

Stucchi, Tamara

**Doctoral Thesis**

## The Internationalization of Emerging Market Firms: A Context-Specific Study

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**The Internationalization of Emerging Market Firms: A Context-Specific Study**

PhD Series 19.2013

# The Internationalization of Emerging Market Firms:

A Context-Specific Study

**Tamara Stucchi**

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**Tamara Stucchi**

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A context-specific study**

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Ph.D. School in Economics and Management (EM)

Tamara Stucchi  
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In general, a big thank you to all the special people that accompanied me during this phase of my life. And I am now looking forward to the next one!

## **Summary of the Ph.D. thesis**

This Ph.D. dissertation investigates some International Business (IB) issues, which emerge from a specific context of research. The study takes inspiration from one of the most currently debated phenomena in IB literature, i.e. the internationalization of Emerging Market (EM) firms. The recent global emergence of these firms is substantial and particularly interesting under several points of view, especially because the IB literature has traditionally been dominated by western-centric theories, whose applicability to the case of EM firms might be questionable.

The present Ph.D. thesis recommends an approach to the study of the internationalization of EM firms that can contribute to the advancement of IB literature in general. This is illustrated by the four research articles of the thesis, where a single-country EM context is used to draw general implications useful for researchers, practitioners and policy makers.

More in details, the first paper “Emerging market firms’ acquisitions in advanced markets: Matching strategy with resource-, institution- and industry-based antecedents” studies the antecedents that can affect the motivations for the acquisitions that EM firms undertake in advanced markets. The second article, entitled “Time to internationalization and evolving institutions: An event history analysis of Indian firms”, analyzes domestic firms’ earlier versus later internationalization, during a period of radical institutional changes. The third paper, “The role of Overseas National Ownership in Outward FDI: A study of the Indian diaspora”, studies how the presence of overseas national shareholders can influence homeland firms’ outward FDI. Finally, the last article is entitled "Business groups’ internationalization: The role of the domestic geographical scope" and analyzes one possible explanation for business groups’ internationalization, from an organizational learning perspective.

The Ph.D. thesis is empirically based on a very comprehensive sample of Indian firms. The data are collected from different sources, i.e. the Prowess database, the Zephyr database, the Indian Census and the World Competitiveness Yearbook. The potential value of this single-country context perspective is highlighted throughout the Ph.D. thesis, and clearly emerges while I address the different issues of the four research articles.

## **Resume på Dansk**

Denne Ph.d. afhandling udforsker en række emner vedrørende International Business (IB), som udspringer af en specifik kontekstuel forskning. Undersøgelsen er inspireret af et af de mest aktuelt debatterede fænomener i IB litteratur, nemlig internationaliseringen af Emerging Market (EM) virksomheder. Den nyere globale fremkomst af disse virksomheder er væsentlig og særlig interessant fra flere synsvinkler, især fordi IB litteratur traditionelt har været domineret af teorier med fokus på den vestlige del af verden, hvis anvendelighed kan diskuteres når de skal appliceres på EM virksomheder.

Nærværende Ph.d. afhandling anbefaler en tilgang til studiet af internationaliseringen af EM virksomheder, der kan bidrage til at fremme IB litteraturen i al almindelighed. Dette illustreres af de fire forskningsartikler i afhandlingen, hvor et enkelt lands EM kontekst bliver brugt til at drage generelle konsekvenser, som er brugbare for forskere, ledere i virksomheder og politiske beslutningstagere.

Helt konkret undersøger den første artikel, "Emerging market firms' acquisitions in advanced markets: Matching strategy with resource-, institution- and industry-based antecedents", de forudgående begivenheder der kan påvirke motivationerne til de opkøb som EM virksomhederne foretager i udvidede markeder. Den anden artikel, "Time to internationalization and evolving institutions: An event history analysis of Indian firms", analyserer og sammenstiller indenlandske virksomheders tidlige og sene internationalisering i en periode med radikale institutionelle ændringer. Tredje artikel, "The role of Overseas National Ownership in Outward FDI: A study of the Indian diaspora", undersøger hvordan tilstedeværelsen af "overseas national" aktionærer kan påvirke indenlandske virksomheders "Outward FDI". Den sidste artikel, "Business groups' internationalization: The role of the

domestic geographical scope", analyserer en mulig forklaring på virksomhedsgruppers internationalisering ud fra et organisatorisk læringsperspektiv.

Empirisk baserer Ph.d. afhandlingen sig på et meget omfattende udvalg af indiske virksomheder. Data er indsamlet fra forskellige kilder som Prowess og Zephyr databaserne samt statistikker fra the Indian Census og the World Competitiveness Yearbook. Den potentielle værdi af konteksten for dette enkelte lands perspektiv er fremhævet igennem hele afhandlingen, og fremgår tydeligt i arbejdet med at diskutere de forskellige emner i de fire forskningsartikler.

**PART ONE:**  
**THESIS INTRODUCTION**

**1. THEME AND OUTLINE OF THE PH.D. THESIS**

**1.1 Objective of the Ph.D. thesis**

This Ph.D. dissertation investigates some International Business (IB) issues, which emerge from a specific single-country context. The study takes inspiration from one of the most currently debated phenomena in IB literature, i.e. the internationalization of Emerging Market (EM) firms. This does not represent a completely new phenomenon, since some of these firms have internationalized in the past during what the literature defines as their first wave of internationalization (cf. Lall, 1982, 1983; Wells, 1983).

The most recent EM firms emergence, which followed the home countries' liberalizations from the 1970s onwards, is however more substantial and different in quality, as other scholars have pointed out (e.g., Gammeltoft, 2008). In addition to this, the fact that the IB literature has traditionally been dominated by western-centric theories has fuelled a debate concerning their applicability to the EM firms' case.

The internationalization of EM firms does not constitute a marginal phenomenon and it cannot be ignored in that sense. At the same time, the increased interest from media, researchers, investors and policy makers should take into consideration the fact that EMs are complex and heterogeneous countries, each of them with peculiarities that can contribute differently to our understanding of the phenomenon. The aim of the thesis is therefore to recommend an approach to the study of the internationalization of EM firms that can contribute to the advancement of IB theory in general. This is illustrated by the central chapters of the thesis (i.e. parts two, three, four and five), represented by studies where a

single EM context is used to understand under-researched phenomena and eventually draw implications that can be useful more in general for practitioners and researchers.

## **1.2 Contribution of the Ph.D. thesis**

With this Ph.D. thesis I would like to contribute to IB literature with a context-specific study concentrating on the internationalization of EM firms. Studies focused on the behavior of firms from EMs often combine different theoretical perspectives (Xu and Meyer, 2012). This Ph.D. thesis follows the same approach, combining for instance the resource-based view and the institution-based view in the first research paper. The theoretical perspectives are selected based on the issues addressed by the four different research papers included in the thesis.

The PhD thesis offers the beginnings of a resolution to the main question in the stream of IB studying the emergence and behavior of EM firms, i.e. *Do we need new theories to explain EM firms' internationalization?* The Ph.D. thesis argues that scholars should not be blinded by the EM “label”, but should instead go beyond it and get deep into the context in order to answer this question.

## **1.3 Research questions**

The overall research question stated in the previous paragraph introduces the context of research and the general aim of the Ph.D. thesis. This is clearly a challenging research question that I tackle in part throughout the thesis, providing separate findings and contributions from the four research papers. Each of them aims indeed at answering specific research questions.

More in details, the first paper “Emerging market firms’ acquisitions in advanced markets: Matching strategy with resource-, institution- and industry-based antecedents” studies the antecedents that can affect the motivations for the acquisitions that EM firms undertake in advanced markets. The paper answers two inter-related research questions about EM firms’ internationalization, i.e. *Which motivations guide EM firms’ acquisitions in advanced*



*markets?* and *Which EM firms should undertake augmenting, rather than exploitative, acquisitions in advanced markets?*

The second paper “Time to internationalization and evolving institutions: An event history analysis of Indian firms” studies firms’ earlier versus later internationalization, during a period of radical institutional changes. The article focuses on the research question *When (i.e. earlier or later) does a firm start to internationalize after a given event?*

The third paper “The Role of Overseas National Ownership in Outward FDI: A study of the Indian diaspora” answers instead the question *How can the presence of overseas national shareholders influence homeland firms’ outward FDI?* Finally, the fourth paper "Business groups’ internationalization: The role of the domestic geographical scope" analyzes the research question *Does the domestic geographical dispersion of business groups influence their OFDI?*

The four papers follow the format of scientific papers in IB and management. Therefore, each of them addresses the specific research questions specified above, which are clearly separate but related.

The remainder of the Ph.D. thesis is organized as follows. First, in part one I present a summary of the Ph.D. thesis, the theme and outline of the thesis, the literature background and the methodology followed. Second, I present the four research papers that compose the core of the Ph.D. thesis, respectively in parts two, three, four and five. Finally, in part six I present the overall conclusions of the study, its limitations and some indications for future research on EM firms’ internationalization.

## **2. RESEARCH ON EMERGING MARKETS: CURRENT LITERATURE AND BEYOND**

EMs are defined as low-income, rapid growth economies that have experienced in the past years radical institutional changes, such as increased openness and liberalization (Hoskisson *et al.*, 2000). This group of countries typically comprises nowadays Middle and South America, Africa, and the ASEAN countries. On the other hand, advanced markets are represented by North America, Western Europe, Australia, New Zealand and Japan. According to the International Monetary Fund, the advanced market group comprises also the so-called Newly Industrialized Economies (i.e. Hong Kong, Singapore, Korea and Taiwan) and Israel, whereas the remaining countries are considered emerging and developing (International Monetary Fund, 2011).

EMs certainly share several characteristics, which justify the common “label”. For instance, they have in general less functioning institutional contexts compared to advanced markets, low average income and costs levels, low markets efficiency and diffused network-based behaviors (e.g. Hoskisson *et al.*, 2000; Fisman and Khanna, 2004; Xu and Meyer, 2012). EMs reserved in the past several sectors to the control of the government, which often plays still a major role, and they are experiencing rapid population growth and urbanization (Dymsza, 1984). Business in EMs can often imply high levels of risk due to diffused corruption, institutional and infrastructural voids and internal divides (Khanna and Palepu, 1997).

Despite the potential risks and disadvantages that operating in EMs can imply, they represent however interesting contexts with great business potential that cannot be ignored by both companies and researchers. For instance, EM firms play nowadays an increasingly important role when it comes to internationalization. Some of them are showing extraordinary

competitiveness in global markets (The economist, 2010) and are developing significant strategic innovations (e.g., Mathews, 2006; Gammeltoft, Barnard and Madhok, 2010; Gaur and Kumar, 2010). This growth is pulled especially by the so-called BRIC countries (Brazil, Russia, India, China), on which past literature has often focused (e.g., Wilson and Purushothaman, 2003; Gammeltoft, 2008; Rabbiosi, Elia and Bertoni, 2012). When it comes to internationalization, EM firms certainly share some characteristics, since they started internationalizing relatively late (Ramamurti, 2009; Narula, 2012; Cuervo-Cazurra, 2012), in a much more globalized world economy compared to the advanced market counterparts (Dymsza, 1984; Williamson and Zeng, 2009) and often still in need of internationalization experience (Ramamurti, 2009).

A past stream of research that emerged in the 1970s and 1980s has studied the so-called “first wave” of internationalization of firms from EMs (e.g., Kumar and McLeod, 1981; Lall, 1983; Dymsza, 1984). Little data and some anecdotal evidence existed at that time on these new multinationals and it was challenging to empirically study them. Few anecdotal examples existed even before this period, such as the cases of some Argentinean firms going global in the early 1900s and Hong Kong and Panama serving as investment bases for expatriates or advanced market multinationals. Given the substantial data problems that this first stream of studies had to face, often no empirical comparisons were possible across countries (Lall, 1982, 1983).

Internationalizing EM firms usually operated with mature technologies and based their competitive advantages especially on lower management and manufacturing costs. Given their origin, they were particularly well suited to operate in other EMs, towards which they directed the majority of their foreign investments at that time; firms oriented towards advanced markets were exceptional cases. These firms usually relied on small scale technologies and operated in the manufacturing sector, investing abroad mainly to support the

export of low cost manufacturing products (Wells, 1983). EM firms at that time preferred joint ventures (JVs) over other forms of internationalization and were often focused on the domestic market. Authors contributing to this research stream have often been enthusiastic about the developmental effects of these first internationalization activities on the home country (Wells, 1983); in general they started digging into these facts and gave an important contribution in starting the discussion over the phenomenon and its implications.

However, in the historical period that this past research focused on, the number of internationalizing EM firms was still relatively small, and the ventures were often directed towards neighboring regions through limited foreign operations (Gammeltoft, Barnard and Madhok, 2010). On the contrary, the internationalization of firms from EMs during the past two decades has been quantitatively and qualitatively different from the previous phases, since it is more diversified in terms of destinations, international acquisitions are a more common internationalization mode, firms in the service sectors clearly emerged and asset-seeking investments became more and more important (Gammeltoft, 2008). Research interest rose therefore again in the 2000s, when this later wave of EM firms emerged.

This recent and extensive body of literature has focused on EM firms' internationalization drivers (Aulakh, 2007; Athreye and Kapur, 2009), entry modes (Duysters, Jacob and Lemmens, 2009), growth rates (Arora *et al.*, 2001; Fortanier and van Tulder, 2009), host location choices (Morck, Yeung and Zhao, 2008; Duysters, Jacob and Lemmens, 2009), ownership structures, relational assets (Arora *et al.*, 2001; Douma, George and Kabir, 2006; Elango and Pattnaik, 2007; Morck, Yeung and Zhao, 2008; Filatotchev *et al.*, 2009; Bhaumik, Driffield and Pal, 2010) and performance effects of internationalization (Douma, George and Kabir, 2006; Aulakh, 2007). The approach of this stream of study has been at first mainly exploratory, with studies concentrating on the arising phenomenon and its interesting aspects (e.g., Aulakh, Kotabe and Teegen, 2000, Buckley *et al.*, 2007;

Gammeltoft, 2008). After these first exploratory studies, the research focus moved to better understand how business in EMs might challenge existing explanations due to the characteristics of these countries (Cuervo-Cazurra, 2012). A debate therefore emerged over potential explanations of the phenomenon, i.e. whether this internationalization activities could be explained by traditional theoretical perspectives – based on mature advanced market firms – or not (Fortanier and van Tulder, 2009). Some studies triggered in this sense some new thinking, arguing that EM firms should be studied using different perspectives (cf. Mathews, 2006; Madhok and Keyhani, 2012), because the traditional ones are based on advanced markets assumptions. Examples of alternative explanations are the LLL framework (Mathews, 2002, 2006) and the springboard perspective in (Luo and Tung, 2007). On the other hand, a more skeptical stream of studies claimed that traditional theoretical explanations are largely suitable for EM firms (e.g., Narula, 2006; Rugman and Li, 2007).

This last stream of research has then further evolved, with more and more studies recently arguing for a convergence of perspectives on a third, moderate point of view (e.g.; Ramamurti, 2009, 2012; Cuervo-Cazurra, 2012). According to this third perspective, studying the behavior of EM firms can be a good opportunity to extend current theory, due to the unique conditions that it is possible to find in these countries. The present study is in line with this third perspective. In the following paragraphs I argue indeed that EMs can represent extremely interesting laboratories to analyze the homeland firms' internationalization process: as some IB scholars have in the past studied the origins of the largest US multinationals (e.g., Curhan, Davidson and Suri, 1977), we have nowadays the opportunity to observe the phenomenon of global growth among companies from EMs. This represents therefore a unique opportunity to comprehensively study contemporary firms' internationalization behaviors and thereby enrich current theories.

The stream of IB research I would like to enter with this Ph.D. thesis is largely focused on the group of EMs and on the several commonalities that these countries share, as mentioned before. In this sense, the discussion about EMs as a group is the necessary starting point to understand the phenomenon and its implications. However, the term “emerging markets” gives the false impression of a homogeneous group. This is clearly not the case since EMs are not a homogeneous or universally identifiable group (Khanna and Palepu, 1997; Ramamurti, 2009): EM firms have different characteristics depending on the country they come from, and, most importantly, national contexts have an influence on the strategies followed by the domestic firms, their behavior and their internationalization (e.g. Sethi and Elango, 1999; Khanna, 2009). Even if EMs clearly have some common characteristics, their categorization as EMs is not strong enough to make sense in every context, nor to *a priori* justify whole new explanations in every research setting (Cuervo-Cazurra, 2012). For instance, different countries are classified as EMs by some sources and as advanced markets by others (Cuervo-Cazurra, 2012). That shows that the classification is an artifact, which does not hold in the cases where countries cannot be grouped by level of development, i.e. they cannot be classified as better or worse but rather as simply different. The grouping should therefore depend on the dimension of analysis, in order to avoid misleading generalizations (Cuervo-Cazurra and Genc, 2011). In the same way the term “advanced markets” can of course also be misleading, since these are also a heterogeneous group of countries. In fact, advanced market firms do not follow “one way of internationalizing” and the same is true for EM firms. This view reflects stereotypes of EM and advanced market firms that can be rather misleading.

Given these reasons, I focus in this thesis on a research approach aiming at better understanding some home-country conditions, in order to better realize and discuss the assumptions that traditional explanations have been based on, and consequently explain some firms’ behaviors that can be influenced by the characteristics of their countries of origin.

Among the potential contributions that studying EM firms' behavior can have, bringing the context more explicitly into IB research is indeed among the main ones.

In line with this reasoning, single-context studies have substantially emerged in the IB literature focusing on EMs, as can be seen for the case of China (e.g., Liu, Buck and Shu, 2005; Deng, 2009; Sutherland, 2009), and, to a smaller extent, India (e.g., Arora *et al.*, 2001, Chittoor *et al.*, 2009; Bhaumik, Driffield and Pal, 2010). In this sense, it is advisable in some cases to focus on a specific EM context and study how this influences homeland firms' internationalization. Much can be lost by looking only at the aggregate group level of analysis, and this may not enable us to answer many of the questions that the internationalization of EM firms has raised.

### **2.1 The value of a single country context**

When it comes to the heterogeneity that clearly exists in the EM group, two risks arise. On the one hand, researchers may perform studies at the EM-level of analysis, even when the above mentioned heterogeneity would not allow generalizing the study's findings to every country in that group. On the other hand, simply stating that every national context is just different from the rest of the countries might give the impression that no generalization will be possible, and no general theory would then be needed in the end.

The present study aims at avoiding both these risks: I claim that the definition of EMs should not limit current research, since most probably it will not be *a priori* functional in every study, because of the high heterogeneity existing in the EM group. The present study works in this way against a forced homogenization tendency. At the same time, single-country studies can allow researchers to get deeper into the context, appreciate its specificities and how those can influence domestic firms' behavior. In this way it is then possible to isolate which characteristics of the context are common to other countries and how the study

implications can therefore be generalized to other cases. In other words, it is possible and advisable to group under different “labels” countries officially classified as EMs, depending on the research aim; we should therefore use classifications that are functional to what we want to study. This can then contribute to the more general theory, without risking too broad generalizations to the whole EM group, which might be unrealistic in some cases. Therefore, a more disaggregated approach that leads to the study of a smaller and selected group of countries or of single-country contexts can be advisable in some cases compared to focusing on the whole EM group. I claim that this approach is likely to be more functional to advance general theory, since a single-country context can give interesting insights in this sense.

Having said this, the tendency in the past has been quite different, with context-free studies being in general favored and considered *a priori* more generalizable. This is a particularly critical aspect for the streams of research focusing on firms originating from EMs, which are particularly interesting laboratories to study issues and processes that have not been studied before.

More in general, studies can be context-free, context-bound or context-specific (Meyer, 2006). Among these, context-free research is certainly the most common orientation, seen as more prestigious, more scientific and more consistent compared to other approaches (Blair and Hunt, 1986). Context-free research is believed to lead to universal knowledge, which should be applicable to any national context. Past literature has a preference for this type of knowledge, since the context is often seen as a drawback rather than as a point of strength (Tsui, 2004).

For this reason the impact of the home country context on domestic firms’ behaviors and strategies has in general not been recognized and studied sufficiently. Surprising results that arise in some studies might in this sense reflect the lack of proper consideration of the context of research, which can indeed bias the study’s results or generalizability (Yang and Terjesen,



2007), whereas understanding the context can help the study to better deliver its application and usefulness to practitioners and policy makers (Johns, 2006). A common example in this sense is exactly the case of theories that were born in western contexts and that might not be suitable to non-western ones (Johns, 2006). If the context is properly taken into account, the behavior of EM firms might turn out to be not surprising anymore in some situations (Ramamurti, 2012). On a related note, context awareness is not a prerogative of qualitative studies – which often immerse themselves in the context, contrary to quantitative studies –, since explicit and clear references to the context can also be made with quantitative studies (Johns, 2006; Yang and Terjesen, 2007).

Moreover, a study's generalizability is not simply represented by how replicable the findings are to other contexts (Johns, 2006). Context embedded research, based on an intimate knowledge of the context, provides more valuable results than simple replication; it can produce a contextualized understanding and contribute to global knowledge at the same time (Tsui, 2004). In other words, taking the context seriously into account implies practicing good science and strengthening general theory (Tsui, 2004).

The behavior of EM firms, which often shows apparently surprising traits, cannot be fully understood without considering the home country context they are immersed in. Therefore, in order to perform a context-specific study that incorporates aspects of the national context and do not take them for granted, I decided to focus on the single country context of India.

## **2.2 The Indian context**

India is one of the largest EMs, with impressive economic growth potential, a billion customers and a large amount of manpower (Som, 2004), including a high number of skilled, English-speaking knowledge workers (Dahlman and Utz, 2005). The country is very diverse in terms of culture, business models and industries.

India has experienced extensive economic changes in its past history (Ahluwalia, 1994). In 1948 the Industrial Policy Resolution formulated a program of planned development and in 1951 the Industries Act established the complete governmental control on the Indian industries (Fisman and Khanna, 2004). From these past years until the early 1980s India has been characterized by heavy governmental involvement in production and critical constraints on firms' expansion, foreign capital and competition (Kochhar *et al.*, 2006; Ray and Gubbi, 2009). That resulted in low growth rates, closure to trade and investment, and an instable economic context (Kochhar *et al.*, 2006), so that in 1991 the government decided to restructure several sectors of the economy, creating a more open and competitive economy. The reforms stabilized the macro economy of India (Ahluwalia, 1994), abolished industrial licensing, reduced the number of monopolized industries and increasingly liberalized FDIs and trade (Kochhar *et al.*, 2006), with critical impacts on every industry. Overall this resulted in impressive general economic growth (Som, 2004; Rothermund, 2008).

The interest of academic research, media and practitioners in the Indian case has grown consequently. The first wave of academic research on this topic focused in the 1970s and 1980s on isolated cases of Indian subsidiaries based in Sri Lanka, Kenya and Malaysia; in these first cases, the internationalizing Indian firms were typically pushed abroad by the harsh conditions of the home context and operated mainly in manufacturing industries (Lall, 1982, 1983). The most recent stream of research interested in the Indian case focuses instead on more diverse cases and issues (e.g., Arora *et al.*, 2001; Chittoor *et al.*, 2009; Bhaumik, Driffield and Pal, 2010; Capelli *et al.*, 2010).

India is sometimes compared with China in cross country studies (e.g., Athreye and Kapur, 2009; Sun *et al.*, 2012) or grouped with other EMs (Wilson and Purushothaman, 2003; Gammeltoft, 2008; Rabbiosi, Elia and Bertoni, 2012). Appreciating its peculiarities in single-

country studies can however be extremely valuable, advance general IB theory and inspire some future reflection on similar contexts of research.

In particular, a context is a composition of different aspects such as space, time, opportunities and constraints, social and physical dimensions (Johns, 2006; Yang and Terjesen, 2007). In the Indian context it is possible to isolate some aspects that, even if not universally new, arise in a particularly intensive and interesting way. India is indeed a very intriguing national context under many points of view.

First of all, the occurrence of particular events represents an important aspect of a context (Johns, 2006). In this sense India experienced in the past an extensive and incremental institutional evolution. This is a paramount issue to be taken into consideration, since home-country institutions typically shape the behavior of domestic firms. Institutional evolution can indeed create new opportunities for domestic firms, increase the exposure to international activities in the local market and facilitate the firms' internationalization process.

Institutional change and subsequent organizational responses to that have of course been studied in other contexts outside India (e.g., Newman, 2000; Peng, 2003; Peng, Wang and Jiang, 2008; Cuervo-Cazurra and Dau, 2009). The case of India is however particularly interesting, since it involves recent, broad and incremental institutional changes, which represent a unique opportunity to study firms' internationalization in its whole complexity. This aspect of the Indian context is taken into consideration in every research paper of this Ph.D. thesis, and represents one of the key points addressed by the paper in part three, titled "Time to internationalization and evolving institutions: An event history analysis of Indian firms".

Business groups represent a second key aspect characterizing the Indian context. Their existence can be related to some weaknesses of the home institutional context (Xu and

Meyer, 2012). Business groups are indeed usually considered valid responses to overcome institutional voids (Khanna and Palepu, 2000) and are therefore relevant organizational forms in several different contexts (cf. Fisman and Khanna, 2004): they can be seen in many EMs and some advanced markets as well, such as France and Italy (Jones and Khanna, 2006).

However, business groups in India are particularly critical and widespread, and can be identified in a reliable way (Khanna and Palepu, 2000). Moreover, operating in a changing homeland environment, they can find it often difficult to change and fit with the new context, due to affiliation advantages that accrue to them (Hoskisson *et al.*, 2004). This is addressed again by the paper in part three, titled “Time to internationalization and evolving institutions: An event history analysis of Indian firms”, and the article in part five, titled “Business groups’ internationalization: The role of the domestic geographical scope”.

As a third point, India experienced important migration phenomena since the 1960s, where the UK and the US represent the primary foci of this diaspora, due to past colonial history and shared language (Shukla, 2003). India has now the second largest diaspora in the world after China. Overseas Indians typically have a strong interest in their home country and maintain their relationships with that, in terms of capital flows, political interests and social relations (Shukla, 2003).

The existence of diasporas is however not an India-specific phenomenon. There are many diaspora-intensive countries, such as for instance Armenia, Palestine, Israel, Albania and Japan, covering both EMs and advanced markets. India represents however an ideal context, since overseas Indians play a particularly important role in the home country, are clearly identified by law and are targeted in many ways by the Indian government (Saxenian, 2005). This topic is addressed in particular by the paper in part four, titled “The role of Overseas National Ownership in Outward FDI: A study of the Indian diaspora”.

A fourth aspect that makes the Indian context particularly interesting is its internal heterogeneity. India is extremely diverse and federalism is an important aspect of this country (Rothermund, 2008). In this sense, institutional changes and decentralization have both created economic opportunities and internal sub-national divergence (Kochhar et al., 2006). India is therefore characterized by uneven levels of economic development and institutional quality (Ravallion and Chaudhuri, 2006; OECD, 2011), together with high linguistic and cultural heterogeneity across sub-national states (The economist, 2012).

Once again, there are other internally heterogeneous countries in the world. For instance, extreme disparities across sub-national states in terms of level of development, resources availability and institutional quality characterize other large and heterogeneous EMs such as China (Abebe and Masur, 2008; OECD, 2011). However India represents a particularly powerful and clear context in this sense. This topic is addressed by the paper in part five, titled “Business groups’ internationalization: The role of the domestic geographical scope”.

Given these examples, India represents an interesting laboratory to study some internationalization sub-problems and subsequently enrich IB theory. This represents exactly the final aim of the four research papers of the Ph.D. thesis.

### **3. THE FOUR RESEARCH PAPERS: METHODOLOGY AND SUMMARY**

The first paper of this Ph.D. thesis is theoretical, whereas the last three develop hypotheses that are then tested on a sample of Indian firms investing abroad. The dataset is based on data collected from different sources, i.e. the Prowess database, the Zephyr database, the Indian Census and the World Competitiveness Yearbook.

