song, 2011; Gomez-Mejia & Palich, 1997). Managing operations spread across such contexts entails intra-firm coordination challenges, which will likely cause senior managers to reflect on the composition of their firm’s country portfolio and the scope for portfolio growth (Hutzschenreuter, Voll, & Verbeke, 2011). However, extant international business (IB) research sheds little light on how diversity in a firm’s country portfolio influences decision makers’ portfolio expansion and reduction decisions. We aim to throw light on this issue by taking a novel behavioural approach towards the management of country portfolios. Specifically, we argue that contextual diversity in a firm’s portfolio poses coordination challenges stemming from constraints to managerial cognitive capacity (Gavetti, Greve, Levinthal, & Ocasio, 2012; Cyert and March, 1963). Diverse portfolios of activities are cognitively challenging to manage, solicit behavioral failures, and likely cause distress signals that reveal an organization’s limited ability to cope with its own complexity (Gavetti, 2012; Argote & Greve, 2007). The most straightforward solution to attend to such signals and keep coordination challenges stemming from portfolio diversity in check is to limit further growth of the portfolio or downsize it. We therefore hypothesize a negative relationship between country portfolio diversity and net portfolio growth as
measured by the difference between the number of countries that a firm subsequently enters and exits.

We also argue that managers’ tendency to attend to distress signals and undertake corrective action as a function of portfolio diversity differs across firms, depending on how well a firm is performing compared to managers’ aspirations. We expect that decision makers will evaluate how well a portfolio is managed by comparing their firm’s current performance to that of its competitors as well as to historical achievements in order to understand the severity of the challenges raised by portfolio diversity (Bromiley & Harris, 2014; Greve, 2003b). Specifically, we use performance feedback theory to argue that performance below historical and social aspirations drives managers to engage in ‘problemistic search’ (Cyert and March, 1963), corrective actions taken to address perceived performance problems. According to performance feedback theory, these corrective actions tend to start with a search for local or ‘myopic’ solutions to performance problems (Kim, Kim, & Miner, 2009; Levinthal & March, 1993). For firms operating a conspicuously internationally diverse portfolio of operations, it is reasonable to assume that such myopic corrective actions will come in the form of individual country entry or exit decisions. We argue, however, that problemistic search does not necessarily stop at the level of myopic solutions, and may also involve farsighted and wholesale international portfolio restructuring decisions. We thus expect sub-aspirational performance to strengthen managers’ tendency to undertake corrective action as a function of portfolio diversity, whereas performance above these two types of aspirations will weaken that tendency. Accordingly, we hypothesize that performance below historical or social aspirations will strengthen the negative effect of country portfolio diversity on the net level of portfolio growth chosen, whereas performance above these aspirations will weaken that negative effect.

We test our hypotheses on a sample of the largest retailers worldwide, since there is substantial variation in the degree of portfolio diversity among such retailers, with some of them being active in only one or a few countries and others in various supra-national regions (Dawson, 2007; Mohr, Batsakis, & Stone, 2018). When managing their country portfolios, retailers particularly struggle with the cultural and economic dimensions of diversity, as they need to make changes to their retail offering in response to differences in consumer tastes and income levels (Burt, Davies, McAuley, & Sparks, 2005; Wrigley, Coe, & Currah, 2005), leading us to focus on these types of diversity. Another reason for focusing on retailers is that they frequently restructure their country portfolios in an attempt to effectively manage portfolio growth,
particularly by exiting some countries and entering others (Burt, Dawson, & Sparks, 2004; Coe, 2004). The difference between the number of countries exited and entered determines whether the restructuring entails negative or positive net growth of the portfolio. Our dataset reveals that portfolio growth decisions by retailers indeed frequently involve a combination of country exits and entries. In 2006 for example, Wal-Mart withdrew from the German and South Korean markets, but also entered five Central American countries, thus realizing net positive portfolio growth. By contrast, the case of Hong Kong-based Dairy Farm International illustrates that firms sometimes also opt for net negative portfolio growth, as the firm entered the South Korean market in 2002, but divested operations in New Zealand and Australia in the same year. Using panel data that capture the country entry and exit decisions of 186 large retailers from 24 home countries over the period 2001 – 2007, we find support for our framework and show that the chosen level of portfolio growth critically depends on the interplay between the diversity of a firm’s country portfolio and feedback on how well the firm is coping with that diversity.

Our study contributes to the literature in three important ways. First, we bring together research on the management of country portfolios by multinational firms and studies of the role of performance feedback in managerial decision making. IB studies increasingly apply a portfolio perspective to better understand interdependencies in processes of internationalization (Belderbos & Zou, 2009; Hendriks, Slangen, & Heugens, 2018; Hutzschenreuter & Matt, 2017; Nachum & Song, 2011), and have started to explore the relevance of performance feedback for individual internationalization decisions (Lages, Jap, & Griffith, 2008; Lin, 2014; Ref & Shapira, 2017). Our study combines these approaches and indicates that decision makers respond differently to either positive or negative signals that are drawn from performance assessments and that this has important implications for the direction and amount of portfolio growth pursued. Our findings thus suggest that it is important for IB scholars to consider the role of aspirations in general and the directionality of aspirational performance gaps in particular. Second, whereas prior IB studies taking a portfolio perspective analyzed foreign entry and exit decisions separately or only considered positive but not negative growth (Nachum & Song, 2011; Belderbos & Zou, 2009; Chan, Makino, & Isobe, 2006), we consider both types of decisions simultaneously through our use of a novel portfolio growth measure. Third, we contribute to the performance feedback literature by applying its core insights to a firm’s full set of IB activities. That is, similar to Lungeanu, Stern, and Zajac (2016), we explore the boundary conditions of performance feedback theory by extending its application to a complex set of interrelated
activities. Prior performance feedback studies have primarily looked at discrete activities such as acquisitions or divestitures and have explored how managers’ aspirations about the performance of an activity influence their decisions on whether and how much to change that activity (Haleblian, Kim, & Rajagopalan, 2006; Iyer & Miller, 2008; Vidal & Mitchell, 2015). We, on the other hand, look at a portfolio of activities and explore whether the effect of portfolio diversity on firm behavior hinges on decision makers’ aspirations about the performance of the portfolio as a whole. We show that managerial responses are often more complex and nuanced than commonly assumed, and take the form of a wider reflection on the entire portfolio of corporate activities. Our study suggests that problemistic search does not have to result in myopic solutions, and that complexity of the search task at hand is not a straightforward boundary condition of performance feedback theory.

3.2 THEORY AND HYPOTHESES

3.2.1 HOW COUNTRY PORTFOLIO DIVERSITY AFFECTS PORTFOLIO ADJUSTMENT DECISIONS

Decision makers likely experience difficulties in making sense of complex environments when being charged with the task of bringing together interrelated but intrinsically diverse activities (Aharoni, Tihanyi, & Connelly, 2011; Egelhoff, 1991; Tihanyi & Thomas, 2005). The constraints posed by diversity are likely to be particularly pertinent in the context of international diversity (Hutzschenreuter et al., 2011; Tong & Reuer, 2007; Powell, 2014; De Jong & Van Houten, 2014; Miller, Lavie, & Delios, 2016). Although diversity in a firm’s country portfolio may offer several benefits such as access to more novel knowledge and risk reduction, differences between countries often necessitate firms to adapt to local environmental conditions, and complicate internal coordination at the corporate level (Meyer, Mudambi, & Narula, 2011). The inherent complexity of this simultaneous external adaptation and internal coordination taxes a firm’s administrative and control systems and presents the firm with substantial coordination costs that increase with the level of contextual diversity among the countries in the portfolio. Such costs arise because managers are characterized by bounded rationality and thus are limited in their ability to bring together cognitively more distant activities (Gavetti, 2012; Cyert & March, 1963; Simon, 1947). That is, decision makers are typically unable to observe, process, and interpret all relevant stimuli within the organization (Simon, 1947; Hambrick & Mason, 1984). Partly unobservable frictions and costs resulting from portfolio diversity include
misunderstandings and conflicts between employees residing in different national units, red tape, and suboptimal forms of market knowledge recombination across host countries. Managers of firms with a more diverse country portfolio need to interpret a higher volume of disparate signals, which may lead to difficulties in processing the available information (Simon, 1947; Henisz, 2003; Banalieva & Robertson, 2010; Tihanyi & Thomas, 2005; Aharoni et al., 2011). Moreover, managers of such firms will experience greater difficulties forming shared cognitive maps that are used by the management team as a whole to understand how activities relate, whether there is overlap between them, and in what way synergies can be brought about (Ginsberg, 1989; Prahalad & Bettis, 1986).

Given managers' cognitive limitations, the complex task of handling diversity in a portfolio is likely to involve so-called behavioral failures, which can be seen as suboptimal organizational decisions (Gavetti, 2012; cf. Tong & Reuer, 2007; Ellis, 2007). Most pressing for the management of diverse portfolios are behavioral failures of two sorts, namely (1) greater difficulties in identifying cognitively distant positions because of cognitive overload, and (2) a reliance on suboptimal structures and procedures that places additional cognitive demands. First, limitations in relation to the gathering and processing of information and the ability to engage in associative processes mean that managers experience difficulty in understanding and bringing together cognitively distant activities and opportunities (Gavetti, 2012). More diverse portfolios tend to be comprised of such activities, for which deviations from predominant ways of thinking are needed, thereby likely putting a strain on mental processes and the recognition of opportunities (Gavetti, 2012). Second, managers will likely attempt to control the complexity of handling diversity through formalization, but such efforts are often suboptimal and tend to produce further coordination challenges. Managers engage in such attempts as diversity within a portfolio gives rise to the need to put structures and detailed procedures in place to manage intra-corporate knowledge flows (Hutzschenreuter et al., 2011). In an optimal form, such structures and procedures act as formalized arrangements that help support the organization's ability to leverage experiences from one setting to another, and may include formal ways of cross-unit collaboration to foster internal communication and specific human resource management practices targeted at a more effective transfer of knowledge (Minbaeva, Pedersen, Björkman, Fey, & Park, 2003). Setting up such structures and procedures, however, requires coordination, and the costs associated with that coordination are likely to be higher for portfolios characterized by greater national diversity. Formalization does not only place additional cognitive demands on decision makers who have to authorize the implementation of coordination
mechanisms, but also on managers further down the hierarchy (Hart, 1992). Specifically, the latter managers will likely experience difficulties in identifying cross-country synergies and may therefore resort to time- and resource-consuming cross-country duplication of activities.

In the pursuit of opportunities such as portfolio growth, managers will thus likely face constraints when it comes to the gathering and processing of information (Gavetti, 2012; Gavetti, Levinthal, & Ocasio, 2007). Such constraints are likely to be particularly pressing when managers’ current tasks are cognitively more challenging. As the management of more diverse portfolios involves greater cognitive challenges, managers of such portfolios are likely to be exposed to a greater amount of distress signals, either in their own day-to-day coordination activities or from subordinates who may feel overburdened. To keep coordination challenges in check, decision makers will likely attend to those signals by restricting further growth of their firm’s country portfolio as a function of that portfolio’s diversity. Moreover, in cases of problematically high levels of portfolio diversity, it will become increasingly likely that decision makers decide to reduce the portfolio’s diversity by exiting foreign markets. For example, after reviewing its country portfolio, Marks and Spencer decided to close all its stores in ten foreign countries in November 2016 quoting difficulties in relation to a “fragmented owned-store portfolio” (Marks and Spencer, 2016). As this example shows, decision makers may thus even resort to negative net growth of the country portfolio, so as to relieve the organizational administrative and control systems from the coordination costs associated with contextual diversity.

Hypothesis 1: The higher the diversity in a firm’s country portfolio, the lower the net level of growth chosen for that portfolio.

3.2.2 The role of performance feedback

Although senior decision makers have access to their own experiences and to reports from within the organization, their bounded rationality will likely hinder them in assessing the exact degree to which diversity taxes their organization with coordination costs. Easy-to-interpret cues in the form of performance feedback may then provide decision makers with information about both the value their firm extracts from its current portfolio and the coordination costs stemming from portfolio diversity. This is especially true for comparative performance indicators. Even though absolute indicators such as high growth or solid profitability may serve as a first signal that
operations are well-managed, these indicators may prove less meaningful when the industry as a whole performs well or when the firm has long been reporting comparable performance figures. Indeed, managers have often been shown to compare their firm's performance to a reference point instead, especially to the performance of their main competitors and its own past performance (Greve, 1998; Baum et al., 2005; Harris & Bromiley, 2007; Kim et al., 2015; Luoma, Ruutu, King, & Tikkanen, 2017). Both these reference points represent an aspiration level for decision makers, i.e. the smallest outcome they deem as satisfactory at the borderline between perceived success and failure (Schneider, 1992; Greve, 2003b). The first reference point is social-relative whereas the second one is self-relative (Harris & Bromiley, 2007; Iyer & Miller, 2008; Audia & Greve, 2006; Greve, 1998; Cyert & March, 1963). Assessments of performance relative to historical and social aspirations are a relatively simple way for decision makers to gain insight into their firm's ability to cope with the extant level of portfolio diversity and how much additional diversity, if any, the organization can handle. Whether their firm’s performance is above or below managers’ aspirations will thus likely affect their evaluation of the severity of the strain associated with diversity (Greve, 2003b; Kim, Finkelstein, & Haleblian, 2015; Chen & Miller, 2007; Baum & Dahlin, 2007; Ketchen & Palmer, 1999; Patel & Chrisman, 2014).

When decision makers observe that their firm’s performance is below social or historical aspirations, they will likely interpret this as a further signal that the diversity of their firm’s country portfolio poses too much of a burden on the organization and, hence, that their firm is incapable of effectively handling the diversity. In such cases, the diversity of a firm’s portfolio will likely have an even stronger limiting effect on the net portfolio growth pursued by senior managers. The underlying mechanism is likely to be twofold. First, when their firm’s performance does not meet their social or historical aspirations, senior managers will likely engage in problemistic search to address the perceived performance problems of the firm’s current portfolio (Cyert & March, 1963; Daft & Weick, 1984; March & Simon, 1958). In an attempt to remedy the problem of not meeting aspired performance levels, managers are likely to be more sensitive to distress signals and relatively more willing to undertake corrective actions in relation to portfolio growth. Performance shortfalls will likely lead decision makers to review their firm’s portfolio and identify problems in relation to the growth strategy that has led the firm to take on diversity. In their quest to repair performance gaps, decision makers will conclude from such gaps that it is necessary to deviate from their current course of action (Tyler & Caner, 2016; Moliterno & Wiersema, 2007; Boone, Van Olffen, Van Witteloostuijn, & De Brabander, 2004; Greve, 1995). In other
words, when decision makers notice that their firm’s current strategy falls short of attaining such targets as surpassing rivals or at least matching historical results, they are likely to implement more radical strategic responses (Audia & Greve, 2006; Miller & Chen, 2004; Baum et al., 2005; Greve, 2002). This tendency likely stems from decision makers’ profound focus on the critical targets that also affect their own position in the organization (March & Shapira, 1987; Wiseman & Gomez-Mejia, 1998), such as the target of closing their firm’s aspirational performance gap (Audia & Greve, 2006).

Second, performance shortfalls will likely lead senior management to restrict both the financial resources available for funding new initiatives and the discretionary budgets available to lower-level managers (cf. Kuusela et al., 2017). Tighter operational budgets will then force decision makers and lower-level managers to engage in a reconfiguration of resources (Vidal & Mitchell, 2015), leaving fewer resources for the optimization of formal structures and procedures. Moreover, having to perform such a reconfiguration of resources likely poses an additional burden on their cognitive capacity, in addition to the already challenging task of handling diversity in their firm’s extant portfolio. We therefore expect that managers’ tendency to undertake corrective action in response to diversity-related coordination costs is likely to be further strengthened by a lack of available financial resources and revised perceptions about their firm’s growth strategy (Chen, 2008; Iyer & Miller, 2008). As senior managers of firms that perform below aspirations are likely to provide their subordinates with fewer financial means and are themselves more willing to engage in strategic change, such firms are likely to pursue even lower net portfolio growth as a function of portfolio diversity. We therefore expect that:

**Hypothesis 2a: Performance below social or historical aspirations strengthens the negative relationship between the diversity of a firm’s country portfolio and the net growth chosen for that portfolio.**

Performance above aspirations, on the other hand, will likely overshadow distress signals and indicate to decision makers that their organization is coping with the diversity of its portfolio relatively well, thereby likely reducing their inclination to restrict portfolio growth as a function of that diversity. Again, the two forces behind this effect are complementary. First, performance above aspirations will likely make decision makers less sensitive to distress signals and to the costs of diversity to the organization, and less concerned about the need for formalization in response to diversity (Audia, Locke, & Smith, 2000; Baum et al., 2005; Iyer & Miller, 2008). They
will therefore likely be less inclined to engage in the type of strategic change that involves restricting portfolio growth in response to diversity (Greve, 2003b). In such cases, positive performance feedback implies that decision makers remain committed to their firm’s default strategy of growth.

Secondly, decision makers of firms that perform above aspirations likely free up additional discretionary financial resources that help reduce diversity-related cognitive complexity, for example through the hiring of additional staff or the implementation of more sophisticated IT systems. Moreover, decision makers may also deploy such resources for both the optimization of formal structures and the loosening of procedures that were devised to channel and manage knowledge flows in order to extract value from portfolio diversity. Decision makers of firms that perform above aspirations thus likely provide their organization with more room to experiment and explore new initiatives in finding ways how to best nurture portfolio diversity, thereby exerting fewer restrictions on themselves and lower-level managers and thus enabling forms of non-local search outside the scope of the current portfolio (Baum & Dahlin, 2007; Cyert & March, 1963; Baum et al., 2005). Accordingly, we expect that:

_Hypothesis 2b: Performance above social or historical aspirations weakens the negative relationship between the extant level of diversity of a firm’s country portfolio and the net growth of that portfolio._

3.3 METHODOLOGY

3.3.1 DATA COLLECTION AND SAMPLE

To test our hypotheses, we compiled a panel dataset of all foreign entries and exits by a set of large international retailers. The retailing industry has drawn scholars’ attention due to the rapid internationalization of its biggest firms (Dawson, 2007; Evans & Mavondo, 2002) and often striking cases of failed internationalization attempts (Bianchi & Ostale, 2006; Burt et al., 2004). Large retailers frequently enter and exit foreign nations, making such retailers suitable objects for studying net portfolio growth strategies and the way they are shaped by a portfolio’s contextual diversity (Mohr, Batsakis, & Stone, 2018). In addition, as retailers’ foreign activities generally have market-seeking purposes (Mohr & Batsakis, 2017; Dawson, 2007), we are able to keep constant entry and exit motives among the firms in our sample.

Our main sources of data are Deloitte’s annual “Global Powers of Retailing” reports, which contain annual ranks of the world’s 250 largest retailers.
worldwide and annual data on their countries of operation, revenues, profitability, and sales growth. From these reports we constructed a dataset of retailers from 24 home countries. By comparing the reports from year to year, we were able to identify all countries entered and exited by a sample of 186 firms over the period 2001-2007.