The *Prowess* database (2011 release) from the Centre for Monitoring of the Indian Economy (CMIE), an independent organization headquartered in Mumbai, provides annual financial data for over 7,000 Indian firms. The database has been used in the past to investigate strategy and IB issues (e.g., Elango & Pattnaik, 2007; Chittoor, Sarkar, Ray, & Aulakh, 2009; Gubbi, Aulakh, Ray, Sarkar, & Chittoor, 2010). The database is very rich but also affected by some data problems: some observations report erroneous values – e.g. negative figures – and missing values, which required some data cleaning. Government and foreign affiliated firms have also been excluded from the dataset, in accordance with Fisman and Khanna (2004), as they are expected to follow different internationalization patterns compared to domestic private firms.

To identify the foreign investments undertaken by Indian firms, I relied instead on the Zephyr database, maintained by Bureau van Dijk. In this database it is possible to identify majority and minority acquisitions, mergers and JVs made abroad by Indian firms. There are no recorded outward FDI by Indian firms prior to 2000. Also in this case some data had to be removed, due to the presence of deals completed by individuals, unknown acquirers, and organizations not included in the Prowess database (which therefore could not be matched with that firm-level database). I have included all the acquisitions, mergers and JVs where the investing Indian firm possessed at least 10% of the company equity after the completion of the deal, in accordance with the OECD classification (OECD, 1999) in order to exclude portfolio investments.

I also collected indicators about different Indian sub-national states from the Indian Census (2001, 2011). As census data are available for the years 2001 and 2011 only, I have used interpolation to derive the values for the missing years. Finally, I also collected data about the recent Indian institutional changes from the World Competitiveness Yearbook, with indicators covering the years from 1997 to 2010.

The combination of these four data sources allowed me to build a panel dataset of Indian firms' characteristics and investments over a long period of time. The final panel dataset provides a longitudinal perspective that gives a valuable insight on a long period of time characterized by significant changes.

The selected sample is a good representation of Indian firms in general, since it is based on big and comprehensive data sources. However, I do not take into consideration greenfield investments, since mergers and acquisitions are the most common and interesting ones in the Indian case.

The three empirical papers aim at explaining different aspects of firms' internationalization, and therefore they focus on different – but related – dependent variables, such as the foreign investments' timing and the extent of internationalization. In the three empirical papers I implement different empirical methods of analysis, which coherently handle the different dependent variables and purposes of research.

More in details, the second paper studies firms' earlier versus later internationalization: the dependent variable is therefore represented by the duration in years that an Indian firm waited before internationalizing, given that it did not do it before. Therefore I relied on an event history method that incorporates time varying explanatory variables and provides estimates of entry timing (Tuma and Hannan, 1979), and includes both internationalizing and non-internationalizing firms dealing with this censoring issue in the appropriate way.

The third paper studies how the presence of overseas national shareholders can influence homeland firms' outward FDIs: the dependent variable captures the cumulative number of majority-owned cross-border acquisitions undertaken by each Indian firm in the dataset during the period 2000-2010. Since the data have a preponderance of zeros in the actual count of outward FDI, the dependent variable includes many zeros. I handle this so-called “zero inflation” condition estimating a zero inflated negative binomial model (Greene, 2000). This type of model is a two steps maximum likelihood estimator that first estimates a logit regression to predict the membership of each observation to the “always zero” group, and then a truncated negative binomial model.

Finally, the fourth paper analyzes Indian business groups' internationalization, and the dependent variable is represented by the number of OFDI that each Indian BG undertakes yearly in the above mentioned period of analysis. To handle the preponderance of zeros that affects also this dependent variable distribution, I estimate again a zero inflated negative binomial model.

Robustness checks are run for every empirical research article. They include different operationalization of dependent variables and different econometrical model and conditions.



## **PART TWO:**

### **Emerging market firms' acquisitions in advanced markets:**

#### **Matching strategy with resource-, institution- and industry-based antecedents**

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#### **Abstract**

This study draws upon the resource-based view and the institution-based view of the firm to provide a comprehensive overview of how different resource-, institution and industry-based antecedents affect the motivations guiding the acquisitions that emerging market firms undertake in advanced markets. These antecedents can influence emerging market firms' capacities to absorb or exploit technological and/or marketing advantages in advanced markets. In order to be successful, emerging market firms have to undertake those upmarket acquisitions that best "fit" their antecedents. Four mutually exclusive acquisition strategies are derived, which are then illustrated using examples of Indian firms' acquisitions in advanced markets.

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The paper has been previously presented at the 2010 Copenhagen Emerging Market Multinationals Conference and 2010 EIBA conference. Insightful comments from the research seminars' participants at the Department of Strategic Management and Globalization of Copenhagen Business School are gratefully acknowledged.

## 1. INTRODUCTION

A growing number of emerging market (EM) firms are showing extraordinary competitiveness in global markets, thus attracting the interest of both media and academia. Some of them are challenging competitors from advanced markets (AMs) (The Economist, 2010), and are developing significant technological, organizational and strategic innovations (Gaur & Kumar, 2010; Mathews, 2006). This phenomenon is widespread among EMs<sup>1</sup> (Gammeltoft, Barnard, & Madhok, 2010).

Given the growing visibility of EM firms' international expansion, an extensive body of literature has focused on this context. Scholars have studied EM firms' internationalization drivers (Athreye & Kapur, 2009; Aulakh, 2007), entry modes (Duysters, Jacob, & Lemmens, 2009), growth rates (Arora, Arunachalam, Asundi, & Fernandes, 2001; Fortanier & Van Tulder, 2008) and host location choices (Duysters et al., 2009; Morck, Yeung, & Zhao, 2008). They have also investigated the ownership structures and relational assets of these internationalizing firms (Arora et al., 2001; Bhaumik, Driffield, & Pal, 2010; Douma, George, & Kabir, 2006; Elango & Pattnaik, 2007; Filatotchev, Liu, Buck, & Wright, 2009; Morck et al., 2008), and the performance effects of their internationalization (Aulakh, 2007; Douma et al., 2006).

In the 1970s, only a small number of EM firms had internationalized, often in neighbouring regions through limited foreign operations (Gammeltoft et al., 2010). The impressive recent emergence of EM firms' foreign investments has therefore fuelled a debate over potential explanations and whether these explanations can be linked to traditional theoretical perspectives based on mature AM firms (Fortanier & van Tulder, 2009). Some authors claim that traditional theoretical explanations are largely suitable for EM firms (see Narula, 2006;

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<sup>1</sup> "Emerging markets" are defined as low-income, rapid growth economies that have experienced radical institutional changes in terms of increased openness and liberalization (Hoskisson et al., 2000). EMs comprise Middle and South America, Africa, and the ASEAN countries. "Advanced markets" are represented by North America, Western Europe, Australia, New Zealand and Japan.

Rugman & Li, 2007), whereas others argue that EM firms should be studied using different perspectives (cf. Madhok & Keyhani, 2012; Mathews, 2006).

Despite this vast body of literature, a unified, comprehensive theoretical framework that explains the internationalization of EM firms is still lacking (Sun, Peng, Ren, & Yan, 2012). Scholars in this stream of research tend to present partial, and sometimes radically opposite, explanations. For instance, EM firms are sometimes said to undertake acquisitions in AMs to gain access to the traditional advantages they otherwise lack (Duysters et al., 2009; Mathews, 2006; Mathews & Zander, 2007). At other times, such acquisitions are described as a sign of EM firms' abilities to exploit their advantages abroad, just as AM firms can normally do (e.g., Rugman & Li, 2007). In other words, no consensus has been reached regarding the augmenting or exploiting motivations for EM firms' acquisitions in AMs.

With regard to this theoretical controversy, the current paper aims to answer two interrelated questions about EM firms' internationalization: *Which motivations guide EM firms' acquisitions in AMs?* and *Which EM firms should follow augmenting, rather than exploitative, acquisitions in AMs?* I answer these questions by identifying four comprehensive, mutually exclusive types of EM firms' acquisitions in AMs, which reflect the different motivations and characteristics of EM firms. I then suggest that, in order to be successful, EM firms should undertake those acquisitions that best "fit" their characteristics. In this way, the paper contributes to the extant literature by claiming that the heterogeneous internationalization motives of firms with potentially weak advantages and home institutions – such as EM firms – can be explained by looking at those firms' antecedents that capture their home contexts' peculiarities.

The paper draws upon the resource-based view (RBV) and the institution-based view (IBV) of the firm, which are often used in studies of EM firms' strategic behaviour (e.g., Hoskisson et al., 2000; Peng & Heath, 1996). Based on this framework, the paper links the resource-

institution- and industry-based levels of analysis (Peng, Wang, & Jiang, 2008), which together can explain EM firms' antecedents to acquisitions in AMs.

The theoretical contribution of this paper consists of a new comprehensive approach to the study of EM firms' acquisitions in AMs, which stresses the importance of heterogeneity in firm characteristics to explaining the motivations behind such acquisitions. EM firms can have very different characteristics and follow a variety of strategies, even when they come from similar institutional contexts and enter similar AM host locations through the same internationalization mode. In this regard, this paper takes the complexity of the phenomenon into account and provides a single comprehensive theoretical framework to address it.

This paper enriches the discussion by providing several firm-level examples derived from the under-researched Indian context (Kumar, 2009). After the main period of liberalization, which started in 1991, acquisitions in AMs became the preferred form of internationalization for Indian firms (Athreye & Godley, 2009; Sun et al., 2012). The theoretical arguments presented here, however, are not India-specific, but apply to EM firms in general.

The rest of this paper is organized as follows. Section 2 presents the theoretical background of the study, including possible motivations for EM firms' acquisitions in AMs and the antecedents to those acquisitions. Section 3 answers the main research questions by developing a theoretical model that identifies four acquisition strategies and links them to the various antecedents of acquiring EM firms. Section 4 presents the conclusions.

## **2. THEORETICAL DEVELOPMENT**

In recent years, the number of acquisitions undertaken by EM firms in AMs ("upmarket acquisitions", see Ramamurti, 2009) has increased considerably (Athreye & Kapur, 2009). For instance, the Chinese firm Lenovo acquired the personal computer branch of IBM in

2004 (Schüler-Zhou & Schüller, 2009), and the Indian company Suzlon Energy successfully acquired the Belgian company Hansen Transmissions in 2006 (Lewis, 2007) and the German company Repower in 2007 (Tiwary & Herstatt, 2009). Other Indian firms, such as Hindalco and Bharat Forge, systematically use upmarket acquisitions as their key internationalization strategy (Kumar, 2009).

Upmarket acquisitions are not the only option available to EM firms wishing to internationalize and connect to AMs. For years, EM firms have experienced high levels of inward foreign direct investments (FDIs), and have served as subcontractors of and collaborators with AM firms (D' Costa, 2000). EM firms, such as firms in the Indian automotive industry, have also undertaken greenfield investments in AMs (Bhaumik et al., 2010).

Undoubtedly, upmarket acquisitions are an important phenomenon for EM firms (Aulakh, 2007; Bhaumik et al., 2010; Gammeltoft et al., 2010; Gaur & Kumar, 2010) for several reasons. EM firms, which generally have weaker technological and marketing advantages (Dunning, Kim, & Park, 2008; Duysters et al., 2009), may prefer acquisitions, as they allow these firms to quickly cover the gap between their capabilities and those of AM players. For instance, the Indian firm Wockhardt established an international joint venture (JV) with the German firm Rhein Biotech. As Wockhardt failed to augment its technological capabilities through the JV, it decided to take over Rhein Biotech (Athreye & Godley, 2009). Such examples exemplify the difficulties that EM firms face in collaborating with AM firms – the insurmountable capability gap between the two partners can discourage the adoption of a collaborative strategy (Rabbiosi, Elia, & Bertoni, 2012). In contrast, upmarket acquisitions can provide quick access to some of the AM firms capabilities (Barkema & Vermeulen, 1998), while simultaneously denying direct competitors access to those capabilities (Child & Rodrigues, 2005) and helping the acquirer to benefit from the proximity of AM competitors

(Pradhan, 2008). Moreover, upmarket acquisitions do not entail the need to build credibility to attract skilled employees and suppliers (Madhok & Keyhani, 2012). Furthermore, AM firms are generally less diversified than EM firms and have “modular” assets, which facilitate post-acquisition integration (Hennart, 2009).<sup>2</sup>

From the RBV perspective, cross-border acquisitions have traditionally been explained in terms of the firms-specific advantages at the time of investment (Barkema & Vermeulen, 1998). When entering a foreign market, firms suffer from a liability of foreignness, i.e., the manifestation of additional costs and risks arising from a lack of complementary resources useful for understanding and operating in the host environment. To compensate, investing firms need to possess some valuable advantages (Cuervo-Cazurra, Maloney, & Manrakhan, 2007; Zaheer, 2002). These firm-specific advantages can be partially shaped by the firm’s home institutional environment. This is particularly true for EM firms. Given that many EMs are characterized by having weaker institutions than AMs (Madhok & Keyhani, 2012; Ramamurti & Singh, 2009), some EM firms develop resources to compensate for this weakness (Bhaumik et al., 2010; Elango & Pattnaik, 2007; Peng et al., 2008). Typical firm responses to the weak institutions in EMs include concentrated ownership and relationships with other firms and governmental authorities (Peng & Heath, 1996). These responses serve as informal substitutes for formal institutional support (Bhaumik et al., 2010; Peng & Heath, 1996).

Accordingly, a focus on EMs clearly requires the integration of both the RBV and the IBV perspectives. While institutions are often taken for granted in AM research contexts, their importance is evident when studying EMs, where they often seem to malfunction (Peng & Heath, 1996).

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<sup>2</sup> Upmarket acquisitions may also carry disadvantages, e.g., time-consuming integration activities (Graebner, 2010), high costs and difficulties in managing the acquired assets (Child & Rodrigues, 2005; Hennart, 2009).

The current paper focuses on EM firms' RBV-inspired and institutionally determined antecedents to acquisitions. To complete the theoretical framework of this paper, the following section discusses the role played by the various motivations for upmarket acquisitions.

## **2.1 Upmarket acquisitions: augmentative and exploitative strategies**

The RBV perspective argues that cross-border acquisitions can be used by firms to redeploy existing firm-specific resources in the target firms market, or to internalize new resources and capabilities (e.g., Wernerfelt, 1984). In other words, through cross-border acquisitions, firms can transfer and exploit firm-specific advantages, or acquire knowledge and resources that are not available in their home country. In this regard, the set of acquisition motivations is typically depicted as dichotomous (see Kuemmerle, 1999). Firm motives for undertaking acquisitions are likely to be both exploitative and augmentative, although a relative emphasis will be typically given to one of the two (Hoskisson, Kim, White, & Tihanyi, 2004).

EM firms frequently lack proprietary technologies and brands (Dunning et al., 2008; Duysters et al., 2009; Lall, 1982). Nevertheless, they are operating in an increasingly globalized and ever-changing context (Narula, 2006). As a result, they must quickly upgrade their capabilities in order to compete with AM firms, whereas building up a competitive brand (Duysters et al., 2009) and undertaking R&D investments are time-consuming, uncertain activities (Pradhan, 2008). For these reasons, they might decide to undertake upmarket acquisitions for the purpose of augmenting firm skills and resources (Madhok & Keyhani, 2012).

Given the lack of strong technologies and brands common among EM firms, studies of internationalization may depict such firms stereotypically as units that possess no valuable advantages relative to AM firms. Such a stance is contradicted by numerous examples. For instance, the Indian company Hidesign has built a global brand of affordable luxury products

and globally promotes its marketing capability (Kumar, 2009). The Serum Institute of India has developed a range of innovative technologies (Gaur & Kumar, 2010). The Indian IT services firms Infosys, Tata Consultancy Services and Wipro have high-quality technological skills (Kumar, 2009). Clearly, EM firms can have valuable, sometimes non-traditional, advantages (Gaur & Kumar, 2010), which can be exploited through upmarket acquisitions. As a result, I suggest that both augmenting and exploitative motivations can therefore guide EM firms' acquisitions in AMs (Aulakh, 2007; Narula, 2006).

As EM firms typically undertake upmarket acquisitions to add value to their business activities (Budhwar, Varma, Katou, & Narayan, 2009), they are likely to focus on acquisition strategies that feature highly value-adding technological and/or marketing advantages (see Figure 1).

Technological advantages are defined in this case as skills in undertaking R&D, producing patents and developing proprietary technology. In contrast, marketing advantages are defined in terms of distribution and servicing skills, attention to customers, and the ability to enhance brand loyalty.

[Insert Figure1 about here]

Gaur and Kumar (2010) claim that upmarket acquisitions can also be driven by the desire to acquire management expertise. However, EM firms are more likely to obtain the managerial skills they may lack by hiring skilled managers and professional consultants. The acquisition of managerial skills is therefore not included in this paper as a primary motive for acquisitions in AMs but rather as a positive "side-effect". For this reason, only the technological and marketing advantages are considered.

Given these premises, this study aims to analyze which types of firms should undertake each of the four mutually exclusive strategies presented in Figure 1. Therefore, the ultimate goal of the paper is to fill the four cells in Figure 1 with the relevant EM firms' antecedents,



because EM firms wishing to benefit from an acquisition should undertake those strategies that best “fit” their characteristics.

## **2.2 Antecedents to internationalization**

Drawing from the RBV and IBV, I refer explicitly to the “strategy tripod” presented by Peng et al. (2008) to organize EM firms’ antecedents to upmarket acquisitions into three categories. According to this study, it is necessary to consider institution-, industry- and firm-based characteristics in order to explain firms’ internationalization (Peng et al., 2008). I apply this classification structure to the EM firms’ antecedents to upmarket acquisitions highlighted in past RBV and IBV literature (Figure 2).

EM firms’ antecedents are divided into three categories. First, the resource-based antecedents (top-left rectangle) encompass EM firms’ heterogeneous resources, capabilities and expertise. Second, the institution-based antecedents (top-right rectangle) comprise the institutionally induced firm characteristics that could influence upmarket acquisition motivations. This category includes the heterogeneous advantages that EM firms can develop in response to weak formal institutions (see Ramamurti & Singh, 2009). Third, the industry-based category (bottom rectangle) accounts for the strategically relevant peculiarities that are likely to arise from the various sectors in which the firm is active (Ramamurti, 2009). These three categories will later be linked to different motivations for EM firms’ upmarket acquisitions.

[Insert Figure 2 about here]

This study does not focus on the linkages among the three categories identified. In order to explain the role of EM firms’ heterogeneous characteristics on upmarket acquisition strategies, a deep analysis of the *individual* antecedents represented in Figure 2 is required.

### **2.2.1 Resource-based antecedents**

*Market focus.* Aulakh, Kotabe, and Teegeen (2000) suggest that the market focus of EM firms can have an impact on their internationalization strategies. Given the radical differences between EMs and AMs in terms of such factors as market competitiveness, consumers, infrastructures and regulations (see Madhok & Keyhani, 2012), EM firms focused on the domestic market (e.g., Ramamurti & Singh, 2009) or on other EMs will follow different strategies and will have a different set of knowledge and capabilities than EM firms focused on AMs. In Figure 2, this antecedent is split to reflect these two possibilities (EMs versus AMs).

For instance, an AM focus implies that the firm is able to better understand the AM institutional context, as well as AM customers' requirements and relationships (Filatotchev et al., 2009). In contrast, firms oriented towards other EMs will have to extract value in the difficult institutional contexts of the host country, which are usually weak, inadequately linked and limited by poverty (Child & Rodrigues, 2005; D' Costa, 2000). As a result, firms focused on EMs should develop an ability to design products and services suitable for EM customers and institutions (Dunning et al., 2008; Ramamurti & Singh, 2009).

*Management background.* Managers with an international background can generally bring rich knowledge and important advantages to the firm (Barkema & Vermeulen, 1998). In particular, managers can have AM education and/or work experience. Alternatively, they can be "bounded entrepreneurs" with limited international training and job experience (Liu, Xiao, & Huang, 2008). As EM institutions typically provide ineffective managerial education (e.g., Ramamurti, 2009), the children of families that control firms in EMs are often educated in AMs. For example, the chairman of India's Sona Steering (D' Costa, 2000), the R&D manager of Ranbaxy (Athreye & Godley, 2009) and the chairman of Bharat Forge (Kumar, 2009) have all been educated in the US. One previous CEO of India's Tata Enterprises, J.R.D. Tata, was educated in France, Japan and England. The present CEO of Tata, Ratan

Tata, studied at Cornell University and worked in Australia (Kumar, 2009). As an alternative, some EM firms – such as India’s Nicholas Piramal, Ranbaxy and ORG Systems – hire human resources from among AM firms past employees (D’ Costa, 2000; Kale, 2010; Kale & Little, 2010). Therefore, this antecedent, positioned under the resource-based category in Figure 2, captures the advantages associated with AM knowledge and experience that some managers can bring to EM firms (Elango & Pattnaik, 2007).

*Diversification experience.* Weak institutions often steer EM firms towards industry and/or location diversification (Fortanier & van Tulder, 2009). In particular, location-diversified firms can develop rich knowledge about the host markets institutions and consumers, which serves as an advantage in upmarket acquisitions. On the other hand, industry-diversified firms can develop important product development capabilities. Diversified firms (see Figure 2, top-left corner) can therefore have advantages in terms of experience and knowledge.

*Internationalization experience.* The firm’s past experience represents an important antecedent for its internationalization (Filatotchev et al., 2009). However, experiential knowledge is typically context specific. EM firms can develop experience in institutionally similar (i.e., EMs) or institutionally dissimilar (i.e., AM) contexts. A firm’s liability of foreignness in a new host country that is institutionally dissimilar can be reduced if that firm has previous experience with institutionally similar circumstances (see Figure 2) (Zaheer, 2002). In other words, the high liability of foreignness that EM firms are likely to face in AMs can be reduced by their past internationalization experience in AMs.

Firm size and age are likely to have an impact on the firm’s resource-based antecedents. For instance, small firms wishing to internationalize are likely to suffer from a liability of smallness, implying resource limitations that can constrain their antecedents and subsequent acquisition strategies (Zhou, Wu, & Luo, 2007). Firm size is therefore expected to impact

some EM firms' resource-based antecedents, such as the possibility of attracting managers with an AM background. Similarly, firm age is expected to influence the type of resource-based antecedents possessed by the firm. In principle, the older the firm, the more likely it is that it will be able to develop valuable resource-based antecedents. Consequently, big and/or mature firms are more likely to undertake acquisitions. However, these two aspects are not explicitly included in this discussion because they are not expected to be connected to motivations for acquisitions in AMs *in particular*.

### **2.2.2 Institution-based antecedents**

*Relational assets.* EM firms often develop linkages in response to weak formal institutions in their home countries (Khanna & Palepu, 2000). These connections imply that it is possible for the focal firm to rely on the connected entities' antecedents, such as their internationalization experience (see Elango & Pattnaik, 2007), which can then support the internationalizing focal firm.

Some EM firms cultivate governmental linkages, which can provide support for the EM firms' internationalization (Hoskisson et al., 2000). In addition, many EM firms belong to large business groups, formed by collections of firms linked by common ownership and directors' interlocks. These groups can provide advantages such as financial support (Kumar, 2009), an improved ability to cope with under-developed infrastructure, and the possibility to share managers (Douma et al., 2006).

EM firms can also rely on foreign business linkages, sometimes with people who have emigrated. These connections can help EM firms obtain foreign market access and experience (Kapur & Ramamurti, 2001). This can be connected to upmarket acquisitions, especially when foreign connections are established in AMs, as is largely the case for Indian firms (Kapur & McHale, 2005).

*Ownership control.* Concentrated ownership is another common response of EM firms to weak home institutions (Bhaumik et al., 2010). It usually implies a strategic influence on the firm, the impact and directionality of which depends on the identity of the controllers (Thomsen & Pedersen, 2000). Douma et al. (2006) distinguish between foreign and local shareholders in EM firms. For this institution-based antecedent (top-right corner in Figure 2), only the strategic controlling shareholders are considered, as they are not guided mainly by financial goals. Moreover, I focus on family and governmental controlling shareholders (the analysis excludes foreign-controlled firms based in EMs).

In family controlled firms, the family often overlaps with the management (Thomsen & Pedersen, 2000), and the family avoids hiring professional managers or consultants in order to maintain control of the firm (Gallo & Sveen, 1991). For example, India's Premier Automobiles experienced many internal family fights linked to the administration of the firm before it decided to introduce professional management (D' Costa, 2000). Even so, there are exceptions to this rule. India's Sona Steering employed professional management from the beginning, while the Swaraj Paul family undertook upmarket acquisitions in the UK that were guided by professional managers (D' Costa, 2000; Kumar, 2009). Governmental control is also a common phenomenon among EM firms (Ramamurti & Singh, 2009). Government controlled firms can quickly obtain governmental approvals (Morck et al., 2008), which facilitate upmarket acquisitions. On the other hand, governmental control may influence a firm's strategy (Fortanier & van Tulder, 2009) and reflect governmental objectives, such as low prices for products and services (Thomsen & Pedersen, 2000). The Indian state-owned Maruti Udyogs extremely low prices (Okada, 2004) serve as a good example.

*Acquisition financing.* Acquisition financing can be a challenge for some EM firms, but it can often be offset through government funding (Ramani, 2001). This can sometimes develop into an institutional dependence that inhibits the firm's strategic investments (Child &

Rodrigues, 2005). Government funding can take several forms, such as preferential financing (Gammeltoft et al., 2010) or tax benefits (Cui & Jiang, 2007).

Alternatively EM firms could rely on foreign capital support, which, in several EMs, has increased in the post-liberalization period (see Douma et al., 2006), for instance in terms of foreign listings (Chittoor, Sarkar, Ray, & Aulakh, 2009). For example, the Indian firm Graycell has attracted business angels and venture capital investors from the US (Arora et al., 2001).

Finally, some EMs have relatively well-developed capital markets that can finance the acquisition-based growth of firms within those markets. Many Indian companies, for example, are listed on the Bombay Stock Exchange or the National Stock Exchange (e.g., Douma et al., 2006).

Even if intra-country institutional differences are likely to be smaller than inter-country differences (Kostova & Zaheer, 1999), it is important to note that firms located in metropolitan cities in EMs can typically access higher quality institutions, services and infrastructure than firms located in rural areas and smaller cities (van Dijk, 2009). A firm's location can consequently influence the development of its institution-based antecedents. However, it is not explicitly included in the discussion of Figure 2 because it is not expected to be connected to motivations for acquisitions in AMs *in particular*.

### **2.2.3 Industry-based antecedents**

*AM competition.* In recent years, direct competition from AM firms has become an increasingly common phenomenon in EMs (Kapur & Ramamurti, 2001). This industry-based antecedent (bottom rectangle in Figure 2) allows EM firms to increase their knowledge of AM competition (Liu et al., 2008). Simultaneously, the opportunity to compete with AM

firms in the domestic market can give EM firms the confidence they need to compete in the AMs themselves (Nayyar, 2008). For example, large Indian firms, such as Tata Consultancy Services, Infosys and Wipro, have been able to improve their communication practices partly due to Texas Instruments presence in India (Patibalanda & Petersen, 2002). Accordingly, some EM firms can be exposed to very high AM firms' competition, whereas others can be industry leaders.

*Industry type.* EM upmarket acquisitions have covered a broad range of industries (for a review of Chinese and Indian upmarket acquisitions, see Fortanier & van Tulder, 2009). The institutional context influences and shapes the industry-based antecedents through industry-specific regulations and policies. As these aspects cannot be applicable to all industries, the "industry type" antecedent is explicitly included in the framework in Figure 2.

In summary, the various combinations of the antecedents represented in Figure 2 constitute the different bases necessary for the exploitation of EM firms' existing advantages or the absorption of the strategic assets sought through upmarket acquisitions. The following section connects these antecedents to different motivations for upmarket acquisitions.

### **3. UPMARKET ACQUISITIONS: A THEORETICAL MODEL**

Rationally, EM firms should undertake those upmarket acquisitions that best "fit" their antecedents. In other words, the EM firm's combination of antecedents places it into one of the cells represented in Figure 3, which are derived from the strategies shown in Figure 1 combined with the antecedents classified in Figure 2.

Every cell in this matrix illustrates the firms' antecedents that best fit the acquisition strategy in that cell. There are four possible strategic aims for acquiring firms: to augment technological capabilities ("upstream strategy", cell 1), to augment marketing capabilities

(“downstream strategy”, cell 4), to augment both technological and marketing capabilities (“augmenting strategy”, cell 3), or to augment neither technological nor marketing capabilities, but instead exploit the advantages already possessed (“exploitative strategy”, cell 2). In order to fit into one of the four strategies highlighted in Figure 3, a firm does not have to possess all the antecedents listed in that cell. Rather, a firm possessing several of the listed antecedents will be expected to have a good fit with the strategy.

[Insert Figure3 about here]

In accordance with the IBV, the antecedents of firms that are deeply rooted in the EM institutional environment are expected to be relevant for that context and transferable to other EMs because of institutional similarities. For the same reason, the antecedents connected to AM institutional conditions can support the effective exploitation and/or acquisition of technological and/or marketing advantages in that context.

### **3.1 Upstream strategy**

The marketing-exploiting and technological-augmenting strategy should be undertaken by EM firms possessing several of the antecedents listed in cell 1 (Figure 3). This strategy is implemented by EM firms with a market focus on EMs that are willing to augment their technological advantages to serve this typically low-cost context with affordable, easy-to-use products (Ramamurti & Singh, 2009). At the same time, these firms exploit their EM-rooted marketing advantages to serve low-income customers, as they have an informational advantage concerning local institutions and requirements (Ramamurti & Singh, 2009), which can help these firms overcome their liabilities of foreignness in host locations (Kostova & Zaheer, 1999).

As highlighted in cell 1 (Figure 3), a market focus on EMs is often linked to family ownership (Mathews & Zander, 2007), which is often connected to the possession of business



linkages in EMs (Bhaumik et al., 2010). Moreover, EM business groups are often industry diversified (D' Costa, 2000; Khanna & Palepu, 2000). The latter is a resource-based antecedent useful for technological augmentation because the firm lacks “attention barriers” and is consequentially highly receptive to new technologies (Barkema & Vermeulen, 1998; Levinthal & March, 1993). In terms of the acquisition financing antecedent, some EM business groups might be connected to local financial institutions or they might tunnel cash among different group members (Douma et al., 2006). As technological augmenting can imply a longer time period before returns actually increase compared to other strategies (Vissa, Greve, & Chen, 2010), internal acquisition financing might be the firms preferred choice.

EM family controlled firms – cf. cell 1 – often employ management with an AM education (Tan & Meyer, 2010), as this resource-based antecedent can support technological augmentation with the advanced knowledge protection techniques the managers are likely to have learned (Levinthal & March, 1993). EM firms undertaking “upstream strategies” may also have built their technological skills base through past internationalization experience, e.g., in the form of international technological collaborations with AM firms (e.g., Lall, 1982). With regard to the industry-based antecedents, these firms are likely to operate in industries sensitive to technological upgrades.

The upmarket acquisitions undertaken by the Indian family owned firm Suzlon serve as a good example of the “upstream strategy”. Suzlon is a global producer of wind turbines. It was the first Indian firm to diversify from the textile industry into the wind energy sector in order to serve the large domestic demand for energy (Lewis, 2007). It then expanded into EMs, especially those in Asia, where the demand for wind power was high (Ramamurti & Singh, 2009). In the 2000s, the firm acquired the German firms Sudwind and Repower (Tiwary & Herstatt, 2009) and the Belgian firm Hansen Transmissions (Lewis, 2007).

Through these upmarket acquisitions, Suzlon successfully absorbed technological AM advantages (Lewis, 2007) and managed to offer a complex technology as a low-cost, accessible product by exploiting its EM marketing knowledge. Suzlon's case fits with the upstream strategy given the firm's focus on EMs, family ownership, industry diversification and industry type antecedents, as illustrated in Figure 3.

### **3.2 Exploitative strategy**

The pure "exploitative strategy" should be undertaken by EM firms characterized by some of the antecedents listed in cell 2 (Figure 3). This strategy should be followed by EM firms supported by institution-based antecedents, such as governmental linkages and financing, which are usually highly risk adverse (Cui & Jiang, 2007) and therefore hostile to augmenting strategies. Government financing is often exploited by firms whose managers have AM working experience (Filatotchev et al., 2009) and it is linked to a domestic market focus (Young, Huang, & McDermott, 1996). This strategy can therefore be followed by EM firms focused on the EM context (cell 2) that have decided to exploit the technological and marketing advantages they possess in AMs. These firms are likely to benefit from the industry-based antecedent of market leadership, which can support an exploitative strategy, while engaging in those activities in which they are particularly competent (Levinthal & March, 1993).

Alternatively, EM firms implementing this strategy may have past internationalization experience, perhaps through acquisitions in AMs. They may therefore have directly acquired marketing and technological advantages that can now be fully exploited through this acquisition strategy.

Examples that fit this "exploitative strategy" can be found in the upmarket acquisitions undertaken by the Indian firm ArcelorMittal, one of the world's leading steel companies (D'

Costa, 2000). ArcelorMittal has built extensive upmarket acquisition experience over the years (Kumar, 2009). It acquired Inland Steel in the US in 1998 (D' Costa, 2000), and the US-based International Steel Group and the Belgium-based Arcelor in 2006. As a result of ArcelorMittal's extensive acquisition experience in AMs, these upmarket acquisitions were successful, and increased the size of the Indian acquirer and its ability to negotiate better prices from its suppliers. They also helped to guarantee its customers a stable supply (Kumar, 2009). This case fits the exploitative strategy given the firms internationalization experience and global leadership antecedents.

### **3.3 Augmenting strategy**

A pure "augmenting strategy" is highly risky and it should be undertaken by the EM firms described by the antecedents listed in cell 3 (Figure 3). These EM firms can benefit from antecedents such as family control, where the controllers often overlap with the top management (Thomsen & Pedersen, 2000), which may make the firm more willing to take risks than if it was under external management (Zahra, 2005).

These EM firms typically have a market focus on AMs (cell 3), and are therefore able to better understand AM institutions and customer relationships (Filatotchev et al., 2009). This represents a useful combination of antecedents for augmenting marketing advantages. At the industry level, this strategy may be implemented by EM firms facing very high AM competition because limited improvements would help too little in such cases (Levinthal & March, 1993), while a radical augmenting acquisition could significantly increase the firm's competitiveness.

These firms are likely to be able to access market acquisition financing, which is often characterized by less shareholder pressure than in AMs (Gammeltoft et al., 2010) and therefore implies more freedom to attempt risky upmarket acquisitions. A strong combination of antecedents is necessary for the assimilation of the technological and marketing

advantages. Taken together, managements AM working and educational background (cell 3) can provide this through familiarity with techniques of knowledge protection and practical experience with marketing opportunities in AMs (Carpenter & Frederickson, 2001). This resource-based antecedent is linked to diversification (Carpenter & Frederickson, 2001), as location- and industry-diversified firms may have the necessary technological and marketing bases needed for the absorption of the advantages.

Alternatively, if the acquiring EM firm does not possess this combination of antecedents, its business linkages to diversified firms can act as a substitute (Elango & Pattnaik, 2007; Tan & Meyer, 2010). Finally, the EM firm may have past internationalization experience in AMs, perhaps as a subcontractor to AM firms (Duysters et al., 2009; Ramamurti & Singh, 2009). This can allow the firm to develop both a technological and marketing base, depending on the type of internationalization activity.

The profile of firms suitable for the ‘‘augmenting strategy’’ is well represented by some Indian pharmaceutical firms, which primarily expand overseas through upmarket acquisitions (Bhaumik et al., 2010) and are highly oriented towards AMs (Athreye & Godley, 2009; Kale, 2010). Many of the Indian pharmaceutical firms undertaking upmarket acquisitions need to gain access to the patents and knowhow of R&D-intensive AM companies (Athreye & Godley, 2009; Bhaumik et al., 2010). At the same time, they need advanced marketing abilities, particularly because they face intense competition from AM firms that have entered the Indian economy with their impressive market power and brand reputation (Athreye & Godley, 2009).

It is important to emphasize the remarkable influence that the institutional context has had on the Indian pharmaceutical industry. Prior to 1995, the Indian Patent Act allowed for patents on the manufacturing process but not on end products, as in AMs. Indian firms therefore developed skills in producing extremely low-cost drugs, but neglected new product

development. In 1991, the Indian government initiated economic liberalization and changes in the intellectual property regime. As a result, Indian pharmaceutical firms faced a serious threat to their low-cost advantage and experienced a considerable increase in competition (Chittoor et al., 2009; Pradhan, 2008). In this changed context, upmarket acquisitions can allow Indian firms to quickly absorb new technologies and marketing skills.

Ranbaxy Laboratories is the most active acquirer in the Indian pharmaceutical industry (Athreye & Godley, 2009). The firm has used upmarket acquisitions to access technological and marketing expertise. Since 1995, the firm has acquired Ohm Labs in the US (Athreye & Godley, 2009), the Belgium-based Ethimed NV, the US-based Signature Pharmaceuticals Inc. and an anti-hypertensive brand in Germany from P&G (Pradhan, 2008). Ranbaxy also relied on licensing and international JVs as modes of technology acquisition (Kale, 2010). In accordance with the antecedents suitable for the “augmenting strategy”, Ranbaxy hired its R&D president from Bristol Mayer Squib in 2003, its vice-president from the Schering-Plough Research Institute in the US and the head of clinical psychiatric R&D at GlaxoSmithKline to manage its R&D (Kale et al., 2010). Ranbaxy’s case fits the augmenting strategy given the firm’s focus on AMs, the high level of competition it experienced, its internationalization experience and its decision to hire managers with AM backgrounds.

Other insightful examples of Indian pharmaceutical firms that fit nicely into the “augmenting strategy” are Sun Pharmaceutical Industries, which undertook upmarket acquisitions of three brands from US-based Women’s First Healthcare (Pradhan, 2008), and Wockhardt, which acquired the German pharmaceutical company Esparma GmbH and its numerous marketing authorizations (Athreye & Godley, 2009).

### **3.4 Downstream strategy**

Finally, the marketing augmenting and technological exploiting strategy should be undertaken by those EM firms described by the antecedents listed in cell 4 (Figure 3). These

EM firms are expected to have a market focus on AMs, to be able to understand AM institutions and requirements (Filatotchev et al., 2009), and therefore to augment their marketing advantages. In addition, they should have a strong technological position rooted in the EM context.

These firms' managers are likely to have AM work experience (Filatotchev et al., 2009), often connected with business linkages in AMs (Zhou et al., 2007). These firms often face high AM competition (Duysters et al., 2009), which can be linked to their focus on AMs. Foreign acquisition financing also represents a coherent resource-based antecedent in this case, which may support the marketing skills base developed through AM linkages (Chittoor et al., 2009; Young et al., 1996). Moreover, marketing-advantage augmentation can be a quicker way of improving returns than technological-augmenting acquisitions (Vissa et al., 2010), a fact that is appreciated by foreign investors. This type of acquisition financing is often linked to location diversification (Carpenter & Frederickson, 2001), which gives the firm a strong marketing skills base for an upmarket acquisition strategy. These firms are experienced in dealing with different customers, competitors and suppliers (Barkema & Vermeulen, 1998), they are less linked to their domestic market, and they are more receptive to opportunities in foreign markets. Alternatively, these firms might be affiliated with location-diversified EM business groups (Elango & Pattnaik, 2007).

Finally, past internationalization experience in AMs can serve as a useful marketing skills base that is derived from contacts with AM customers. Through this type of upmarket acquisition, the acquiring firm can obtain exclusive access to the targets AM marketing advantages and customer relationships (Graebner, Eisenhardt, & Roundy, 2010).

Some Indian firms in the IT services industry fit well into the "downstream strategy" category. These firms are generally oriented towards AMs (Gaur & Kumar, 2010; Kapur & Ramamurti, 2001) because the domestic IT services market is relatively small (Patibalanda &

Petersen, 2002). Furthermore, long-term customer relationships (Arora et al., 2001) and a presence in AMs are of crucial importance for these firms (D' Costa, 2000). Managers of these firms are likely to have AM working experience, which can support the firm's capabilities from the technological and customer collaboration perspectives (Arora et al., 2001; Schware, 1992). These firms often benefit from foreign listings or capital from their AM connections (D' Costa, 2000).

In particular, the Indian diasporas in AMs play an important role in the internationalization of Indian software firms (Gaur & Kumar, 2010). These firms have experienced substantial growth in the presence of global competitors in India (D' Costa, 2000) and have become active outsourced service providers for AM firms (Kapur & Ramamurti, 2001). Leading Indian firms in the IT services industry, such as Infosys, Wipro, Satyam Computers and Visualsoft, have gained impressive technological capabilities (Patibalanda & Petersen, 2002) that can be exploited through upmarket acquisitions. Infosys and Wipro, in particular, have made upmarket acquisitions of US firms in the past (Kapur & Ramamurti, 2001). This example fits the downstream strategy given the firms focus on AMs, managers with AM working experience, foreign financing, AM connections, high AM competition and internationalization experience (cell 4 in Figure 3).

In other industries, good examples of the "downstream strategy" are the upmarket acquisitions of the UK-based Tetley Teas global brand in 2000 by Tata Tea (Kumar, 2009) and of Jaguar-Land Rover in 2008 by Tata Motors. The latter upmarket acquisition was aimed at gaining experience in managing a luxury brand (Athreye & Kapur, 2009; Bhaumik et al., 2010; Kumar, 2009) in an industry in which competition is becoming increasingly intense (Okada, 2004). Other examples of Indian downstream acquisitions in the UK are found in the Indian firm VIP Industries' acquisition of Carlton's brand and distribution

capabilities, and in United Breweries' acquisition of Whyte and Mackay, which provided it with access to several prestigious brands (Kumar, 2009).

To conclude, firms' antecedents are often linked in a complex manner. All three categories (resource-, institution- and industry-based antecedents) typically exert an impact on the motivations behind the four acquisition strategies.

#### **4. DISCUSSION AND CONCLUSIONS**

The present work studies the phenomenon of upmarket acquisitions undertaken by EM firms, which is an interesting and challenging phenomenon involving firms that originate from institutionally weaker contexts than those found in traditional AMs. The emergence of this phenomenon has fuelled a vivid theoretical debate concerning its potential explanations in comparison to traditional theories based on AM firms. This debate typically focuses on two alternatives. On the one hand, traditional AM-based explanations may be viewed as suitable also for explaining the internationalization of EM firms (see Narula, 2006; Rugman & Li, 2007). On the other hand, new theoretical alternatives can be developed to help enhance our comprehension of EM firms' internationalization (see Madhok & Keyhani, 2012; Mathews, 2006).

In particular, EM firms' upstream acquisitions are sometimes said to be guided by augmenting motivations because EM firms lack traditional exploitable advantages (Duysters et al., 2009; Mathews, 2006; Mathews & Zander, 2007). At other times, such acquisitions are described as deals based on the exploitation of the acquirer's advantages abroad, as in the case of AM firms (e.g., Rugman & Li, 2007). Not only are the two streams of research in disagreement, but they also run one risk associated with the study of internationalizing EM firms – the possibility that such firms will be depicted as stereotypes.



The paper offers the beginnings of a resolution to this debate by giving a comprehensive overview of EM firms' antecedents to upstream acquisitions and by discussing how such antecedents guide firms' motivations for undertaking these investments. The institutionally induced factors that EM firms develop in response to weak home institutions are explicitly included in the analysis. In this regard, the analysis includes both traditional explanations and factors capturing the peculiarities of EM contexts. As such, the paper stresses that the EM firms' heterogeneity must be considered if we are to understand which motivations should guide EM firms' upmarket acquisitions.

Three types of antecedents, organized in resource-, institution- and industry-based categories, capture this heterogeneity among EM firms. Therefore, the paper extends previous research on EM firms' internationalization by presenting a more comprehensive view of these firms' behaviours and choices, thereby overcoming the radical, sometimes oversimplified, previous explanations.

The paper has some important managerial implications. First, it can help EM firms' managers increase their awareness of the need to match the motivations guiding upmarket acquisitions with the heterogeneous antecedents their firms possess. This should lead to a more rational perception of how these firms can be successful in AMs. Second, this discussion should incentivize the managers of both EM and AM firms to develop their awareness of the institutional differences between these groups of countries and to invest in relevant assets when venturing into institutionally dissimilar host countries. Third, the paper can be useful for AM firms' managers willing to explore which capabilities they should develop when entering EMs and what competencies their local competitors are likely to possess. In this regard, the theoretical framework presented here can assist AM managers in better understanding EM firms and their environment, potentially supporting future interactions.

The study has some limitations. First, of the different internationalization modes, the paper focuses only on upmarket acquisitions, which have been found to be particularly relevant for EM firms (see Aulakh, 2007; Bhaumik et al., 2010; Gammeltoft et al., 2010; Gaur & Kumar, 2010). It would be interesting to examine various internationalization alternatives to see the strengths and limitations of the theoretical model in those contexts.

Second, some illustrative Indian firm-level examples have been presented in this study because the Indian context is especially relevant and interesting in terms of upmarket acquisitions. These examples, however, do not provide conclusive results. There is, therefore, an opportunity to validate the findings of the study through the application of the model to empirical data. A future empirical analysis could consider, for instance, Indian and Chinese upmarket acquisitions, which is a common practice in this type of research (e.g., Kapur & Ramamurti, 2001; Sun et al., 2012). This comparison might be relevant, as Chinese overseas acquisitions are often carried out by state-owned enterprises, while the majority of Indian deals are handled by private sector firms. Furthermore, Chinese firms operate mainly in primary sectors, whereas Indian acquirers are distributed across various industries (Athreya & Kapur, 2009; Sun et al., 2012). Furthermore, the Indian diasporas are more dispersed in AMs than the Chinese diasporas. This type of comparative empirical analysis could, therefore, be a particularly interesting test of the theoretical model.

Finally, the present study has analysed which EM firms upmarket acquisition strategies suit different firms' antecedents. At this point, it would be interesting to look into unsuitable combinations, i.e., "misfits" between strategies and antecedents. For example, in cases of an augmenting strategy with no coherent combination of antecedents, the firm is likely to be unable to recognize and absorb the implied advantages, to incur extra managerial costs and potentially fail in fulfilling its acquisition goals. In the opposite case of exploitation of the

firms' antecedents without a suitable combination of antecedents, the firm will be likely to fail to take advantage of this type of upmarket strategy.

To conclude, EMs represent an interesting setting for the study of aspects that are not substantially available or significant in AMs (Gaur & Kumar, 2010). In such contexts, many assumptions underlying traditional theories might need to be re-investigated (Meyer & Tran, 2006). Future investigations should therefore incorporate the context of the research more explicitly.

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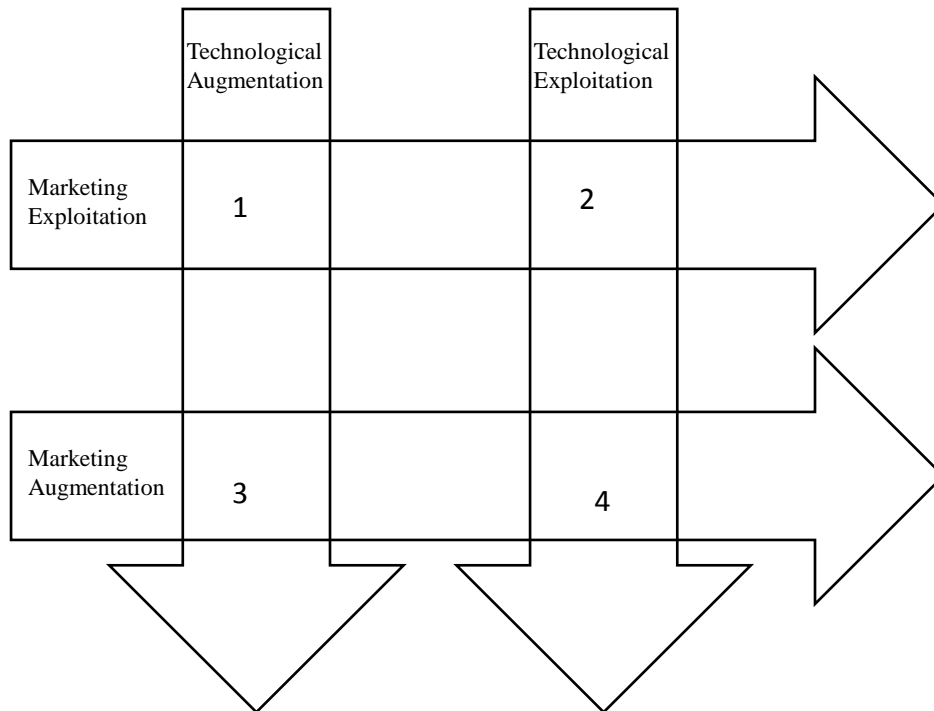
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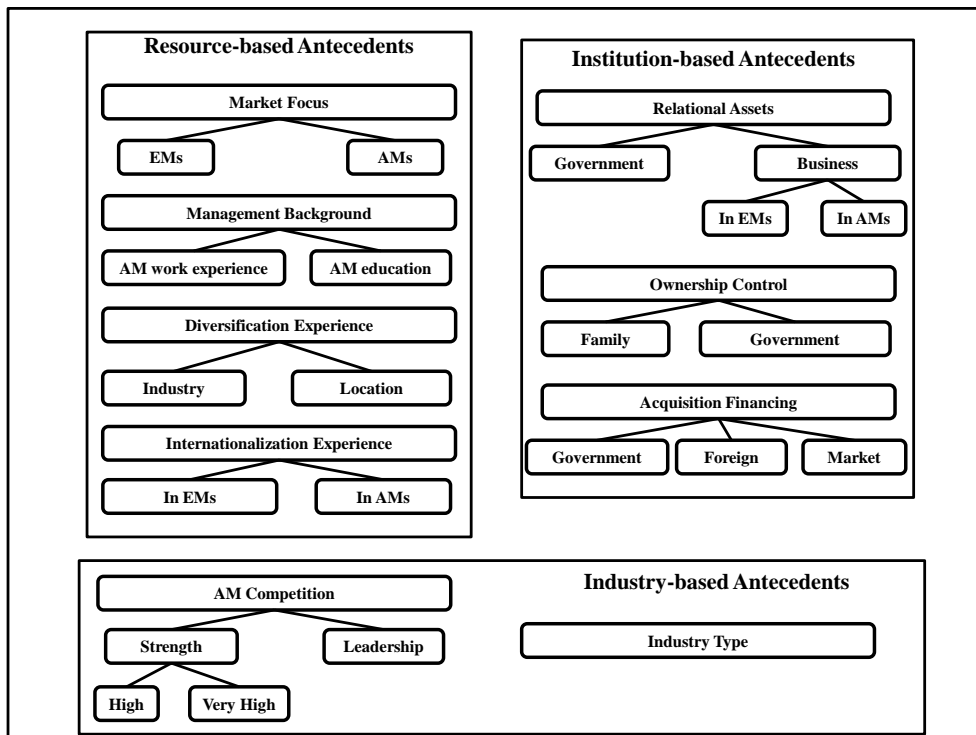
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## Illustrations

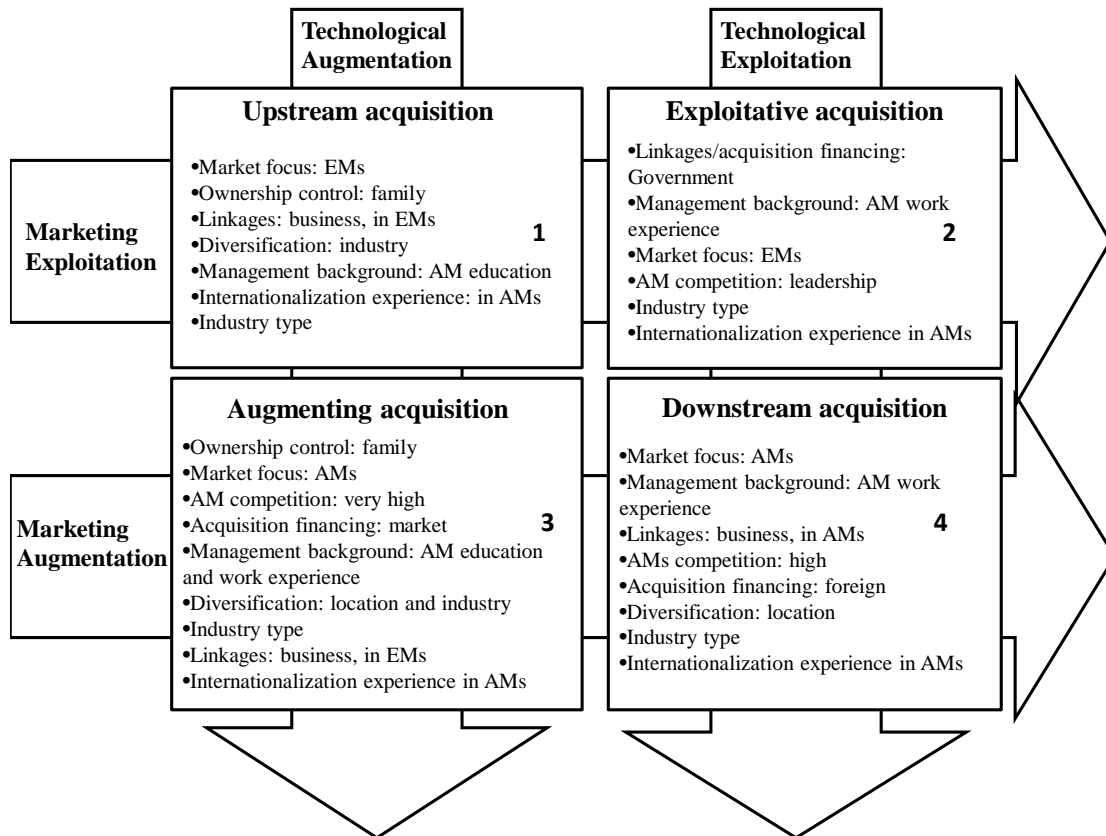
**Figure 1: Emerging market firms' acquisition strategies**



**Figure2: Emerging market firms' antecedents**



**Figure3: Emerging market firms’ antecedents and acquisition strategies**



## **PART THREE:**

### **Time to Internationalization and Evolving Institutions:**

#### **An Event History Analysis of Indian Firms**

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#### **Abstract**

Drawing upon the temporal and institutional theoretical perspectives, we study firms' 'time to internationalization' during a period of institutional change. Time to internationalization refers to the time it takes for a firm to conduct the first big step in setting up a subsidiary abroad. In order to explain different time to internationalization behaviors, we propose a framework based on the embeddedness of domestic and industrial contexts. We develop six hypotheses and test them in an Indian empirical setting, using an event history technique that takes into account both firms that go international and those that do not internationalize. Our findings provide interesting insights on factors that promote early versus late internationalization with significant theoretical and managerial implications.

The paper has been presented at the 2012 AIB Conference and at a research seminar organized by the Department of Strategic Management and Globalization of Copenhagen Business School. Insightful comments from colleagues at the Center for Emerging Markets of Northeastern University are also gratefully acknowledged.

## **1. INTRODUCTION**

The time that a firm takes to internationalize can have important implications on its competitive positioning and long term performance. Early internationalizers develop global experiential knowledge sooner than other competitors (Eisenhardt and Brown, 1998); they have an earlier exposure to international opportunities (Jones, 2001) and are able to potentially increase their market share and, sometimes, profitability and survival chances (cf. for a review Kochhar and Hitt (1995)). In other words, successful internationalization requires, among other factors, that time to internationalization is properly managed by the firm (Jones and Coviello, 2005).

Given the relevance of the timing issue when it comes to internationalization, it is important to study the variation in behavior between early and late internationalizers. In this paper we aim to study the determinants of the timing of firms' first internationalization foray. Despite its relevance, research on firms' time to internationalization has received surprisingly little attention (Ancona et al., 2001), with few recent exceptions (e.g. Gaba, Pan and Ungson, 2002; Zucchella, Palamara and Denicolai, 2007).

We delve into this research issue from an emerging market (EM) perspective through the study of Indian firms. Our contention is that valuable and interesting insights can arise from studying internationalization aspects in EMs (e.g. Filatotchev et al., 2009; Wright et al., 2005). EMs represent indeed a unique context to study firms' time to internationalization, as institutions are not only different to those in advanced markets but in the recent past have undergone significant changes (Aulkah and Kotabe, 2008; Chittoor et al., 2009; Peng, 2003). This provides a unique opportunity for our study that focuses on how economic liberalization is affecting the internationalization pattern of indigenous Indian firms.