All retailers appearing in the Deloitte “Global Powers of Retailing” ranking between 2000 and 2009 are part of our sample, as the report of a given year provides data on a firm’s activities two years earlier. Although the vast majority of companies appears in every consecutive report, events such as bankruptcies and mergers imply that we estimate our models on an unbalanced panel with 752 firm-year observations. Other sources include Thomson One Financial, Compustat, and company annual reports for firm-specific data. Country-level data was retrieved from Euromonitor’s Passport GMID database and the World Bank’s World Development Indicators database.

3.3.2 Dependent variable

To measure a firm’s annual net portfolio growth, we calculated the difference between the number of countries that it entered in a given year and the number of countries that it exited in that year, and weighted this difference by the change in a firm’s size that year. Specifically:

$$PG_t = (EN_t - EX_t) \times \frac{S_t}{S_{t-1}}$$

where EN is the number of countries a firm entered in year t, EX the number of countries it exited that year, and S the natural logarithm of its total annual sales. Negative values of the index represent negative net growth of the portfolio, whereas positive values indicate net positive portfolio growth. The data on all components of the index were derived from Deloitte’s “Global Powers of Retailing” reports.

3.3.3 Key independent variables

Country portfolio diversity. Countries differ from one another along several contextual dimensions, such as culture, administrative systems, economic development levels, language, and religion (Ghemawat, 2001; Dow & Karunaratna, 2006). For international retailers, cultural and economic differences arguably pose the greatest challenges because such differences
necessitate cross-country adaptation of retailers’ concepts and products, resulting in high coordination costs (Goldman, 2001; Coe & Wrigley, 2007). We therefore operationalize the diversity of a firm’s country portfolio in both cultural and economic terms.

To measure the cultural diversity of a firm’s country portfolio, we use a Blau index (cf. Gomez-Mejia & Palich, 1997). This index is defined as $1 - \sum \rho_i^2$, where $\rho_i$ is the proportion of countries in a firm’s portfolio that belongs to cluster $i$ of Ronen and Shenkar’s (2013) 11 cultural clusters of countries. We prefer this measure over the average cultural distance between all pairs of countries in a firm’s portfolio as used by Hutzschenreuter et al. (2011), since Ronen and Shenkar’s clusters are the result of a comprehensive analysis of 11 studies that provide country-level cultural scores, whereas the average cultural distance between country pairs would need to be based on only one or a few studies.

To ensure consistency among our measures of country portfolio diversity, we also used a Blau index to measure the economic diversity of a firm’s country portfolio. Specifically, we used Euromonitor’s Passport GMID to collect data on the retail sales per capita in all sample countries, grouped the countries into ten economic clusters based on deciles, and used these clusters to calculate a Blau index of the economic diversity of a firm’s country portfolio.

*Performance relative to social aspirations.* We measure a firm’s performance relative to social aspirations by its return on sales (ROS) in a given year relative to the average ROS of its peers in that year (cf. Baum et al., 2005; Audia & Greve, 2006; Iyer & Miller, 2008; Greve, 2011). We defined a firm’s peers as those operating in the same segment of the retail industry and originating from the same supranational region, distinguishing between four segments (i.e., grocery retail, high street retail, department & do-it-yourself stores, and other specialty retail) and three home regions (i.e., the Americas; Europe, the Middle East, and Africa; and Asia-Pacific). ROS is an important strategic metric in the retail industry that is applied by both analysts and firms (Lewis & Thomas, 1990). Following prior performance feedback studies (Kim et al., 2015; Joseph & Gaba, 2015; Parker, Krause, & Covin, 2017; Greve, 2003a), we created separate variables for performance above and below social aspirations. The first variable, performance above social aspirations, measures positive differences between a firm’s ROS and the average ROS among its peers and was set to 0 for negative differences. Likewise, performance below social aspirations measures negative differences between a firm’s ROS and the average ROS among its peers and was set to 0 for positive differences.
Performance relative to historical aspirations. A firm's performance relative to historical aspirations was measured by the difference between its year-on-year sales growth (from \(t-1\) to \(t\)) and its Compound Annual Growth Rate (CAGR) over the previous five years (i.e., \(t-6\) to \(t-1\)). We focus on longitudinal differences in sales growth rates rather than those in profitability because organizations in general and retailers in particular tend to put heavy emphasis on growth targets (Van Witteloostuijn, 1998; Dawson, 2001). The data on firms' sales growth rates were retrieved from Deloitte's “Global Powers of Retailing” reports. In line with our approach to measuring a firm's performance compared to social aspirations, we created separate measures for observations indicating performance above and below historical aspirations, respectively.

3.3.4 Control variables

Besides our variables of interest, several other factors may also influence managers’ portfolio growth decisions. One of them is a firm's domestic footprint, for which we control by entering the ratio of the firm’s domestic annual sales to total annual sales (Hendriks et al., 2018). We obtained the data on firms’ total and foreign annual sales from Thomson One, Compustat, and their annual reports. We then subtracted a firm’s foreign sales from its total sales to determine its domestic sales. We also enter control variables measuring the number of foreign countries and the number of retail formats in a firm’s portfolio in the preceding year (Tallman & Li, 1996; Gonzalez-Benito, Munoz-Gallego, & Kopalle, 2005). We obtained the data on both variables from Deloitte’s “Global Powers of Retailing” reports, which list the countries and retail segments in which a retailer is active on an annual basis. We also control for a firm’s size and age through its total annual sales the number of years since its inception. The data on these variables were obtained from the Deloitte reports and from firms’ annual reports and websites, respectively.

Since franchising arrangements may enable firms to expand their country portfolio more rapidly than equity-based expansion modes but may impede rapid country exits, we include a dummy variable coded 1 for retailers exploiting large franchise concepts (Hoffman, Munemo, & Watson, 2016). We based our coding on whether a firm was listed in a given annual edition of either the Franchise Times’ Top 200 or Franchise Direct’s Top 100 of the largest global franchises (Lawrence & Kaufmann, 2011; El Akremi, Perrigot, & Piot-Lepetit, 2015). We also include a dummy variable coded 1 when a retailer has substantial brand value, which is an important asset in the retail industry (Ailawadi & Keller, 2004). This dummy variable is based on whether
a given retailer was included in a given annual edition of either Interbrand’s Best 100 Global Brands or BrandFinance’s Best 25 Global Retail Brands (Johansson, Dimofte, & Mazvancheryl, 2012). To control for potential shareholder pressures on firms’ portfolio growth decisions, we entered a dummy variable coded 1 for publicly-listed firms and a dummy variable coded 1 for firms originating from Anglo-Saxon home countries. We also control for several other home-country characteristics that may influence managers’ portfolio growth decisions. First, firms from different countries may have different time horizons when it comes to corporate growth or to local market withdrawal in the case of failure. We therefore control for a home country’s score on Hofstede’s long-term orientation dimension (Hofstede, Hofstede, & Minkov, 2010). Second, uncertainty in a firm’s home market, which is typically its largest market, may affect executives’ portfolio growth decisions, since domestic uncertainty may stimulate foreign entries (e.g., Lee & Makhija, 2009). This may especially hold true for domestic demand uncertainty, which is arguably the most important dimension of uncertainty in the retail industry (Dawson, 2001). We measure domestic demand uncertainty by the standard deviation of retail sales per capita in the country over the previous five years. The data on countries’ retail sales per capita were obtained from Euromonitor’s Passport GMID database. We also control for a home country’s level of economic development through its GDP per capita, which was retrieved from the World Bank’s World Development Indicators database. To control for the possibility that the level of saturation of the domestic market co-determines firms’ portfolio growth decisions, we also enter the reverse-coded value of the year-on-year domestic retail sales growth in a firm’s home country (Williams, 1992). The data on that growth were obtained from Euromonitor’s Passport GMID database. We also control for the strength of a home country’s formal institutions by entering its score on the World Bank’s rule of law indicator (Liu, Feils, & Scholnick, 2011), since firms that are better protected at home may be inclined to expand their country portfolio more rapidly. To control for possible biases stemming from the fact that the large majority of our observations pertain to three home countries, we entering dummy variables for firms from the United States, the United Kingdom, and Japan, respectively (cf. O’Brien & David, 2014). Finally, we control for possible differences in portfolio growth rates across retail sector segments by entering dummy variables for grocery retailers, high street retailers, department & do-it-yourself stores, and other specialty retailers. We obtained the data on a firm’s main retail segment from Deloitte’s “Global Powers of Retailing” reports.
3.3.5 Estimation method

To reliably assess the impact of country portfolio diversity on firms' portfolio growth decisions, it is important to account for possible endogeneity (Reeb, Sakakibara, & Mahmood, 2012; Hamilton & Nickerson, 2003). In our case such endogeneity may arise from the fact that the country portfolio of some of our sample firms may be systematically more diverse than that of others, which may have implications for the observed level of net portfolio growth. To rule out the possible presence of such endogeneity, we implemented Heckman's (1979) two-stage procedure. We ran two separate probit regressions, one for cultural and one for economic portfolio diversity, in which we adopted binary dependent variables coded 1 if the focal firm's country portfolio was more diverse than the industry average and 0 if it was less diverse (cf. Martin, 2013; Laamanen, Simula, Torstila, 2012). We regressed all of the above-mentioned firm and country-level factors on these dependent variables. We also entered the ethnic, linguistic, and religious fractionalization in a firm's home country (Alesina, Devleeschauwer, Easterly, Kurlat, & Wacziarg, 2003), as firms from contextually more diverse home countries may be better able to deal with portfolio diversity and may therefore have more diversified country portfolios. The regression results for both first-stage probit models are displayed in the Appendix. We included the Inverse Mills ratio that followed from these probit regression analyses as a correction term in our second-stage regression models estimating the net growth of a firm's country portfolio. We estimated these models using GLS random-effects regression analyses, since a Hausman test indicated that the regression coefficients were consistent between random and fixed effects models, in which case random effects models are preferred due to their relative efficiency (Clark & Linzer, 2015). We clustered the standard errors by firm and lagged all time-varying independent variables by one year.

3.4 RESULTS

Table 1 shows the descriptive statistics and correlations for the variables included in this study. The mean value of the dependent variable is positive, indicating that, on average, firms opt for positive net portfolio growth, i.e. for expansion rather than contraction of their country portfolio. The mean number of countries in a firm's country portfolio equals 8.31, suggesting that the sample firms have substantial opportunities for further portfolio growth. The highest correlation of 0.77 is between a home country's GDP per capita and its rule of law, while all other correlations are below 0.60. To test for multicollinearity, we generated the Variance inflation factors (VIFs) of the
independent variables included in our regression models. We found no
evidence of multicollinearity, as the highest VIF was 4.75, which is well below
the commonly accepted threshold of 10 (Hair, Black, Babin, Anderson, &
Tatham, 2006).

Table 2 displays our regression results when we measure the diversity of a
firm’s country portfolio by its cultural diversity. Model 1 only contains the
control variables, whereas Model 2 adds our measure of cultural portfolio
diversity. Model 3 contains the interactions between cultural portfolio
diversity and our measures of a firm’s performance relative to social
aspirations, whereas Model 4 contains those between cultural portfolio
diversity and our measures of a firm’s performance relative to historical
aspirations. Model 5 contains all four interaction terms.

Hypothesis 1 stated that the diversity of a firm’s country portfolio would be
negatively related to the net level of growth chosen for the portfolio. This
hypothesis is supported, as the regression coefficient of cultural portfolio
diversity is significantly negative in Model 2 (b=-0.18, SE=0.06, p=0.002,
CI95= -0.30 -0.07). Hypothesis 2a stated firm performance below either social
or historical aspiration levels would strengthen the negative relationship
between the diversity of a firm’s country portfolio and the net level of growth
chosen for that portfolio. This hypothesis also receives support, as the
coefficient of the interaction between cultural portfolio diversity and
performance below social aspirations is significantly negative in Model 3
(b= -0.26; SE=0.13, p=0.047, CI95= -0.52 -0.01), and so is that between cultural
portfolio diversity and performance below historical aspirations in Model 4
(b=-0.06; SE=0.03, p=0.016, CI95= -0.13 -0.01). Hypothesis 2b stated that
performance above aspirations, whether social or historical, would weaken
the negative relationship between the diversity of a firm’s country portfolio
and the net growth chosen for that portfolio. Models 3 and 4 also lend support
to that hypothesis. Specifically, the coefficient of the interaction between
cultural portfolio diversity and performance above social aspirations is
significantly positive in Model 3 (b=0.25, SE=0.08, p=0.003, CI95= 0.08 0.41),
and so is that between cultural portfolio diversity and performance above
historical aspirations in Model 4 (b=0.07, SE=0.03, p=0.042, CI95= -0.12
-0.00).
Table 1: Descriptive statistics and correlations

| Variable                                         | Mean   | S.D.   | 1       | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10      | 11      | 12      | 13      | 14      | 15      | 16      | 17      | 18      | 19      | 20      |
|-------------------------------------------------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1. Net portfolio growth                          | 0.27   | 1.76   |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| 2. Cultural portfolio diversity                 | 0.23   | 0.32   | 0.16    |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| 3. Economic portfolio diversity                 | 0.21   | 0.29   | 0.11    | 0.90    |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| 4. Performance above social aspirations         | 1.39   | 2.52   | 0.10    | 0.16    | 0.12    |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| 5. Performance below social aspirations         | 0.88   | 2.35   | 0.00    | 0.02    | 0.00    | -0.21   |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| 6. Performance above historical aspirations     | 6.30   | 21.04  | 0.06    | 0.00    | 0.01    | -0.03   | -0.03   | -0.03   |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| 7. Performance below historical aspirations     | 4.05   | 8.30   | -0.06   | -0.10   | -0.12   | -0.03   | 0.09    | -0.17   |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| 8. Firm’s domestic footprint                    | 68.6   | 25.7   | -0.09   | -0.59   | -0.54   | -0.09   | -0.04   | 0.01    | 0.07    |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| 9. Number of formats in a firm’s portfolio      | 2.43   | 2.01   | -0.07   | 0.22    | 0.37    | -0.05   | -0.11   | 0.13    | -0.06   | -0.23   |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| 10. Number of countries in a firm’s portfolio   | 8.31   | 9.18   | 0.21    | 0.58    | 0.52    | 0.12    | 0.02    | 0.01    | -0.10   | -0.58   | 0.18    |         |         |         |         |         |         |         |         |         |         |         |         |         |
| 11. Firm size                                   | 9.15   | 0.95   | 0.01    | 0.30    | 0.34    | -0.03   | -0.08   | 0.00    | -0.04   | -0.19   | 0.22    | 0.22    |         |         |         |         |         |         |         |         |         |         |         |         |
| 12. Firm age                                    | 63.88  | 41.33  | -0.11   | 0.00    | 0.07    | -0.09   | -0.03   | 0.07    | -0.06   | 0.04    | 0.18    | -0.08   | 0.03    |         |         |         |         |         |         |         |         |         |         |         |
| 13. Firm is large franchise                     | 0.04   | 0.19   | -0.02   | 0.19    | 0.21    | 0.00    | -0.05   | -0.02   | 0.00    | -0.23   | 0.15    | 0.25    | 0.11    | 0.02    |         |         |         |         |         |         |         |         |         |         |         |
| 14. Firm has a valuable brand                   | 0.34   | 0.47   | 0.11    | 0.20    | 0.15    | 0.16    | -0.20   | 0.00    | -0.10   | -0.02   | -0.10   | 0.23    | 0.30    | -0.10   | 0.19    |         |         |         |         |         |         |         |         |         |
| 15. Firm is publicly listed                     | 0.70   | 0.46   | 0.03    | 0.25    | 0.26    | 0.16    | -0.14   | 0.00    | 0.05    | -0.14   | 0.12    | 0.20    | 0.15    | 0.03    | 0.11    | 0.24    |         |         |         |         |         |         |         |
| 16. Home country is Anglo-Saxon                 | 0.62   | 0.49   | 0.00    | -0.21   | -0.32   | -0.02   | 0.01    | -0.04   | 0.03    | 0.33    | -0.44   | -0.21   | 0.06    | -0.06   | -0.12   | 0.23    | -0.04   |         |         |         |         |         |         |         |
| 17. Home-country long-term orientation         | 45.47  | 24.80  | -0.01   | 0.21    | 0.30    | -0.04   | 0.07    | 0.05    | -0.03   | 0.22    | 0.33    | 0.16    | -0.04   | 0.14    | 0.06    | -0.18   | 0.03    | -0.81   |         |         |         |         |         |         |
| 18. Domestic demand uncertainty                 | 562.6  | 265.8  | 0.07    | 0.21    | 0.22    | 0.02    | 0.01    | 0.17    | -0.11   | 0.25    | 0.17    | 0.20    | 0.03    | 0.11    | 0.09    | 0.07    | -0.09   | -0.04   | 0.17    |         |         |         |         |         |
| 19. Domestic GDP per capita                     | 10.48  | 3.76   | -0.33   | -0.10   | -0.16   | -0.05   | 0.06    | -0.04   | -0.03   | 0.13    | -0.29   | -0.14   | 0.10    | -0.03   | -0.04   | 0.13    | -0.14   | 0.53    | -0.29   | 0.17    |         |         |         |         |
| 20. Domestic market saturation                 | -0.05  | 0.06   | -0.04   | -0.21   | -0.18   | 0.00    | 0.10    | -0.23   | 0.16    | 0.27    | -0.22   | -0.19   | -0.04   | -0.01   | 0.06    | -0.09   | 0.04    | 0.01    | 0.10    | -0.21   | 0.21    |         |         |         |
| 21. Domestic rule of law                       | 1.43   | 0.38   | 0.01    | 0.08    | 0.09    | -0.05   | 0.04    | 0.05    | -0.03   | -0.06   | -0.04   | 0.03    | 0.12    | 0.10    | -0.04   | 0.19    | -0.09   | 0.45    | -0.16   | 0.32    | 0.77    | -0.01   |

Correlations greater than |0.08| are significant at p<0.05, while those greater than |0.10| are significant at p<0.01.
Table 2: Regression analyses of the effect of cultural portfolio diversity on net portfolio growth