Furthermore, EM firms' internationalization is often characterized as "accelerated", evoking similarities with firms that start internationalizing soon after inception, referred to in literature as "international new ventures", "early internationalizing firms" (Knight, Madsen and Servais, 2004) or "born globals" (Knight and Cavusgil, 2004; Oviatt and McDougall, 1994). Typically, such firms that internationalize soon after their inception are defined and categorized, empirically, based on the years of existence prior to internationalization. However, the years prior to internationalization to be considered as a "born global" or "international new venture" range anywhere from three to ten years, limiting seriously the generalizability of such findings. We adopt a more nuanced approach, studying the actual time to internationalization. In this way we go beyond the different labels used in past literature and study more rigorously the timing determinants.

Focusing on the firms' first decision to internationalize, this study attempts to explain, in particular, the factors that determine early versus late international investments. In order to understand this issue, we argue that different factors at the firm, industry and institution-level of analysis influence firms' time to internationalization. To test our theoretical framework, we analyze Indian firms during the period 1997-2010, employing event history method with time varying explanatory variables. Our study contributes to existing literatures on the internationalization of firms and the institutional theory. Moreover, we contribute to the growing but still scarce number of studies examining Indian firms, focusing however on aspects that can contribute to a broader understanding of the internationalization process and that highlight the value of utilizing an EM empirical setting.

The event history method that we use for our analysis allows us to overcome a common weakness in studies on time to internationalization -- they only look at those firms that do internationalize and disregard all those firms that do not internationalize (e.g. Zucchella, Palamara and Denicolai, 2007; Schwens and Kabst, 2009). In our study we are able to take



into account information on the timing of internationalization for all firms making our results more robust than previous studies.

The paper is organized as follows. First, we present the theoretical framework of our study, which combines the temporal and the institutional theoretical perspectives. Second, we develop a set of 6 hypotheses, primarily based on the concept of context embeddedness. Third, we explain and justify the chosen methodology in terms of data collection, the measurement of our variables and applied econometric model. Finally, we present our empirical results, we discuss them and we draw some theoretical and managerial implications of the study.

## **2. THEORETICAL BACKGROUND**

Time has been included in theories on internationalization as a boundary condition, but has rarely been positioned as a primary factor in internationalization (George and Jones, 2000). In fact, many studies have analyzed situations as if they were disjointed in time (Melin, 1992). Since time is abstract and complex, it is difficult to study and analyze it explicitly, and thus there is usually an over-simplistic and no uniform treatment of this dimension in current literature (Sharma and Blomstermo, 2003). As such the time to internationalization has largely been ignored in past literature (Ancona et al., 2001; Sharma and Blomstermo, 2003; Jones and Coviello, 2005).

Nevertheless, time is a fundamental factor, essential to our understanding of firms' internationalization and its potential success (Jones and Coviello, 2005). In general, time should play a more important and explicit role in current studies, since to understand the very nature of a phenomenon it is equally important to understand how it evolves over time. Activities do not exist independent of time, which constitutes an essential feature of firms'

behavior (George and Jones, 2000) and can be an important input for firm's strategy (Mosakowski and Earley, 2000). Time can be viewed as a resource to be managed, to pursue organizational objectives (Bluedorn and Denhardt, 1988). The concept of change over time is also fundamental in organizational research for almost all studied phenomena (Chan, 1998).

More specifically with regard to internationalization, time is an important factor for internationalizing firms to manage. In international business studies however it has traditionally played a marginal role (Ancona et al., 2001), with few important exceptions (e.g. Gaba, Pan and Ungson, 2002; Zucchella, Palamara and Denicolai, 2007). The concept of time in the internationalization process can refer to two distinct concepts, (i) to the early start of international activities (i.e. precocity, or time to internationalization) and (ii) to the speed of international expansion over time (i.e. pace of growth) (Zucchella, Palamara and Denicolai, 2007). The *time to internationalization* addresses the question of when (i.e. earlier or later) does a firm start to internationalize after a given event, whereas the *speed of internationalization* addresses the intensity of internationalization activities between successive internationalization events. It is important to distinguish between the timing of the initial entry and speed of the subsequent international expansion and these two concepts should be treated separately. In this paper, we focus on the timing of the first foreign direct investment (FDI) conducted by the firm.

We depart from past literature by relating the occurrence of cases of earlier versus later firms' internationalization not to the age of the firm, but to the emergence of specific new internationalization opportunities. With the concept of *time to internationalization*, we do not focus on a over-simplified dichotomy that identifies early versus late internationalizing firms; instead, we take into consideration all the nuances of the actual time that it takes for firms to internationalize.

The focus on the first (big) step of internationalization of the firm is also a deliberate choice we make. The first internationalization activity is a critical event, as threshold between the domestic and international state of the firm involves a more substantial change compared to subsequent internationalization steps (Pedersen and Shaver, 2011). The timing of this first internationalization, however, has not been systematically researched, and it tends to be treated as a given condition. We aim to enrich theory by making the issue of timing to internationalization more endogenous to firms. Furthermore, since we aim at explaining organizational responses to institutional changes, we combine the temporal theoretical lens with an institutional perspective. Drawing on the institution-based view – which is an increasingly important theoretical lens in international business studies –, several authors have studied how institutions<sup>3</sup> change and how they affect firm behavior and transformation (e.g. Cuervo-Cazurra and Dau, 2009; Peng, 2003; Newman, 2000; Peng, Wang and Jiang, 2008).

We believe that EMs constitute a particularly insightful research setting, since many of them have recently experienced widespread economic and market liberalization and the subsequent emergence of new internationalization opportunities for their firms (Hoskisson et al., 2000; Wright et al., 2005). A few decades ago many governments in the world heavily controlled their economies; starting from the 1970s, some of them have been forced to embark on a path of institutional reform (Cuervo-Cazurra and Dau, 2009), characterized by institutional transformations, market liberalizations and the introduction of market-based systems (Peng, 2003). This has generated new opportunities and many EM firms have subsequently ventured into international markets. However, we know that not all firms are behaving in the same way and benefitting equally from the opening of these new windows of

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<sup>3</sup> When we refer to the institutional environment, we draw on the definition in line with neo-institutional economists, which use this term to refer primarily to the regulatory framework (e.g. North, 1990); the distinction between the institutional environment's regulatory, normative and cognitive dimensions defined by socio-economists (e.g. Scott, 1995) is not applicable to our discussion.

opportunity (e.g. Peng, 2003). We aim at studying the determinants of the time taken by these firms to internationalize during a period of critical institutional changes.

We propose a theoretical framework and test it empirically on the case of one of the largest EM, namely India. Institutional change can indeed be qualitatively different across EMs (Peng, 2003) and India offers an ideal context for such an investigation. Up until 1990 strict regulations discouraged Indian firms from internationalizing, and it was only in the early 1990s that institutional reforms were made, which allowed inward and outward internationalization (Kedia, Mukherjee and Lahiri, 2006). Measures were introduced to open several sectors (Chakrabarti, Megginson and Yadav, 2008; Mathur, 2005) and liberalize the foreign activities that Indian firms could undertake (Khandwalla, 2002), changing the economic landscape in India considerably from 1991 and onwards (Ghemawat and Khanna, 1998).

While internationalization prior to reforms consisted mainly of foreign collaborations with advanced market firms and modest export activity, after the liberalization many opportunities emerged and local firms undertook an increasing number of FDIs (Khandwalla, 2002). However, not all firms were pushed similarly towards internationalization as a result of the institutional changes. During this period of complex changes and emergence of new international opportunities, some firms have been able to internationalize fairly quickly; other firms have taken more time to expand internationally; and some others have not internationalized at all. We base our framework to explain the time to internationalization in this extremely interesting and dynamic EM research setting.

### **3. HYPOTHESES DEVELOPMENT**

In order to extend our understanding of the firms' time to internationalization, we apply the temporal and institutional theoretical lenses to build some testable hypotheses, which are primarily based in the concept of "embeddedness" (Polanyi, 1944). This concept has taken different meanings in the past. Embeddedness is usually treated as a constraint; however, this is not always the case. Different forms of embeddedness exist and the effects are likely to depend on the context that the firm is embedded in. Therefore, different types of embeddedness can lead to either a firm's inertia to internationalize or to a triggering effect, which can subsequently lead respectively to increased or reduced time to internationalization. In the following sections, we look at these two opposed consequences of embeddedness separately, i.e. on the one hand, the role of inertia due to embeddedness in the domestic context, on the other hand, the triggering effect of embeddedness in an internationally oriented industrial context (Melin, 1992).

#### **3.1 Domestic context embeddedness**

We expect that the more a firm is embedded in the domestic context, the less likely it will have an early reaction to new international opportunities. In other words, high domestic context embeddedness can increase the firm's inertia and make it less responsive to external opportunities. Inertia can be defined in terms of time to firms' adjustment relative to the timing of environmental changes (Hannan and Freeman, 1984) and can therefore retard firms' responses to particular events, such as the first foreign expansion of firms.

A basic factor that can increase the firm's level of domestic embeddedness (and therefore the firm's time to internationalization) is the firm's age. Drawing on organizational imprinting theory, the context in which a firm is founded has an impact on it, the imprint creates an initial fit with the founding context and persists for some time (Boeker, 1989; Stinchcombe, 1965). However, when the context changes, imprinting forces will limit firms'

responses by making changes costly or difficult (Boeker, 1989). Older firms will therefore suffer from higher inertia to change, compared to younger firms, because of their higher embeddedness in the old domestic context. Old-generation firms must unlearn old routines and competencies developed in the old domestic context before new ones can be learned to adapt to the new changing context (Newman, 2000). This is expected to be more time-consuming for old-generation firms.

Domestic context embeddedness can also inhibit the firm's awareness of the need to change (Dixon, Meyer and Day, 2010). This is likely to increase organizational inertia, which will make the firm less responsive to new international opportunities. On the other hand, firms founded in more recent time periods are likely to be more aware of international opportunities and ready to internationalize much sooner. For this reason, we expect the following:

*H1a: In liberalizing institutional environments, firms incorporated more recently will take less time to internationalize.*

Affiliation to domestic business groups is also expected to increase the firm's domestic context embeddedness, and therefore increase the firm's time to internationalization. In order to respond to opening of new windows of international opportunity, business group affiliated firms have to first unlearn behaviors that were appropriate in a protectionist domestic environment, but that would create obstacles in the new liberalized business environment (Ray, 2001). The competitive advantages of business groups affiliated firms will be less relevant to the new context of emerging international opportunities (Wright et al., 2005; Kedia, Mukherjee and Lahiri, 2006). While adapting to the new formal institutions may be relatively easy for business group affiliates, making changes to their informal institutions (such as conducting business based on social connections) in order to fit with the new environment will be much more difficult (North, 1990). Furthermore, affiliated firms can

experience a sort of buffering effect against changes due to affiliation advantages that accrue to them (Hoskisson et al., 2004), and so perceive less the need to react to those changes in the short term. The unlearning of the old routines and capabilities associated with domestic business group affiliation will take a much longer time and will result in increased firm inertia as well, with subsequent increase in the firm's time to internationalize. Given all these reasons, we formulate the following hypothesis:

*H1b: In liberalizing institutional environments, firms not affiliated to local business groups will take less time to internationalize.*

### **3.2 Industrial context embeddedness**

In contrast to the previous set of hypotheses, a second type of organizational embeddedness can lead to a triggering effect facilitating a faster time to internationalize. This triggering effect will emerge depending on the type of industrial context that the firm is embedded in. The industrial context can in general facilitate such a triggering effect for two reasons. First, firms are likely to be influenced by what other firms in their industry do, also when it comes to the pattern of internationalization (Guillen, 2002; Jones, 2001; Enright and Hulsink, 1998). Second, the industrial context can span across country borders (Melin, 1992), and this can have a triggering effect on the time to internationalization. Certainly, some industries have a larger international scope and are integrated into global markets much more than others such as the highly internationalized high-tech industries.

Firms willing to internationalize might imitate who they perceive to be successful (Schwens and Kabst, 2009), such as in this case the firms that have successfully internationalized before in the same industry. A firm may also get additional information and legitimacy from other firms in the same industry, especially in uncertain situations (Chung and Beamish, 2005), such as of first internationalization during institutional change. On the

other hand, low embeddedness in a highly internationalized industrial context will result in low exposure to cases of successful internationalization, which is likely to result in a postponement of international investments. We argue therefore that a high level of internationalization within the industry is likely to make the focal firm more aware of the new existing internationalization opportunities. This will have a triggering effect on the focal firm and will therefore reduce its time to internationalization. Accordingly, we formulate the following:

*H2a: In liberalizing institutional environments, firms belonging to highly internationalized industries will take less time to internationalize.*

In similar vein, continuing at the industry-level of analysis, reduced time to internationalization can also be partly explained by the firm's belonging to a high-technology industry (Preece, Miles and Baetz, 1998). Research investigating "accelerated internationalization" has mainly focused often on high-technology firms (Jones, 2001; Knight, Madsen and Servais, 2004; Autio, Sapienza and Almeida, 2000), because the types of competences they have are more easily leveraged abroad compared to non-high-technology firms. These competencies are also often not location-bound and can thus be utilized for internationalization purposes (Anand and Delios, 1997). International activity is also particularly important for high-technology firms' growth as it can help them augment their technological resources (Jones, 2001), which is particularly important for EM firms. Therefore, firms that are highly embedded in the high-technology sector are expected to show a reduced time to internationalization than non high-technology firms. Given these reasons, we formulate the following hypothesis:

*H2b: In liberalizing institutional environments, firms belonging to technology-intensive industries will take less time to internationalize.*

The first set of hypotheses (H1a and H1b) reflects the specific EMs setting, since it focuses



on the domestic context embeddedness; on the contrary, the second set of hypotheses (H2a and H2b) is not EM-specific, since industry context embeddedness can span across borders.

### **3.3 Institutional evolution**

Studying the time to internationalization of domestic firms is a useful way to relate the internationalization process to the firm's external institutional context. The key premise of our study is that institutional evolution facilitates internationalization process, including the time to internationalization. In other words, we expect time to internationalization to be reduced, in general, as domestic institutions keep changing, given the reduced protectionism, improved access to capital markets, investment incentives, and the like, associated with this change. Liberalization and opening up of the economy will create new opportunities for domestic firms, more competition in the local market and also infuse more exposure towards international activities. All these effects result in earlier internationalization by domestic firms than in a scenario without any institutional change.

Building on this line of argument further, we also posit that institutional evolution will have a (negative) moderating effect on the previous two sets of hypotheses, based on domestic and industrial context embeddedness. The direct effects are indeed expected to decrease in importance as the context undergoes continual evolution.

Institutional changes take place in an incremental fashion, rather than as discrete events. As such, their effects are not likely to be realized immediately, but after a certain time lag. Moreover, the earlier stages of institutional transition often bring increased competition along with – still – underdeveloped institutions (Ghemawat and Khanna, 1998). This leads to the coexistence of new and old institutional systems, creating difficulties for the local firms (Kim, Kim and Hoskisson, 2010). During this early institutional phase it is more difficult for firms to tap into international opportunities and undertake FDIs. Therefore, we argue that at the beginning of the institutional evolution firms with a low level of domestic context

embeddedness (first set of hypotheses) and a high level of industrial context embeddedness (second set of hypotheses), are able to more readily tap into internationalization opportunities. On the other hand, it is harder for firms that are highly embedded in the domestic context but not so in the industrial context, to quickly leverage the new institutional environment in order to quickly internationalize

The above relationship is expected to change as the institutional context continues to evolve. In later stages, institutions are far more developed and stable (Ghemawat and Khanna, 1998), facilitating domestic firms to internationalize more easily. With institutional reforms the “agility” and benefits of being stand alone and young will disappear as a higher number of firms starts accessing managerial and financial resources and other relevant information (Hoskisson et al., 2004) . While in the initial period of institutional evolution firms that were less embedded in the domestic context were typically better at coping with the new and changing institutional environment, in the later period they (old and affiliated firms) get used to the changed institutional conditions. We propose therefore that the difference in the time to internationalize for firms embedded in the domestic context versus those that are not is likely to decrease as the institutional changes evolve. This is primarily because embedded firms recognize and start to respond to the changed conditions as well. For these reasons we formulate the following:

*H3a: In liberalizing institutional environments, the more advanced the institutional evolution, the less difference there will be between domestic context embedded firms and non-embedded firms.*

A similar situation is expected to emerge for firms with deep industrial context embeddedness. As the institutional context evolves, being part of a highly international and high-technology industry will not necessarily be an advantage in terms of reduced time to internationalization anymore. In other words, the advantages associated with this type of

embeddedness will decrease, as local institutions improve with time and are able to give requisite support to the international investing firm. It becomes possible for any firm, irrespective of their level of industrial embeddedness to get relevant information for international investments more easily, reducing the time to undertake FDIs. With institutional evolution, the gap between EM and advanced markets institutional contexts reduces, making it easier for local firms to perceive and be prepared to tap into internationalization opportunities. The tendency of industry imitation is therefore likely to decrease – at least from the timing point of view – after the firm finds it more common and easy to internationalize. A firm may not need to get information and legitimacy from other firms in the same industry, once the uncertainty of the context has substantially reduced. For these reasons we formulate the following last hypothesis:

*H3b: In liberalizing institutional environments, the more advanced the institutional context, the less difference there will be between industrial context embedded firms and non-embedded firms.*

The above six hypotheses are presented in our theoretical framework in figure 1. We test these hypotheses on a sample of Indian firms observed during the 1997-2010 time period.

-Insert figure 1 about here-

## **4. METHODOLOGY**

### **4.1 Data and sample**

In order to investigate the time to internationalization of domestic firms during a period of institutional change, relevant data was collected from the Prowess Database (2011 release) of the Centre for Monitoring of the Indian Economy (CMIE), an independent organization

headquartered in Mumbai. Prowess includes financial data of private and public Indian firms that incorporated companies are required to disclose in their annual reports.

We have downloaded information on firms listed in Prowess for the period 1997-2010, including both firms that have been incorporated before and after 1991 (which is our reference year for the start of the major institutional reforms in India). We therefore implement a longitudinal study during a “long epoch” characterized by significant changes (Melin, 1992). Some observations reported erroneous values – e.g. negative figures – and some data cleaning was required, together with the removal of all missing values. Government and foreign affiliated firms have been eliminated, in accordance with Fisman and Khanna (2004), as they are expected to follow significantly different internationalization patterns.

In order to investigate the time to internationalization of firms undertaking FDIs – in the form of mergers, acquisitions and joint ventures – additional data was collected from the Zephyr database, maintained by the Bureau van Dijk. We then combined the deal-specific data from Zephyr with the firm-specific data from Prowess. This database required some data cleaning too, since it included deals completed by individuals, unknown investors or organizations whose names could not be found in the Prowess database. Many serial acquirers have also been identified; for this reason the number of usable data decreased when switching from the deal-specific database to the firm-specific one. We have included all the acquisitions, mergers and joint ventures where the investing Indian firm possessed at least 10% of the company equity after the completion of the deal, in accordance with the OECD classification (OECD, 1999). Finally, we also collected data about the institutional evolution in India from the World Competitiveness Yearbook, with indicators covering the years from 1997 to 2010.

## **4.2 Measures**

The dependent variable is represented by the duration in years that an Indian firm waited before internationalizing, given that it did not do it before. This duration is calculated as the year of first internationalization minus 1991 (the beginning of the major liberalizations in India). *Time* is a relative concept, and in our case it is measured relative to the opening of the economy. If the firm was incorporated after 1991, the variable is represented by the age of the firm at the time of the first investment (i.e. year of the first FDI minus incorporation year). Moreover, we focus on the objective measurement of time (Mosakowski and Earley, 2000) and we follow its typical western definition, i.e. of a linear flow from past, to present, to future (Sharma and Blomstermo, 2003). Accordingly, we study temporality by focusing on the duration of state, which is the distance between stimulus and response, critical when studying organizational change (Mosakowski and Earley, 2000).

The internationalization activity is represented by FDIs such as foreign acquisitions, mergers and joint ventures. We do not control for the magnitude of the investment, because the existence of some international activity, even if small, indicates the strategic intent to internationalize (Filatotchev et al., 2009), which is what we want to capture.

We include the censored international expansion for firms in the sample that do not internationalize, i.e. the number of years from the beginning until the end of our sampling period (2010). For example, for a firm born in 1979 that internationalizes in 2005, the dependent variable would be  $2005-1991=14$ . For a firm born in 1993 that internationalizes in 2005, it would be  $2005-1993=12$ . For a firm that does not internationalize and that is born for example in 1970, it would be a censored dependent variable of  $2010-1991=19$ .

According to the databases that we relied on for our empirical analysis, from 1997 to 1999 no firms in our sample undertook FDIs. Despite the fact that our empirical sources reported no FDIs before 1997, anecdotal evidence suggests that there have been certainly some cases of international investment prior to that date. We however expect them to be very

few, especially compared to the ones that we actually have in our sample. In particular, in 2000, 2001 and 2002 respectively 8, 6 and 11 firms undertook FDIs. From 2003 we register an increase in the level of investments, with 17 firms internationalizing. Then 22 and 23 firms made investments in 2004 and 2005 respectively. Then 33 firms took this step in 2006, 50 in 2007, 41 in 2008 and 14 in 2009. Finally, 23 internationalized in 2010 for the first time via means of FDI; 7.225 firms in our sample are censored in this last year.

As independent variables, we explore the major factors that are expected to influence the time to internationalization of firms during a period of institutional change. We took a 1-year lag of the independent time-varying variables<sup>4</sup>. Embeddedness is often treated as dichotomous, even if use of continuous measures has been encouraged in the past (Dacin, Ventresca and Beal, 1999). We present in our study measures of embeddedness that are of both, dichotomous and continuous, types. First, to assess the effect of embeddedness in the domestic context, we have included a variable called *Year of incorporation*, represented by the year in which the focal firm was incorporated, and the variable *Dummy stand-alone*, which takes the value 1 if the firm is not affiliated to Indian business group, 0 otherwise.

Second, to evaluate the embeddedness in the industrial context, we take the *Competitors' internationalization*, calculated as the level of average FDIs for every industry, and the *High-tech industry dummy* that takes the value 1 if the firm belongs to high-technology industry, 0 otherwise: as Prowess reports industries belonging to the manufacturing, services and diversified categories, we have further specified the manufacturing industries based on their R&D intensity following the OECD classification in Hatzichronoglou (1997). Industries defined as high-technology are: computers and office machinery; electronics-communication; pharmaceuticals. Finally, the variable *Institutional evolution* is operationalized as the degree to which “Investment incentives are attractive to

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<sup>4</sup> The decision to take a *one year* lag for the independent variables is an assumption about time that we make, i.e. we are assuming that it will take on average a year for a domestic firm to plan and then implement an FDI.

foreign investors”, which is one of the indicators that represent the level of openness according to the 1997-2010 World Competitiveness Yearbooks. This variable is strictly speaking more related to opening up for foreign investments in India, however, we use it here as a general proxy for the opening up of the Indian economy affecting both inward as well as outward investments.

We add also some control variables. *Domestic profit* is included to control for domestic profit opportunities, as some firms might prefer to exploit domestic opportunities rather than internationalize. Domestic profit is measured as the overall net profit before tax and extraordinary income, multiplied by the share of domestic sales over total sales. We then control for the firm’s *Size*, calculated as the natural logarithm of the total assets of the firm, which takes into account that big firms might be more likely to internationalize earlier than small firms, because they can bear the internationalization risk more easily. We control for the firm’s stock exchange listing with the variable *Dummy listing* that equals 1 if the firm is listed at the time of internationalization, 0 otherwise. We control for different firm’s resources, since reduced time to internationalization might be associated with higher firms’ resources and capabilities compared to a later internationalization (Lieberman and Montgomery, 1998; Autio, Sapienza and Almeida, 2000; Liesch and Knight, 1999). We have added the variables *Licensing intensity*, which includes royalty, technical know-how and license fees, divided by total sales; *R&D intensity* as the annual R&D expenses, divided by total sales; the variable *Advertising intensity* as the annual advertising expenses, divided by total sales. These variables are included in other studies of Indian firms (e.g. Kumar and Aggarwal, 2005). We also control for the firm’s past *Export experience*, since firms with a higher degree of international experience might be more likely to enter a newly opened international market earlier (Gaba, Pan and Ungson, 2002). Finally, we control for the firm’ *Headquarters location*, as a dummy variable that takes value 1 if the firm is located in one of the major

metropolitan Indian cities (i.e. Mumbai, Delhi, Chennai, Bangalore, Hyderabad, Kolkata and Ahmedabad).

### **4.3 Results**

We employ an event history method that incorporates time varying explanatory variables and provides estimates of entry timing through censoring techniques (Tuma and Hannan, 1979). Given that many firms in our sample do not internationalize at all during the period of our analysis (cf. previous section), the data in our sample are right censored, i.e. in some cases no internationalization event has happened before the last observed year (i.e. 2010). In this case using right censored models is the best way to test the hypotheses. In other words, we include both internationalizing and non-internationalizing firms and we deal with this censoring issue with the appropriate statistical method. Event-history data are almost always right censored. In case of censoring problems, the researcher can ignore the censored observations; treat censored observations as if the event occurred at the time of the last observation; use an estimation method that adjusts for censoring. We chose the latter approach, since the first two can lead to biased estimates (Tuma and Hannan, 1979).

We have chosen to use a duration (i.e. survival) model, which is able to analyze in a defined time period the likelihood for every firm to make a transition, represented in this case by an FDI. This event history analysis is well suited to handle the right censored cases. Since we cannot formulate a priori assumptions about the distribution of the hazard function of the observations, we chose to implement a Cox's partial likelihood model (Cox, 1975), which does not require any type of assumption concerning the shape of the baseline hazard. This event history technique uses the dependent variable and information on whether it has been censored to construct a hazard function, which indicates the probability that an event (in this case, internationalization) will occur at a given time, conditioned that the event did not happen before. Alternative models would have worked on unconditional probabilities,



disregarding whether the firm has internationalized in the past or not, which would have lead to biased results.

In accordance with the Cox's model characteristics, we test whether our data are in accordance with the proportionality assumption. To test for the compliance with this assumption we included time-dependent covariates in the model. The test reports that two control variables might violate the proportionality assumption, i.e. *dummy listed* and *metropolitan area*. Our main variables of interest instead do not appear to violate the assumption. Removing these two control variables from our regression, we can see that the results are largely unaffected; if these variables were truly violating the assumptions, we would have expected different results. In addition, we have relied on the scaled Schoenfeld test. By looking at the graphs of the residuals we can see that they show basically no time trend and their hazard ratios are fairly constant over time. We decided therefore to keep these two variables in the main model, since they represent important controls for our model and at the same time they do not seem to truly violate the proportionality assumption.

As already mentioned, 1991 has been considered the "year 0" for Indian firms able to internationalize. Few Indian firms were able to internationalize before this date (Khandwalla, 2002). Moreover, even if the window of analysis for our model ranges from 1997 to 2010, we assume to have a limited left censoring problem (i.e. few firms undertaking FDI's before 1997). Left censoring can be a problem, unless the observations are very few (Tuma and Hannan, 1979). In our case this is assumed to be not problematic because very few Indian firms relative to our sample had FDI's prior to 1997.

Our data show cases of left truncation (or "delayed entry"), which, if ignored, can also cause problems. The key assumption we make in this case is that those firms who enter the study in "year t" are a random sample of those in the population still at risk at "year t". The econometric software we use to implement the event history analysis (i.e. Stata version 12)

adjusts for these delayed entries, indicating when the firm comes at risk (for a discussion on left truncation, see e.g. Sampford, 1954; Filatotchev et al., 2009; Turnbull, 1976; Klein and Moeschberger, 2003).

Since we include in our study both internationalizing and non-internationalizing firms, the chosen econometric model, which is meant to measure just the first internationalization step, drops from the sample all the firms' that have internationalized for the years following the internationalization event. For instance, if a firm was incorporated in 1970 and internationalizes for the first time in 2001, the model takes into account for that firm all the observations between 1997 (the start of our window of analysis) and 2001 (year of internationalization), and drops the observations after 2001. Therefore, the number of observations varies between the data description reported in Table 1 (which does not consider this dropping mechanism) and the description of the results in Table 2. The firms that internationalize for the first time every year will indeed be censored from the regression for the years following the one of internationalization, because they would not be "at risk" of first internationalization anymore.