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural portfolio diversity (H1)</td>
<td>-</td>
<td>-0.18 (0.06)</td>
<td>-0.18 (0.06)</td>
<td>-0.18 (0.06)</td>
<td>-0.17 (0.06)</td>
</tr>
<tr>
<td>Cultural portfolio diversity x Performance above</td>
<td>-</td>
<td>-0.25 (0.08)</td>
<td>-</td>
<td>-0.27 (0.09)</td>
<td></td>
</tr>
<tr>
<td>social aspirations (H2a)</td>
<td>-</td>
<td>-0.26 (0.13)</td>
<td>-</td>
<td>-0.19 (0.11)</td>
<td></td>
</tr>
<tr>
<td>Cultural portfolio diversity x Performance below</td>
<td>-</td>
<td>-</td>
<td>0.07 (0.03)</td>
<td>0.07 (0.03)</td>
<td>0.07 (0.03)</td>
</tr>
<tr>
<td>social aspirations (H2b)</td>
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<td>-0.06 (0.03)</td>
<td>-0.06</td>
<td>-0.05 (0.03)</td>
<td></td>
</tr>
<tr>
<td>Firm's performance above social aspirations</td>
<td>0.02 (0.03)</td>
<td>0.01 (0.03)</td>
<td>0.07 (0.05)</td>
<td>0.00 (0.03)</td>
<td>0.07 (0.05)</td>
</tr>
<tr>
<td>Firm's performance below social aspirations</td>
<td>-0.03 (0.04)</td>
<td>-0.02 (0.04)</td>
<td>-0.00 (0.04)</td>
<td>-0.02 (0.04)</td>
<td>-0.00 (0.04)</td>
</tr>
<tr>
<td>Firm's performance above historical aspirations</td>
<td>0.07 (0.03)</td>
<td>0.07 (0.03)</td>
<td>0.07 (0.03)</td>
<td>0.07 (0.03)</td>
<td>0.07 (0.03)</td>
</tr>
<tr>
<td>Firm's performance below historical aspirations</td>
<td>-0.06 (0.03)</td>
<td>-0.05 (0.03)</td>
<td>-0.04 (0.03)</td>
<td>-0.06 (0.03)</td>
<td>-0.05 (0.03)</td>
</tr>
<tr>
<td>Firm's domestic footprint</td>
<td>0.02 (0.05)</td>
<td>-0.04 (0.05)</td>
<td>-0.00 (0.05)</td>
<td>-0.03 (0.05)</td>
<td>0.00 (0.05)</td>
</tr>
<tr>
<td>Number of formats in a firm's portfolio</td>
<td>-0.03 (0.04)</td>
<td>-0.02 (0.04)</td>
<td>-0.02 (0.04)</td>
<td>-0.01 (0.04)</td>
<td>-0.01 (0.04)</td>
</tr>
<tr>
<td>Number of countries in a firm's portfolio</td>
<td>0.03 (0.05)</td>
<td>0.08 (0.05)</td>
<td>0.06 (0.05)</td>
<td>0.06 (0.05)</td>
<td>0.04 (0.05)</td>
</tr>
<tr>
<td>Firm size</td>
<td>-0.07 (0.03)</td>
<td>-0.07 (0.03)</td>
<td>-0.07 (0.03)</td>
<td>-0.07 (0.03)</td>
<td>-0.07 (0.03)</td>
</tr>
<tr>
<td>Firm age</td>
<td>-0.16 (0.04)</td>
<td>-0.15 (0.03)</td>
<td>-0.14 (0.03)</td>
<td>-0.16 (0.04)</td>
<td>-0.15 (0.03)</td>
</tr>
<tr>
<td>Firm is large franchisor</td>
<td>0.01 (0.03)</td>
<td>0.01 (0.03)</td>
<td>0.01 (0.03)</td>
<td>0.01 (0.03)</td>
<td>0.02 (0.03)</td>
</tr>
<tr>
<td>Firm has a valuable brand</td>
<td>-0.12 (0.04)</td>
<td>-0.12 (0.04)</td>
<td>-0.12 (0.04)</td>
<td>-0.12 (0.04)</td>
<td>-0.12 (0.04)</td>
</tr>
<tr>
<td>Firm is publicly listed</td>
<td>-0.02 (0.04)</td>
<td>-0.01 (0.03)</td>
<td>-0.01 (0.03)</td>
<td>-0.00 (0.04)</td>
<td>0.00 (0.03)</td>
</tr>
<tr>
<td>Firm operates in Anglo-Saxon home environment</td>
<td>0.05 (0.10)</td>
<td>0.07 (0.10)</td>
<td>0.09 (0.09)</td>
<td>0.11 (0.10)</td>
<td>0.13 (0.09)</td>
</tr>
<tr>
<td>Home-country long-term orientation</td>
<td>-0.06 (0.10)</td>
<td>-0.02 (0.09)</td>
<td>0.01 (0.09)</td>
<td>-0.01 (0.09)</td>
<td>0.02 (0.09)</td>
</tr>
<tr>
<td>Domestic uncertainty</td>
<td>0.01 (0.05)</td>
<td>0.00 (0.04)</td>
<td>-0.01 (0.04)</td>
<td>-0.01 (0.04)</td>
<td>-0.01 (0.04)</td>
</tr>
<tr>
<td>Domestic GDP per capita</td>
<td>-0.04 (0.08)</td>
<td>-0.04 (0.08)</td>
<td>-0.06 (0.07)</td>
<td>-0.03 (0.08)</td>
<td>-0.06 (0.07)</td>
</tr>
<tr>
<td>Domestic market saturation</td>
<td>0.09 (0.05)</td>
<td>0.08 (0.05)</td>
<td>0.08 (0.05)</td>
<td>0.08 (0.04)</td>
<td>0.07 (0.05)</td>
</tr>
<tr>
<td>Domestic rule of law</td>
<td>0.14 (0.08)</td>
<td>0.15 (0.07)</td>
<td>0.15 (0.07)</td>
<td>0.14 (0.07)</td>
<td>0.14 (0.07)</td>
</tr>
<tr>
<td>Inverse Mills ratio</td>
<td>-1.12 (0.23)</td>
<td>-1.25 (0.22)</td>
<td>-1.26 (0.21)</td>
<td>-1.29 (0.22)</td>
<td>-1.31 (0.21)</td>
</tr>
</tbody>
</table>

R²         0.139  0.150  0.166  0.161  0.177
Wald χ²     113.4  121.5  147.8  130.8  154.9

The intercept and segment and country dummies are included but not shown; Robust standard errors in parentheses; Number of observations: 752
To gain further insight into these interaction effects, we plotted them in Figure 1 on the basis of the results of Models 3 and 4. The upper panel shows how the effect of cultural portfolio diversity on net portfolio growth differs between firms performing below social aspirations and those performing above such aspirations, whereas the lower panel shows how this effect differs across firms performing below and above historical aspirations. The panels show similar moderating effects for both types of aspirations: cultural portfolio diversity is more negatively related to net portfolio growth for firms performing below aspirations than for firms performing above aspirations. However, for firms performing above social aspirations, the relationship between cultural portfolio diversity and net portfolio growth is positive rather than negative. This suggests that decision makers continue to embrace an expansionist strategy in the face of cultural portfolio diversity if their firm is outperforming competitors. For firms performing above historical aspirations, on the other hand, the relationship between cultural portfolio diversity and net portfolio growth is negative, indicating that managers of firms that perform better than in the past tend to limit the growth of their firm's portfolio in response to cultural diversity in that portfolio.

When we enter all four interaction terms simultaneously in Model 5, we continue to find substantial support for Hypotheses 2a and 2b, both for a firm's performance relative to social aspirations (above: $b=0.27$, $SE=0.09$, $p=0.004$, CI95=[0.09 0.45] and below: $b=-0.19$, $SE=0.11$, $p=0.067$, CI95=[-0.40 0.01]) and for that relative to historical aspirations (above: $b=0.07$, $SE=0.03$, $p=0.009$, CI95=[0.02 0.13] and below: $b=0.05$, $SE=0.03$, $p=0.04$, CI95=[0.00 0.11]).

Table 3 shows our findings when we measure a firm's country portfolio diversity in economic terms. Overall, these findings are very similar to those obtained for cultural portfolio diversity. The negative coefficient of -0.17 for economic portfolio diversity in Model 2 indicates a stronger managerial tendency to engage in lower net growth of a portfolio when that portfolio is characterized by greater economic diversity ($SE=0.05$, $p=0.002$, CI95=[-0.28 -0.06]), lending further support to Hypothesis 1. Hypothesis 2a continues to receive support as well, since the coefficient of the interaction between economic portfolio diversity and performance below social aspirations is negative in Model 3 ($b=-0.11$, $SE=0.06$, $p=0.048$, CI95=[-0.22 -0.00]) and so is that between economic portfolio diversity and performance below historical aspirations in Model 4 ($b=-0.05$, $SE=0.02$, $p=0.014$, CI95=[-0.10 -0.01]).
Figure 1. The effect of cultural portfolio diversity on net portfolio growth at different aspirational performance levels
Table 3: Regression analyses of the effect of economic portfolio diversity on net portfolio growth

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic portfolio diversity (H1)</td>
<td>-</td>
<td>-0.17 (0.05)</td>
<td>-0.18 (0.05)</td>
<td>-0.17 (0.05)</td>
<td>-0.17 (0.05)</td>
</tr>
<tr>
<td>Economic portfolio diversity x Performance above social aspirations (H2a)</td>
<td>-</td>
<td>-</td>
<td>0.09 (0.03)</td>
<td>-</td>
<td>0.09 (0.03)</td>
</tr>
<tr>
<td>Economic portfolio diversity x Performance below social aspirations (H2b)</td>
<td>-</td>
<td>-</td>
<td>-0.11 (0.06)</td>
<td>-</td>
<td>-0.08 (0.05)</td>
</tr>
<tr>
<td>Economic portfolio diversity x Performance above historical aspirations (H2a)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.05 (0.02)</td>
<td>0.05 (0.02)</td>
</tr>
<tr>
<td>Economic portfolio diversity x Performance below historical aspirations (H2b)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-0.05 (0.02)</td>
<td>-0.05 (0.03)</td>
</tr>
<tr>
<td>Firm’s performance above social aspirations</td>
<td>0.03 (0.03)</td>
<td>0.00 (0.03)</td>
<td>0.05 (0.03)</td>
<td>0.00 (0.03)</td>
<td>0.05 (0.03)</td>
</tr>
<tr>
<td>Firm’s performance below social aspirations</td>
<td>-0.03 (0.04)</td>
<td>-0.02 (0.04)</td>
<td>-0.09 (0.05)</td>
<td>-0.02 (0.04)</td>
<td>-0.07 (0.05)</td>
</tr>
<tr>
<td>Firm’s performance above historical aspirations</td>
<td>0.07 (0.03)</td>
<td>0.07 (0.03)</td>
<td>0.07 (0.03)</td>
<td>0.07 (0.03)</td>
<td>0.06 (0.03)</td>
</tr>
<tr>
<td>Firm’s performance below historical aspirations</td>
<td>-0.03 (0.03)</td>
<td>-0.04 (0.03)</td>
<td>-0.04 (0.03)</td>
<td>-0.06 (0.03)</td>
<td>-0.06 (0.03)</td>
</tr>
<tr>
<td>Firm’s domestic footprint</td>
<td>0.05 (0.06)</td>
<td>0.02 (0.05)</td>
<td>0.03 (0.04)</td>
<td>0.03 (0.05)</td>
<td>0.04 (0.04)</td>
</tr>
<tr>
<td>Number of formats in a firm’s portfolio</td>
<td>-0.02 (0.05)</td>
<td>-0.02 (0.04)</td>
<td>-0.01 (0.04)</td>
<td>-0.02 (0.04)</td>
<td>-0.01 (0.04)</td>
</tr>
<tr>
<td>Number of countries in a firm’s portfolio</td>
<td>0.13 (0.05)</td>
<td>0.13 (0.05)</td>
<td>0.10 (0.05)</td>
<td>0.12 (0.05)</td>
<td>0.09 (0.05)</td>
</tr>
<tr>
<td>Firm size</td>
<td>-0.08 (0.04)</td>
<td>-0.04 (0.03)</td>
<td>-0.05 (0.03)</td>
<td>-0.04 (0.03)</td>
<td>-0.05 (0.03)</td>
</tr>
<tr>
<td>Firm age</td>
<td>-0.17 (0.04)</td>
<td>-0.12 (0.03)</td>
<td>-0.12 (0.03)</td>
<td>-0.13 (0.03)</td>
<td>-0.13 (0.03)</td>
</tr>
<tr>
<td>Firm is large franchisor</td>
<td>-0.03 (0.04)</td>
<td>-0.02 (0.03)</td>
<td>-0.02 (0.03)</td>
<td>-0.02 (0.03)</td>
<td>-0.02 (0.03)</td>
</tr>
<tr>
<td>Firm has a valuable brand</td>
<td>-0.13 (0.05)</td>
<td>-0.09 (0.04)</td>
<td>-0.10 (0.04)</td>
<td>-0.09 (0.04)</td>
<td>-0.10 (0.04)</td>
</tr>
<tr>
<td>Firm is publicly listed</td>
<td>-0.04 (0.04)</td>
<td>-0.02 (0.03)</td>
<td>-0.02 (0.03)</td>
<td>-0.02 (0.03)</td>
<td>-0.01 (0.03)</td>
</tr>
<tr>
<td>Firm operates in Anglo-Saxon home environment</td>
<td>-0.01 (0.12)</td>
<td>-0.04 (0.09)</td>
<td>0.01 (0.09)</td>
<td>-0.00 (0.09)</td>
<td>0.04 (0.09)</td>
</tr>
<tr>
<td>Home-country long-term orientation</td>
<td>0.00 (0.11)</td>
<td>-0.05 (0.08)</td>
<td>-0.01 (0.08)</td>
<td>-0.04 (0.08)</td>
<td>0.01 (0.08)</td>
</tr>
<tr>
<td>Domestic uncertainty</td>
<td>0.02 (0.04)</td>
<td>0.02 (0.04)</td>
<td>0.01 (0.04)</td>
<td>0.02 (0.04)</td>
<td>0.02 (0.04)</td>
</tr>
<tr>
<td>Domestic GDP per capita</td>
<td>-0.06 (0.09)</td>
<td>-0.06 (0.07)</td>
<td>-0.05 (0.07)</td>
<td>-0.06 (0.07)</td>
<td>-0.05 (0.07)</td>
</tr>
<tr>
<td>Domestic market saturation</td>
<td>0.09 (0.05)</td>
<td>0.08 (0.04)</td>
<td>0.08 (0.04)</td>
<td>0.08 (0.04)</td>
<td>-0.07 (0.04)</td>
</tr>
<tr>
<td>Domestic rule of law</td>
<td>0.19 (0.08)</td>
<td>0.14 (0.07)</td>
<td>0.12 (0.07)</td>
<td>0.13 (0.07)</td>
<td>0.12 (0.07)</td>
</tr>
<tr>
<td>Inverse Mills ratio</td>
<td>-1.43 (0.27)</td>
<td>0.94 (0.21)</td>
<td>-1.04 (0.20)</td>
<td>0.97 (0.21)</td>
<td>-1.08 (0.21)</td>
</tr>
<tr>
<td><strong>R²</strong></td>
<td>0.130</td>
<td>0.149</td>
<td>0.165</td>
<td>0.159</td>
<td>0.173</td>
</tr>
<tr>
<td><strong>Wald χ²</strong></td>
<td>88.8</td>
<td>120.0</td>
<td>142.4</td>
<td>127.6</td>
<td>148.1</td>
</tr>
</tbody>
</table>

Intercept, industry and country dummies included but not presented in this table; Robust standard errors in parentheses; Number of observations: 752
Models 3 and 4 also lend support to Hypothesis 2b, since they show that performance above aspirations, whether social or historical, positively moderates the negative relationship between economic portfolio diversity and net portfolio growth (for social aspirations: b=0.09, SE=0.03, p=0.009, CI95=0.02 0.15; for historical aspirations: b=0.05, SE=0.02, p=0.03, CI95=0.00 0.09). Figure 2 shows these moderating effects graphically and reveals patterns that are similar to those identified in Figure 1, the only difference being that the relationship between economic portfolio diversity and net portfolio growth is always negative, even when a firm’s performance exceeds social aspirations.

3.4.1 Robustness tests and supplementary analyses

We conducted three additional analyses to establish the robustness of our findings. First, we estimated our models using the net difference between the number of countries entered and the number of countries exited in a given year as an alternative dependent variable, thus no longer weighing this difference by the change in a firm’s annual sales. Negative binomial regression models yielded results that were qualitatively similar to those reported in Tables 2 and 3. Second, we measured a firm’s performance relative to social aspirations by defining its peers as all sample firms operating in the same segment of the retail industry, thus dropping the restriction that peers be based in the same supranational region as the focal firm. The use of this less restrictive measure of a firm’s performance relative to social aspirations also yielded results that were highly consistent with those reported above. Third, we reran our models while excluding those firms that were ranked in the lowest quartile in terms of foreign sales. We continued to find support for all hypothesized effects.

We also performed a supplementary analysis in which we replaced our indicators of a firm’s performance relative to social and historical aspirations by measures of a firm’s absolute performance, notably its annual return on sales and its annual sales growth. These analyses indicated that a firm’s absolute performance does not moderate the negative relationship between the diversity of a firm’s country portfolio and the net level of growth chosen for that portfolio. These findings support our view that performance comparisons, rather than absolute performance indicators, are the main form of performance feedback that decision makers use to assess how well their firm is coping with the diversity of its country portfolio and, thus, how strongly to curb portfolio growth as a function of such diversity.  

6
Figure 2. The effect of economic portfolio diversity on net portfolio growth at different aspirational performance levels.
3.5 DISCUSSION

3.5.1 CONTRIBUTIONS AND IMPLICATIONS

Our study contributes to the literature in three main ways. First, we offer a theoretical advancement to prior IB studies by applying behavioral theory to understand firms’ portfolio adjustment decisions. We thereby aim to bring together two nascent strands of research in IB that independently started to gain traction, but could benefit from each other’s insights. On the one hand, studies have increasingly considered international growth decisions as a corporate-level phenomenon and analyzed either country exits or country entries as a function of a firm’s portfolio of international operations (e.g., Nachum & Song, 2011; Belderbos & Zou, 2009; Chan et al., 2006). On the other, scholars have started to explore the relevance of organizational performance feedback for the internal management of multinational corporations (Klueter & Monteiro, 2017), as well as for specific and individual internationalization decisions, such as exporting (Lin, 2014; Lages et al., 2008). We extend the analysis to a complex set of interrelated activities. Such an extension allows for a better understanding of the extent to which decision makers are constrained in their ability to coordinate different parts of a portfolio, and how they evaluate how much the portfolio’s diversity is taxing their organization. Our study indicates that performance comparisons, either with respect to prior achievements or industry competitors, present managers with important cues that feed into decision-making about the course of portfolio growth. Not taking into account the role of aspirations may therefore lead to inaccurate conclusions about the drivers of international portfolio growth. Overall, our study indicates that behavioral factors play a larger role than previously assumed in studies on international portfolio growth (e.g., Nachum & Song, 2011; Belderbos & Zou, 2009). Our findings are thus in line with suggestions made by Hutzschenreuter, Pedersen and Volberda (2007), who have called for more research on the role of aspirations in the field of IB. Our study suggests that such behavioral factors include decision makers’ greater encouragement to keep their firm on a course of growth, or alternatively, a higher tolerance towards strategic change. The consideration of these factors offers a more complete explanation for inter-firm and intertemporal differences in managerial tendencies to (de)internationalize firms, as reflected by the difference between the number of countries entered and exited in a given time period.

Second, we contribute to prior IB studies that have taken a portfolio perspective to analyze foreign entry and exit decisions, but have looked at such decisions separately or have only considered positive but not negative
growth (Nachum & Song, 2011; Belderbos & Zou, 2009; Chan, Makino, & Isobe, 2006). Specifically, we have analyzed a firm’s net portfolio growth by considering country entries and exits simultaneously and using a novel measure accounting for their co-occurrence. We have done so because when decision makers view their firm as a portfolio of businesses whose overall performance is more important than that of individual businesses, entries into new businesses and exits from existing ones are likely to be interrelated, which calls for a simultaneous consideration of both moves to correctly estimate in what direction decision makers take the portfolio as a whole. Such a consideration could help to prevent that certain factors are erroneously associated with for example higher likelihoods of divestment, even though resources may actually be reallocated in support of a growth course that is overall positive.

Third, we contribute to the performance feedback literature by shedding more light on the ways in which aspirations influence the strategic direction firms take. Although organizational performance feedback has been widely studied in relation to individual events of risk-taking (for a review, see Gavetti et al., 2012), “existing theory is very limited in predicting the specific kinds of strategies firms will adopt” (Shinkle, 2012: 444). In terms of firm-level strategic repositioning, for example, studies have identified factors that lead firms to move closer or further away from their competitors (Park, 2007; Schimmer & Brauer, 2012), but less is known about strategies used to influence the overall direction of the firm. Researchers have recently begun to look at the relationship between performance feedback and a firm’s entire portfolio of activities (Lungeanu et al., 2016), which allows for a broader perspective on the range of alternatives available and the role aspirations play in influencing the strategic direction of the firm. We have extended such recent analyses beyond the domestic setting by considering the full set of international activities of firms. Our study reveals two findings which deviate from those of prior performance feedback studies, possibly due to our consideration of such a context. First, we find that the social dimension of aspirations, rather than the historical dimension, has a stronger moderating effect on the relationship between portfolio diversity and net portfolio growth. Prior studies typically found that decision makers react more strongly to historical feedback (Shinkle, 2012). International growth strategies, and the foreign entries and exits that form them, are inherently complex and characterized by dynamics of competition. That is, when internationalizing, firms may enter countries in which competitors are already located or even choose to enter their respective countries-of-origin. Performance comparisons that contrast a firm’s performance with that of its main competitors will then be particularly important for decision makers as
they determine in what direction to take their firm’s portfolio. Second, whereas prior studies typically found strong direct effects of a firm’s aspirational performance on its behavior, we find relatively weak direct effects of such performance on firms’ behavior and, moreover, show that aspirational performance may in fact also influence the degree to which firm characteristics (in our case the diversity of a firm’s country portfolio) influence firm behavior. Our framework suggests that managers use performance assessments to better understand the taxing nature of portfolio diversity and to decide on the desirability of further portfolio growth. Managerial responses thus take the form of a wider reflection on the entire portfolio of corporate activities, and are often more complex and nuanced than often assumed. Applied more broadly, it may thus be beneficial for future studies of the relationship between aspirations and complex sets of activities to consider the interplay between factors that contribute to cognitive and structural complexity and aspirational performance assessments about that complexity, rather than to look at these two sets of factors in isolation (see also Joseph, Klingebiel, & Wilson, 2016).

3.5.2 LIMITATIONS AND FUTURE RESEARCH

Our study has several limitations. First, we used Deloitte’s “Global Powers of Retailing” reports as an important source of data for this study. These reports are compiled annually and state in which countries large retailers have operations. There were only minor inconsistencies between firms’ national operating locations listed in these reports and those listed in firms’ annual reports, a source we chose to follow when we were confronted with conflicting information. As this was the case for only a minor fraction of our firm-year observations for which data from both sources were available, we believe the Deloitte reports to be sufficiently reliable. Second, as these reports only provide information on the range of countries in which the various retailers operate, the total direct investment made in each of these countries remains unknown, which we thus have to assume to be sizeable enough to result in additional coordination costs (Bianchi & Ostale, 2006; Wrigley, Coe, & Currah, 2005). Future studies could explore how decision makers make portfolio adjustments by changing the size of their investments in host countries in addition to our focus on exits and entries.

Our findings indicate that cultural and economic diversity in a firm’s country portfolio play an important role in the net growth of that portfolio, both individually and in combination with the firm’s perceived relative performance. Although cultural and economic diversity have been argued to
constitute the two main forms of national diversity that pose coordination challenges to retailers (Goldman, 2001; Coe & Wrigley, 2007), other forms of national diversity may also pose such challenges. Future studies could therefore extend our analyses to other types of differences across countries, such as administrative and spatial differences (Ghemawat, 2001), so as to shed further light on the role of cross-country diversity in international portfolio management.

Future research should also aim to study multiple investment motives when considering portfolio growth strategies by firms. As retailers primarily enter new countries to seek new customers, our sample of entries is mainly characterized by market-seeking motives (Mohr & Batsakis, 2017; Dawson, 2007). Future studies could explore whether portfolio growth decisions differ across investment motives, such as strategic asset-seeking and efficiency-seeking motives (Dunning, 1998). Moreover, whereas we analyzed portfolio growth decisions in terms of foreign entries and exits, future studies could explore the potential role of performance feedback in other internationalization decisions that co-occur, such as location and ownership mode decisions (Boeh & Beamish, 2012) or establishment and ownership mode choices (Dikova & Van Witteloostuijn, 2007).

Future research could also explore alternative ways of measuring a firm’s performance relative to social aspirations, for example by comparing the focal firm’s financial achievements to those of its closest competitor rather than to the average financial performance of a broader set of peers. There is some evidence that retailers sometimes only look at their closest competitor when choosing to enter foreign markets (Yuang & Sternquist, 2007), which may also be the case for performance comparisons. Future studies could explore whether such firms arrive at different portfolio growth decisions than those that look at a broader set of competitors. Moreover, as decision makers’ reference points may change over time (e.g., Hu, Blettner, & Bettis, 2011; Blettner, He, Hu, & Bettis, 2015), future studies could explore the consequences of such changes for firms’ internationalization decisions.

Lastly, recent studies of firms’ business line portfolio restructuring activities have focused on the importance of corporate governance, and especially on the pressure that shareholders may exert on managers to adjust their firm’s portfolio of activities (Bergh & Sharp, 2015; Filatotchev, Wright, Uhlenbruck, Tihanyi, & Hoskisson, 2003; Zuckerman, 2000). By controlling for whether a firm was publicly listed or based in an Anglo-Saxon country (Weimer & Pape, 1999), we were able to take into account such pressures to some degree, but we were unable to fully account for them because about half of our sample
firms were privately owned and thus reported little data on their corporate governance features.

3.6 CONCLUSION

Our study indicates that behavioral factors have an important bearing on international portfolio growth decisions in terms of foreign entries and exits. Although decision makers may have the intention to grow their firm’s portfolio, contextual diversity in that portfolio introduces coordination costs that stem from cognitive limitations among senior executives responsible for cross-country coordination of corporate activities, leading such managers to attend to distress signals by limiting growth. However, decision makers’ urgency to restrict growth as a function of portfolio diversity hinges on a firm’s performance relative to social or historical aspirations. When a firm’s performance is below aspirations, decision makers are more willing to undertake corrective strategic actions and experience a greater urgency to restrict growth as a function of portfolio diversity. Decision makers of firms that perform above aspirations, on the other hand, are less concerned about the coordination challenges raised by diversity, and thus, less inclined to restrict portfolio growth in response to diversity. Hence, a firm’s performance relative to competitors and historical achievements will co-determine whether decision makers are encouraged to keep their firm on a portfolio growth course in the face of portfolio diversity. The evolution of a firm’s country portfolio is thus shaped by its extant level of diversity and feedback on how well that diversity is managed.

NOTES

1 The home countries in our sample are Australia, Belgium, Brazil, Canada, Chile, China, Finland, France, Germany, Hong Kong, Ireland, Italy, Japan, Mexico, Netherlands, Norway, Portugal, South Africa, South Korea, Spain, Sweden, Switzerland, United Kingdom, and the United States.
2 For a related yet different measure of the degree of restructuring of industry portfolios, see Bergh and Lawless (1998).
3 We obtained similar results when we used quintiles instead of deciles.
4 There were no instances where a firm’s ROS was equal to that of its peers.
5 We obtained qualitatively similar results when we estimated fixed effects models instead.
6 A detailed overview of the results of all these analyses is available upon request.
## APPENDIX

First-stage probit regression of the likelihood that a firm’s cultural diversity is above the industry average

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm’s performance above social aspirations</td>
<td>0.13 (0.08)</td>
</tr>
<tr>
<td>Firm’s performance below social aspirations</td>
<td>-0.04 (0.07)</td>
</tr>
<tr>
<td>Firm’s performance above historical aspirations</td>
<td>0.15 (0.07)</td>
</tr>
<tr>
<td>Firm’s performance below historical aspirations</td>
<td>0.09 (0.07)</td>
</tr>
<tr>
<td>Firm’s domestic footprint</td>
<td>-1.07 (0.13)</td>
</tr>
<tr>
<td>Number of formats in a firm’s portfolio</td>
<td>0.24 (0.09)</td>
</tr>
<tr>
<td>Number of countries in a firm’s portfolio</td>
<td>0.77 (0.10)</td>
</tr>
<tr>
<td>Firm size</td>
<td>0.14 (0.10)</td>
</tr>
<tr>
<td>Firm age</td>
<td>0.13 (0.07)</td>
</tr>
<tr>
<td>Firm is large franchisor</td>
<td>-0.03 (0.09)</td>
</tr>
<tr>
<td>Firm has a valuable brand</td>
<td>0.21 (0.08)</td>
</tr>
<tr>
<td>Firm is publicly listed</td>
<td>0.25 (0.09)</td>
</tr>
<tr>
<td>Firm operates in Anglo-Saxon home environment</td>
<td>-1.18 (0.48)</td>
</tr>
<tr>
<td>Home-country long-term orientation</td>
<td>-0.57 (0.35)</td>
</tr>
<tr>
<td>Domestic uncertainty</td>
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</tr>
<tr>
<td>Domestic GDP per capita</td>
<td>0.25 (0.18)</td>
</tr>
<tr>
<td>Domestic market saturation</td>
<td>-0.13 (0.12)</td>
</tr>
<tr>
<td>Domestic rule of law</td>
<td>-0.02 (0.23)</td>
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<tr>
<td>Domestic ethnic fractionalization</td>
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<td>Domestic linguistic fractionalization</td>
<td>-0.04 (0.32)</td>
</tr>
<tr>
<td>Domestic religious fractionalization</td>
<td>0.34 (0.27)</td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-237.7</td>
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<tr>
<td>LR $\chi^2$</td>
<td>538.7</td>
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The intercept and segment and country dummies are included but not shown; Robust standard errors in parentheses; Number of observations: 752

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First-stage probit regression of the likelihood that a firm’s economic diversity is above the industry average

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm’s performance above social aspirations</td>
<td>0.10 (0.07)</td>
</tr>
<tr>
<td>Firm’s performance below social aspirations</td>
<td>-0.06 (0.07)</td>
</tr>
<tr>
<td>Firm’s performance above historical aspirations</td>
<td>0.10 (0.06)</td>
</tr>
<tr>
<td>Firm’s performance below historical aspirations</td>
<td>0.07 (0.08)</td>
</tr>
<tr>
<td>Firm’s domestic footprint</td>
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</tr>
<tr>
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<td>Number of countries in a firm’s portfolio</td>
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<tr>
<td>Firm size</td>
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</tr>
<tr>
<td>Firm age</td>
<td>0.08 (0.07)</td>
</tr>
<tr>
<td>Firm is large franchisor</td>
<td>0.12 (0.09)</td>
</tr>
<tr>
<td>Firm has a valuable brand</td>
<td>0.08 (0.08)</td>
</tr>
<tr>
<td>Firm is publicly listed</td>
<td>0.28 (0.09)</td>
</tr>
<tr>
<td>Firm operates in Anglo-Saxon home environment</td>
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</tr>
<tr>
<td>Home-country long-term orientation</td>
<td>-0.84 (0.35)</td>
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<tr>
<td>Domestic uncertainty</td>
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<tr>
<td>Domestic GDP per capita</td>
<td>-0.53 (0.24)</td>
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<tr>
<td>Domestic market saturation</td>
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</tr>
<tr>
<td>Domestic rule of law</td>
<td>0.70 (0.24)</td>
</tr>
<tr>
<td>Domestic ethnic fractionalization</td>
<td>0.29 (0.32)</td>
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<tr>
<td>Domestic linguistic fractionalization</td>
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<td>Domestic religious fractionalization</td>
<td>0.43 (0.28)</td>
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<tr>
<td>LR $\chi^2$</td>
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The intercept and segment and country dummies are included but not shown; Robust standard errors in parentheses; Number of observations: 752
CHAPTER 4

WHEN DO CROSS-BORDER ACQUSITIONS IMPROVE THE DOMESTIC PRODUCTIVITY OF EMERGING MARKET MULTINATIONALS?

ABSTRACT

This study sheds light on the conditions under which firms grow their domestic productivity following specific cross-border acquisitions (CBAs). Using new internalization theory and particularly concentrating on resource recombination, we build a theoretical framework that focuses on firms’ ability to recombine and meld knowledge, despite possible recombination barriers. At a low to medium level of internationalization, that level will likely exert a negative influence on the growth of a foreign acquirer’s domestic productivity. The reason is that, at low to medium levels of internationalization, foreign acquirers will likely be inclined to increasingly introduce formal structures and procedures that hamper the entrepreneurial activity required for successful recombination of foreign-acquired resources. At a medium to high level of internationalization, on the other hand, that level will likely be positively related to domestic productivity, as firms build recombination expertise and increasingly realize that rules should be interpreted as guidelines. We therefore hypothesize a U-shaped relationship between a firm’s degree of internationalization and its growth of domestic productivity following a CBA. Furthermore, we predict that both relative acquisition size and state-ownership of a firm will steepen that relationship, and that the magnitude of home-country institutional voids is likely to flatten it. Analyzing a sample of 382 CBAs by manufacturing firms from 13 emerging economies, we find strong and consistent support for our framework. We thereby draw attention to an ‘upgrading paradox’ as our findings indicate that even though emerging market firms internationalize through acquisitions in order to upgrade, they only manage to successfully upgrade when they are sufficiently well-internationalized already.\(^3\)

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\(^3\) This study is conducted in collaboration with Arjen Slangen and Pursey Heugens

66
4.1 INTRODUCTION

Although firms often use cross-border acquisitions (CBAs) as a means to rapidly access new markets and strengthen their competitive position in the global arena (Madhok & Keyhani, 2012; Cui, Meyer, & Hu, 2014; Buckley, Elia, & Kafouros, 2014), in many cases such moves are made with the domestic market in mind (Meyer, 2015; Williamson & Raman, 2011; Gubbi, Aulakh, Ray, Sarkar, & Chittoor, 2010; Peng, 2012). Access to proprietary technologies or process know-how may allow a firm to upgrade its domestic asset base, and thereby improve domestic productivity, and hence, see off competitors in its home market (Rui & Yip, 2008; Deng, 2009). Although domestic upgrading is important for all MNEs, it is especially relevant to firms from emerging markets since such firms tend to have relatively weak domestic firm-specific advantages (FSAs) and increasingly face competition in their domestic market from better-equipped foreign competitors (Cuervo-Cazurra, Narula, & Un, 2015; Williamson & Raman, 2011). In that such upgrading requires the discarding of redundant resources, and having to unlearn routines, alter procedures, and transform employees’ mindsets at the heart of the firm’s asset base, it can be described as even more complex than the four forms of resource recombination as identified by Verbeke and Kano (2016), so that it has characteristics of what could be called transformative bundling.

The international business (IB) literature has devoted only limited attention to a better understanding of the conditions under which firms benefit domestically from acquired strategic assets, although certain firms are likely better able than others to engage in the complex form of resource recombination that is needed for productivity gains to materialize. Multinational enterprises (MNEs) characterized by a low degree of internationalization (DOI) have a great opportunity to strengthen their firm-specific advantages, but likely face the biggest challenges in being able to benefit from CBAs (Kim, Hoskisson, & Lee, 2015). That is, these firms likely experience difficulties in melding acquired resources with their own FSAs, given the complexity of having to reallocate, leverage and meld resources that are embedded in distinct national environments (Verbeke, 2013; Rugman & Nguyen, 2014). Since the capabilities which firms need to effectively engage in resource recombination are unique and difficult to build, they are likely reserved to full-fledged MNEs only (Verbeke & Yuan, 2010; Pitelis & Verbeke, 2007).

IB studies of resource recombination processes have focused on the difficulties in relation to the deployment, leveraging and melding of resources, but have primarily analyzed them in host-country settings.
(Rugman, Verbeke, & Nguyen, 2011; Narula & Verbeke, 2015; Verbeke & Kano, 2016). We build on that work and extend it to study firms that aim to grow domestic productivity. We propose that firms have a tendency to formalize organizational processes and managerial responsibilities as their degree of internationalization increases from low to medium levels and that this tendency causes managers to increasingly abstain from the entrepreneurial activities required for recombining the knowledge of a foreign-acquired firm (Rugman et al., 2011; Hutzschenreuter, Voll, & Verbeke, 2011). As a firm’s degree of internationalization increases from medium to high levels, however, managers will likely increasingly realize that formal processes and responsibilities should be seen as behavioral guidelines rather than as strict rules and will therefore likely become more inclined to experiment with newly-acquired resources, thereby stimulating its recombination. We therefore hypothesize a U-shaped relationship between a firm’s DOI and its domestic productivity growth after making a CBA.

Furthermore, we propose that the extent to which a firm’s DOI affects its domestic productivity growth following a CBA is shaped by three factors that not only influence managerial tendencies to formalize at early stages of internationalization or how strong the effects of such tendencies are, but also how a firm develops the entrepreneurial mindset needed for complex resource recombination. Specifically, we consider the moderating effects of whether a firm is state-owned, the magnitude of domestic institutional voids and relative acquisition size. Analyzing a sample of 382 cross-border acquisitions made in developed economies by emerging market firms from manufacturing industries, we find support for our hypothesized U-shaped relationship and the three moderating effects.

Specifically, we find that the curve is steeper for firms that are state-owned, presumably as in these more bureaucratic firms procedures and structures act as a greater constraint at early stages of internationalization, whereas lower degrees of managerial turnover mean that less tacit knowledge leaves the organization and that the same managers are involved when recombination expertise is developed by firms at medium-to-high degrees of internationalization (Shleifer, 1998; Goldeng, Grünfeld, & Benito, 2008). The magnitude of home-country institutional voids flattens the curve, in line with our expectation that managers already work less according to strict rules and procedures when their firm is at a low-to-medium DOI, in order to deal with lower institutional quality at home (Khanna & Palepu, 2006; Cuervo-Cazurra & Genc, 2011, 2008). At medium-to-high degrees of firms’ internationalization, managerial experience with domestic institutional voids also means that a firm is less likely to further develop its entrepreneurial
mindset, as that mindset is already formed to a substantial degree. Lastly, the relationship is steepened by the relative size of the acquisition. This finding is in line with our expectation that larger acquisitions tend to function as a greater strain on structures and procedures in firms that are characterized by a low-to-medium DOI. Firms’ experience with more entrepreneurial forms of recombination at medium-to-high such degrees allows them to also benefit more from relatively larger acquisitions (Aybar & Ficici, 2009; Lee & Caves, 1998).