Table 1 summarizes the descriptive statistics and correlations for all the variables used to test our hypotheses. No variables exhibit distribution or correlation problems, apart from the correlation between the *High-tech industry dummy* and the *Competitors internationalization*, which is slightly above 0.50. This correlation is most likely a result of the construction of the *Competitors internationalization* itself (it is calculated as the average level of FDIs per industry). The correlation is not extremely high, but still slightly over limit. For this reason, given the lack of a proper econometric tool that evaluates the problem of multicollinearity for survival models, we have tried to remove one of the two variables from the regressions to see how that influences the results. The results do not change.

-Insert Table 1 about here-

We report in Table 2 the results of our regressions, in terms of hazard ratios. Hazard ratios indicate the instantaneous probability of a firm to internationalize in the “year t”, given that it has not done so in the past and conditional on the independent and control variables. The coefficients test whether the independent variables accelerate or decelerate the baseline hazard function. Hazard ratios above 1 indicate a greater hazard of international expansion (i.e. earlier internationalization) while ratios below 1 indicate the opposite.

-Insert Table 2 about here-

The control variables show in general the expected signs. For instance, the hazard ratio of firm’s *Size* indicates that bigger firms are more likely to have a lesser time to internationalization. The same goes for firms located in the major metropolitan cities. Turning to the main variables of interest of our study, the findings support almost all of our hypotheses. In particular H1a is supported, since the firms incorporated in more recent years would wait a shorter period of time to internationalize for the first time, compared to firms incorporated during later years ( $p < 0.05$ ). The survival curves reported in Figure 2 give a good representation of this result. Survival curves are plotted as staircases, where in this case each internationalization event is shown as a drop in survival. The y axis in the graph shows the percent survival, which in this case reflects the fact that internationalization via FDI is not a common strategy in the time period that we are considering. It is clear from the graph that younger firms (incorporated for instance in 2006) have a steeper survival curve compared to older firms (incorporated 60 years earlier), meaning that they approach internationalization sooner than the older firms. On the other hand affiliation to local networks (H1b) does not show a significant result. Concerning this unexpected result, it might be that despite the extensive institutional changes, traditional Indian business groups prosper both domestically and in some cases internationally, despite their certainly high domestic context

embeddedness. More information would be needed to distinguish between different types of business groups and possibly perform an analysis at the business group-level of analysis.

-Insert figure 2 about here-

The second set of hypotheses is highly significant and supported: intra-industry competitive (H2a) and technological (H2b) pressures have a positive and significant impact on the likelihood of decreasing the firm's time to the first FDI activity ( $p < 0.01$ ). It is therefore apparent that the behaviors of firms' competitors can have an impact on the firms' time to internationalization. Support for H2a and H2b can be found also in Figure 2, where it can be seen that those firms belonging to the high-tech industry and to sectors characterized by high competitive pressure show steeper survival curves, and therefore approach internationalization at an earlier stage.

H3a is partially supported: institutional evolution has a significant and negative moderating effect when interacted with the firm's *Year of incorporation* ( $p < 0.05$ ). H3b is instead fully supported, since both the interaction of institutional evolution with the *Competitors' internationalization* ( $p < 0.1$ ) and with the *High-tech industry dummy* ( $p < 0.01$ ) report negative and significant hazard ratios.

As a robustness check we have run the same regressions operationalizing this time *Institutional evolution* as a dummy variable that takes value 1 if the FDI happens after 2003, 0 otherwise, which divides the sample in two subgroups. The reason for this choice is that according to some past studies (i.e. Nayyar, 2007; Gopinath, 2007) during the period 1991-2003 India has experienced a "permissive policy" phase that has been mainly export oriented. After 2003 instead a "liberal policy" phase started, which was more supportive of FDI's. The results are confirmed, except for domestic context embeddedness, which loses significance also in the case of the interaction of *Institutional phase* with *Year of incorporation*. We prefer the original measure (derived from the World Competitiveness Yearbook), because in this

way we do not use time as a proxy for a separate concept. We acknowledge however the potential weakness of our first set of hypotheses (i.e. hypotheses H1a and H1b), which might reflect that the inertia of old-generation firms might be too strong to be overcome in few years and thus reduce the time to internationalization.

As another robustness check, we have run the same model removing the domestic firms that are mainly active in industries controlled by the government. After 1991, industrial licensing in India was abolished in many industries so that now, according to the version of the Industries (Development and Regulation) Act (1951) revised in 2010, only five industries (i.e. distillation and brewing of alcoholic drinks, cigars and cigarettes made from tobacco and manufactured tobacco substitutes, electronic aerospace and defense equipments, industrial explosives, and hazardous chemicals) remain under compulsory license, because of safety and strategic reasons. The peculiar structure of these industries may influence the rationale behind firms' internationalization (Source: [dipp.gov.in/English/Archive/statannual/2009-10/chapter1.2.pdf](http://dipp.gov.in/English/Archive/statannual/2009-10/chapter1.2.pdf)). Removing these firms the results are largely confirmed.

Some firms might never internationalize because their small size makes this option impossible. For this reason, as another robustness check, we isolated a subsample of firms that have a size at least as big as the one of the smallest internationalizing firm. The results are confirmed also in this case. Finally, we have added to our sample those firms affiliated to government bodies; this does not change our results either. The results of these robustness checks are not reported in details due to lack of space, but they are available from the authors upon request.

## 5. DISCUSSION AND CONCLUSIONS

Our primary objective in this paper was to combine the temporal and the institutional theoretical lenses to explore the time it takes for domestic firms to internationalize, if they did so, during a period of institutional change. We have focused on time as a critical internationalization aspect that can relate the firm's internationalization process to the external institutional context.

Internationalization is often a major and essential strategic choice for a firm's growth (Melin, 1992) and it can provide numerous benefits, such as technology transfer, increased efficiencies, training, and the like. Certainly, it is not possible to claim that internationalization is always a good choice for every firm, at the same time, in order to make a successful strategic move, it is necessary that the firm properly considers and manages, among other factors, the time to internationalization. For this reason, we have decided to study what explains the early versus late internationalization for certain groups of firms. Even if time clearly plays an important role in international business and in many other disciplines, the duration issues – such as the firm's time to internationalization – are still under-studied (Ancona et al., 2001). Moreover, time is usually treated as a methodological proxy for other phenomena that are functions of time and it is seldom a variable of primary theoretical and empirical importance. In the extreme case, it is incorporated in some studies with no explicit attention to assumptions about it (Mosakowski and Earley, 2000). Studies need however to be theoretically and methodologically more aware of its relevance (Mitchell and James, 2001).

We decided to focus on India as our study setting as interesting insights can arise from the study of time to internationalization from an EM context, and we make some contributions in this sense. In particular, we study the cases of earlier versus later firms' internationalization in a context of emerging new internationalization opportunities, which many EMs have recently experienced. The case of India is particularly insightful in this sense as it allows us

to study the effects of broad changes of an entire country, which is rare to find in extant literature (Khandwalla, 2002). In addition, it improves our understanding of firm behavior in an institutionally turbulent environment. Our framework and analysis is not exclusively India or EM-specific, but it is definitely inspired by these contexts and it is testable thanks to their existence. EMs represent perfect laboratories when it comes to testing time to internationalization in institutionally changing contexts. The use of an EM empirical context therefore is not only justified simply by the fact that the majority of existing research on this topic is focused on the advanced market context, but also because it can bring additional value. In our case, by focusing on the Indian context – compared to an advanced market one – we benefit for instance from the existence of broad yet incrementally changing institutions, the existence of local business groups as proxy of firms' domestic context embeddedness and the preference of Indian firms for brownfield investments such as cross-border acquisitions (Athreya and Godley, 2009). In this sense, India might certainly be grouped with other Asian EMs. In this way, we contribute to the discussion concerning the role of EM firms in developing new theories and explanations. Our perspective lies somewhere between the approach of studies arguing that the EM case requires new theories because existing theories are based on analysis of advanced market firms (e.g., Luo and Tung, 2007; Mathews, 2006), and the approach of studies that argue that EM firm behavior can be easily explained by existing explanations (e.g., Dunning, Kim and Park, 2008; Rugman, 2010). We position our study between these two extreme approaches by arguing that an EM single country context, such as India, can be important to show mechanisms that would not be visible in other contexts. Our view is therefore in accordance with Cuervo-Cazurra (2012) and Ramamurti (2012).

Through this paper we provided some theoretically novel results by isolating factors that we believe can explain firms' time to internationalization, considering the domestic and

industrial context embeddedness. Our empirical analyses indicate clearly that a firm-level of analysis is appropriate because contextual changes – such as the emergence of new international opportunities – cannot have the same effect on all firms, even in the same country.

At the same time, given the lack of methodologies to properly measure complex temporal phenomena (Lilien and Yoon, 1990; Ancona et al., 2001), we make some contributions also in terms of refinement of research methods, by clearly discussing assumptions, strengths and weaknesses of our approach. We employ an event history method that incorporates time varying explanatory variables and provide estimates of time to internationalization, controlling for the censoring of the event. There are firms that have no international aspirations and decide not to internationalize at all. It is important to look at both these cases to avoid biased results. We also use the actual firms' time to internationalization, which is more precise than arbitrarily defined dummy variables indicating early versus late internationalization.

The current study also provides some managerially relevant implications. We believe that studying time to internationalization is particularly important because of the firms' earlier access to the potential benefits of internationalization, in terms of international experiential knowledge (Eisenhardt and Brown, 1998), exposure to international opportunities (Jones, 2001) and increased market share (Kochhar and Hitt, 1995). However, the impressive growth experienced in general by EM firms might lead their managers to perform inaccurate strategic analyses. We suggest that a rational approach to choose their internationalization strategies would be to understand the specific factors that can support a reduced time to internationalization.

## **5.1 Limitations and future research**



Our study has also some limitations that should be addressed by future research. First, since we decided to focus on a single country context, systematic comparative analysis in another EM empirical context would be an interesting extension. For instance, India and China have some important economical similarities. It would be interesting to perform a similar study in the Chinese case and analyze whether and how the framework could be potentially strengthened. Second, we do not take into account regulations that might be implemented for individual industries, which might be interesting to incorporate in the future. Third, we do not look at the long term consequences of earlier versus later internationalizing firms. As future research, it would be interesting to look into this issue, to study whether earlier internationalization can be beneficial for EM firms, and under what conditions (despite the controversies associated with using financial performance measures). Here, our focus is on time to internationalization, and we do not aim at explaining the motivations of internationalizing firms. Finally, since we focus on the first step of internationalization, it would be interesting to look at the following ones and how embeddedness factors change their influence in subsequent internationalization steps.

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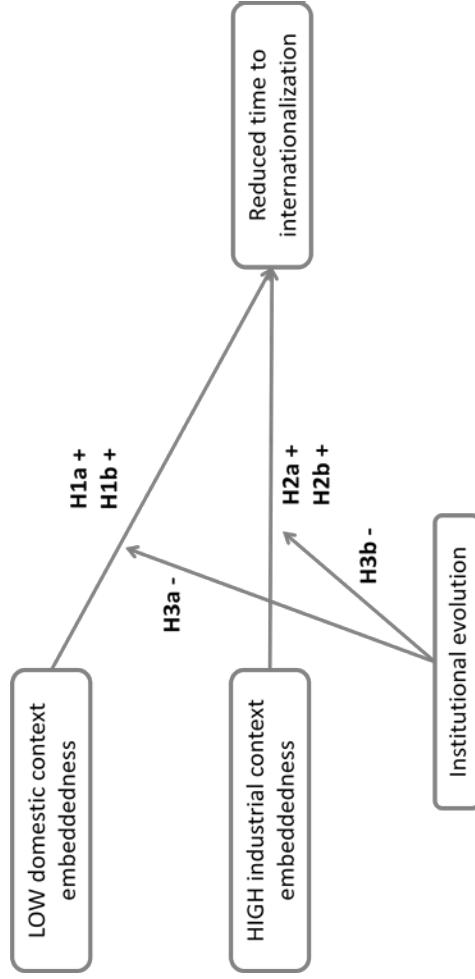
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Tables and figures

Figure 1. Hypotheses representation



**Table 1. Descriptive statistics and correlation matrix (No. of observations= 95,922).**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1) FDI														
2) Institutional evolution <sub>t-1</sub>	0.020													
3) Year of incorporation <sub>t-1</sub>	-0.001	0.085												
4) Dummy stand alone <sub>t-1</sub>	0.026	-0.059	-0.159											
5) Competitors int. <sub>t-1</sub>	0.040	0.357	0.084	-0.003										
6) High-tech industry dummy <sub>t-1</sub>	0.032	-0.041	0.015	0.063	0.515									
7) Domestic profit t-1	0.039	0.022	-0.044	0.039	0.015	0.008								
8) Size t-1	0.074	0.034	-0.142	0.375	0.051	0.070	0.114							
9) Dummy listed <sub>t-1</sub>	0.003	-0.003	0.008	-0.004	0.010	0.007	-0.006	-0.016						
10) Licensing intensity <sub>t-1</sub>	-0.001	0.006	0.014	0.010	-0.005	-0.010	-0.002	0.006	-0.002					
11) R&D intensity <sub>t-1</sub>	0.000	-0.004	0.001	-0.001	0.003	0.012	0.000	0.004	-0.003	0.000				
12) Advertising intensity <sub>t-1</sub>	-0.001	0.000	-0.004	0.010	-0.006	-0.009	-0.010	0.020	0.008	0.006	0.002			
13) Export experience <sub>t-1</sub>	0.000	0.005	0.003	0.007	-0.002	-0.003	-0.118	0.010	-0.003	0.004	0.000	0.002		
14) HQ location <sub>t-1</sub>	0.011	0.010	0.018	0.031	0.046	0.037	0.004	0.010	0.006	0.001	-0.001	0.008	0.003	
Mean	0.003	6.221	1981	0.326	0.002	0.258	6.734	3.246	0.330	0.005	0.007	0.035	0.461	0.713
Std. Deviation	0.051	0.497	19.183	0.469	0.004	0.437	185.297	1.743	0.470	0.143	0.488	1.707	72.274	0.452
Minimum	0	5.310	1825	0	0	0	-30385	0	0	0	0	0	0	0
Maximum	1	6.880	2008	1	0.03	1	10459	12.41	1	26	125.60	309	20900	1

Censored observations are included in the descriptive statistics in Table 1; refer to the methodology section for details.

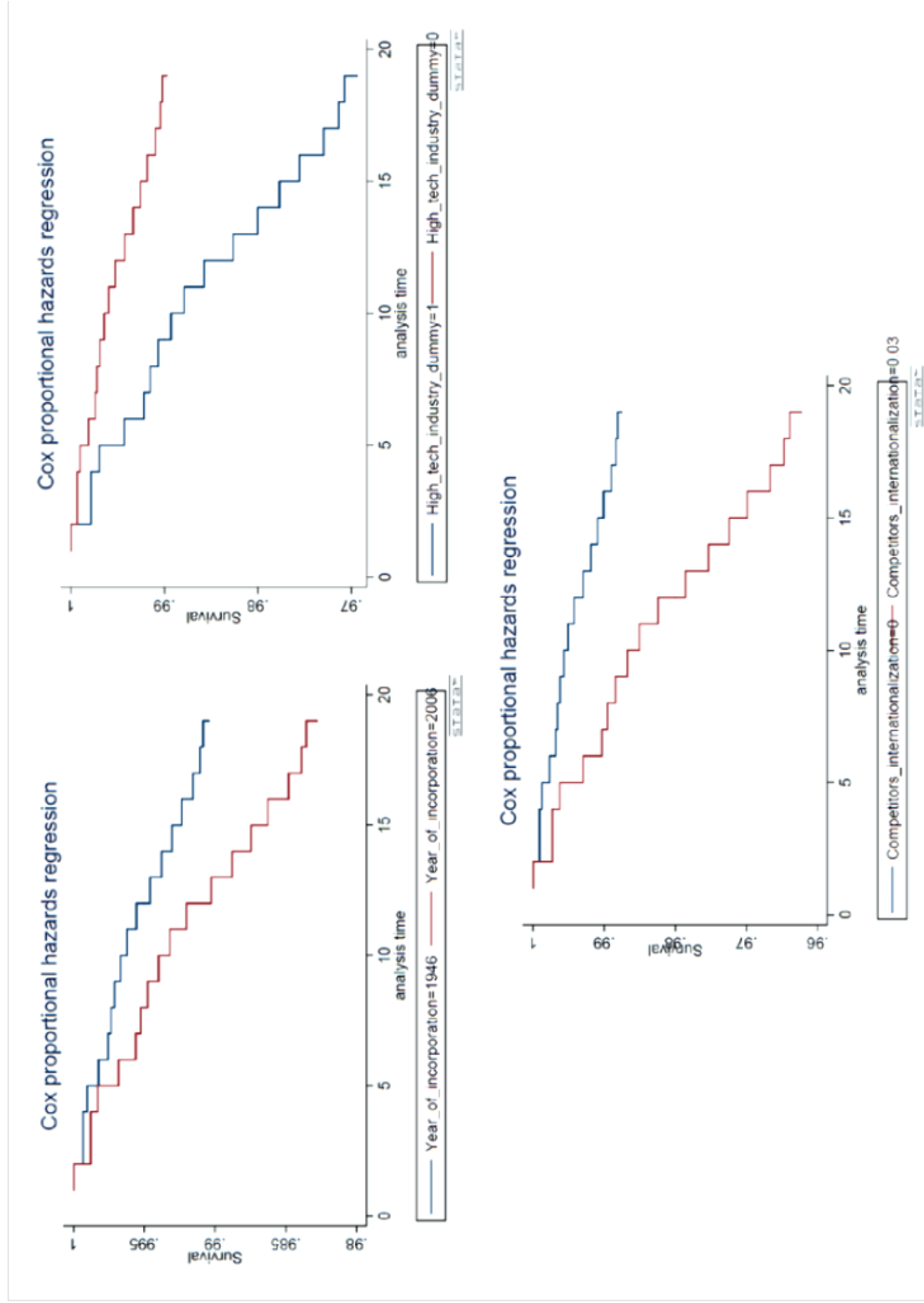
Table 2. Event history analysis

	Model 1			Model 2			Model 3			Model 4		
	H.Ratio	Std. error	Signif.	H.Ratio	Std. error	Signif.	H.Ratio	Std. error	Signif.	H.Ratio	Std. error	Signif.
Institutional evolution <sub>t-1</sub>	1.469	(0.307)	*	1.561	(0.575)	*	2.253	(0.675)	***	2.439	(1.046)	**
Year of incorporation <sub>t-1</sub>	1.010	(0.004)	**	1.009	(0.004)	**	1.128	(0.062)	**	1.121	(0.061)	**
Dummy stand alone <sub>t-1</sub>	0.857	(0.132)		0.851	(0.131)		12.808	(24.623)		12.159	(22.979)	
Competitors int. <sub>t-1</sub>	1.693e+16	(2.088e+17)	***	1.177e+88	(1.043e+90)	**	3.707e+16	(4.569e+17)	***	3.137e+84	(2.766e+86)	**
High-tech industry dummy <sub>t-1</sub>	3.021	(0.485)	***	726.544	(1,439,252)	***	3.009	(0.482)	***	771.951	(1,532.204)	***
Institutional evolution *				4.19e-11	(5.78e-10)	*				1.52e-10	(2.08e-09)	*
Competitors int. <sub>t-1</sub>				0.421	(0.131)	***				0.417	(0.130)	***
Institutional evolution * high-tech industry dummy <sub>t-1</sub>							0.983	(0.008)	**	0.984	(0.008)	*
Institutional evolution * year of incorporation <sub>t-1</sub>							0.656	(0.195)		0.661	(0.193)	
Institutional evolution *												
Dummy stand alone <sub>t-1</sub>	1.000	(.0001)	**	1.000	(.0001)	*	1.000	(.0001)	**	1.000	(.0001)	*
Domestic profit <sub>t-1</sub>	2.082	(0.083)	***	2.080	(0.083)	***	2.085	(0.083)	***	2.083	(0.083)	***
Size <sub>t-1</sub>	1.233	(0.165)		1.241	(0.166)		1.233	(0.165)		1.242	(0.166)	
Dummy listed <sub>t-1</sub>	.0001	(0.001)		.0001	(0.001)		.0001	(0.001)		.0001	(0.001)	
R&D intensity <sub>t-1</sub>	1.002	(0.140)		1.002	(0.132)		1.004	(0.144)		1.005	(0.135)	
Advertising intensity <sub>t-1</sub>	0.722	(0.249)		0.724	(0.245)		0.725	(0.250)		0.730	(0.246)	
Export experience <sub>t-1</sub>	1.000	(0.001)		1.000	(0.002)		1.000	(0.001)		1.000	(0.002)	
HQ location <sub>t-1</sub>	1.491	(0.242)	**	1.487	(0.241)	**	1.485	(0.241)	**	1.483	(0.240)	**
Observations	95,015			95,015			95,015			95,015		

Standard errors in parentheses

\*\*\* p&lt;0.01, \*\* p&lt;0.05, \* p&lt;0.1

Figure 2. Survival curves for specific values of year of incorporation, high-tech industry dummy and competitors' internationalization.



## **PART FOUR:**

### **The Role of Overseas National Ownership in Outward FDI:**

#### **A Study of the Indian Diaspora**

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#### **Abstract**

Overseas nationals are an important subset of investors in their countries of origin. Inspired by work on the relationship between ownership structure and internationalization, we identify overseas national ownership in homeland firms, as a firm-level mechanism relating to homeland firms' outward foreign direct investment (OFDI). We explain this relationship by overseas nationals' dual orientation, i.e. their familiarity with both the domestic and the international contexts. In particular, drawing on behavioral theory on internationalization, we hypothesize and empirically corroborate that overseas national ownership is positively correlated with OFDI. Moreover, for reasons related to provision of information-processing capacity for internationalization, overseas national ownership can mitigate the risk aversion of family ownership to firm internationalization, and is better at doing so than foreign corporations' ownership. This is related to the fact that incentives and the ability to provide information-processing capacity differ between overseas nationals and foreign corporations.

The paper has been presented at the 2012 AOM Conference, 2012 AIB Conference, 2012 Copenhagen Summer Workshop on Corporate Governance and 2012 Copenhagen Emerging Market Multinationals Conference. Insightful comments from the research seminars' participants at the Department of Strategic Management and Globalization of Copenhagen Business School and at the Center for Emerging Markets of Northeastern University are also acknowledged.

## 1. INTRODUCTION

“The world has some 215m first-generation migrants, [...] If migrants were a nation, they would be the world’s fifth-largest, a bit more numerous than Brazilians, a little less so than Indonesians.” (The Economist, November 19<sup>th</sup> 2011). Although there have always been migrants, the availability of new communication channels provided by newer technologies makes it easier to maintain interconnections between the homeland and the new location. Accordingly, the involvement in and the contribution to economic growth of *overseas nationals* in both host and home countries is becoming more evident and discernible. In particular, “overseas nationals” (Buckley, Clegg, & Wang, 2002; Ramamurti, 2004)—emigrants of a given ethnic group outside their country of origin, also referred to as diaspora—are an important subset of investors in their “homelands” (used here interchangeably with the notion of “country of origin”).

Although the Jewish diaspora represents an “archetypal” diaspora, different—both mature and newer—diasporas originating from central and eastern Europe or countries such as South Korea, Taiwan, Mexico, Japan, India, China, and many others, have been and are active in contributing to the development of their home countries (Kapur, 2003; Patterson, 2006; Smith, 1999; White, 2003). Nowadays, the economic growth and the globalization of many emerging market countries have put new emphasis on diaspora phenomena. Many emerging and less developed countries are seeking policies and marketing programs to promote and attract overseas nationals’ investments in their countries of origin (Nielsen & Riddle, 2010; Saxenian, 2005; United Nations, 2006). Overseas nationals are becoming recognized economic agents who are able to connect the world to their homelands, and vice versa.

The interest in diasporas in international business (IB) is not new. Research in IB has shown that a country's diaspora is more likely than other foreign investors to invest in the

homeland (e.g., Buckley, et al., 2002; Gillespie, Riddle, Sayre, & Sturges, 1999; Nielsen & Riddle, 2010). Researchers interested in international entrepreneurship have studied both the role of overseas nationals in establishing new ventures abroad (e.g., Saxenian, 2005; Saxenian, 1994), and the role of scientists and engineers returning to their countries of origin (“returnees”) to start up a new venture (Liu, Lu, Filatotchev, Buck, & Wright, 2010). Other scholars have focused on ethnic ties as a determinant of the location decisions of foreign and domestic entrants (Zaheer, Lamin, & Subramani, 2009). Parallel research regarding the economic involvement of overseas nationals in their countries of origin has focused on the role of remittance flows—i.e., cash transfers (Vaaler, 2011).

However, overseas nationals could play a crucial role also in relation to the internationalization of firms located in the country of origin of the diaspora. In particular, inspired by work on the relationship between ownership structure and internationalization (Bhaumik, Driffield, & Pal, 2010; Fernandez & Nieto, 2006; Lien, Piesse, Strange, & Filatotchev, 2005), we identify overseas national ownership as a micro (firm-) level mechanism promoting homeland outward foreign direct investment (OFDI). Recent work has contributed to our understanding of how family ownership and other block-holdings (e.g., domestic and foreign institutional investors) relate to internationalization (Fernandez & Nieto, 2006; Filatotchev, Stephan, & Jindra, 2008; Lien, et al., 2005). Yet there has been little, if any, research on the specific role of overseas national investors in influencing the extent of OFDI of homeland firms. We expect overseas nationals to be important because of their *dual orientation*: they are foreign and local at the same time.

Building on behavioral models of internationalization, first we argue for a positive relationship between overseas national ownership and OFDI undertaken by the invested firm located in the country of origin. Second, the literature on ownership structure and internationalization highlights the risk averseness of family owned businesses to firm



internationalization (Bhaumik, et al., 2010; Filatotchev, Strange, Lien, & Piesse, 2007). We posit that overseas national ownership can mitigate this risk aversion. Specifically, inspired by information-processing theory, we suggest that information-processing capacity provided by overseas national ownership can positively influence OFDI decisions by family members. Thirdly, since valuable information-processing capacity for internationalization can be provided also by other foreign investors (Bhaumik, et al., 2010), we disentangle foreign investors into foreign corporations and overseas nationals and examine how these two ownership categories differ in moderating the OFDI decisions of family members. In particular, from a FDI motivation perspective we posit that overseas nationals will be more successful at lowering family members' risk perception toward OFDI, than will foreign corporations.

Indian firms represent the empirical context for our study. This is an ideal context since, starting from the early 1990s, India has experienced important economic reforms, which have influenced the characteristics and internationalization behavior of its firms. India has faced significant growth in FDI. Starting from USD237 million in 1990, in 2010 USD24,640 million of inward FDI was registered. There has been a similar dramatic increase in OFDI from USD6 million in 1990 to USD14,626 million in 2010 (UNCTAD, 2011). India is characterized by a variety of types of firm ownership. Although family ownership is probably the dominant ownership category, finance institutions (e.g., mutual fund Unit Trust of India) and foreign corporations also hold important shares in Indian companies (Bhaumik, et al., 2010; Chakrabarti, Megginson, & Yadav, 2008). Overseas nationals are certainly a particularly important phenomenon in India. The Indian government has been active in sending strong "welcome signals" to the Indian diaspora. In the 1970s, it created the formal category of "Non Resident Indians" (NRI), which represents Indian migrants living outside their country of origin. This legal and social category has strategic relevance for the

government and is targeted by many services such as the Ministry for Overseas Indians (Saxenian, 2005). A dual citizenship law, passed in 2003, provides NRI with most of the same benefits as received by domestic citizens of India.

Our work contributes to the diaspora literature by pointing to the importance of overseas national ownership as a firm-level mechanism related to homeland firms' OFDI. It adds also to the literature on family ownership and OFDI by proposing a lower detrimental impact of family ownership on outward expansion when there are overseas national investors present in the ownership structure of the firm. Moreover, testing a hypothesis about the different influence of overseas nationals and foreign corporations on family members' risk perception of OFDI, we address the question of how the FDI motivation and, therefore, the ability and incentives to provide information-processing capacity for internationalization, differs between these two types of owners. We provide insights for government about the potential benefits that overseas nationals offer and, therefore, which government tools might be more effective in their immigration regimes.