Our study aims to make three main contributions to the IB literature. First, our study suggests something of an ‘upgrading paradox’. Even though the IB literature suggests that many EMNEs internationalize through acquisitions to upgrade (Narula, 2012, Ramamurti, 2012; Cuervo-Cazurra et al., 2015), we find that they only manage to successfully upgrade when they are sufficiently well-internationalized already. Paradoxically, firms may thus want to accomplish a certain objective by making a CBA, but they typically need to have made multiple such acquisitions to actually realize that objective. Such findings seem to be at odds with some of EMNEs’ remarkable success stories that suggest that these firms face more modest barriers to growth (Luo & Tung, 2007; Mathews, 2006). Our finding that the relationship between a firm’s DOI and domestic productivity growth is moderated by three factors may explain why prior studies found CBAs to be beneficial to EMNEs, even when these firms were not that internationalized. That is, cross-border acquirers seem to suffer less from low-to-medium degrees of internationalization when they are privately owned, make relatively small acquisitions, or originate from countries with large institutional voids. Second, we contribute to new internalization theory through our explicit focus on the resources that firms acquire abroad and recombine with FSAs in their home country rather than in the host-country (Verbeke & Kano, 2016; Rugman et al., 2011; Verbeke, 2013; Verbeke & Yuan, 2010). We thereby put a new form of resource recombination at the center of inquiry, namely transformative bundling, which is used for upgrading processes in the firm’s home country. Third, studies on the role of MNEs in development have suggested that outward investment by firms from lesser-developed economies could bring about positive development effects in their respective home countries, for example through productivity spillovers (Debaere, Lee, & Lee, 2010; Li, Li, Lyles, & Liu, 2016; Hendriks, 2017). However, the evidence in support of this relationship is mixed at best. Some of the factors we propose as important recombination barriers could potentially also explain why home-economy firms struggle to benefit from spillovers, and thus, why so few studies report compelling evidence.
4.2 THEORY AND HYPOTHESES

4.2.1 CROSS-BORDER ACQUISITIONS AND DOMESTIC PRODUCTIVITY GROWTH

Even more so than their counterparts from service industries, manufacturing firms are likely to gain an advantage over competitors when they successfully grow their productivity. As firms typically conduct a large share of their operations in their respective home countries, such domestic settings tend to shape to an important extent how productivity can be grown (Hendriks, Slangen, & Heugens, 2018; Asmussen, 2009). That is, not all domestic settings are as conducive to the type of innovation that leads to productivity gains. Firms from emerging markets typically have relatively weak domestic FSAs and increasingly face fierce competition in their domestic market from better-equipped foreign competitors (Madhok & Keyhani, 2012). Internationalization is then a feasible alternative for such firms, whereby they aim to access superior resources abroad (Elia & Santangelo, 2017). Indeed, given the suboptimal innovation infrastructure in their home environment, emerging market firms have relied in great numbers on CBAs to upgrade their FSAs (Cuervo-Cazurra et al., 2015; Rui & Yip, 2008; Deng, 2009; Pananond, 2015). Even though the benefits of importing superior resources to settings that are comparatively underdeveloped are potentially sizeable, so are the obstacles that firms face in the deployment of such resources.

For firms to improve domestic productivity after a given CBA, they need to successfully connect the acquired host-country resources with their own asset base at home, through a process labeled as recombination in the new internalization theory literature (Verbeke, 2013; Rugman & Verbeke, 2001). Those acquired resources could include technologies and equipment, process and product know-how, brand reputation, but also human capital. Recombination involves managerial creativity in order to deploy, leverage and meld firm-specific resources with those taken from host-country settings (Verbeke & Kano, 2016). The notion that firms face important recombination barriers to growth is central within this body of literature (Rugman et al., 2011). That is, resource recombination processes are intrinsically complex and substantial managerial expertise is required to coordinate activities across multiple contexts and efficiently transfer knowledge between locations (Hutzschenreuter et al., 2011; Meyer, Mudambi, & Narula, 2011). Resource recombination is therefore described as a higher-order advantage (Verbeke & Yuan, 2010), primarily reserved to full-fledged MNEs, which are specialized in recombining and melding location-bound and non-location-bound knowledge (Pitelis & Verbeke, 2007). Indeed, even the largest MNEs experience difficulties in crafting novel resource recombinations (Verbeke & Kano,
Many EMNEs are only characterized by a limited DOI with suboptimal structures and organizational procedures (Narula, 2012; Ramamurti, 2012), which will likely cause them great difficulty in taking full advantage of resources for upgrading. That is, it is unlikely that such firms will be able to engage in more complex forms of resource recombination (Narula & Verbeke, 2015).

Verbeke and Kano (2016: 87) identify four such forms, characterized by increasing complexity: fast bundling, principles-driven bundling, adaptive bundling and entrepreneurial resource orchestration. Involving the highest degree of novelty, entrepreneurial resource orchestration implies a focus on creative resource recombinations, non-programmable bricolage and an important role for informal and relational elements, such as diplomacy and negotiations (Verbeke & Kano, 2016). It involves the coordinated deployment of FSAs across various host-country settings where they are melded with local resources. However, EMNEs which aim to upgrade domestically do not deploy their FSAs for use in host countries, but rather take back newly accessed resources to transform what is at the heart of their asset base. The type of recombination that is needed to upgrade domestic assets has characteristics of what we would describe as transformative bundling, and requires an even stronger entrepreneurial mindset than processes of resource orchestration. That is, managers of firms that aim to upgrade domestically need to make changes, some more fundamental in nature than others, to oftentimes taken-for-granted ways of doing business, thereby likely facing resistance further down the hierarchy. Such changes involve discarding redundant resources, unlearning routines, altering procedures, and transforming employees’ mindsets to accommodate the newly acquired foreign resources. Even more so than ‘entrepreneurial resource orchestration’, such types of recombination activities are profoundly complex and require a high degree of managerial skill and expertise.

Firms characterized by low degrees of internationalization are likely unable to engage in such a complex form of resource recombination. The marginal contribution from accessing superior resources is still high when firms are newly internationalized, as they may benefit from a direct replacement of existing resources. When firms become more internationalized, they have a tendency to formalize organizational processes and managerial responsibilities to facilitate intra-firm coordination (Martinez & Jarillo, 1991; Meyer et al., 2011). However, such formalization likely limits the room managers have for entrepreneurial activity, considering that rules and procedures define appropriate behavior and structure how a firm’s employees think and act (Thornberry, 2001; Barrett & Weinstein, 1998;
Stopford & Baden-Fuller, 1994). In that the resource recombinations that make up transformative bundling are relatively complex and idiosyncratic in nature, they require a great deal of such activity when it comes to the assessment of what resources need to be combined and what procedures need to be replaced. Hence, managerial tendencies to formalize will likely be counterproductive for the growth of a firm’s domestic productivity. When firms move from low to medium degrees of internationalization, that degree is thus likely to be negatively related to domestic productivity growth.

As a firm’s degree of internationalization increases from medium to high levels, however, managers are likely to realize that formal processes and responsibilities should be seen as behavioral guidelines rather than as strict rules and will therefore become more inclined to engage in entrepreneurial activities. Firms characterized by a medium-to-high DOI develop recombination expertise in response to further internationalization, in no small part due to that realization. Expertise with more complex forms of resource recombination, necessary for the management of more highly internationalized firm networks, means that managers are more likely to be exposed to the factors that determine whether resources are successfully deployed, leveraged or melded. As more complex forms of recombination require an entrepreneurial mindset, the realization that such a way of thinking is needed will gradually gain in prominence in managers’ minds. Important within such a realization process is the understanding that structures and procedures should not be applied too rigidly (Burgelman, 1983). When their managers come to understand such formal arrangements as guidelines rather than strict rules in response to the demands of more highly internationalized networks, firms develop stronger recombination capabilities that provide room for entrepreneurial activity. Such better-developed recombination capabilities allow a firm to more effectively identify what resources can be used to partially replace and adapt existing FSAs, so that the effectiveness of recombination increases. Firms characterized by a medium-to-high DOI are thus likely to better perform complex forms of resource recombination, and increasingly so for higher such levels of internationalization. Hence, the relationship between a firm’s DOI and domestic productivity growth is likely to be positive for firms that move from medium to high degrees of internationalization.

A firm’s DOI is therefore key to their effectiveness in processes of transformative bundling. Whereas the ability of firms to benefit in terms of domestic productivity growth is constrained at lower degrees of internationalization by formal processes and responsibilities, at higher such degrees managerial expertise with creative resource recombinations allows
firms to develop stronger recombination capabilities. Combining the described negative relationship between a firm’s DOI and domestic productivity growth at low-to-medium such degrees with a positive relationship at medium-to-high degrees, we expect the overall relationship to have a turning point at medium levels of internationalization. In other words, we expect that:

*Hypothesis 1: The relationship between a firm's degree of internationalization and the growth of its domestic productivity after making a cross-border acquisition is U-shaped.*

4.2.2 The moderating roles of state-ownership, institutional voids, and relative acquisition size

The relative benefits and costs of recombining acquired resources as a function of a firm’s DOI, and hence the steepness of the U-shaped relationship between a firm’s DOI and its domestic productivity growth, will likely vary across acquisitions. We argue that recombination processes are co-shaped by characteristics of the acquisition itself, firm-specific aspects, as well as home-environment characteristics. We focus on three factors that all affect the extent to which formal processes and responsibilities act as a constraint for resource recombination processes at early stages of internationalization, and also shape the ways in which managers realize such processes require an entrepreneurial mindset at medium-to-high degrees of internationalization. That is, we consider the moderating roles of whether a firm is state-owned, the magnitude of domestic institutional voids, and relative acquisition size.

The nature of an acquirer’s existing FSAs is likely to co-determine the extent to which it is able to engage in transformative bundling and thereby increase its domestic productivity after making a CBA. Especially in the context of EMNEs and their outward investment, it is important to take into account what role a firm’s home government plays in the formation of those advantages (Buckley, Clegg, Cross, Liu, Voss, & Zheng, 2007; Wang, Hong, Kafouros, & Wright, 2012; Peng, 2012). State-owned EMNEs are argued to operate with a so-called ‘soft budget constraint’, as they often rely on government support in the form of funds for investment, subsidies, preferential credit and ministerial engagement (Buckley et al., 2007; Luo, Xue, & Han, 2010). However, together with its advantages, the literature has traditionally also discussed negative consequences of state-ownership, zooming in on the question of efficiency (Megginson & Netter, 2001; Cuervo-
Cazurra, Inkpen, Musacchio, & Ramaswamy, 2014). State-owned firms are often thought to be more bureaucratic, in no small part due to their governmental ties, as more hierarchical layers are needed to accommodate extensive approval and reporting procedures (Cui & Jiang, 2012; Ralston, Terpstra-Tong, Terpstra, Wang, & Egri, 2006). As for the firms which are characterized by low-to-medium degrees of internationalization, where formal arrangements are set up to support recombination, it is likely that managers of those that are state-owned typically apply rules even more strictly than managers of their private counterparts. That is, bureaucratic structures promote stability and force managers to adopt role-taking behavior that is limited to the task at hand, thereby allowing little room for non-routine applications of rules and procedures (Heugens, 2005). In such a way, structures and procedures are likely to act as even greater barriers to recombination processes, and further exert a limiting effect on the growth of domestic productivity (Shleifer, 1998; Goldeng et al., 2008).

Conversely, when moving from medium to high levels of internationalization, state-owned firms will likely benefit more than their private counterparts from the entrepreneurial activities undertaken at such levels of internationalization. The reason is that state-owned firms are typically characterized by lower managerial turnover (Tsui, Wang, & Zhang, 2002), and therefore more likely to strengthen recombination capabilities as their level of internationalization increases from medium to high levels. That is, not all knowledge can be made explicit, and in certain cases considerable amounts of knowledge continue to be held by individuals. In that expertise is required and opportunities for codification are limited, creative resource recombination processes rely heavily on the inputs of individual managers (Volberda & Karali, 2015). Firms are likely to benefit even more strongly from the realization that rules should not be applied rigidly when the same individuals give guidance to resource recombination processes and directly pass knowledge on to new workers. Hence, we expect that:

_Hypothesis 2a: The U-shaped relationship between a firm’s degree of internationalization and the growth of its domestic productivity after making a cross-border acquisition is steeper for state-owned firms than for privately-owned firms._

Next to identifying that state-ownership plays an important role in the internationalization of EMNEs, recent studies on this topic find that home-country contexts leave important traces on the expansion patterns of such firms (Luo & Wang, 2012; Hoskisson, Wright, Filatotchev, & Peng, 2013). Home-environment characteristics also likely co-shape how firms make use
of internationally acquired assets in order to grow domestic productivity (cf. Zhu, Ma, Sauerwald, & Peng, 2017). Unlike their developed economy counterparts, EMNEs are used to having to operate in home countries with underdeveloped institutions, also dubbed institutional voids (Cuervo-Cazurra & Genc, 2008; Khanna & Palepu, 2006). Such voids are reflected by “an imperfect contracting environment, less-developed market mechanisms, an inefficient judiciary, unpredictable and burdensome regulations, heavy bureaucracy, political instability or discontinuity in government policies” (Cuervo-Cazurra & Genc, 2008: 960). The more pronounced institutional voids will be in a firm’s home country, we expect such a firm to be less inclined to formalize as a function of DOI, since their domestic experiences have likely compelled them to develop a more entrepreneurial mindset already.

Firms respond to domestic institutional voids by internalizing into their structures ways to cope with institutional challenges, and, as a result, develop a larger set of non-market resource bundles (Cuervo-Cazurra & Genc, 2011; Cuervo-Cazurra, 2006). Indeed, to be able to operate in challenging institutional environments, EMNEs develop informal organizational mechanisms (Khanna & Palepu, 2006), and also rely on inter-organizational networks that require efforts of coordination (Khanna & Palepu, 2000). Moreover, in the absence of institutions which facilitate the flow of credible information, such firms need to search for and filter information that is both widely dispersed and of variable quality (Khanna & Palepu, 2006). Similarly, firms oftentimes need to take over roles otherwise played by transaction-facilitating institutions, in that they for example provide a forum for exchange (Khanna & Palepu, 2006). Such experiences provide firms with important know-how and make it necessary for them to develop reconfiguration and adaptation skills if they are to adequately answer to demanding environments (Del Sol & Kogan, 2007). The disadvantage of having to operate in a challenging institutional environment can then be transformed by firms into an advantage (Cuervo-Cazurra & Genc, 2011, 2008). That advantage stems from managers’ ability to work not as much according to formal rules, but instead in more creative and flexible ways to cope with unpredictable and complex environments. Compared to their counterparts from countries with limited institutional voids, the firms that deal with challenging institutional environments at home are thus not as likely to introduce formal rules and procedures at low-to-medium degrees of internationalization. Being able to draw on domestically developed capabilities that involve greater degrees of entrepreneurial activity rather than following strict rules, such firms will thus be to a lesser extent restricted by lower degrees of internationalization when they engage in more challenging forms of cross-border resource
recombination, such as transformative bundling. We therefore expect that the negative effect of introducing formal structures and procedures is not as strong for firms from home countries that are characterized by greater institutional voids.

When firms move from medium to high degrees of internationalization, experience with domestic institutional voids also means that managers’ realization that formal structures and procedures can act as recombination barriers does not generate as many productivity gains. That is, firms from countries with large institutional voids are less likely to further develop their entrepreneurial mindset, as that mindset is already formed to a substantial degree. Moreover, the development of domestic non-market resource bundles could also introduce a type of rigidity that complicates the formation of cross-border recombination capabilities that help more highly internationalized firms to extract greater value from resources acquired in developed economies (Cuervo-Cazurra, Maloney, & Manrakhan, 2007). Taking into account both effects at either end of the curve, firms are thus less likely to suffer from internal recombination barriers when moving from low to medium degrees of internationalization, but also benefit relatively less from managerial expertise when they develop stronger cross-border recombination capabilities at medium-to-high degrees of internationalization.

In other words, we expect that:

Hypothesis 2b: The U-shaped relationship between a firm’s degree of internationalization and the growth of its domestic productivity after making a cross-border acquisition is flatter for firms from home countries with greater institutional voids.

Whereas domestic institutional voids and state-ownership will likely increase a firm’s tendency to formalize processes and responsibilities as it moves from low to medium degrees of internationalization, the relative size of a CBA will likely cause this tendency to pose a greater burden to the firm in the initial stages of its internationalization. Firms often face a dilemma when they aim to use internationally accessed resources for processes of domestic upgrading. Larger investments, relative to the size of the acquiring firm, are more likely to substantially upgrade that firm’s domestic resource base, but can also be more difficult to ‘digest’ (Aybar & Ficici, 2009; Ellis, Reus, Lamont, & Ranft, 2011; Lee & Caves, 1998). The reason we propose is that larger acquisitions, relative to firm size, tend to function as a greater strain on formal processes and responsibilities of firms that are characterized by a low-to-medium DOI, and thus act as greater barrier to recombination. That is, when making such an acquisition, there is even less room for entrepreneurial
activity when it is integrated with existing resource bundles, thus worsening the negative effect that relates to managerial tendencies to formalize at low-to-medium degrees of internationalization (Datta, 1991; Zollo & Singh, 2004).

Cross-border acquirers characterized by medium to high degrees of internationalization, on the other hand, will likely especially benefit from the entrepreneurial activities they undertake at such degrees of internationalization when they make a relatively large acquisition. The reason is that such acquisitions allow access to larger sets of resources and firms can make better use of the entrepreneurial capabilities they develop in creatively identifying resources for subsequent replacement or transformation of existing FSAs (Zollo & Winter, 2002; Ellis et al., 2011). In other words, firms stand to benefit more from superior recombination capabilities in terms of domestic productivity gains when they acquire relatively larger target firms. Therefore, we expect that:

\[ H2c: \text{The U-shaped relationship between a firm’s degree of internationalization and the growth of its domestic productivity after making a cross-border acquisition is steeper for relatively larger acquisitions.} \]

4.3 METHODOLOGY

4.3.1 EMPIRICAL SETTING AND SOURCES

Firms from a multitude of emerging economies such as China, Mexico, and Turkey have been observed to make CBAs with the aim of upgrading their domestic capabilities (Young, Huang, & McDermott, 1996; Bonaglia, Goldstein, & Mathews, 2007). We collected data about firms from multiple such economies to have a diverse sample with wide generalizability and to be able to test in what way domestic institutional voids affect the relationship between a firm’s DOI and its domestic productivity growth. The most important source of data has been the “Emerging Market Global Players” reports, published by the Columbia Center on Sustainable Investment (CCSI). When compared over multiple years, these reports give information on the characteristics of individual CBAs made by EMNEs from 13 home countries, as well as firm-specific indicators up to three years after those investments. To arrive at a sample in which our theoretical framework can appropriately be tested, we apply three restrictions to the acquisitions we consider. First, we focus on firms from manufacturing industries, and exclude those that are active in low-technology sectors, as we aim to analyze firms that engage in CBAs in search of superior technologies to improve domestic productivity. We
used OECD’s classification of manufacturing sectors by R&D intensity to exclude those defined as ‘low-technology industries’ (Hagedoorn & Narula, 1996). CCSI’s reports provided information on the main industry in which a firm operates. Second, superior resources are likely to be found in developed economies where the environment is more conducive to value-adding innovation (Gubbi & Elango, 2016). We therefore only consider investments made by EMNEs in countries that are classified by the International Monetary Fund as ‘advanced economies’. Third, we select only those acquisitions whereby firms explicitly stated that they aimed to obtain technologies for the domestic market in acquisition announcements or their annual reports. Having applied these three restrictions, we identify 382 acquisitions that were made over the period 2006-2013. Other sources of data include the firms’ annual reports for firm-specific data and Euromonitor’s Passport GMID, IMF’s Direction of Trade Statistics and World Bank’s World Development Indicators for country-level data.

4.3.2 Dependent variable

We measure a firm’s domestic productivity growth after making a CBA by the difference in its domestic labor productivity in the year of the acquisition and that three years later. The focus on labor productivity is particularly relevant in an emerging economy context, as suggested by Park, Li, and Tse (2006: 139), who state that in China it is a “critical indicator of operating efficiency”. That operating efficiency, in turn, can be improved through the access to superior technologies that are brought back to the home country. Domestic labor productivity is measured as the ratio of domestic sales to domestic employment. To derive the growth rate, we calculate that ratio at the time of the investment and three years after, and divide the latter ratio by the former. Similar to a great variety of studies which considered the impact of acquisitions on firm performance, we choose a three year time window to take into account that post-acquisition performance gains take considerable time to materialize (for a review, see King, Dalton, Daily, & Covin, 2004). When a firm made multiple foreign acquisitions over this three year period, we excluded it from our final sample, as we aim to link a firm’s domestic productivity growth to a specific foreign acquisition. We also run additional analyses in which we adopt a one-year and two-year growth rate. Data on domestic sales in U.S. dollars and domestic employment were retrieved from CCSI’s “Emerging Market Global Players” reports.
4.3.3 INDEPENDENT AND MODERATOR VARIABLES

In line with prior studies, we operationalize a firm’s DOI through its ratio of foreign sales to total sales (FSTS) (Ruigrok, Amann, & Wagner, 2007; Tallman & Li, 1996). Both of these values in U.S. dollars were obtained from CCSI’s “Emerging Market Global Players” reports. We choose the FSTS ratio, rather than similar measures such as foreign assets to total assets or foreign employment to total employment, as such a measure of outputs better captures firms’ ability to successfully operate in foreign markets (Rugman & Verbeke, 2004). Similarly, it better reflects the coordination challenges a firm faces in managing its internal network and the extent to which recombination of firm-specific and location-bound knowledge is needed (Meyer et al., 2011).

To measure whether a firm was state-owned over the three years following the focal acquisition, we adopt a binary variable that takes the value of “1” when a firm was partly or fully state-owned and “0” when it was not. We considered a firm to be state-owned when its domestic government owned 10% or more of its shares (Cannizzaro & Weiner, 2018), as governments frequently do not need a majority share to have a considerable influence on a firm’s (internationalization) strategy (Cuervo-Cazurra et al., 2014; Meyer, Ding, Li, & Zhang, 2014). We obtained the data on state-ownership from firms’ annual reports.

In line with previous studies, we operationalize the magnitude of home-country institutional voids through a composite measure of three factors that capture the quality of financial, legal and labor market institutions (Carney, Gedajlovic, Heugens, Van Essen, & Van Oosterhout, 2011). We measure the quality of a country’s financial institutions by the stock market capitalization of all domestic companies as a percentage of GDP (Carney et al., 2011). We take this information from World Bank’s World Development Indicators database. Second, we use a country’s rule-of-law score to measure the quality of legal institutions (Liu, Feils, & Scholnick, 2011). These scores were obtained from World Bank’s World Governance Indicators database. Third, we measure the quality of a country’s labor market institutions through its score on labor market efficiency in the Global Competitiveness Reports of the World Economic Forum (Jamali, Karam, Yin, & Soundararajan, 2017; Carney et al., 2011). Cronbach’s alpha for the three measures equaled 0.71, which is above the recommended 0.60 limit, while a factor analysis produced a single factor with all loadings significant at p < 0.01, indicating sufficient reliability and validity (Arino, 2003). We then standardized and averaged them into a single composite measure.
The size of the acquisition relative to the size of the foreign acquirer is measured by the ratio of the U.S. dollar transaction value of the acquisition and the US dollar book value of the acquirer’s total assets (for similar measurements, see Datta, 1991; Lee & Caves, 1998; Hayward, 2002; Slangen, 2006). The data on both these values were obtained from CCSI’s “Emerging Market Global Players” reports.

4.3.4 Control variables

We control for firm-specific, acquisition-specific and home- and host-country factors to rule out alternative explanations for our findings. First of all, we enter firms’ domestic labor productivity at the time of the focal acquisition, as firms with lower levels of such productivity may find it easier to realize domestic productivity gains. We measure a firm’s productivity by the ratio of its domestic sales to its number of domestic employees. These data were obtained from CCSI’s “Emerging Market Global Players” reports. Next, we control for firm size as larger firms may have more resources to finance foreign acquisitions, and may thus be able to acquire larger and more complete resource bundles. Moreover, networks of larger firms may be more complex and such firms may be internationalized to a higher degree (Meyer et al., 2011; Ghoshal & Bartlett, 1990). We measure firm size through the book value of its total assets (e.g., Lee & Makhija, 2009). We also control for the ease with which a firm can access new capital for foreign expansion by entering a binary variable coded “1” for stock listed firms and “0” for unlisted ones (Filatotchev & Piesse, 2009). The data on this variable were obtained from CCSI’s reports and firms’ annual reports. We also include a dummy variable to control for whether a firm primarily sells to consumers or businesses. This variable is coded “0” for firms selling in business-to-consumer markets and “1” for firms that produce goods for business-to-business sectors. This information is also provided by the “Emerging Market Global Players” reports. Furthermore, we control for the share of its total sales that it realizes in its home region. Strong regional players could possibly benefit from internationalization to developed economies, but may be constrained in the way they internationalize beyond their region’s confines (c.f., Rugman & Verbeke, 2004; Oh & Rugman, 2014). We follow the categorization of 9 regions that CCSI uses in its “Emerging Market Global Players” reports and rely on data published there. For example, we take the percentage of total sales generated in “Latin America” for Chilean firms, the percentage of total sales generated in “East Asia” for Chinese firms, and the percentage of total sales generated in “Eastern Europe” for Russian firms.
Next to these firm-specific aspects, we also control for acquisition-related factors that may affect the extent to which firms grow domestic productivity. We control for the relatedness of acquired resources, by including a variable coded “1” when a firm enters an industry in which it is already active (e.g., Morosini, Shane, & Singh, 1998). Furthermore, we include a binary variable that takes the value of “1” when a foreign acquisition is partial and “0” when full ownership is acquired. We thereby use a cut-off value of 10% to distinguish portfolio investments from partial acquisitions and a value of 95% to separate partial from full acquisitions (Chen, 2008; Chung, Park, Lee, & Kim, 2015). We do so as collaborative entry modes can partially make up for a lack of recombination knowledge in terms of sense-making of tacit assets as well as opportunity recognition (Grogaard & Verbeke, 2012; Collinson & Narula, 2014). The information on industries and ownership stakes is extracted from CCSI’s “Emerging Market Global Players” reports and firms’ annual reports. We also control for the extent to which a firm already operates in the target region where the acquisition is made. After identifying in which region a firm performs a CBA, we enter the associated ratio of sales in the target region to total sales in our regression models, based on CCSI’s data (Uhlenbruck, 2004).

As our dataset covers investments made by firms from 13 emerging countries in 28 host economies, we control for home- and host-country characteristics and relative differences between them. First, we control for the geographic distance between the acquirer and the acquired unit, as a larger spatial separation may render both the exchange of knowledge and site visits more difficult (Narula, 2014a; Criscuolo & Verspagen, 2008). Geographic distance is measured by the number of kilometers between the capitals of the home and host country, using CEPII’s data (e.g., Liu et al., 2011). In addition to geographic distance, we enter in our models the linguistic distance between a firm’s home country and the host country, using Dow and Karunaratna’s (2006) data. By including this factor, we aim to control for additional ways in which distance can act as a recombination barrier by hindering the exchange of information (Cuypers, Ertug, & Hennart, 2015). Furthermore, we control for the host country’s economic dependence on a firm’s home country, and follow Duanmu (2014) in measuring it by a ratio that captures the host country’s export to the focal firm’s home country as a percentage of its total export to the world at the time of the acquisition. In 2013, for example, Australia exported 32.2% of all its products and services to China, which signals a relatively high economic dependence, and potentially a reduced likelihood of opposition to acquirers from that country (Ramamurti, 2001; Cuervo-Cazurra, 2011). Such dependence is not as pronounced for a country like the U.S., which only exported 7.7% of all products and services to China in
2013. Data on bilateral trade has been retrieved from IMF’s *Direction of Trade Statistics* database. We also control for the level of economic development of both the home and host country. Resources acquired in more developed host economies may be more valuable to firms for their process of domestic upgrading (Luo & Tung, 2007), while home-country economic development could be associated with firms possessing more sophisticated domestic assets (cf. Narula & Kodyiat, 2016; Hoskisson et al., 2013). Both types of development are measured by the countries’ GDP per capita. These data have been obtained from World Bank’s *World Development Indicators* database. In a similar vein, we control for the size of both home and host country. We do so to account for the possibility that EMNEs want to grab a foothold in larger markets, of which they can take advantage after they upgrade their asset base (Khanna & Palepu, 2006). On the other hand, when firms operate in larger home markets, they may have a stronger incentive to upgrade and strengthen their position in such a market (Williamson & Raman, 2011). We measure country size by the natural logarithm of GDP using World Bank data. Both arguments could similarly be made in relation to market growth rates, as a higher growth potential of a country could stimulate firms to expand to that country, or when it relates to their home country, focus efforts to upgrade domestically (Buckley et al., 2007). Home-country and host-country economic growth are measured by GDP growth from year-1 to year-t, whereby we use data from World Bank’s *World Development Indicators* database. Last, we control for the quality of legal institutions in the host country, in addition to the home country (Wu, Wang, Hong, Piperopoulos, & Zhuo, 2016). We use a country’s rule-of-law score to measure that institutional quality (Liu et al., 2011). These scores have been obtained from World Bank’s *World Governance Indicators* database.

### 4.3.5 Estimation Method

We use Heckman’s (1979) two-stage procedure, to avoid possible selection bias stemming from a sample which only includes firms that make foreign acquisitions to improve domestic productivity (Reeb, Sakakibara, & Mahmood, 2012). Yet, some firms may opt for greenfield investments as an alternative mode of direct investment in a foreign country (Slangen & Hennart, 2007; Luo & Tung, 2007). In the first stage, we thus predict the likelihood of a firm’s decision to acquire when making an equity investment in a foreign country. We use a probit model with a dependent variable coded “1” when a firm makes an acquisition and “0” when a firm makes a greenfield investment. We use CCSI’s “Emerging Market Global Players” reports to identify what greenfield investments were made by the largest 20 firms in
each home economy in a given year. Across all countries included in our study, we identify 156 greenfield investments. Together with the 382 identified CBAs, this leads to a sample of 538 foreign investments in our first-stage model.

We include as our exclusion restriction one additional variable in our first-stage model that is not entered in our second-stage model (Clougherty, Duso, & Muck, 2016). Specifically, we enter the number of foreign stock exchanges on which a firm is listed. We do so as we only expect it to influence the likelihood firms opt for acquisitions over greenfield investments, but not labor productivity growth. That number captures the ease with which firms can access capital abroad, their possible political capital, familiarity with international reporting and disclosure regulations, as well as ties with different investment communities (Karolyi, 2006; Biddle & Saudagaran, 1991). A higher amount of listings therefore indicates a greater ease with which firms can identify acquisition targets, raise capital, and overcome pre-acquisition bureaucratic hurdles. Once an acquisition has been chosen, however, the number of foreign listings provides little information about a firm’s ability to engage in the creative recombination processes that are needed to effectively improve domestic productivity. The results of our first-stage probit model are presented in the Appendix. We then take the Inverse Mills ratio from the first stage and enter it together with the variables listed above in our second-stage OLS model. We use STATA 13 to estimate our models.

4.4 RESULTS

Table 1 presents the descriptive statistics and pairwise correlations for the variables included in our models. Our dependent variable’s mean and standard deviation values are very much in line with expectations that can be drawn from our framework, as they indicate that firms on average improve their domestic productivity through CBAs, but also that there is substantial variation, with some firms experiencing decreases in domestic productivity. Specifically, the mean value of 141.8 indicates that a CBA increases a firm’s domestic labor productivity by an average of 41.8% after 3 years. The standard deviation is 177.8, which means that some firms’ domestic labor productivity suffers from making a CBA. All the pairwise correlations involving one of our independent measures are below 0.30. Moreover, as an additional indication that our models are not affected by multicollinearity, the highest variance inflation factor (VIF) is 4.08, still well below the commonly-
Correlations greater than |0.10| are significant at p<0.05, while those greater than |0.13| are significant at p<0.01.
Table 2 shows the results of our second-stage regression models. Model 1 reveals the effects of our control variables. Hypothesis 1 is tested in Model 2. We include both the linear and squared term of a firm’s DOI to test whether it has a U-shaped relationship with domestic labor productivity growth. Both terms are significant in this model (p < 0.001). We find support for Hypothesis 1, as the model indicates that the effect for the linear term is negative, but positive for the squared term. Model 3 introduces two interaction terms, which enables us to test Hypothesis 2a. That is, we test for steepening in Model 3 by entering two variables that capture the interaction between the linear and squared term of a firm’s DOI and the variable that measures whether a firm is state-owned. Testing for flattening or steepening is then equivalent to testing whether the latter interaction term is significant (Haans, Pieters, & He, 2016). We find support for Hypothesis 2a, as the coefficient is significantly positive (p < 0.001). In Model 4 we enter the interaction terms with the variable that captures the magnitude of institutional voids in a firm’s home country. We find that this magnitude significantly flattens the U-shaped relationship between a firm’s DOI and its domestic productivity growth (p < 0.05), indicating support for Hypothesis 2b. In a similar vein, we interact relative acquisition size with both the linear and squared term of a firm’s DOI. Model 5 shows that the coefficient related to this interaction term is positive and significant (p < 0.05), thereby indicating support for the steepening effect expressed by Hypothesis 2c. Model 6 shows the results when all variables are entered simultaneously. Also in this model we continue to find support for our hypotheses (p < 0.05).

Figure 1 represents our findings graphically. The upper-left panel displays the main effect of a firm’s DOI on its domestic labor productivity growth. The other three panels each present the effect of a firm’s DOI at low and high values of our moderator variables (one standard deviation above and below their sample mean, respectively). The graphs display patterns in line with all four of our hypothesized effects and corroborate the conclusions drawn from Table 2. Whereas the U-shaped relationship is steepened by whether an EMNE is state-owned and the relative size of the acquisition, the relationship is flattened by the magnitude of domestic institutional voids.
<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm’s DOI</td>
<td>-</td>
<td>-0.62 (.17)**</td>
<td>-0.62 (.17)**</td>
<td>-0.52 (.17)**</td>
<td>-0.58 (.17)**</td>
<td>-0.52 (.18)**</td>
</tr>
<tr>
<td>Firm’s DOI (squared) (H1)</td>
<td>-</td>
<td>0.85 (.16)**</td>
<td>0.87 (.17)**</td>
<td>0.74 (.16)**</td>
<td>0.83 (.16)**</td>
<td>0.76 (.17)**</td>
</tr>
<tr>
<td>Firm’s DOI x Firm is state-owned</td>
<td>-</td>
<td>-</td>
<td>-0.64 (.15)**</td>
<td>-</td>
<td>-</td>
<td>-0.42 (.16)*</td>
</tr>
<tr>
<td>Firm’s DOI (squared) x Firm is state-owned (H2a)</td>
<td>-</td>
<td>-</td>
<td>0.57 (.16)**</td>
<td>-</td>
<td>-</td>
<td>0.54 (.16)**</td>
</tr>
<tr>
<td>Firm’s DOI x Magn. of home-country institutional voids</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.23 (.13)*</td>
<td>-</td>
<td>0.24 (.14)*†</td>
</tr>
<tr>
<td>Firm’s DOI (squared) x Magnitude of home-country institutional voids (H2b)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-0.34 (.17)*</td>
<td>-</td>
<td>-0.34 (.17)*</td>
</tr>
<tr>
<td>Firm’s DOI x Relative acquisition size</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-0.23 (.13)*†</td>
<td>-0.23 (.13)*†</td>
</tr>
<tr>
<td>Firm’s DOI (squared) x Relative acquisition size (H2c)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.23 (.11)*</td>
<td>0.24 (.12)*</td>
</tr>
<tr>
<td>Firm is state-owned</td>
<td>0.10 (.06)</td>
<td>0.05 (.06)</td>
<td>0.08 (.06)</td>
<td>0.02 (.06)</td>
<td>0.05 (.06)</td>
<td>0.05 (.06)</td>
</tr>
<tr>
<td>Relative acquisition size</td>
<td>-0.01 (.04)</td>
<td>-0.06 (.03)*†</td>
<td>-0.03 (.03)</td>
<td>-0.09 (.04)*</td>
<td>-0.03 (.03)</td>
<td>-0.00 (.06)</td>
</tr>
<tr>
<td>Magnitude of home-country institutional voids</td>
<td>-0.04 (.06)</td>
<td>-0.04 (.05)</td>
<td>-0.08 (.05)</td>
<td>-0.08 (.06)</td>
<td>0.01 (.06)</td>
<td>-0.11 (.06)*</td>
</tr>
<tr>
<td>Firm’s domestic labor productivity</td>
<td>0.01 (.03)</td>
<td>0.02 (.03)</td>
<td>0.01 (.03)</td>
<td>0.04 (.03)</td>
<td>0.02 (.03)</td>
<td>0.02 (.03)</td>
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<tr>
<td>Firm size</td>
<td>0.01 (.05)</td>
<td>-0.02 (.05)</td>
<td>0.00 (.05)</td>
<td>-0.03 (.05)</td>
<td>-0.02 (.05)</td>
<td>-0.00 (.05)</td>
</tr>
<tr>
<td>Firm has domestic stock listing</td>
<td>-0.06 (.06)</td>
<td>-0.03 (.05)</td>
<td>-0.01 (.05)</td>
<td>-0.03 (.05)</td>
<td>-0.03 (.05)</td>
<td>-0.02 (.05)</td>
</tr>
<tr>
<td>Firm is B-to-B manufacturer</td>
<td>-0.05 (.04)</td>
<td>-0.07 (.04)*†</td>
<td>-0.06 (.04)*†</td>
<td>-0.05 (.04)</td>
<td>-0.06 (.04)</td>
<td>-0.04 (.04)</td>
</tr>
<tr>
<td>Firm’s amount of sales in home region</td>
<td>0.05 (.04)</td>
<td>0.07 (.04)*†</td>
<td>0.07 (.04)*†</td>
<td>0.06 (.04)</td>
<td>0.07 (.04)*†</td>
<td>0.06 (.04)</td>
</tr>
<tr>
<td>Related acquisition</td>
<td>0.02 (.04)</td>
<td>0.03 (.04)</td>
<td>0.03 (.04)</td>
<td>0.03 (.04)</td>
<td>0.03 (.04)</td>
<td>0.03 (.04)</td>
</tr>
<tr>
<td>Partial acquisition</td>
<td>-0.04 (.04)</td>
<td>-0.03 (.03)</td>
<td>-0.03 (.03)</td>
<td>-0.03 (.03)</td>
<td>-0.02 (.03)</td>
<td>-0.03 (.03)</td>
</tr>
<tr>
<td>Percentage sales in target region</td>
<td>-0.06 (.05)</td>
<td>-0.02 (.05)</td>
<td>-0.03 (.04)</td>
<td>-0.01 (.04)</td>
<td>-0.01 (.05)</td>
<td>-0.01 (.04)</td>
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<td>Geographic distance</td>
<td>-0.02 (.04)</td>
<td>-0.03 (.04)</td>
<td>-0.03 (.04)</td>
<td>-0.02 (.04)</td>
<td>-0.02 (.04)</td>
<td>-0.01 (.04)</td>
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<tr>
<td>Linguistic distance</td>
<td>0.02 (.04)</td>
<td>0.03 (.04)</td>
<td>0.04 (.03)</td>
<td>0.02 (.04)</td>
<td>0.02 (.04)</td>
<td>0.02 (.04)</td>
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<tr>
<td>Host country’s economic dependence on home country</td>
<td>-0.04 (.05)</td>
<td>-0.02 (.05)</td>
<td>-0.02 (.05)</td>
<td>-0.02 (.05)</td>
<td>-0.02 (.05)</td>
<td>-0.01 (.05)</td>
</tr>
<tr>
<td>Home-country GDP per capita</td>
<td>-0.13 (.06)*</td>
<td>-0.20 (.05)**</td>
<td>-0.13 (.06)*</td>
<td>-0.24 (.06)**</td>
<td>-0.19 (.05)**</td>
<td>-0.21 (.06)**</td>
</tr>
<tr>
<td>Host-country GDP per capita</td>
<td>0.12 (.09)</td>
<td>0.13 (.09)</td>
<td>0.10 (.08)</td>
<td>0.10 (.09)</td>
<td>0.14 (.09)</td>
<td>0.09 (.08)</td>
</tr>
<tr>
<td>Home-country size</td>
<td>-0.20 (.07)**</td>
<td>-0.12 (.07)*†</td>
<td>-0.03 (.07)</td>
<td>-0.17 (.07)*</td>
<td>-0.11 (.07)</td>
<td>-0.09 (.07)</td>
</tr>
<tr>
<td>Host-country size</td>
<td>0.01 (.05)</td>
<td>0.02 (.05)</td>
<td>0.00 (.05)</td>
<td>0.00 (.05)</td>
<td>0.02 (.05)</td>
<td>0.02 (.05)</td>
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<tr>
<td>Home-country GDP growth</td>
<td>-0.13 (.05)*</td>
<td>-0.11 (.05)*</td>
<td>-0.10 (.05)*</td>
<td>-0.11 (.05)*</td>
<td>-0.12 (.05)*</td>
<td>-0.10 (.05)*</td>
</tr>
<tr>
<td>Host-country GDP growth</td>
<td>0.08 (.04)*†</td>
<td>0.08 (.04)*†</td>
<td>0.09 (.04)*</td>
<td>0.06 (.04)</td>
<td>0.08 (.04)*†</td>
<td>0.09 (.04)*</td>
</tr>
<tr>
<td>Host-country rule of law</td>
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<td>-0.10 (.09)</td>
<td>-0.09 (.09)</td>
<td>-0.03 (.09)</td>
<td>-0.10 (.09)</td>
<td>-0.02 (.09)</td>
</tr>
<tr>
<td>Inverse Mills ratio</td>
<td>-0.05 (.12)</td>
<td>-0.05 (.12)</td>
<td>-0.12 (.12)</td>
<td>-0.04 (.12)</td>
<td>-0.04 (.12)</td>
<td>-0.06 (.12)</td>
</tr>
<tr>
<td>F-statistic</td>
<td>1.95**</td>
<td>4.35***</td>
<td>4.96***</td>
<td>4.48***</td>
<td>4.14***</td>
<td>4.73***</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.07</td>
<td>0.22</td>
<td>0.26</td>
<td>0.24</td>
<td>0.23</td>
<td>0.28</td>
</tr>
</tbody>
</table>