The rest of the paper is structured as follows. In the succeeding sections, we describe the economic relevance of overseas nationals and the concept of dual orientation. Next we develop our hypotheses, and then describe our research method and present the results of the hypotheses testing, based on a sample of 2,453 Indian firms. The paper concludes with a discussion and some remarks related to future research.

## **2. RESEARCH BACKGROUND**

### **2.1 Overseas nationals**

“Overseas nationals” are emigrants of a given ethnic group, living outside their country of origin, also referred to as diaspora (Buckley, et al., 2002; Ramamurti, 2004). The term “diaspora” originally referred to the dispersion of Jewish populations, which represents the “archetypal” diaspora. Other archetypal and mature diasporas include those involving

Armenians and Palestinians (Kapur, 2003; Smith, 1999); newer diasporas originate from Argentina, South Africa and Colombia (Kuznetsov, 2006). Emigration flows (forced and voluntary) and associated diasporas from Mexico, Philippines, South Korea, Taiwan or Afghanistan, are other examples (Kuznetsov, 2006; Patterson, 2006; United Nations, 2011).

Overseas nationals are not a new phenomenon, nor are they specific to a single country. However, the recent and growing economic importance of African, Latin American and Asian countries has shown new light on diasporas and the role they can play in economic development. For instance, the Chinese diaspora is estimated at around 60 million, and about 20 million Indians live outside of India. More and more often in emerging and less developed countries we are witnessing national governments and multilateral organizations enacting policies and reforming their constitutions—special ministers, investment opportunities, voting rights—to officially recognize their diaspora communities and encourage a sense of membership (United Nations, 2006). This is because of the important role of overseas nationals in contributing to the economic development of their home countries (Gillespie, et al., 1999; Liu, et al., 2010; Vaaler, 2011).

Research in IB has shown that a diaspora is more likely than some other foreign investor to invest in its country of origin (e.g., Buckley, et al., 2002; Gillespie, et al., 1999). Historically, a perceived unattractive environment was the reason why foreign investors were reluctant to invest in certain economies, and local governments solicited inward FDI from their diasporas, making overseas nationals significant investors in their homelands (Gillespie, et al., 1999). More recently, academic research has suggested that not only financial but also emotional motivations and those related to social status—non-pecuniary motivations—are driving the investments decisions of overseas nationals in their country of origin (Nielsen & Riddle, 2010). International entrepreneurship, meanwhile, has highlighted the existence of and role played by diasporas in finding connections to start business abroad (e.g., Kalnins &

Chung, 2006; Siqueira, 2007). A typical example is the case of Chinese and Indian entrepreneurs who contributed to the development of Silicon Valley in California (Saxenian, 1994). Ethnic ties provide access to market information, supply matching, and referral services and distributors, and can represent critical reputational intermediaries (Giarratana & Torrasi, 2010; Kapur & McHale, 2005). These network-based benefits have been found also to be crucial for returnees establishing new ventures in their home countries (Liu, et al., 2010; Zaheer, et al., 2009).

At the macro level, Vaaler (2011) shows that diasporas' remittance flows—i.e., cash transfers—explain the level of economic internationalization of the country of origin. This result provides crucial preliminary evidence of the ability of overseas nationals to positively alter home-country internationalization. At the more micro level, Filatotchev et al. (2009) argue theoretically and provide empirical support for a positive association between the presence of a returnee entrepreneur and the export orientation of small and medium enterprises. Inspired by these important findings and recent developments in IB on whether different governance characteristics are more or less related to the decision to undertake FDI (Bhaumik, et al., 2010; Fernandez & Nieto, 2006; Lien, et al., 2005), we expect overseas national ownership in a homeland firm to constitute a firm-level mechanism that is positively related to that firm's OFDI decision. Specifically, we suggest that overseas national owners relate to firms' OFDI because of their *dual orientation*: an international and local space of experience and knowledge—an ongoing sense of double belonging.

### **Overseas nationals' dual orientation**

We follow Saxenian's (2005) portrayal of how diaspora members benefit from a unique opportunity to learn from their host environment while maintaining access to network, resources, and knowledge in the country of origin.

Overseas nationals can develop a “*transnational habitus*” (Guarnizo, 1997: 311): a set of analytic, emotional, creative and communication competencies characteristic of individuals who are able to familiarize themselves with a range of other values, practices and cultures (Koehn & Rosenau, 2002; Vertovec, 2004). Overseas nationals live abroad, and are exposed to education, training, work experience and work practices that differ from those in their countries of origin. Accordingly, we assume this type of investor will have experiential knowledge stemming from the ability to manage multiple identities and grasp unfamiliar settings, and a sense of transnational efficacy and openness toward difference. Such international knowledge creates an information advantage relevant to internationalization (Eriksson, Johanson, Majkgard , & Sharma, 1997; Johanson & Vahlne, 1977).

Transnational habitus is a significant characteristic of overseas nationals’ dual orientation, but not the only one. Overseas nationals also experience a need to belong to their country of origin, a need that favors the formation and maintenance of social bonds and interpersonal relationships with locals (Baumeister & Leary, 1995). Not surprisingly, overseas nationals also preserve their relationship with their home country in terms of capital flows, political interests and social relations (Nielsen & Riddle, 2010; Vaaler, 2011). However, it is a form of double belonging. By investing in the homeland, overseas nationals gain local recognition and legitimacy: in fulfilling their origin-country-duty they become a legitimate part of their country of origin (Nielsen & Riddle, 2010; Vaaler, 2011). We expect this characteristic to affect the ability and motivation of overseas nationals to provide additional information-processing capacity in the invested firm in the country of origin. This information-processing capacity is relevant to internationalization (Hoskisson, Eden, Lau, & Wright, 2000; Sanders & Carpenter, 1998).

In the next section, we use the concept of dual orientation—a characteristic specific to the overseas nationals’ ownership group—to identify and develop theoretical mechanisms

that explain why overseas national ownership in homeland firms is positively related to homeland firms' OFDI. In particular, we suggest overseas nationals' dual orientation is related to overseas nationals' risk-taking behavior in OFDI and to the information-processing capacity available in the homeland firm.

### **3. HYPOTHESES DEVELOPMENT**

#### **3.1 Overseas national ownership and OFDI**

The decision to engage in OFDI is a complex and risky one. FDI requires the ability to control activities linked to a different cultural, linguistic, political, economic environment; to evaluate when, where and how to enter a foreign market; and to coordinate different people, units and processes across countries (Dunning & Lundan, 2007). In the early 1970s, Penrose (1972) referred to the risk in decisions as to their potential associated losses (gains). This focus on risk of loss is particularly prominent in the internationalization literature and often is assessed in terms of the costs of the international venture (for a review, see Liesch, Welch, & Buckley, 2011).

Behavioral models of internationalization indicate that the decision to internationalize is based on the basis of its perceived cost, and that this perception is based on past experience (Johanson & Vahlne, 1977). The development of and access to institutional market knowledge, business knowledge and internationalization knowledge reduces the perceived risks associated with foreign investments and are fundamental to the firm's internationalization decisions (Eriksson, et al., 1997; Johanson & Vahlne, 2009). While market-specific business knowledge tends to be country-specific, more general internationalization knowledge tends to be firm-specific rather than specific to a country (Eriksson, et al., 1997). For instance, internationalization knowledge can be seen as knowledge reflecting the firm's understanding of the situations and problems arising from international ventures (e.g., Madhok, 1997), experience and capabilities developed in

connection with investments in different markets (e.g., Barkema & Vermeulen, 1998), or different modes of entry (e.g., Padmanabhan & Cho, 1999).

We posit that overseas nationals' international orientation represents a source of internationalization knowledge that can lower perceptions of the costs associated with OFDI. Consequently, overseas nationals are likely to display more risk-taking behavior towards OFDI. Diaspora members have international experience such as travel stays abroad and foreign language proficiency (Dichtl, Koeglmaier, & Mueller, 1990), they share an "openness to experience", seen as a willingness to be adventurous and to experiment (Costa & McCrae, 1992). Gupta and Govindarajan (2002), suggest that experience in foreign cultures and the ability to integrate diverse perspectives—which are at the basis of overseas nationals' transnational habitus—contribute to the development of a "global mindset".

Also, overseas national investors have already exhibited superior means to discover and exploit new business opportunities back home (Vaaler, 2011). In particular, by investing in homeland firms, overseas national owners have had opportunities to develop the ability to evaluate international initiatives, and to learn what information is required to evaluate a foreign venture and where it can be found. This international knowledge should result in overseas national owners being more confident of their ability to accurately estimate the risks and returns associated with foreign investments.

Based on these arguments, we hypothesize that:

**Hypothesis 1:** Overseas national ownership is positively associated with the extent of OFDI.

### **Overseas Nationals and Information Benefits: A Moderating Effect**

Research on ownership structure and FDI suggests that family shareholders' attitudes to protecting personal wealth (Anderson, Mansi, & Reeb, 2003) and their limited financial portfolio diversification, lead to a rigid localization of resources that hinders internationalization (Filatotchev, et al., 2007; Gallo & Garcia Pont, 1996). Moreover, family

ownership typically is associated with lack of international attitude and information needed to support the internationalization of business (Fernandez & Nieto, 2006; Gallo & Garcia Pont, 1996). However, the exposure, for instance, of family members to an international context (e.g., leisure or work travel abroad; speaking other languages; belonging to an international business association) can favor the acquisition of international knowledge (Gallo & Sveen, 1991). We suggest that international knowledge and attitudes can be promoted within the firm. Specifically, family members' access to the information-processing capacity provided by overseas national owners can broaden their orientation and attitudes.

Research on the firm stock price formation process shows that different types of investors also likely influence the firm's information environment (e.g., El-Gazzar, 1998; Piotroski & Roulstone, 2004). Decision makers often rely on the information they can gather from others to support their decision-making process. Galbraith (1977) suggests that there is a relationship between the amount of uncertainty faced by a decision maker, and the information available to the decision maker. How decision makers perform their decision making tasks, therefore, is related to their information-processing capacity. So, from an information-processing perspective, we would argue that the provision of additional information by an owner will have important effects on the risk-taking behavior of other types of owner. Specifically, we expect that assessment of the risk inherent in OFDI decisions by an ownership group can be modified by the information-processing capacity of other ownership categories within the firm.

Overseas nationals who invest in their home country can be a crucial source of international information due to their experience and professional networks abroad (Saxenian, 2005). They may be the source of ideas that have been internationally tested, and of relationships for investment advice (Vaaler, 2011). The transnational habitus of overseas nationals (Guarnizo, 1997; Vertovec, 2004) can fill the gap in international knowledge faced



by domestic firms (Khanna & Palepu, 2000). Moreover, family members benefit from greater information-processing capacity, because diaspora members typically understand domestic business practices and have a similar cultural background (Nielsen & Riddle, 2010). Based on their knowledge of their home countries, overseas nationals are able to “translate” their overseas experience to be accessible to family members.

Accordingly, the exposure of family members to overseas national owners can enhance the stock of international knowledge and attitudes within the family. If this stock is sufficient to reduce perception of the costs of OFDI to an acceptable level, family members will be less resistant to OFDI. Based on these arguments, we hypothesize that:

**Hypothesis 2:** Overseas national ownership will decrease the negative effect of family ownership on the extent of OFDI.

However, it could be argued also that overseas nationals are no different from other foreign investors able to provide access to information related to understanding and evaluation of international opportunities. Potential access to the knowledge and linkages of other foreign shareholders could reduce the uncertainty associated with OFDI, thereby facilitating the decision to take on the risk of such investment by family members. In this context, Bhaumik et al. (2010) suggest and corroborate empirically that foreign owners in a family-owned firm can facilitate access to investment opportunities abroad. We build on and extend this important contribution; specifically, we differentiate between foreign corporations and overseas nationals. This allows us to investigate how these two distinct categories of foreign investors differ in their information-processing capacity and, therefore, in how they can influence the relationship between family ownership and OFDI. In particular, we posit that overseas nationals differ from foreign corporations in their motivation and ability potentially to provide additional information-processing capacity to family members.

Not wholly-owned investment are often used by foreign corporations to enter a new

market and access local knowledge (Dunning & Lundan, 2007; Johanson & Vahlne, 1977). It has been suggested that this way of gaining key information on local tastes, customers and distribution channels, the local culture, and local governmental policies and norms predominates in the case of entry to less developed countries which may require an unfamiliar set of knowledge and resource endowments (Beamish, 1994; Hitt, Dacin, Levitas, Arregle, & Borza, 2000; Meyer, 2001; Meyer, Estrin, Bhaumik, & Peng, 2009). Accordingly, for a foreign corporation, having an equity stake in a host country firm represents an efficient first way to *search* for information about the new local foreign context. On the other hand, research shows that overseas nationals' decisions to buy and sell shares in firms located in the country of origin are predicated not just on expectation of financial returns; overseas nationals' local orientation increases the importance of non-pecuniary investment motivations, such as the desire to engage in investment decisions deemed socially desirable (Gillespie, et al., 1999; Nielsen & Riddle, 2010). In other words, investing in domestic firms at home can be perceived as a way to contribute to the future economic development of the country of origin. In this context, an equity stake in a domestic firm constitutes an opportunity for overseas nationals potentially to *provide* access for other shareholders, to their particular international information and experience. Therefore, the motivations of and incentives for foreign corporations and overseas nationals differ in relation to the provision of additional information-processing capacity to the participating firm. Due to the different motivations for foreign investment, we expect the incentive to share information-processing capacity with family members to be higher in the case of overseas nationals than in the case of foreign corporations.

Also, in addition to the different investment motivations of overseas nationals and foreign corporations, they will likely differ also in their ability to make the information they possess, intelligible to family members. Since overseas nationals are both local and

international, we have argued that they can play a translator role.

Based on these arguments, we posit that overseas nationals are likely to have a greater positive effect on the risk perception of family members toward OFDI, than the influence exercised by foreign corporations. Accordingly, we hypothesize that:

**Hypothesis 3:** *Minority* overseas national ownership will decrease the negative effect of family ownership on the extent of OFDI, more than *minority* foreign corporations' ownership.

Note that we consider minority foreign ownership in order to exclude homeland firms that are controlled by foreign corporations or are part of an international business group, investments that can be deemed to be inward FDI (OECD, 1996). In such cases, the homeland invested firm will derive some partial benefit, directly from the multinational network and market access of the foreign owner. This multinationality can reduce the barriers to internationalization and facilitate OFDI (Dunning, 1988).

## **4. METHOD**

### **4.1 Data and Sample**

The *Prowess* database (2011 release) from the Centre for Monitoring of the Indian Economy (CMIE), an independent organization headquartered in Mumbai, provides annual financial data for over 7,000 Indian firms. This database has been used to investigate strategy and international management issues (e.g., Chittoor, Sarkar, Ray, & Aulakh, 2009; Elango & Pattnaik, 2007; Gubbi, Aulakh, Ray, Sarkar, & Chittoor, 2010). To identify OFDI by Indian firms, we rely on the Zephyr database, maintained by Bureau van Dijk.

We analyze firms where ownership by foreign corporations or foreign institutions is lower than 10%, which excludes domestic firms that are under direct control of foreign corporate bodies. The threshold of 10% is in line with the OECD definition of a direct

investment relationship as determined by ownership of at least 10% of ordinary shares or voting stock (OECD, 1996). In other words, we exclude Indian firms based on investment by a foreign MNE which therefore benefit from the multinationality of the foreign owner. Note that the 10% limit does not apply to overseas national ownership; given that this type of ownership consists of individual investors, the benefits deriving from the multinationality of the foreign owner would be unlikely to apply in this case.

Our final sample consists of a cross-section of 2,453 Indian firms observed in 2010. We excluded firms with missing financial and ownership structure data, and those firms with seemingly erroneous reported values—e.g., negative values for export intensity. For these 2,453 firms we count the number of majority-owned cross-border acquisitions undertaken during the period 2000-2010 (extremes included). From the Zephyr database, we identified 619 majority-owned (i.e. acquired stake over 50%) acquisitions abroad, by Indian firms, in the period 2000-2010. Removing deals completed by individuals, unknown acquirers, and organizations not included in the Prowess database, we are left with a total of 449 acquisitions undertaken by 380 firms. Some two thirds of this total was lost due to missing values in the Prowess data, leaving a final number of acquisitions in our sample of 136 undertaken by 90 firms.

According to Gubbi and colleagues (2010), the value of cross-border acquisitions by Indian firms in 2007 was over USD11 billion, with the number of deals going from 7 in 1992 to 197 in 2007. In the case of India, a focus on cross-border acquisitions compared to other forms of investment is particularly useful because they represent the largely preferred internationalization mode (Athreya & Godley, 2009).

## **4.2 Measures**

The dependent variable, *cumulative OFDIs*, captures the cumulative number of majority-owned cross-border acquisitions undertaken by each Indian firm during the period 2000-

2010. Our dependent variable assumes values from 0 to 10. In 2010 (our reference year) 90 firms had undertaken at least 1 majority cross-border acquisition in the previous 11 years (2000-2010). The average number of cumulative cross-border acquisitions in 2010 per Indian firm is 1.5. In more detail, in 2010, 68 firms had undertaken 1 cross-border acquisition in the previous 11 years; 13 firms had undertaken 2 acquisitions; 3 firms had invested 3 times; 3 firms had achieved 4 acquisitions; 3 firms had undertaken respectively 5, 6 and 10 cross-border acquisitions.

For each Indian firm, we define the following independent variables capturing the firm's ownership structure. The variable *family ownership* captures the percentage of shares owned by local individuals belonging to Hindu Undivided Families, which is a legal entity defined by Indian law. The percentage of shares owned by Indian individuals not resident in India but living abroad, is captured by the variable *overseas national ownership*. It is important to note that we do not know the percentage of ownership of individual owners; however, we know the total number of shares owned by each ownership category. For instance, the overseas national owners' group could include more than one overseas national investor, but we do not have access to details of the specific ownership of each of these investors. We know how many shares the overseas nationals' category owns and we assume similar behavior among these owners in terms of risk taking and information-processing capacity, compared to other ownership groups (Pedersen & Thomsen, 1997). In order to test hypothesis 3, we define the following variables. *Minority foreign corporate* is a dummy that equals 1 for presence of portfolio investments (under 10%) by foreign corporations, and 0 otherwise. The dummy variable *minority overseas national* equals 1 if overseas national ownership is of the minority type (under 10%), and 0 otherwise.

We control for a number of factors that could impact Indian firms' OFDI behavior. We control for two further ownership categories: domestic institutions and Indian

government. *Domestic institutional ownership* measures the percentage of shares of the companies in our sample owned by Indian financial institutions, Indian mutual funds, Indian banks and insurance companies, and other Indian institutions; *state ownership* is the percentage of shares owned by the Indian government. We control also for firm performance: *profitability* measures the return on capital employed (ROCE), and add to the model the dummy variable *group affiliation*, which takes the value 1 if the firm is affiliated to a business group, and 0 otherwise. The variable *technological intensity* is the annual R&D expenses divided by total sales, normalized by the average technological intensity of the industry. This normalization is useful to capture each firm's R&D spending compared to the industry average, which might be relatively low in an emerging market such as India (Hennart & Park, 1994). The variable *advertising intensity* is the firm's annual expenditure on advertising, sales and distribution divided by total sales, normalized by the average advertising intensity of the industry. We account for the firm's internationalization experience by adding the variable *exporting experience*, measured as the value of the natural logarithm of export activities as a fraction of total sales. The variable *borrowing intensity* is the value of the total financing received by the focal firm from the group, from associated business enterprises, or from a government agency, divided by the total liabilities. Following Chittor et al. (2009), we define the variable *international technological resources* as the sum of royalty, technical know-how and license fees, and imports of raw materials and capital goods. We control for *firm age*, measured as number of years from the date of its establishment, and *firm size* measured as the natural logarithm of the firm's total assets. Finally, we control for the industry to which the Indian firm belongs. Since the firms in the sample span several industries, we group them into industry classes captured by the dummy variables: *high-tech*, *medium-high tech*, *medium-low tech*, *low-tech*, *services* and *diversified industries*. Prowess reports industries belonging to the manufacturing, services and

diversified categories; we differentiate manufacturing industries further based on their R&D intensity, following the OECD classification<sup>5</sup> (Hatzichronoglou, 1997). All independent and control variables are lagged one year with respect to the dependent variable and, therefore, are measured at 2009.

### 4.3 Results

The dependent variable in this study is a count measure, proxying the cumulative number of OFDIs undertaken by Indian firms between 2000 and 2010. Since our data have a predominance of zeros in the actual OFDI count, our dependent variable includes several zeros. Indian firms investing abroad represent some 4% of total firms in our sample (2,363 out of 2,453 firms in 2010 had never invested in the previous 11 years). We handle this so-called “zero inflation” condition by estimating a zero inflated negative binomial model (Greene, 2000). In particular, we explain the probability of the count dependent variable being equal to zero by focal firm’s previous export experience. The reason why we expect that there will be firms in our sample that will always be zeros (thereby generating the phenomenon of zero inflation) is that there are likely to be domestic firms that have never developed the competencies required to internationalize; we capture these with the variable *exporting experience*. They are likely to fall into the “always zero” group.

Table 1 summarizes the descriptive statistics and correlations for all the variables used to test our hypotheses. No variables exhibit distribution or correlation problems. The reason for the low average (i.e. 0.6%) of the variable *overseas national ownership* is that it includes several zeros, i.e. overseas nationals are a comparatively less frequent ownership category.

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<sup>5</sup> Industries defined as high-technology are: computers and office machinery; electronics-communication; pharmaceuticals. Industries defined as medium-high-technology are: industrial machinery; electrical machinery; transport equipment. Industries falling under the category of medium-low-technology are: plastic; cement and glass; metal; manufacturing articles; construction; minerals. Finally, industries defined as low-technology are: agricultural products; irrigation; vegetable oils and products; food products; textiles; leather products; wood; paper products.

When we consider firms invested by overseas nationals, the average for this variable rises to around 9%.

*Insert Table 1 about here*

Table 2 reports the results of the zero inflated negative binomial model. The “inflate” section specifies the equation that determines whether the observed count is likely to be always zero. *Export experience*, which is the independent variable in this case, is negative and significant in all the models specified, suggesting that the lower the export intensity the more likely the homeland domestic firm will never engage in OFDI. We performed a Vuong (1989) test to check for the existence of “zero inflation”. In other words, we test whether the zero inflated negative binomial model would be preferable to a regular negative binomial model. This test statistic shows a standard normal distribution and significant positive values for Models 1, 2, 3 and 4 (respectively 2.45 ( $p<0.01$ ), 2.44 ( $p<0.01$ ), 2.50 ( $p<0.01$ ), and 2.48 ( $p<0.01$ )) indicating that the zero inflated negative binomial model is preferable. Since we are estimating a non-linear model, in order to provide a more meaningful interpretation of the estimated coefficients, in the Appendix we show the marginal effects and incidence rate ratios (IRR) calculated for Model 1 (Table 2), which reports all the main effects of the independent and control variables on the dependent variable.

The results of the zero inflated negative binomial model support all the hypothesized relationships. In Model 1, we find support for hypothesis 1: the coefficient of the variable *overseas national ownership* is positive and statistically significant across the different estimations. Based on the IRR from Model 1, a standard deviation increase in the level of overseas nationals’ ownership (equal to 4%) corresponds to around an 11.4% increase in the level of cumulative OFDI. Also, the variable *family ownership* has a negative and significant coefficient ( $p<0.05$ ), indicating that the higher the number of firm shares owned by family members, the lower is the firm’s involvement in OFDI. This result is consistent across



Models 2, 3 and 4 and confirms previous findings on the relationship between family ownership and internationalization. More precisely, based on IRR, the expected decrease in the level of the dependent variable given a 1 standard deviation increase in the family ownership (i.e. 23%) would be around 26.3%.

In Model 2, the interaction term between *family ownership* and *overseas national ownership* is positive and significant ( $p < 0.10$ ). This is in line with hypothesis 2.

The interaction term between *minority overseas national* and *family ownership*, as expected, is significant and positive ( $p < 0.01$ ) in Model 3. This result is confirmed if we add the interaction between *minority foreign corporate* and *family ownership* to the model (Model 4). However, the coefficient of this latter interaction is not significant. Testing whether the coefficients of the two interaction variables are statistically different confirms a difference at a significant level of  $p < 0.01$  ( $\chi^2(1) = 17.39$ ). This finding in combination with the estimated coefficients of the interaction terms in Model 4, supports hypothesis 3.

*Insert Table 2 about here*

In order to reduce the number of unobserved effects in our empirical analysis, we include the control variables highlighted as important in the literature on FDI. The resulting relationships are in line with the findings in other empirical work on firms' internationalization. For instance, firms with *past export experience* are more likely to undertake OFDIs (e.g., Johanson & Vahlne, 1977). Given the potentially larger availability of financial and managerial resources, we find confirmation that bigger firms are also more likely to engage in international investments (Chen & Hambrick, 1995). The industry dummies suggest higher OFDI involvement in high tech industries. Higher levels of state ownership result in lower levels of firm involvement in OFDIs, confirming the findings in the literature that most FDI in India is linked to private firms (Athreya & Kapur, 2009; Sun, Peng, Ren, & Yan, 2012).

## **Robustness Checks**

The dependent variable in this study is the cumulative count of the OFDIs undertaken by Indian firms from 2000 to 2010. The ownership structure variables are observed at 2009. Accordingly, we assume that the ownership structure of the investing Indian firm is stable over the period 2000-2010. Unfortunately, we do not have access to data on the ownership structure of the Indian firms during these 11 years. However, we have information on the ownership structure of the firms in our sample in 2006 to 2010. As a robustness check, we analyze the changes in ownership structure over these five years. We observe that the shares of family members, and overseas national and foreign corporations remained stable over this five year period. The majority of firms experienced no changes to their ownership structure. Where changes occurred, shares increased or decreased on average by less than 1%, year to year. These results indicate stability over the five observable years.

Given the cumulative nature of our dependent variable and the sampled firms studied in 2010, there might be concern that overseas nationals might have invested in the homeland firm after its engagement in OFDI. We check this condition relying on the information on the ownership structure of firms between the years 2006 and 2010. Our data show that overseas nationals' ownership does not move from zero to a positive value after the year (or years) in which OFDI is undertaken. In other words, for the observable time period, we have observations where the presence of overseas national owners always precedes an acquisition.

Since our dependent variable is the cumulative number of majority-owned cross-border acquisitions undertaken by each Indian firm during the period 2000-2010, it is interesting to see whether the results hold if a broader definition of OFDI is used. OFDI can be pursued via other entry modes (e.g., greenfield investment, joint venture), and control can be achieved with ownership stakes of less than 50%. Unfortunately, we do not have access to data regarding greenfield investments by Indian firms in the period 2000-2010. However, in

addition to the 136 majority acquisitions described above, in the period 2000-2010, and for a total of 155 OFDIs, we can observe also the cumulative number of minority acquisitions and the cumulative number of mergers and joint ventures with a final stake in the Indian firm of at least 10%. Using this new definition of the dependent variable, the results of Models 1-4 reported in Table 2 remain largely unchanged.

Due to the non-linearity of the inflated negative binomial model applied in our empirical exercise, the estimated probabilities of the interaction terms depend on the values of the other covariates, making their interpretation difficult (Norton, Wang, & Ai, 2004). A graphical representation does not help to identify the interaction effect because of the preponderance of zeros in our dependent variable (i.e. zero inflation). However, applying Hilbe's (2011) methodology allows us to evaluate the robustness of the interaction between *family ownership* and *minority overseas national* using the IRR. We calculated the significance of the interaction using the following values for *family ownership*: mean (i.e. 26%), one standard deviation above the mean, and one standard deviation below the mean (i.e. 49% and 3%, respectively). For all three values, the coefficient of the interaction term is confirmed as positive and significant. Specifically, we obtain that the IRR = 2.022 (95% confidence interval: [1.100, 3.710]) for one standard deviation below the mean value of *family ownership*, IRR = 2.046 (95% confidence interval: [1.100, 3.704]) at the mean value, and IRR = 2.071 (95% confidence interval: [1.128, 3.805]) for one standard deviation above the mean value for *family ownership*. These results confirm the findings from the regression output, i.e. that the variable *minority overseas national* has a positive moderating effect on the relationship between *family ownership* and OFDI, and provide evidence of the robustness of our result concerning the estimation of the interaction effects. Conversely, the interaction effect between *family ownership* and *minority foreign corporations* continues to be non-

significant at any conventional level, when calculated for the mean, one standard deviation above the mean, and one standard deviation below the mean of *family ownership*.