Intercept included but not shown; Robust standard errors in parentheses; N=382
4.4.1 Additional analyses

Although we purposefully considered a time period in which firms conducted only one CBA, we performed two additional analyses to establish with more certainty that these acquisitions are the main driver of a firm’s domestic productivity growth. First, we replicated our regression analyses with a sample of firms that did not internationalize over the same period 2006-2013. We base this alternative sample on the list of firms included in CCSI’s “ Emerging Market Global Players” reports and the information that these reports provide on their international investment activity. Where possible, we verified these data by comparing them with information provided in firms’ annual reports. As CCSI’s reports reveal the largest 20 firms in each home economy in a given year, and thus also many firms that abstain from internationalizing, we are able to consider a sizeable number of companies that choose not to make foreign acquisitions over the time period 2006-2013,
namely 337 firms. We find that our hypothesized effects do not exist in this alternative sample. Second, we performed our analyses with a firm's absolute level of domestic productivity as the dependent variable rather than a three-year growth rate of that productivity. Since we expect that CBAs as important events bring about changes to domestic productivity, we do not expect our hypotheses to hold when we express that productivity in absolute terms. In line with that expectation, the results of this analysis provide little support for our hypothesized effects. Therefore, both analyses seem to indicate that CBAs are the main driver of a firm's domestic productivity growth.

We have conducted four further analyses to establish the robustness of our findings. First, we ran additional regression models in which we estimate the effect of our variables on one-year and two-year growth rates of labor productivity, rather than the three-year growth rate that we use as our main dependent variable. Second, we conduct analyses with one-year, two-year and three-year asset productivity growth as an alternative dependent variable, instead of labor productivity growth. From CCSI’s “Emerging Market Global Players” reports we take information on a firm’s domestic assets at the time of investment and three years after, to derive the growth rate. Third, we calculate the host country's economic dependence on a firm’s home country on the basis of bilateral foreign direct investment rather than international trade flows using UNCTAD's Bilateral FDI Statistics database. Fourth, we use alternative cut-off values to distinguish between partial and full acquisitions, namely 80%, 90% and 100%, instead of the 95% value used previously (Yiu & Makino, 2002). All four of these analyses generated results that were qualitatively similar to those we obtained in our main regression models.³

4.5 DISCUSSION
4.5.1 CONTRIBUTION AND IMPLICATIONS
Our study aims to make three main contributions to the IB literature. First, studies that have quoted upgrading as playing a key role in the rapid rise of EMNEs may have underestimated the difficulties associated with such a process (e.g., Luo & Tung, 2007; Bonaglia et al., 2007; Guillen & Garcia-Canal, 2009). That is, our study reveals something of an ‘upgrading paradox’. Our findings suggest that even though EMNEs internationalize through acquisitions in order to upgrade, they only manage to successfully upgrade when they are sufficiently well-internationalized already. As EMNEs typically rely on acquisitions in their internationalization trajectory, they need to make several such acquisitions before they achieve their aim of upgrading. A common assumption in the IB literature is that especially internationally
inexperienced EMNEs are in need of resources not available in their home countries (Hernandez & Guillen, 2018). Yet, we find that those firms experience the greatest challenges in improving domestic productivity after making a foreign acquisition. On average, EMNEs need to be characterized by a relatively high DOI before being able to benefit from internationally acquired resource bundles, while at low degrees of internationalization the domestic productivity growth following a CBA can even be negative. It is unlikely that many EMNE are at a stage in which they can rely on a large international network in support of effective recombination processes (Narula, 2012; Ramamurti, 2012). The three factors in our theoretical framework that exert a moderating effect on the relationship between a firm’s DOI and labor productivity growth could help explain why prior studies found CBAs to be beneficial to EMNEs, even when these firms were not that internationalized. Our findings indicate that cross-border acquirers seem to suffer less from low-to-medium degrees of internationalization when they are privately owned, make relatively small acquisitions, or originate from countries with large institutional voids. Our study therefore sheds light on the conditions under which firms overcome internal recombination barriers to growth at low-to-medium degrees of internationalization (cf. Rugman et al., 2011). Having considered these moderating factors, our study also provides insights regarding the extent to which higher degrees of internationalization shape the building of recombination capabilities, presumably through managerial expertise and their realization that recombination processes require an entrepreneurial approach. The positive relationship between the DOI and domestic productivity growth for firms characterized by medium-to-high such degrees is stronger for relatively large acquisitions and state-owned firms, as well as for firms operating in home countries with more modest institutional voids. Our findings thus imply that these acquisition-, firm- and home-country characteristics are important for analyses of resource recombination processes.

Second, we expand on recent advances in new internalization theory that put recombination processes at the center of inquiry (Verbeke, 2013; Verbeke & Kano, 2016; Narula & Verbeke, 2015; Rugman et al., 2011). Our study shifts the focus from recombination of FSAs and location-bound knowledge in host countries to a firm’s home country and the transformative bundling that is required to upgrade the domestic asset base. We therefore add to Verbeke and Kano’s (2016) conceptual work as we suggest a fifth and additional recombination process. Our focus on the domestic upgrading of EMNEs allows us to zoom in on a context in which it is not only important to reconfigure existing resources, but also overhaul and partially replace them to accomplish certain goals. Firms’ DOI provides information on the extent to
which firms face internal recombination barriers and at what stage they overcome such barriers through enhanced expertise and managers’ realization that structures and procedures should be interpreted as guidelines rather than strict rules. As the building of recombination capabilities both has benefits and costs associated with it, such capabilities can act as “both the driver and key constraint of firm growth” (Verbeke & Yuan, 2010: 100). In that we consider resource recombination with the aim of strengthening domestic activities, we add to recent papers that restore balance and address a bias in IB research towards the foreign activities of MNEs (Hendriks et al., 2018). Sharing the conclusion of other scholars (e.g., Verbeke & Kano, 2015), our study also suggests that no new theory is needed to explain facets of EMNEs’ internationalization. That is, our theoretical framework is very much in line with recent advances in the IB literature that stress the importance of recombining or bundling of knowledge and resources as a higher-order capability of MNEs (Rugman et al., 2011; Hennart, 2012). Rather than highlighting the need to invent new theories, our focus on the domestic productivity improvement capabilities of EMNEs allows for an extension of existing theory to the understudied topic of domestic upgrading (Cuervo-Cazurra, 2012; Buckley, 2018; Hernandez & Guillen, 2018).

Third, our findings add to the segment of IB literature that studies the development effects of MNE behavior. Although foreign investments made by MNEs could possibly have important effects on the home countries from which they internationalize (Blomström & Kokko, 1998; Driffield, Pereira, & Temouri, 2017), most studies focus on their impact on the host countries in which they invest (Meyer & Sinani, 2009; Kolk & Van Tulder, 2010). The rise of EMNEs onto the world stage allows considering both of these effects, as they internationalize from environments that can still make considerable progress in terms of development (Hendriks, 2017; Chen & Johnson, 2013). Little is known about either effect, however, as IB scholarship has not addressed the potential contribution of EMNEs to the economic development of countries (Buckley, Doh, & Benischke, 2017). While some have responded by addressing this question conceptually (e.g., Hendriks, 2017), we have now empirically looked at the conditions under which an EMNE’s labor productivity improves after a foreign acquisition. Future research should establish what such labor productivity gains mean for the wages that employees receive and whether the effect on employment could be positive (cf. Maksimov, Wang, & Luo, 2017). The literature on the investment-development relationship generally presents inconclusive evidence, mainly in relation to host countries (for a review, see Narula, 2014b), but also with respect to firms’ home countries (Lipsey, 2004). With our framework suggesting several barriers to firms’ labor productivity growth, we may have
identified a potential mediating factor that could explain such a lack of conclusive findings. Whereas studies typically suggest a direct link between firms’ outward investment and home-country development, whether or not through the mechanism of spillovers, it could be the case that firms need to improve their productivity first before development gains can materialize. Such gains could be direct in nature, for example when firms are able to pay higher wages, or take the form of productivity spillovers to other firms in the home economy. Studies in the realm of development economics would typically argue that sufficient absorptive capacity needs to be in place for the materialization of spillovers, as other firms in the home economy need to be capable enough to take advantage of technologies and resource bundles that EMNEs would bring back home with them (e.g., Lorentzen, 2005). Our findings imply that there are many factors that make upgrading processes difficult even for the investing EMNEs, let alone for other firms in the home economy. That is, some of the factors we propose as important internal recombination barriers could potentially also explain why host-economy firms struggle to benefit from spillovers, and thus, why so few studies report compelling evidence. More research is needed, however, to determine what factors strain the relationship between outward investment and home-country development.

4.5.2 LIMITATIONS AND FUTURE RESEARCH

Several limitations apply to our work. First, to test our theoretical framework it was our objective to compare firms at different stages of internationalization, but not to look at the hypothesized effects within the same firm over time. We have considered specific CBAs by firms and the subsequent domestic productivity gains that follow from such acquisitions; the only instance when the dimension of time plays a role in our research design. Although we find support for our framework, future research should aim to corroborate our findings by means of a truly longitudinal research design.

Second, we choose a three-year period to study to what extent firms succeed in using specific CBAs to improve domestic productivity. Data limitations prevent us from considering a timeframe longer than three years. Although our additional analyses based on one and two-year periods generated qualitatively similar findings, future studies could explore whether these findings continue to hold when different timeframes are considered. Future studies could also explore how domestic productivity gains from CBAs shape a firm's subsequent performance in foreign markets. That is, we have looked
at the period in which EMNEs reap the first benefits from their newly accessed assets, but we have not considered what they are able to achieve with their upgraded asset base.

Third, to answer our research question we were interested in EMNEs that make CBAs with the aim of upgrading their existing FSAs, in order to improve productivity. We therefore considered EMNEs from manufacturing industries that have conducted CBAs in developed economies. In such host countries these firms are likely to find the superior technologies that help upgrade their domestic asset base. Future research should aim to extend our analyses and consider different industries and other types of host economies.

Fourth, we excluded firms from our sample if they conducted more than one CBA over a three year time period, as we aimed to link a firm’s labor productivity growth to a specific foreign acquisition. Since firms may also rely on a combination of different investments to upgrade their domestic asset base, we recommend future studies to assess the interplay between multiple investments and the role it plays for upgrading processes.

Lastly, this study aimed to introduce a fifth type of recombination process, namely transformative bundling. However, more research is needed to study its relation with the other four types as suggested by Verbeke and Kano (2016). For example, future studies could explore how prior experience with different types of recombination processes shape the success with which firms engage in the more complex processes of transformative bundling. Similarly, future studies could address other contexts in which this type of bundling is likely to play an important role, in addition to home environments where key FSAs are upgraded by EMNEs.

NOTES
1 The home countries included in our sample are Argentina, Brazil, Chile, China, Hungary, India, Israel, Mexico, Poland, Russia, Slovenia, South Korea, and Turkey. We obtain qualitatively similar results when we exclude firms from Hungary, Slovenia and South Korea which are not classified as emerging markets by the IMF, in contrast to CCSI’s categorization.
2 Our findings are qualitatively similar when we use a cut-off ownership stake of 0% or 25% (c.f., Duanmu, 2014).
3 A detailed overview of the results of these analyses is available from the authors upon request.
APPENDIX

First-stage probit regression of the likelihood that a firm makes a CBA rather than a foreign greenfield investment

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm’s DOI</td>
<td>0.16 (0.11)</td>
</tr>
<tr>
<td>Firm is state-owned</td>
<td>-0.30 (0.11)**</td>
</tr>
<tr>
<td>Relative investment size</td>
<td>-0.08 (0.08)</td>
</tr>
<tr>
<td>Magnitude of home-country institutional voids</td>
<td>0.24 (0.10)*</td>
</tr>
<tr>
<td>Host country’s economic dependence</td>
<td>0.25 (0.10)*</td>
</tr>
<tr>
<td>Firm’s domestic labor productivity</td>
<td>0.01 (0.08)</td>
</tr>
<tr>
<td>Firm size</td>
<td>-0.22 (0.09)*</td>
</tr>
<tr>
<td>Firm has domestic stock listing</td>
<td>0.15 (0.11)</td>
</tr>
<tr>
<td>Firm is B-to-B manufacturer</td>
<td>0.13 (0.10)</td>
</tr>
<tr>
<td>Firm’s amount of sales in home region</td>
<td>-0.06 (0.10)</td>
</tr>
<tr>
<td>Investment is in same industry</td>
<td>0.14 (0.10)</td>
</tr>
<tr>
<td>Investment is wholly-owned</td>
<td>-0.04 (0.13)</td>
</tr>
<tr>
<td>Percentage sales in target region</td>
<td>0.16 (0.10)</td>
</tr>
<tr>
<td>Geographic distance</td>
<td>0.06 (0.10)</td>
</tr>
<tr>
<td>Linguistic distance</td>
<td>-0.02 (0.09)</td>
</tr>
<tr>
<td>Home-country GDP per capita</td>
<td>-0.07 (0.11)</td>
</tr>
<tr>
<td>Host-country GDP per capita</td>
<td>0.63 (0.24)**</td>
</tr>
<tr>
<td>Home-country size</td>
<td>-0.19 (0.16)</td>
</tr>
<tr>
<td>Host-country size</td>
<td>-0.11 (0.13)</td>
</tr>
<tr>
<td>Home-country GDP growth</td>
<td>0.09 (0.12)</td>
</tr>
<tr>
<td>Host-country GDP growth</td>
<td>-0.01 (0.11)</td>
</tr>
<tr>
<td>Host-country rule of law</td>
<td>0.15 (0.20)</td>
</tr>
<tr>
<td>Firm’s number of foreign listings</td>
<td>-0.26 (0.10)*</td>
</tr>
</tbody>
</table>

Log likelihood                                           -167.4  
LR $\chi^2$                                               131.9***

N=538; the dependent variable is coded 1 for CBAs; intercept is included but not shown; robust standard errors in parentheses


Narula, R. 2012. Do we need different frameworks to explain infant MNEs from developing countries? *Global Strategy Journal, 2*(3): 188-204.


Narula, R. 2014b. Foreign direct investment as a driver of industrial development: Why is there so little evidence? In R. van Tulder, A. Verbeke, & R. Strange (Eds.),


In a world marked by considerable competition, many firms aim to pursue international growth, but likely face important limits as it comes to their ability to do so. This dissertation has focused attention on firms' domestic activities and their country portfolios to better understand these limits. Even though many large MNEs still perform a sizeable share of their activities in their home economy, the effect of this *domestic footprint* on a firm's internationalization strategy has not been studied in the IB literature. The first study addresses this gap and finds that larger such footprints lead firms to engage in less complex international expansion moves, as reflected by the cultural distance added to their country portfolio. That is, firms likely add one or more countries to their portfolio that are relatively close in cultural terms. As suggested in this study, such a negative relationship likely stems from the attention that senior executives devote to their firm's home market on which it is dependent in terms of resources provided. More attention to the home market likely goes at the expense of the attention that can be devoted to international expansion. The relationship is moderated by two types of domestic environmental uncertainty, namely policy and demand uncertainty. The former type can at least partially be influenced by firms, so that they likely allocate even more attention domestically, with more modest additions to its portfolio as a result. Demand uncertainty typically cannot be affected by a single firm, which leads them to hedge against that uncertainty and diversify it away through foreign expansion.