A small group of the firms in our sample is operating in a regulated industry. After 1991, industry licensing in India began incrementally to be abolished in many industries, including the infrastructure sectors, financial services, retail banking and insurance (Athreya & Kapur, 2001). After more than 20 years, according to the 2010 version of the Industries (Development and Regulation) Act (1951), five industries remain under compulsory license, which is for safety and strategic reasons.<sup>6</sup> These five industries are: distilling and brewing of alcoholic drinks; cigars and cigarettes made from tobacco and manufactured tobacco substitutes; electronic aerospace and defense equipment; industrial explosives; and hazardous chemicals. The reasons for and dynamics underlying acquisitions (and strategic decisions in general) undertaken by the firms in these industries may be biased and reflect the peculiar industry structure. We excluded the firms belonging to these industries and re-ran the analyses on the reduced sample; the results did not change.

It might be important to verify whether the moderating role of overseas national ownership, on the relationship between family ownership and OFDI, still holds if we consider firms with majority family holdings. To check for this effect, we replace the continuous variable capturing the share of equity owned by the family (*family ownership*) with a dummy variable that takes the value of 1 if the largest shareholder category is the family. Using this new variable, the results of Models 1-4, reported in Table 2, remain largely unchanged.

Finally, the zero inflated negative binomial model assumes that the dependent variable for a set of observations will always be equal to zero. In order to check that our results are not model-dependent, we ran a valid alternative to the zero inflated negative binomial model, which involves running an ordered probit model that fits the ordinal

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<sup>6</sup> Source: <http://dipp.gov.in/English/Archive/statannual/2009-10/chapter1.2.pdf>.

dependent variables models. The actual values taken by the dependent variable are irrelevant, although higher values are assumed to correspond to “better” outcomes. Ordered probit estimation by of our models does not affect our results.

## **5. DISCUSSION AND CONCLUSION**

Governments, the business press and academics increasingly are acknowledging that overseas nationals are important actors within and outside their countries of origin. Attention has been paid to the effects of overseas nationals’ remittance flows on the economic growth of their countries of origin (Vaaler, 2011), to the role of diaspora in spurring entrepreneurship in host countries or countries of origin using ethnic social networks (Liu, et al., 2010; Saxonian, 2005; Zaheer, et al., 2009), and to returnees on venture performance (Li, Zhang, Li, Zhou, & Zhang, 2012). However, the role of overseas nationals on the OFDI decisions of firms located in the country of origin has been largely ignored in the literature. Focusing on the relationship between overseas nationals and internationalization among homeland firms, this work contributes to our understanding of the role of diaspora in accelerating international economic development of the country of origin.

Drawing on recent work in IB that highlights the need to analyze the link between a firm’s ownership structure and the decision to internationalize (Bhaumik, et al., 2010; Fernandez & Nieto, 2006; Filatotchev, et al., 2008; Lien, et al., 2005), we posit that the presence of overseas nationals in the ownership structure of a homeland domestic firm represents a firm-level mechanism through which diasporas relate to OFDI. Overall, the international (ethnic) entrepreneurship literature argues theoretically and shows empirically that returnees promote business development, technology growth and export activities (Filatotchev, et al., 2009; Liu, et al., 2010; Zaheer, et al., 2009). However, we show that also the simple presence of overseas nationals in the ownership structure of a domestic firm is at

least as relevant as the effect of returnee entrepreneurs. Thus, we complement the work on the importance of diasporas by showing how migrants can foster change in the home country without actually returning to live there. This is an interesting insight into the phenomenon of “brain circulation” or reverse brain drain (Saxenian, 2005).

Looking at the under-researched, but relevant ownership category of overseas nationals, we contribute theoretically and empirically to the literature on the effect of ownership structure on firms’ internationalization, in several ways (Bhaumik, et al., 2010; Fernandez & Nieto, 2006; Filatotchev, et al., 2008; Filatotchev, et al., 2007). We find that the ownership category of overseas nationals is positively correlated with the internationalization of homeland firms. We contribute the theoretical argument that overseas nationals’ dual orientation reduces overseas nationals’ perception of the costs associated with OFDI. Specifically, overseas nationals have an *international orientation*, endowed by their venturing abroad and their personal exposure to and experience of the challenge of entering a foreign environment. It can be argued that this experience was successful, since they have been able to accumulate sufficient wealth to invest at least part of it in a home-country firm. Theoretically, we interpret the international orientation of overseas nationals as a source of international knowledge that predicts higher risk taking related to international ventures and a less negative perception of the barriers to and complexity of OFDI (Eriksson, et al., 1997). These conditions that create a positive perception of OFDI, can lead to increased risk-taking behavior.

Studies that analyze the relationship between ownership structure and firm internationalization argue and show empirically that there is a negative relationship between family ownership, and different measures of internationalization such as small and medium enterprises’ exporting activities (Fernandez & Nieto, 2006), use of alliances and joint ventures in foreign markets (Zahra, 2005), and share ownership in foreign affiliates

(Filatotchev, et al., 2007). This negative effect of family ownership on internationalization has been shown previously in the Indian context, with the presence of Indian family owners negatively associated with the proportion of assets held overseas by the domestic firm (Bhaumik, et al., 2010). We corroborate and extend this finding of a negative relationship between family ownership and internationalization in the context of OFDI as captured by majority-owned foreign acquisitions.

Moreover, our result—of the negative relationship between family ownership and OFDI being reduced by the presence of overseas nationals in the firm ownership structure—contributes to extending further the theoretical and empirical literature on family businesses and internationalization. The assessment of OFDI by family owners is expected to be negative, as a consequence of family owners' high risk averseness when confronted with this strategic decision (e.g., Bhaumik, et al., 2010; Fernandez & Nieto, 2006). In this context, applying the concept of overseas nationals' dual orientation within the framework of the information-processing theory, we identify a set of theoretical mechanisms associated with the additional information-processing capacity available in the firm given the presence of overseas national investors. The presence of overseas nationals in the ownership structure provides potential access to relevant information by family members that allows a new assessment of OFDI opportunities, and threats. In other words, family members may begin to evaluate OFDI through the eyes of overseas nationals, which may distort family perceptions of situational risks (Sitkin & Pablo, 1992; Sitkin & Weingart, 1995), in particular, as we have argued and shown empirically, by underemphasizing OFDI risk.

The literature on family business and OFDI typically focuses on potential access of family members to additional information-processing capacity provided by foreign corporations (Bhaumik, et al., 2010; Filatotchev, et al., 2007). Our study contributes to this strand of the literature. Within the category of foreign investors we distinguish the roles of

overseas nationals and foreign corporations. We posit theoretically and corroborate empirically that overseas nationals differ from foreign corporations in their incentives to potentially provide additional information-processing capacity to family members. Specifically, our finding of a non-significant role for a minority stake of a foreign corporation in positively moderating the negative relationship between family ownership and OFDI (relative to a minority stake owned by overseas nationals) is in agreement with the theoretical argument that foreign corporations are more keen to use a minority equity stake in order to search for information about a new local foreign context (Beamish, 1994; Hitt, et al., 2000; Meyer, 2001). Whereas overseas nationals—often motivated by non-pecuniary reasons, and armed with knowledge of domestic business practices and a similar culture (Gillespie, et al., 1999; Nielsen & Riddle, 2010)—are more likely to favor other shareholders' access to their information-processing capacity. Therefore, although both foreign corporations and overseas nationals (i.e., foreign investors) may facilitate similar access to international information or investment opportunities abroad, for instance, through managerial inputs (Bhaumik, et al., 2010), we show there is a need for more research to identify more fine-grained characteristics of the different investor categories. In particular, identifying the dual orientation of overseas nationals allows a better understanding of the incentives for sharing the relative information advantage stemming from different ownership categories.

### **Limitations and Future Research**

It should be noted that in this study, we do not know in which countries the overseas nationals are located. Examining how the effect of overseas national ownership on OFDI differs depending on which the country hosting the diaspora would be interesting for future research. Another limitation of our analysis is that we are unable to consider individual ownership stakes. For instance, the overseas nationals' group might include more than one overseas national investor, but we have no details of individual investors. Accordingly, we



assume that homogenous types of investors will have similar strategic objectives and decision making horizons, and similar risk rationales (Douma, George, & Kabir, 2006; Pedersen & Thomsen, 1997; Thomsen & Pedersen, 2000), and also similar ability and motivation to provide information-processing capacity. Analysis of the distribution of aggregate shares among various individual owners would provide insights into how the number of owners or, alternatively, the size of individual ownership shares might influence the contribution of overseas nationals to homeland firms' internationalization.

Also, although we control for the influence of government ownership in our empirical analysis, our theory development does not include government ownership. In emerging markets, local government continues to be an important investor. Since government-invested firms typically follow very different strategic objectives compared to other firms—governments generally have political aims such as the promotion of employment and social welfare, and may be subject to pressure from local interest groups (Cuervo-Cazurra & Dau, 2009; Thomsen & Pedersen, 2000). Investigating how government ownership interrelates with other ownership categories in influencing OFDI might yield useful insights.

For researchers interested in diaspora and OFDI, it would be interesting to examine cross-diaspora comparisons of ethnic group characteristics influencing risk-taking behavior and information-processing capacity. Despite some similarities, we acknowledge that there are also significant differences among and within different communities of overseas nationals.

Among different entry modes, our analysis focuses on acquisitions. Since our empirical setting is India, we proxy for OFDI by wholly-owned acquisitions and our analysis does not include greenfield investments, a much less diffused entry mode for Indian firms (Athreya & Godley, 2009). However, greenfield investments play an important role in other contexts, such as China. Future research should assess this limitation and evaluate how

informative ownership-based mechanisms are regarding the relationship between overseas nationals and OFDI via greenfields.

### **Practical Implications**

Our study shows that the presence of overseas nationals in the ownership structure of a homeland domestic firm is positively related to its internationalization, including in the presence of family ownership. Accordingly, this preliminary evidence suggests that governments from the countries of origin of diasporas could make strategic use of these groups and that government investments aimed at attracting and supporting overseas nationals would be worthwhile.

Not all governments are effective at attracting overseas nationals' investments. As a result of the breakup of the Soviet Union, several million Russians formed diasporas in the newly independent states (Smith & Wilson, 1997). At that time, Russia had no policies in place to deal with this phenomenon, and many members of the Russian diaspora felt that the homeland had "abandoned" them (Heleniak, 2004; Smith, 1999). In the case of India, although the government has sent some "welcome signals" (Davis & Hart, 2010), overseas Indians still face difficulties when they want to invest back home. According to a report by PriceWaterhouseCoopers (2010), NRIs' investments are subject to stricter investments limits in some industries in India. Some authors have suggested that the Indian government could do more to attract NRIs, and create better conditions to stimulate investment (Saxenian, 2002).

Our results suggest that overseas national owners are likely to exhibit higher risk taking in relation to FDI and the additional information-processing capacity that they can provide to other investors—in particular to risk-averse family members. This is initial evidence for governments interested in promoting overseas nationals' investments. Governments could assess the effectiveness of their national immigration regimes in reducing

obstacles related to dual citizenship and integration of overseas nationals. Specific actions could be aimed improve communication about services, marketing events and investment promotion activities for diaspora members, or could focus on how the home market might be made more attractive for overseas nationals, which would have a direct effect on the extent of overseas nationals' investment in domestic companies. In relation to “brain circulation”, the creation of supportive institutions and policies addressing overseas nationals is clearly fundamental.

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## Tables

Table 1. Descriptive statistics and correlation matrix

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
1)Cumulative outward FDI <sub>t</sub>																					
2)Family ownership <sub>t-1</sub>	-0.069																				
3)Overseas national ownership <sub>t-1</sub>	0.067	-0.067																			
4)Minority overseas national <sub>t-1</sub>	0.050	-0.032	0.134																		
5)Minority foreign corporation <sub>t-1</sub>	0.056	-0.070	0.056	0.162																	
6)Domestic financial institutional ownership <sub>t-1</sub>	0.093	-0.181	-0.021	0.021	0.053																
7)State ownership <sub>t-1</sub>	-0.010	-0.146	-0.016	-0.018	-0.012	0.076															
8)Profitability <sub>t-1</sub>	-0.001	0.044	-0.004	-0.014	-0.011	0.010	-0.004														
9)Group affiliation <sub>t-1</sub>	0.045	-0.311	-0.034	0.048	0.073	0.244	-0.066	-0.011													
10)Technological intensity <sub>t-1</sub>	.0002	-0.026	-0.003	0.003	0.005	0.047	-0.003	-0.016	-0.010												
11)Advertising intensity <sub>t-1</sub>	-0.004	0.050	-0.008	-0.009	.0002	-0.006	-0.008	0.005	0.005	0.023											
12)Exporting experience <sub>t-1</sub>	0.131	0.020	0.067	0.033	0.035	0.001	-0.035	0.007	0.013	0.045	0.038										
13)Borrowing intensity <sub>t-1</sub>	-0.006	-0.050	-0.003	0.011	-0.007	0.013	0.081	0.008	-0.011	-0.001	.0003	0.022									
14)International technological resources <sub>t-1</sub>	-0.001	0.011	-0.001	0.004	0.025	0.081	0.033	-0.013	0.028	0.578	0.009	0.053	0.010								
15)Firm age <sub>t</sub>	-0.005	-0.117	0.009	0.012	-0.001	0.235	0.123	.0003	0.270	-0.026	-0.003	-0.042	0.014	-0.011							
16)Firm size <sub>t-1</sub>	0.189	-0.150	-0.035	0.031	0.063	0.309	0.264	-0.013	0.362	0.013	0.009	0.118	-0.019	0.090	0.198						
17)Medium-high tech <sub>t-1</sub>	-0.013	-0.031	0.019	0.018	0.008	0.045	0.004	0.001	0.093	-0.006	0.005	-0.025	-0.009	-0.004	0.136	0.055					
18)Medium-low tech <sub>t-1</sub>	-0.032	0.044	-0.011	0.006	0.005	0.043	0.021	0.010	-0.021	-0.022	-0.023	-0.014	-0.016	0.002	-0.004	0.120	-0.174				
19)Low tech <sub>t-1</sub>	-0.041	0.039	-0.026	-0.045	-0.006	0.036	-0.019	0.026	0.037	-0.002	0.012	0.008	0.004	-0.022	0.046	0.043	-0.171	-0.298			
20)Services <sub>t-1</sub>	-0.055	0.017	-0.023	-0.043	-0.023	-0.120	-0.016	-0.023	-0.088	0.024	0.025	-0.049	-0.028	0.006	-0.111	-0.214	-0.178	-0.309	-0.305		
21)Diversified <sub>t-1</sub>	0.008	-0.032	-0.014	0.016	-0.015	0.080	-0.013	-0.001	0.100	-0.001	0.003	-0.021	-0.005	-0.003	0.174	0.080	-0.031	-0.053	-0.053	-0.055	
Mean	0.055	0.259	0.006	0.051	0.023	0.028	0.014	5.819	0.308	1.399	0.864	0.127	0.010	0.094	29.17	4.291	0.091	0.232	0.227	0.240	0.009
Standard deviation	0.377	0.229	0.042	0.219	0.151	0.060	0.103	194.27	0.462	35.39	6.018	0.300	0.152	0.601	17.41	1.872	0.288	0.422	0.419	0.427	0.096
Minimum	0	0	0	0	0	0	0	-2500	0	0	0	0	0	0	3	0.039	0	0	0	0	0
Maximum	10	0.988	0.731	1	1	0.563	0.997	7533	1	1714.6	253.93	8.975	6.702	21.201	148	11.936	1	1	1	1	1

Observation N: = 2,453. Correlations greater than 0.029 are significant at least at  $p < 0.10$ .

**Table 2. Ownership structure and the extent of OFDI**

	Model 1	Model 2	Model 3	Model 4
Family ownership <sub>t-1</sub>	-1.329 (0.632) **	-1.338 (0.650) **	-1.847 (0.736) **	-1.820 (0.738) **
Overseas national ownership <sub>t-1</sub>	2.689 (0.991) ***	5.644 (1.836) ***	2.345 (1.008) **	2.333 (1.013) **
Family ownership <sub>t-1</sub> × Overseas national ownership <sub>t-1</sub>		0.002 (0.001) *		
Minority overseas national <sub>t-1</sub>			0.667 (0.283) **	0.738 (0.288) **
Minority overseas national <sub>t-1</sub> × Family ownership <sub>t-1</sub>			5.764 (1.400) ***	5.763 (1.387) ***
Minority foreign corporation <sub>t-1</sub>	0.695 (0.303) **	0.655 (0.301) **	0.554 (0.293) *	0.150 (0.463)
Minority foreign corporation <sub>t-1</sub> × Family ownership <sub>t-1</sub>				-0.028 (0.023)
Domestic institutional ownership <sub>t-1</sub>	1.878 (1.233)	1.914 (1.225)	1.957 (1.162) *	2.045 (1.172) *
State ownership <sub>t-1</sub>	-4.840 (1.565) ***	-4.832 (1.517) ***	-5.064 (1.593) ***	-5.032 (1.593) ***
Profitability <sub>t-1</sub>	-0.002 (0.001) *	-0.002 (0.001) *	-0.002 (0.001)	-0.002 (0.001)
Group affiliation <sub>t-1</sub>	-0.889 (0.288) ***	-0.912 (0.285) ***	-0.971 (0.294) ***	-1.003 (0.301) ***
Technological intensity <sub>t-1</sub>	0.001 (0.005)	0.001 (0.005)	-0.000 (0.006)	0.001 (0.005)
Advertising intensity <sub>t-1</sub>	-0.026 (0.074)	-0.025 (0.074)	-0.016 (0.068)	-0.017 (0.068)
Exporting experience <sub>t-1</sub>	0.241 (0.132) *	0.240 (0.134) *	0.238 (0.111) **	0.244 (0.110) **
Borrowing intensity <sub>t-1</sub>	0.166 (0.332)	0.164 (0.335)	0.163 (0.350)	0.159 (0.354)
International technological resources <sub>t-1</sub>	-2.427 (1.243) *	-2.421 (1.230) **	-2.678 (1.233) **	-2.710 (1.244) **
Firm age <sub>t</sub>	-0.009 (0.005) *	-0.009 (0.005)	-0.010 (0.005) *	-0.010 (0.005) *
Firm size <sub>t-1</sub>	0.805 (0.073) ***	0.809 (0.073) ***	0.834 (0.072) ***	0.830 (0.072) ***
Medium-high tech <sub>t-1</sub>	-0.660 (0.324) **	-0.653 (0.324) **	-0.648 (0.327) **	-0.653 (0.325) **
Medium-low tech <sub>t-1</sub>	-1.309 (0.289) ***	-1.314 (0.290) ***	-1.336 (0.285) ***	-1.344 (0.284) ***
Low-tech <sub>t-1</sub>	-1.355 (0.304) ***	-1.342 (0.304) ***	-1.406 (0.290) ***	-1.410 (0.289) ***
Services <sub>t-1</sub>	-1.834 (0.492) ***	-1.887 (0.476) ***	-1.967 (0.518) ***	-1.966 (0.517) ***
Diversified <sub>t-1</sub>	0.441 (3.135)	0.501 (3.394)	-0.444 (8.815)	-0.463 (8.793)
Constant	-4.806 (0.581) ***	-4.825 (0.593) ***	-4.844 (0.572) ***	-4.824 (0.568) ***
<i>Inflate equation</i>				
Exporting experience <sub>t-1</sub>	-7.199 (2.808) **	-6.892 (2.541) * **	-6.898 2.430 ***	-6.905 2.403 ***
Constant	1.146 (0.480) **	1.155 (0.500) * *	1.089 0.333 ***	1.084 0.332 ***
Log pseudolikelihood	-341.115	-340.282	-334.326	-333.983
Wald chi2	285.85***	288.21***	287.63***	297.72***

Robust standard errors in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. Observation N. = 2,453.

## Appendix

**Table A1. Zero inflated negative binomial: marginal effects and incidence rate ratios**

	Model A1	
	Marginal effects <sup>a</sup>	IRR
Family ownership <sub>t-1</sub>	-0.051	0.265
Overseas national ownership <sub>t-1</sub>	0.104	14.712
Minority foreign corporation <sub>t-1</sub>	0.027	2.004
Domestic institutional ownership <sub>t-1</sub>	0.073	6.541
State ownership <sub>t-1</sub>	-0.187	0.008
Profitability <sub>t-1</sub>	-0.0001	0.998
Group affiliation <sub>t-1</sub>	-0.034	0.411
Technological intensity <sub>t-1</sub>	.00001	1.001
Advertising intensity <sub>t-1</sub>	-0.001	0.975
Exporting experience <sub>t-1</sub>	0.165	1.272
Borrowing intensity <sub>t-1</sub>	0.006	1.181
International technological resources <sub>t-1</sub>	-0.094	0.088
Firm age <sub>t</sub>	-0.0003	0.991
Firm size <sub>t-1</sub>	0.031	2.238

<sup>a</sup> All continuous variables at mean values and all categorical variables at benchmark values (industry=high tech).



**PART FIVE:**

**Business groups' internationalization:**

**The role of the domestic geographical scope**

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**Abstract**

In this analysis of why business groups (BGs) internationalize, we look at the influence of BGs' domestic geographical scope on the extent of their outward FDI (OFDI). In particular, we adopt an organizational learning perspective. We borrow the concept of exaptation – a process whereby capabilities historically developed in a specific context are used in a different environment – from evolutionary biology. We argue that BGs exapt knowledge that is domestically developed to organize and manage geographically dispersed units across sub-national areas, so that they can engage in OFDI. As BGs increase their engagement in OFDI, OFDI experience becomes a substitute for the exaptation of domestically developed capabilities. We also find that the exaptation of domestically developed capabilities to enable OFDI critically depends on the BG's portfolio of domestic sub-national areas. We test our argument on a sample of 693 Indian BGs covering the period from 2001 to 2010.

The paper has been presented at the 2012 Linz SMS conference extension, 2012 Copenhagen Emerging Market Multinationals Conference and 2012 EIBA conference. Insightful comments from the research seminars' participants at the Department of Strategic Management and Globalization of Copenhagen Business School are gratefully acknowledged.

## 1. INTRODUCTION

Business groups (BGs) play a critical role in both emerging and mature markets (Khanna and Yafeh, 2005). These confederations of firms, which are referred to using a variety of terms such as Latin American *grupos*, Japanese *zaibatsus* and Korean *cheabols*, share a number of features regardless of their location. BGs are typically diversified across a number of industries, are usually associated with a single extended family and often control a substantial portion of a country's productive assets (Cuervo-Cazurra, 2006; Xu and Meyer, 2012). Although member firms remain legally independent, they rely on the network of social ties provided by the BG to coordinate their actions in product and factor markets (Granovetter, 1994). Specifically, BGs supply access to internal capital markets, government connections, intermediation functions, labor markets, reputation, and credibility to affiliated firms (Leff, 1978; Ghemawat and Khanna, 1998; Guillen, 1997).

On the basis of the idea that coordinated strategic action within a BG supports decisions on outward FDI (OFDI) at the group level, a number of studies have recently investigated the drivers of BG internationalization. These studies highlight the relevance of managerial resources and product-diversification strategies (Tan and Meyer, 2010; Kumar, Gaur, and Pattnaik, 2012; Gaur and Kumar, 2009). However, despite the widespread sub-national divides that BGs from large home countries have to face, this literature has overlooked the relevance of domestic geographical scope when analyzing why BGs internationalize. In response to the call for more sub-national analyses in the international business (IB) field (Nachum, 2000) and the increasing attention paid to the sub-national dimension (Tan and Meyer, 2011), we aim to advance this stream of research by focusing on the domestic geographical dispersion of BGs as a critical antecedent of OFDI.

In line with organizational learning theory (Fiol and Lyles, 1985; Levitt and March, 1988), we argue that BGs rely on experiential learning to internationalize. In this regard, we

identify *exaptation* as a specific learning process. Exaptation is a process documented by evolutionary biologists in which features adapted for a particular purpose in a specific environment are used for another purpose in a different environment (Gould, 1980, 1991). In particular, we follow the internationalization process (IP) model (Eriksson et al., 1997) in that we distinguish between country- and firm-specific types of international experience. The former concerns the firm's knowledge of how foreign businesses and institutions function in the target country, while the latter relates to experience with organizing and managing operations across space. We refer to this latter type of firm-specific knowledge as “experience in dispersed business management”.

Although country-specific knowledge, which is traditionally acquired through less complex organizational forms (such as exports), may enable organizations to increase their internationalization commitment, the perceived costs of engaging in more complex internationalization forms (such as FDI) may still be high because firms lack relevant knowledge about managing operations across space. Organizations that have an opportunity to acquire experience in dispersed business management at home will perceive lower internationalization costs and therefore increase their internationalization commitment by engaging in OFDI to a greater extent. In other words, organizations – such as BGs – that have developed the knowledge necessary to organize and manage geographically dispersed units across sub-national locations will exapt that knowledge in the international context and internationalize through OFDI to a greater extent than organizations that have missed such a domestic opportunity. Furthermore, as BGs gain complex international experience (i.e., both country-specific knowledge and experience in dispersed business management) through OFDI, experiential learning in international contexts becomes a substitute for the exaptation of domestically developed knowledge. Hence, the relevance of domestic geographical dispersion for additional OFDI declines.

In addition, we contend that the extent to which a BG exerts such capabilities in order to engage in OFDI depends on its portfolio of sub-national locations. Specifically, highly urbanized sub-national states are typically characterized by a higher resource endowment than less urbanized areas. For this reason, BGs primarily dispersed in highly urbanized sub-national states experience a supporting effect from the context and are more likely to engage in OFDI. In contrast, BGs primarily dispersed across less urbanized sub-national areas must deal with the local contexts' shortages and typically lack the opportunity to exapt knowledge in order to engage in OFDI.

The coexistence of different definitions of BGs (e.g., Fisman and Khanna, 2004) drives our decision to empirically focus on a single country. In particular, the Indian context serves as an excellent context for testing our argument. BGs are critical organizations in the Indian economy. In India, BG affiliation is not a legal construct, but extant research (Khanna and Palepu, 2000) has assessed and confirmed the reliability of the Centre for Monitoring of the Indian Economy (CMIE) classification of BG membership, which is based on the number of common shareholders, company announcements and shared interests.

After a period of institutional "closeness" (from 1948 until the early 1980s) during which organizations could only expand domestically, India has recently experienced a dramatic opening of its industries to international competition (Fisman and Khanna, 2004) and the increasing internationalization of BGs. Furthermore, in terms of the geographical diversity with which BGs must cope, India is a large country with uneven levels of economic development and significant variations in institutional quality across sub-national states (Ravallion and Chaudhuri, 2006; OECD, 2011). In addition, it is the world's third-most heterogeneous nation in terms of spoken languages (The Economist, 2012).

Our focus on domestic geographical scope advances IB theory and the studies of why BGs internationalize by improving our understanding of the spatial dimension in IB (Khanna

and Yafeh, 2005; Tan and Meyer, 2010; Gaur and Kumar, 2009; Kumar, Gaur, and Pattnaik, 2012). By setting our analysis in India, we also contribute to the debate on the merit of traditional IB theories for analyzing the internationalization of emerging market (EM) firms. In particular, we provide theoretical and empirical insights into the relevance of experience in dispersed business management for internationalization, and the role of home-location-specific assets in constraining and defining such knowledge (Narula, 2012). Our study supports the view that EM organizations internationalize gradually through a process of evolution (Ramamurti, 2009).