Study 2 similarly applied a portfolio perspective, but went beyond only considering foreign expansion to also incorporate foreign exit decisions in a novel portfolio growth measure. It suggests that behavioral factors have a greater bearing on the management of country portfolios than hitherto assumed. Having to manage a more diverse portfolio, in economic or cultural terms, leads decision makers to opt for lower net growth of that portfolio, presumably to relieve the organization from costs associated with cognitive complexity. A firm's performance relative to aspirations held by its managers moderates the relationship. When a firm performs better than in the past or outperforms its competitors, decision makers' tendency to restrict growth is weakened. On the other hand, such tendencies are strengthened when a firm's performance falls short of aspired targets.

As Study 3 indicates, firms' domestic activities not only shape their internationalization moves, the reverse also holds true. Firms from emerging economies benefit to a different degree from specific cross-border
acquisitions in terms of domestic productivity growth. This study reveals a U-shaped relationship between a firm’s degree of internationalization and such growth, and suggests that this relates to the balance between internal recombination barriers and recombination capabilities at different stages of internationalization. The relationship is moderated by characteristics of the acquisition itself, firm-specific aspects, but also home-country characteristics. Whereas the U-shaped curve is flattened by the magnitude of domestic institutional voids, it is steepened by relative acquisition size and by whether a firm is state-owned. Emerging economy firms therefore seem to benefit from cross-border acquisitions only under certain circumstances, most notably when they are characterized by a medium-to-high degree of internationalization, but this relationship is dependent on factors that shape recombination barriers and capabilities.

This dissertation thus shed new light on the various limits that firms face in their international growth trajectories, in particular in relation to a domestic footprint that demands decision makers’ scarce attention, to cognitive capacity constraints when they manage diverse portfolios, and to internal recombination barriers that tend to limit growth.
SAMENVATTING

In een wereld die gekenmerkt wordt door stevige concurrentie zetten veel bedrijven in op internationale groei, maar ze lopen daarbij ook tegen een aantal belangrijke beperkingen aan. Dit proefschrift vestigde de aandacht op de thuismarktactiviteiten van bedrijven en hun landenportfolio's om deze beperkingen beter te kunnen begrijpen. Ondanks dat een belangrijk deel van de activiteiten van veel grote multinationals plaatshebben in hun thuismarkt, is er weinig onderzoek gedaan in de IB literatuur naar het effect van deze thuismarkt-voetafdruk op de internationaliseringsstrategieën van bedrijven. Het eerste onderzoek in dit proefschrift gaat in op deze lacune en vindt dat een dergelijke voetafdruk ervoor zorgt dat bedrijven kiezen voor minder complexe internationale expansie, in de vorm van een lagere culture afstand die wordt toegevoegd aan hun landenportfolio. Dat wil zeggen, bedrijven voegen één of meerdere landen toe aan hun portfolio die gekenmerkt worden door een relatief soortgelijke cultuur. In dit onderzoek wordt geopperd dat een dergelijk negatief verband te maken heeft met de aandacht die leidinggevenden besteden aan hun thuismarkt gezien de grote afhankelijkheid van hun bedrijf ten opzichte van die markt. Meer aandacht naar de thuismarkt gaat ten koste van de aandacht die kan uitgaan naar internationalisering. Deze relatie wordt gemodereerd door twee typen van onzekerheid die het thuisland kenmerken, namelijk beleidsonzekerheid en marktvraagoonzekerheid. Het eerste type onzekerheid kan ten minste gedeeltelijk beïnvloed worden door bedrijven, zodat hoogstwaarschijnlijk nog meer aandacht van leidinggevenden uitgaat naar de thuismarkt, wat resulteert in meer bescheiden internationaliseringsstappen in de vorm van een lagere toegevoegde culturele afstand. Marktvraagoonzekerheid kan normaalgesproken niet worden beïnvloed door individuele bedrijven, zodat ze zich proberen af te dekken tegen deze onzekerheid door internationale expansie.

Het tweede onderzoek past ook een portfolioperspectief toe, maar gaat verder dan het alleen overwegen van toetredingsbeslissingen tot landen en houdt ook rekening met desinvesteringen om te komen tot een nieuwe maatstaf van portfoliogroei. Het onderzoek geeft aan dat cognitieve gedragsfactoren een grotere invloed hebben op de manier waarop leidinggevenden landenportfolios aansturen dan breed wordt aangenomen. Wanneer zulke portfolios diverser zijn, zowel in economische als culturele zin, dan kiezen leidinggevenden ervoor de netto groei ervan te beperken, waarschijnlijk om de organisatorische belasting te verminderen die uitgaat van het managen van cognitief complexe processen. De prestatie van het
bedrijf in verhouding tot de aspiraties van haar managers heeft een modererend effect op deze relatie. Het negatieve verband tussen portfoliodiversiteit en de netto groei van een portfolio is zwakker wanneer het bedrijf beter presteert dan voorheen of dan haar concurrenten, maar juist sterker in de omgekeerde situatie.

Het derde onderzoek geeft aan dat de thuismarktactiviteiten van een bedrijf niet alleen haar internationale expansies vormgeven, maar dat het omgekeerde ook mogelijk is. Bij het doen van buitenlandse overnames halen sommige bedrijven uit opkomende economieën meer profijt uit zulke overnames dan andere, waarbij profijt opgevat wordt als productiviteitsgroei in hun thuisland. Dit onderzoek laat zien dat het verband tussen de mate waarin een bedrijf geïnternationaliseerd is en die productiviteitsgroei weergegeven kan worden als een U-curve. Een dergelijke vorm ontstaat doordat de samenhang tussen interne recombinatiebarrières en capaciteiten tot recombinatie verschilt wanneer bedrijven gekenmerkt worden door een andere mate van internationalisering. De relatie wordt gemodereerd door factoren die gerelateerd zijn aan de overname, door bedrijfsspecifieke aspecten en door karakteristieken van het thuisland. De U-vorm van de curve is platter wanneer de kwaliteit van instituties tekortschiet in het thuisland, terwijl de curve juist steller is voor staatsbedrijven en wanneer een relatief grote overname wordt gedaan. Bedrijven uit opkomende economieën profiteren dus alleen onder bepaalde omstandigheden van buitenlandse overnames, met name wanneer ze al gekenmerkt worden door een relatief hoge mate van internationalisering, maar dit wordt beïnvloed door factoren die recombinatiebarrières en -capaciteiten vormgeven.

Dit proefschrift biedt derhalve nieuwe inzichten met betrekking tot de vele beperkingen waarmee bedrijven te maken hebben in hun internationaliseringstraject, met name wat betreft de activiteiten in de thuismarkt die aandacht vereisen, als ook de cognitieve beperkingen van leidinggevenden die diverse portfolios aansturen en de opgeworpen interne recombinatiebarrières die groei kunnen beperken.
Ve světě plném konkurence, hodně firem usiluje o mezinárodní růst, jedná se však o komplikovaný proces s řadou omezení, vyžadujících zvláštní pozornost. Tato disertační práce se snaží porozumět těmto omezením růstu a především se zaměřuje na aktivitu firem v domácích trzích a na portfóliu zemí ve kterých tyto firmy investují. I přesto, že hodně multinárodních korporací stále soustředí značnou část svých aktivit na domácích trzích, působení těchto aktivit na firemní mezinárodní strategii zatím nebyl zkouman v literatuře o mezinárodním podnikání. První studie usiluje o naplnění této mezery ve vědecké literatuře a zjišťuje, že čím větší je působení firmy v místě původu, tím méně komplexní je způsob mezinárodního expanze, což se projevuje velikostí kulturní vzdálenosti přidané do firemního investičního portfolia. To znamená, že firmy s největší pravděpodobností expandují do jedné či více zemí, které jsou kulturně nejblíž k zemi jejich původu. Jak se uvádí v dané studii, tento záporný vztah pravděpodobně vychází ze skutečnosti, že se vrcholový management především soustřeďuje na domácích trzích, na kterém je firma závislá z hlediska zdrojů. Více pozornosti k domácímu trhu ale na úkor pozornosti, která může být věnována mezinárodní expanzi. Dva druhy nejistoty v domácím prostředí ovlivňuje tento vztah, regulace a nejistota poptávky. První druh nejistoty je alespoň pod částečnou kontrolou firem, proto věnují ještě více pozornosti domácím trhům, kdy výsledkem je velmi omezená velikost nového mezinárodního portfolia. Nejistota poptávky se nejčastěji nedá ovlivnit působením pouze jedné firmy, proto se firmy snaží chránit proti nejistotě prostřednictvím diverzifikace na mezinárodních trzích.

Druhá studie se obdobně zaměřuje na zkoumané téma z hlediska portfolia, ale kromě samotného mezinárodního expanze také věnuje hlubší pozornost rozhodnutím vstoupit do a odejít z existujících a nových mezinárodních trhů. Studie navrhne hypotézu, že behaviorální faktory ovlivňují management portfolia zemí více než se dosud předpokládalo. Pokud vedení firmy má řídit diverzifikované portfolio, at' už z ekonomického či kulturního hlediska, nejspíše zvolí nižší růstové tempo portfolia, v domnění že se tím sníží náklady spojené s kognitivní komplexitou. Firemní výkon v poměru k aspiraci firemního vedení přináší bilanci do tohoto vztahu. Pokud má společnost lepší výkon než v minulém období nebo má lepší výsledky než konkurence, firemné vedení má tendencí povolit v záměrném omezování růstu. Na druhou stranu, pokud se výsledky zhoršují, růstové očekávání se omezení.
Jak se uvádí ve třetí studii, domácí aktivity firem formují jejich způsob mezinárodní expanze, ale opačné působení je také stejně důležité. Podniky z rozvojových zemí mají prospěch z jistých přeshraničních akvizic, z hlediska růstu domácí produktivity. Tato studie ukazuje relaci ve tvaru U-křivky mezi mírou firemní internacionalizace a tímto způsobem růstu, a uvádí že to souvisí s bilanci mezi interními rekombinačními bariéry a rekombinačními schopnostmi v různých stádiích internacionalizace. Vztah je moderován charakteristikami samotné akvizice, aspekty specifickými pro danou firmu, ale také charakteristikami domácího trhu. Kdežto se tvar U-křivky zmírněuje s mešním regulativním působením domácích institucí, naopak je tvar strmější s rostoucí velikostí akvizice a zda je podnik ve státním vlastnictví. Podniky rozvojových zemí proto mají prospěch z přeshraničních akvizic jenom ve zvláštních případech, například pokud se jedná o podniky se střední až vysokou mírou internacionalizace. Tento vztah je ovšem závislý na faktorech působících na rekombinační bariéry a schopnosti.

Tato disertační práce proto přináší nový úhel pohledu na řadu omezení, jimž firmy čelí na své cestě k mezinárodní expanzi. Především ve vztahu k působení na domácím trhu, které vyžaduje vzácnou pozornost vedení firmy, či omezením v kognitivní kapacitě pokud jde o management rozmanitého portfolia, a také interním rekombinačním bariéram omezujícím růst.
Guus Hendriks embarked on Ph.D. studies in 2013 at the Department of Strategic Management and Entrepreneurship and engaged in international business research under the direction of Pursey Heugens and Arjen Slangen. Always interested in topics at the intersection of business studies and economics, he completed both undergraduate programmes at Radboud University in his hometown of Nijmegen in the Netherlands. After already having spent a semester at the University of Turin in Italy, Guus had the opportunity to continue his studies in a truly international postgraduate programme. He graduated with distinction from a joint-degree programme in international economics that led him to study at the University of Antwerp, Staffordshire University and VŠE University of Economics in Prague. Having worked in industry in the Czech Republic for a period of three years prior to pursuing a Ph.D., Guus developed a strong interest in the challenges that firms face when operating across country borders. His research interests relate to the portfolio growth strategies of multinational enterprises, the internationalization of emerging market multinationals as well as the development effects of foreign investment. His work on these topics has won several awards, including the Best Overall Paper Award of Academy of Management’s International Management division and the GSJ Prize for Best Global Strategy Paper at the 2016 annual meeting of the European International Business Academy. His work is published in journals such as the Journal of Management Studies and UNCTAD’s Transnational Corporations. Guus currently works as an Assistant Professor of International Business at the University of Warwick in the United Kingdom.
AUTHOR’S PORTFOLIO

Education and academic positions

University of Warwick – Warwick Business School (UK) 2018 - present
Assistant Professor of International Business

Rotterdam School of Management, Erasmus University (NL) 2013 - 2018
Ph.D. in Management

Copenhagen Business School (DK) fall 2017
Visiting researcher

University of Cambridge, Judge Business School (UK) fall 2016
Visiting researcher

University of Antwerp (BEL) 2009 - 2010
M.A. in Economics of International Trade and European Integration
Erasmus Mundus joint degree, co-awarded by Staffordshire University (attended)
VŠE University of Economics (attended), University of Bari, University Lille 1, University of Cantabria • Graduated with distinction (Cum Laude)

Radboud University Nijmegen (NL) 2005 - 2009
B.Sc. in Business Administration
B.Sc. in Economics (specialisation International Economics)
Included 6-month stay at the University of Turin (Italy)

Research Interests

Multinational enterprises (MNEs) and their internationalization strategies, FDI, development effects of multinational investment, cross-country distance, emerging market multinationals, MNE portfolio management, entry mode choices

Publications

Main publications:

Other peer-reviewed publications:


Working Papers


④ **Hendriks, G.** How the spatial dispersion and size of country networks shape the geographic distance that firms add while expanding internationally.

⑤ Müller, M., **Hendriks, G.**, & Slangen, A.H.L. An institution-based view of information accuracy: Solving the alliance vs. acquisition puzzle abroad.

⑥ **Hendriks, G.** How outward foreign investment affects home-country economic development: Using the eclectic paradigm to synthesize two influential IB literatures.

Awards & Recognition*

**IJoEM Prize for Best Paper on Emerging Markets** ③ 2017
43rd European International Business Academy annual meeting, Milan, Italy

**Copenhagen Business School Prize for Best Paper by Young Scholars** ⑤ 2016
42nd European International Business Academy annual meeting, Vienna, Austria

**Global Strategy Journal Prize for Best Global Strategy paper** ② 2016
42nd European International Business Academy annual meeting, Vienna, Austria
Finalist of EIBA Best Doctoral Thesis Proposal in IB Award ①②③ 2016
42nd European International Business Academy annual meeting, Vienna, Austria

Best Reviewer Award 2016
58th Academy of International Business annual meeting, New Orleans, United States

Best Overall Paper Award - Academy of Management IM Division ① 2015
75th Academy of Management annual meeting, Vancouver, Canada

Best Paper Proceedings of the 75th Academy of Management Meeting ① 2015

Best Doctoral Thesis Proposal Award ①②③ 2015
Valencia Doctoral Symposium in Strategy and IB, Valencia, Spain

Best PhD Student paper Award ① 2014
EIASM 12th Workshop on International Management, Copenhagen, Denmark

* Number indications refer to the above-listed (working) papers to which the awards apply

Conference Presentations

2017  Hendriks, G., & Slangen, A.H.L.  When do emerging market multinationals upgrade their domestic asset base? Overcoming recombination barriers to growth. Presented at 43rd annual conference of the European International Business Academy, Milan, Italy

Hendriks, G.  The sustainable development effects of investment by emerging market multinationals: shaping beneficial outcomes for home and host country. Presented at 43rd annual conference of the European International Business Academy, Milan, Italy

Hendriks, G., Heugens, P.P.M.A.R., & Slangen, A.H.L.  Stay the course? The role of performance feedback in assessing limits to country portfolio growth. Presented at 59th AIB Annual Meeting, Dubai, United Arab Emirates

2016  Hendriks, G., Heugens, P.P.M.A.R., & Slangen, A.H.L.  Portfolio restructuring in the face of diversity: The role of performance feedback. Presented at 42nd annual conference of the European International Business Academy, Vienna, Austria


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Hendriks, G., Heugens, P.P.M.A.R., & Slangen, A.H.L. *Home market importance, domestic uncertainty and attention allocated to international expansion: explaining added cultural distance.* Presented at 58th AIB Annual Meeting, New Orleans, United States

Hendriks, G. *Sense-of-security and risk-taking behavior by emerging market multinationals: On the role of home-country supportive investment policy.* Presented at the JIBS-AIB Paper development workshop, New Orleans, United States

2015 Hendriks, G., Heugens, P.P.M.A.R., & Slangen, A.H.L. *The antecedents of added cultural distance: Towards an integrated, multi-theoretical framework.* Presented at 75th Annual Meeting of the Academy of Management, Vancouver, Canada

Hendriks, G., Heugens, P.P.M.A.R., & Slangen, A.H.L. *The antecedents of added cultural distance.* Presented at 5th Reading-UNCTAD IB Conference, Reading, United Kingdom

Hendriks, G. *Home market conditions for international investment.* Presented at 1st Valencia International Doctoral Symposium in Strategy and International Business, Valencia, Spain

2014 Hendriks, G. *The antecedents of added cultural distance: complementing a learning based approach with resource dependence theory and the attention-based view.* Presented at EIASM 12th Workshop on International Management, Copenhagen, Denmark
THE ERIM PhD SERIES

The ERIM PhD Series contains PhD dissertations in the field of Research in Management defended at Erasmus University Rotterdam and supervised by senior researchers affiliated to the Erasmus Research Institute of Management (ERIM). All dissertations in the ERIM PhD Series are available in full text through the ERIM Electronic Series Portal: http://repub.eur.nl/pub. ERIM is the joint research institute of the Rotterdam School of Management (RSM) and the Erasmus School of Economics (ESE) at the Erasmus University Rotterdam (EUR).

Dissertations in the last four years


Szatmari, B., *We are (all) the champions: The effect of status in the implementation of innovations*, Promotors: Prof. J.C.M & Dr D. Deichmann, EPS-2016-401-LIS, http://repub.eur.nl/pub/94633


Most multinational enterprises (MNEs) pursue growth and aim to expand their international portfolios of operating locations. Often, however, they face important limits to growth. This dissertation studies several such limits and aims to restore balance in the international business literature by addressing some of the biases built over time. Firms’ home-country activities may act as a limiting factor in their international expansion trajectory, but have received little attention to date. One of the dissertation chapters reveals that a firm’s domestic footprint, in combination with domestic environmental uncertainties, shapes its cross-cultural expansion strategy, and may limit the complexity it adds to its portfolio. The subsequent chapter indicates that behavioral factors have an important bearing on international portfolio growth decisions, more so than hitherto assumed. It finds that the net growth of an MNE’s country portfolio in the face of cultural and economic diversity within that portfolio hinges on cues as to how well the MNE is performing relative to its own past performance and the current performance of its peers. The last chapter indicates that firms’ domestic activities not only shape their internationalization moves, the reverse also holds true. Emerging economy firms seem to benefit domestically from cross-border acquisitions only under certain circumstances, most notably when they are already characterized by a relatively high degree of internationalization. The chapters study collectively the linkages between a firm’s domestic and international activities and shed new light on the various limits that firms face in their international growth trajectories.

Multinational Enterprises and Limits to International Growth: Links between Domestic and Foreign Activities in a Firm’s Portfolio

GUUS HENDRIKS

ERIM
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