## **2. THEORETICAL BACKGROUND**

Research on internationalization has increasingly adopted an organizational learning perspective (Fiol and Lyles, 1985; Levitt and March, 1988). Furthermore, it has emphasized the critical role of experiential learning in international expansion strategies (Hutzschenreuter, Pedersen, and Volberda, 2007). In this perspective, internationalization is the outcome of a learning process in which knowledge and routines developed in relation to specific events are effectively applied and used when similar events are encountered (March, Sproull, and Tamuz, 1991). Routines include organizational rules, procedures, and conventions, as well as the underlying knowledge and belief structures (Levitt and March, 1988). Routines enable organizations to function by relying on codified scripts, which in turn lessens the amount of time and attention needed for conscious thought, speeds up decision processes in conditions of bounded rationality, and improves the success of subsequent trials (Cyert and March, 1963; Nelson and Winter, 1982). Organizations expand their routines and knowledge through experience (Levitt and March, 1988; Cohen and Levinthal, 1990). In particular, experiential learning helps organizations combine successful old routines with new ones (Levitt and March, 1988).

IB scholars have documented the relevance of experiential learning and capability accumulation for internationalization (Johanson and Vahlne, 1977; Kogut and Zander, 1993), and they have acknowledged the costs of this process. In particular, Eriksson et al. (1997) distinguish between foreign business and institutional knowledge, on the one hand, and the knowledge related to the organization and management of operations across space, on the other. The former reflects country-specific knowledge, while the latter is firm specific. The IP model (Johanson and Vahlne, 1977) primarily focuses on country-specific knowledge (Eriksson et al., 1997). In particular, internationalization is interpreted in the IP model as an incremental learning process in which initial expansion abroad through more simple forms of internationalization, such as exports, enables the acquisition of knowledge about preferences and tastes, languages, business practices, and national cultures (country-specific knowledge), and expands the firm's knowledge base and capabilities. As a result, country-specific experiential learning reduces the risks associated with further internationalization, provides a vehicle for acquiring knowledge of internal and external resources, and creates opportunities for combining them. A significant amount of literature has documented the critical role of country-specific experience in increasing the likelihood of success abroad and overcoming the liability of foreignness (Barkema and Vermeulen, 1998; Delios and Henisz, 2000; Zahra, Ireland, and Hitt, 2000).

However, in addition to costs related to the liability of foreignness (Zaheer, 1995), international expansion implies transaction and coordination costs, which increase with distance and organizational complexity (Jones and Hill, 1988). In this regard, a key organizational skill for internationalization is the ability to manage geographically dispersed resources (firm-specific knowledge) (Bartlett and Ghoshal, 1989), as organizations must be able to manage operations and sales in a new environment (Kogut and Zander, 1993). In particular, the knowledge-based view of the multinational enterprise (MNE) (Kogut and

Zander, 1993) acknowledges that experience accumulation and capability development shape incremental and evolutionary internationalization paths. In this perspective, the path-dependent creation of a rich social context within the firm drives international expansion. In particular, organizations need to learn how to deal with the complexity of geographical dispersion by legitimizing diverse perspectives, developing multiple coordination and innovation processes, and building a shared vision and individual commitment across units (Ghoshal and Bartlett, 1990).

This perspective suggests the relevance of acquisition of experience in dispersed business management for successful internationalization. In particular, experience in dispersed business management lowers the perceived costs of increasing internationalization commitment – for instance from exporting to undertaking FDI. More complex forms of internationalization, such as FDI, enable organizations to acquire both host country-knowledge and firm-specific experience in dispersed business management, but at a cost (Eriksson et al., 1997). The ability to acquire knowledge related to the geographical organization and management of firms' operations at home should therefore reduce the costs of an increase in internationalization commitment. However, this strategy is not available to all firms. Organizations from smaller countries lack an opportunity to acquire experience with the organization and management of operations across space domestically before they decide to adopt more complex forms of internationalization. In contrast, organizations from larger countries have opportunities to acquire experience in dispersed business management at home and eventually exapt that knowledge to FDI.

Large EMs, such as India, serve as excellent contexts for investigations of whether BGs' OFDI expansion relies on capabilities developed in the domestic context that are exapted to the international context. The institutional "closeness" that has characterized many EM in the past has generally produced a lack of OFDI experience among domestic

organizations (Luo and Tung, 2007). Traditionally, expansion in domestic markets across sub-national states was the only opportunity available to BGs and other domestic organizations in these countries (Fisman and Khanna, 2004). BGs' expansion abroad, therefore, primarily encompassed exports and local partnerships with MNEs from advanced countries (Luo and Tung, 2007). In recent decades, however, several EMs have experienced substantial institutional changes, especially in terms of liberalization and the opening of domestic economies to foreign opportunities (Cuervo-Cazurra & Dau, 2009). New possibilities for undertaking OFDI have therefore emerged for BGs located in EMs. BGs that are widely geographically dispersed on the domestic front may be better prepared to respond to these opportunities, as such organizations have acquired experience in dispersed business management through the organization and management of their operations within the home country.

### **3. HYPOTHESES DEVELOPMENT**

#### **3.1 The exaptation effect of domestic geographical dispersion**

The benefits and costs of geographical dispersion are the subject of an ongoing debate. On the one hand, transaction and coordination costs increase as the degree of geographical dispersion rises (Jones and Hill, 1988) due to coordination difficulties, information asymmetry, and incentive misalignment (Jakobsen and Onsager, 2003; Chakrabarti, Singh, and Mahmood, 2007). On the other hand, geographically dispersed organizations may be able to achieve higher efficiency by spreading risks (Kim, Hwang, and Burgers, 1993), and by enhancing their market power over their suppliers, distributors, and customers (Kogut, 1985). They can also learn more effectively by accumulating and transferring knowledge across distances (Caves, 1996; Argote, Beckman, and Epple, 1990). Although geographical concentration facilitates interaction across organizational units in terms of information



sharing, communication, and socialization (Benito, Lunnan, and Tomassen, 2011), firms that are more geographically dispersed have an opportunity to learn how to organize and manage operations across space. In this regard, expansion across locations requires specific routines and capabilities if spatially dispersed units are to be effectively coordinated.

In large, diversified countries, crossing sub-national domestic borders and operating domestically are likely to be at least as risky and expensive as crossing international borders (Boisot and Meyer, 2008). In large EMs, market imperfections exacerbate this aspect. Khanna and Yafeh (2005: 41) acknowledge the analogy between “internalizing cross-border transactions because of cross-border imperfections ... and internalizing within-country transactions because of local market imperfections.” In large and diversified developed and EM contexts, BGs that are geographically dispersed in the domestic market need to manage activities across diverse resource- and institution-endowed environments. In other words, BGs need to learn how to organize and manage their activities across space.

The development of organizational routines, procedures, and structures is critical to the functioning of an organization (Cyert and March, 1963). These knowledge assets are accumulated over time and influence subsequent behavior. As a result, firms’ accumulated experiential knowledge on how to organize geographically dispersed operations across different sub-national contexts influences their ability to go abroad. In fact, the learning associated with domestic geographical dispersion reduces the perceived costs of internationalization (Eriksson et al., 1997). This reasoning is in line with the idea that accumulated experience in internationalization is not only country-specific but also firm-specific, as it concerns “knowing what knowledge is required in different situations and different settings ... and where to seek this knowledge” (Eriksson et al., 1997: 345). Hence, domestic geographical dispersion equips BGs with the knowledge base and organizational

agility required to manage globally dispersed activities and their complexity. In particular, this domestic training should sustain BGs' internationalization.

This learning mechanism can be illustrated using the concept of exaptation, a concept originating from evolutionary biology (Gould, 1980, 1991). Organizations, like organisms, exapt (re-adapt) capabilities initially developed as adaptive responses to a specific environment for new uses in a different environment. In the context of bank acquisitions, for example, Marquis and Huang (2010) show that capabilities originally developed for bank branch management became useful for bank acquisition management and integration after an environmental shift. Exaptation refers to a situation in which the historical origin of a capability differs from its current applicability. In particular, the experience gained in large, heterogeneous domestic contexts can be re-adapted (or exapted) to different international contexts (not necessarily other EMs), thereby helping BGs getting the critical knowledge and organizational agility needed to internationalize.

In contrast, BGs that are geographically concentrated in their home country are likely to fail to learn about intra-firm geographical organization and management, and run the risk of becoming over-embedded in a narrow set of sub-national locations. The "easier to manage" conditions of geographically concentrated BGs prevent group and affiliate managers from developing the flexible management capabilities needed to run complex organizational structures across space. Therefore, our first hypothesis is:

*H1a: Domestic geographical dispersion is positively associated with OFDI for BGs lacking OFDI experience.*

Experience in international contexts through FDI eases the acquisition of both country-specific knowledge and experience in dispersed business management (Eriksson et al., 1997). BGs going abroad learn about foreign business and institutions, as well as how to organize and manage activities across space. Such knowledge about clients, markets, competitors,

governments, institutional framework, rules, norms, and values is critical if internationalization is to be sustained (Johanson and Vahlne, 1977). In addition, the level of organizational complexity in an international context is arguably greater than the organizational complexity in a domestic context, and should lead to improved organizational and management capabilities (Chakrabarti, Singh, and Mahmood, 2007; Calori, Johnson, and Sarnin, 1994).

Therefore, as BGs open up to internationalization opportunities, OFDI experience encompassing both country-specific knowledge and experience in dispersed business management can serve as a substitute for the experience in dispersed business management acquired through domestic geographical dispersion. In other words, the relevance of domestic geographical dispersion for successful internationalization decreases as BGs acquire complex internationalization experience through FDI. This leads to our next hypothesis:

*H1b: The effect of domestic geographical dispersion on the extent of OFDI declines as BGs gain OFDI experience.*

### **3.2 The contingent effect of sub-national heterogeneity**

Extreme disparities across sub-national states in terms of the level of development, resource availability, and institutional quality are typical in large countries where the differences between urban and non-urban areas are often substantial (Henderson, 2002). The level of urbanization is usually connected to the level of economic development and the quality of the institutional framework (Hoff, 2003; Henderson, 2002; Fan et al., 2009). Rural areas are often characterized by stagnation, delayed economic growth, and poor institutional frameworks, whereas the level of economic development and quality of institutions are greater in urbanized areas (Norton, 2003). Urban areas often offer local economies of scale as a result of the concentration of infrastructure and services (Coughlin, Terza, and Arromdee, 1991). In

particular, highly urbanized areas offer more and better business services, such as telecommunication and financing institutions (Baaij, van den Bosch, and Volberda, 2004; Klier and Testa, 2002).

Such disparities are remarkably evident in EMs. Khanna, Palepu, and Sinha (2005) demonstrate that the availability of venture capital in India, for instance, is limited to urban areas. In China, highly urbanized areas coexist with more rural areas, and some authors talk about “two Chinas” (e.g., Abebe and Masur, 2008).

Extant studies document BGs’ ability to operate across underserved sub-national areas (Fisman and Khanna, 2004). BGs are able to address the shortages associated with underdeveloped local contexts, as their affiliates can rely on formal and informal ties, which act as a social mechanism that facilitates resources sharing and reduces the likelihood of renegeing on contracts (Granovetter, 1994). However, geographical concentration in less urbanized areas requires BGs to devote their efforts to dealing with shortages in the domestic environment, and carries high costs in terms of coordinating units across space. The lack of a supporting local context requires BGs to make specific resource commitments. These resources might otherwise have been allocated to international expansion through complex internationalization modes, such as FDI. Hence, BGs dispersed in less urbanized sub-national areas will face a trade-off when allocating resources to domestic and international strategies. Moreover, those BGs that develop experience to successfully cope with low urbanized areas’ shortages would not be able to easily apply it outside those low urbanized contexts. In other words, BGs would not be able to exapt that knowledge to undertake OFDI.

In contrast, although BGs primarily dispersed in highly urbanized sub-national areas must bear the costs of managing their geographically dispersed networks, they also arguably experience more supportive local contexts. As a result, geographical dispersion across highly urbanized sub-national areas should allow BGs to devote resources to international expansion

through exaptation of the knowledge gained from organizing and managing domestic operations across space. At the same time, operating in highly urbanized sub-national areas can imply some disadvantages as well, such as for instance higher real estate costs than in low urbanized areas. However, BGs located in highly urbanized areas will be likely to benefit from the location despite these disadvantages, due to the available business services and easier access to resources, knowledge and networks. This availability of opportunities in highly urbanized contexts will positively influence how BGs exapt knowledge, so that they can more easily engage in OFDI.

We argue that the relationship between a BG's domestic geographical dispersion and the extent of OFDI is therefore contingent on the degree of urbanization in the sub-national areas in which the BG's units are dispersed. In this regard, we propose:

*H2: For BGs lacking OFDI experience, domestic geographical dispersion in highly urbanized sub-national areas has a greater positive effect on the extent of OFDI than in low urbanized areas.*

## **4. METHODOLOGY**

### **4.1 Data and sample**

We follow past studies in the strategy and international management fields (Chittoor et al., 2009; Elango & Pattnaik, 2007; Gubbi et al., 2010; Fisman and Khanna, 2004) in that we rely on the Prowess database (2011) from the CMIE to identify Indian BGs. Prowess provides annual financial data for over 7,000 Indian firms and information on firms' BG affiliations. To identify Indian BGs investing abroad, we used the Zephyr database from Bureau van Dijk, which collects information on cross-border deals. Data concerning the level of urbanization of different Indian states are drawn from the Indian Census (2001, 2011). As census data are

only available for 2001 and 2011, we use interpolation to derive the values for the missing years.

We focus on the period from 2001 through 2010 for which we have information on BGs' financial data, affiliation, and OFDI. The lack of data on OFDI prior to 2000 (Delios, Gaur, and Kamal, 2009; Kumar, Gaur, and Pattnaik, 2012) motivates our decision to start our focal period in 2001. As a result of erroneous (e.g., negative values for financial expenditures) and missing values, our sample covers 693 BGs, which we observe over a ten-year period, giving a total of 5,816 observations.

## **4.2 Measures**

### *Dependent variable*

We measure a BG's OFDI as the number of OFDIs the BG undertook each year from 2001 through 2010. In particular, we focus on cross-border acquisitions and mergers in which the final stake acquired by the Indian BG is greater than 10%, and we exclude portfolio investments. We chose to focus on brownfield investments because greenfield FDI are uncommon among Indian BGs (e.g., Bhaumik, Driffield, and Pal, 2010).

### *Independent variables*

To operationalize BGs' domestic geographical dispersion, we rely on the postal index number (PIN<sup>7</sup>) of the BG affiliates' plants (see Fisman and Khanna, 2004, for a similar measure). We consider both single- and multi-plant cases. To identify plant location, we refer to the last available year reported in Prowess on the assumption that plant location information is updated when the location changes. Single-plant units (88%) report information only on corporate headquarters (HQ), whose locations are based on the year

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<sup>7</sup> The PIN code is a six-digit code introduced in India in 1972 (see <http://www.mapsofindia.com/chhattisgarh/pincode.html>; <http://www.mapguide.in/pincode/>, consulted on March 30, 2012).

2010. We acknowledge that corporate HQ might move over time; however, the literature on HQ relocations (e.g., Strauss-Kahn and Vives, 2009) suggests that HQ relocation is rare (Klier and Testa, 2002), even within the home country, especially when the company is large, diversified, and old (Strauss-Kahn and Vives, 2009; Benito, Lunnan, and Tomassen, 2011). A relocation of the corporate HQ implies the movement of people and may be particularly expensive (Baaij, van den Bosch and Volberda, 2004). International relocation is also unlikely, with only 5-6% of multi-unit firms relocating their HQ to another country during their life spans (Strauss-Kahn and Vives, 2009; Voget, 2011). For instance, in the European Union (where differences among member countries might be comparable to those among Indian states), relocation is rare, and in the United States relocation within the same state is the most common option (Baaij, van den Bosch, and Volberda, 2004). Although the literature on HQ relocation mainly refers to advanced markets (Baaij, van den Bosch, and Volberda, 2004; Strauss-Kahn and Vives, 2009), we discussed this issue with an Indian IB researcher who confirmed that the practice of relocating corporate HQ is uncommon in India. Thus, we do not expect a substantial number of corporate HQ in our sample to relocate over time.

In line with extant research (Fisman and Khanna, 2004), we analyze domestic geographical dispersion at the state level. In India, there are two kinds of administrative entities: states and union territories. The latter are centrally administrated. The former have a significant degree of political autonomy, which implies a significant amount of heterogeneity that must be managed by organizations operating across states. Although we are aware of intra-state heterogeneity, intra-state-level data are not consistently available across India. In addition, studies on India document the validity of a state-level analysis (Fisman and Khanna, 2004).

To measure domestic geographical dispersion (*DGD*), we rely on extant research (see, e.g., Allayannis, Ihrig, and Weston, 2001) in that we use the one-year lag of an inverse

Herfindahl index. For each BG, this measures the dispersion across Indian states and is defined as:

$$DGD_{it} = \frac{-\sum_{j=1}^{19}(U_{ijt}^2)}{\sum_{i=1}^{693} U_{ijt}^2}, \quad (1)$$

where  $U$  is the number of plant units of BG  $i$  located in state  $j$  at time  $t$  (with  $i = 1, 2, \dots, 693$ ;  $j = 1, 2, \dots, 19$ ; and  $t = 1, 2, \dots, 10$ )<sup>8</sup>.

*OFDI experience* measures the one-year lag of the cumulative number of OFDI undertaken by the BG since the year 2000. A similar proxy has been used in past studies to account for the firm's OFDI experience, which is likely to augment the firm's foreign investments in the present (e.g., Takechi, 2011). We rely on this continuous variable to test H1b.

To test for the contingent effect of sub-national heterogeneity on the state level, we discriminate between BGs mainly dispersed across highly urbanized states and those dispersed across less urbanized states (*HU* and *LU*, respectively<sup>9</sup>). To this end, we use two binary variables, which account for states with (1) more than or equal to, or (2) less than or equal to the median urbanization level of the 19 Indian states considered (*BGs in HU* and *BGs in LU*, respectively). We exclude Delhi from both groups, as BGs commonly locate in this area, such that this location is not discriminatory across BGs. The two categories are not mutually exclusive. As a result, BGs may be geographically dispersed across both types of states. However, the overlap between the two groups does not undermine our analysis. In line

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<sup>8</sup> There are 28 states in India, but two states host none of the BGs in our sample. Thus, we consider 26 Indian states: Delhi, Haryana, Punjab, Himachal Pradesh, Jammu & Kashmir, Chandigarh, Uttar Pradesh, Uttarakhand, Rajasthan, Gujarat, Daman and Diu, Dadra & Nagar Haveli, Goa, Maharashtra, Madhya Pradesh, Chattisgarh, Andhra Pradesh, Karnataka, Tamil Nadu, Kerala, Pondicherry, Lakshadweep, Orissa, West Bengal, Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura, Meghalaya, Andaman and Nicobar Islands, Bihar, Jharkhand. However, the Indian postal system assigns a single PIN code to the following four groups of states: Goa and Maharashtra, Sikkim and West Bengal, Arunachal Pradesh and Assam, Manipur, Meghalaya, Nagaland, and Tripura. Thus, the final number of states considered amounts to 19.

<sup>9</sup> The *HU* states are Andhra Pradesh, Goa, Maharashtra, Gujarat, Haryana, Karnataka, Madhya Pradesh, Punjab, Sikkim, West Bengal, and Tamil Nadu. The *LU* states are Arunachal Pradesh, Assam, Bihar, Himachal Pradesh, Jammu and Kashmir, Kerala, Manipur, Meghalaya, Nagaland, Tripura, Orissa, Rajasthan, and Uttar Pradesh.



with our theoretical argument, there are no BGs with OFDI experience dispersed only in *LU*. Furthermore, our dependent variable is always zero for BGs without OFDI experience only dispersed in *LU*.

### *Controls*

Based on the distinction between the host-country-specific knowledge and the experience in dispersed business management required to successfully expand abroad (Eriksson et al., 1997), we control for the BG's country-specific knowledge that organizations acquire through initial, simple forms of internationalization, such as exports and collaborations with foreign investors (Johanson and Vahlne, 1977). To this end, our model includes the variables *export experience*, which measures the BG's one-year lag of the average level of exports relative to total sales, and *JV experience*, which captures the BG's past collaborations with foreign firms, as discussed in Kumaraswamy et al. (2012).

We also control for a number of factors related to BG- and location-specific characteristics that could influence BGs' OFDI. In terms of specific characteristics, a number of studies document the influence of industrial diversification on internationalization (Kumar, Gaur, and Pattnaik, 2012). Thus, we include *industrial diversification*, which measures the one-year lag of the inverse of the Herfindahl index calculated across the BG's industrial sectors. This variable captures the BG's dispersion across different industries (Jacquemin and Berry, 1979). We also include a number of controls that reflect the BG's managerial capabilities (Tan and Meyer, 2010). In particular, BG *profitability* is measured as the one-year lag of profits before depreciation, interest, tax, and amortization (PBDITA) divided by the BG's total income. More profitable BGs are expected to find it easier to undertake OFDI (Bhaumik, Driffield, and Pal, 2010). We also control for the BG's one-year lags of *R&D investments*, *marketing investments*, and *advertising investments* (Chang and Hong, 2002;

Kumar, Gaur, and Pattnaik, 2012). Older and larger firms may have access to more resources. Thus, we include the variables *age*, which captures the number of years since the incorporation of the oldest BG unit (Luo and Chang, 2005; Kumar, Gaur, and Pattnaik, 2012), and *size*, which is calculated as the one-year lag of the BG's total assets, as in Kumar et al. (2012). We also control for industry effects using a binary variable (*service*), which takes a value of 1 if the BG is mainly active in service industries and a value of 0 otherwise. The contribution of the service sector to India's growth was remarkable over the period under analysis (Eichengren and Gupta, 2011).

As far as location-specific characteristics are concerned, we include a control for *market saturation*, as BGs might decide to internationalize in response to saturation in the home market. We include a proxy for market saturation measured as the average industry-specific market share across BG affiliates in every year and in every sub-national state. Given our focus on domestic geography, we also account for the number of BG units in Delhi (*BG in Delhi*), as many large BGs are located in the capital (Encarnation, 1989). Such a location could imply relations with the government (Khanna and Palepu, 2000) that may eventually ease internationalization.

Finally, our model incorporates year dummies to account for time effects. We also include the one-year lag of the dependent variable (*lag OFDI*) to rule out potential endogeneity problems.

### **4.3 Results**

Table 1 summarizes the descriptive statistics and correlations for all of the variables included in the model. No variables exhibit distribution or correlation problems. The correlation between *OFDI experience* and *lag OFDI* may signal collinearity issues. However, as described below, we ran ad hoc tests, which ruled out such concerns.

- Table 1 about here –

To handle the preponderance of zeros in the dependent variable distribution, we estimate a zero-inflated negative binomial (zinb) model. This type of model is a two-step maximum likelihood estimator that, first, estimates a logit regression to predict the membership of each observation in the “always zero” group (inflate section) and, second, estimates a truncated negative binomial model. As no zinb model is available for panel data, we use a pooled cross-section of all observations available in the period from 2001 through 2010 and account for the time dimension by using year dummies and lagged independent variables. We also use Stata’s cluster option to control for BG’s fixed effects.

To check the actual existence of the “zero inflation” phenomenon and test whether the zinb model is preferable to a regular negative binomial model, we perform the Vuong (Vuong, 1989) test. For all of the estimated models, the test reports significant positive values, which indicate that the zinb model is preferable. Moreover, we check that the zinb is the best-fitting of all count data models (i.e., poisson, negative binomial, zero-inflated poisson, and zinb) and find supporting results.

To rule out potential collinearity problems, particularly the potential problem signaled by the correlation between *OFDI experience* and *lag OFDI*, we implement the regression collinearity diagnostic procedures proposed by Belsley, Kuh, and Welsch (1980), which is suitable for non-linear models. The matrix’s condition number that we obtain based on our independent and control variables (12.25) is well below the threshold of 30 that indicates multicollinearity problems (Belsley, Kuh, and Welsch, 1980). An inspection of the individual indexes does not reveal two or more variables associated with 50 percent (or more) variance decomposition portions. These findings enhance our confidence in our results.

Tables 2 and 3 report the results of the zinb models. We include *export experience* in the inflate section of the estimated models. In the inflation equation, this variable predicts the

probability of the dependent variable being “always zero” and is generally significant, as expected.

- Table 2 and Table 3 about here -

In Table 2, Model 1 and 2 report the sample split between BGs with and without OFDI experience, respectively. This step allows us to control for the joint effect of the firm- and country-specific knowledge the BG has acquired through complex forms of internationalization. At the same time, given that the zinb model is not linear, the split sample allows us to avoid interpretation problems. For BGs without OFDI experience, domestic geographical dispersion is positively associated with internationalization ( $p < 0.01$ ). Thus, BGs without OFDI experience exert their capabilities to organize and manage geographically dispersed affiliates in order to successfully engage in OFDI. H1a is therefore supported. It is worth noting that Model 1 reports the results of a negative binomial regression, instead of a zinb model, because it is based on a subsample of BGs that already have matured OFDI experience in the past. Therefore, by definition this subsample does not suffer from problems of zero inflation, which would instead justify the use of a zero inflated model. Table A1 in the Appendix reports the marginal effects and incidence rate ratios for Models 1 and 2.

- Table A1 about here -

Table 3 provides the results of the zinb model for the full sample and includes *OFDI experience* as a continuous variable. Model 3 is the basic model, which includes all independent and control variables. In Model 4, we add the interaction between geographical dispersion and OFDI experience. *DGD* shows a positive and significant coefficient in both Models 3 and 4 ( $p < 0.01$ ). In other words, the higher the level of the BG's domestic geographical dispersion, the greater the extent of its OFDI. In Model 4, the interaction term between *DGD* and *OFDI experience* is negative and statistically significant ( $p < 0.01$ ). This

indicates that the relationship between *DGD* and the extent of OFDI is weakened when the BG gains international experience through FDI. H1b is therefore supported.

To test H2, we consider BGs primarily dispersed in highly and less urbanized areas with and without OFDI experience. The results are presented in Table 4. As expected, *DGD* is never significant for those BGs with OFDI experience. However, *DGD* is statistically significant for BGs dispersed in highly urbanized sub-national states without OFDI experience ( $p < 0.01$ ). That is, BGs dispersed across highly urbanized sub-national states experience a supporting effect from the local context that leads to internationalization. One could argue that highly urbanized sub-national states might also represent contexts that are more similar to the host countries that Indian BGs typically target for their internationalization (i.e., advanced markets). Nonetheless, H2 is supported. Once again, we should point out that Model 5 and Model 6 report the results of negative binomial regressions, instead of zinb regressions, because they are both based on subsamples of BGs that already have matured OFDI experience in the past, and that therefore do not suffer from zero inflation.

- Table 4 about here -

In terms of the controls, our results are consistent with findings of prior studies.

#### **4.4. Robustness check**

To check the robustness of our results, we run alternative specification models. First, we run the zinb model but remove the BGs that are mainly active in industries controlled by the government. After 1991, industrial licensing in India was abolished in many industries. However, five industries (i.e., distillation and brewing of alcoholic drinks; cigars and cigarettes made from tobacco and manufactured tobacco substitutes; electronic aerospace and defense equipment; industrial explosives; and hazardous chemicals) remain subject to

compulsory licensing for safety and strategic reasons, according to the Industries (Development and Regulation) Act (1951), which was revised in 2010. The peculiar structure of these industries may influence the rationale behind BG's OFDI (Source: [www.dipp.gov.in](http://www.dipp.gov.in), Archive, SIA statistics). Then we re-run our estimations using an ordered probit model in which larger values for the dependent variables are assumed to correspond to higher degrees of OFDI. The order probit serves as an alternative to count models. In both cases, our findings are confirmed. The results are not reported but are available from the authors.

## **5. DISCUSSION**

### **5.1 Contributions**

Our study seeks to advance recent research on BG internationalization. In this regard, it focuses on domestic geographical scope as an antecedent of BGs' OFDI expansion. We draw on organizational learning theory and IB research distinguishing between host country-specific knowledge and firm-specific experience in dispersed business management as critical factors easing internationalization. In this regard, we make three contributions to the extant literature.

First, our focus on the sub-national dimension advances both the broad IB field and recent studies on BG internationalization (Tan and Meyer, 2010; Gaur and Kumar, 2009; Kumar, Gaur, and Pattnaik, 2012). In particular, our study answers calls for research that improves our understanding of the spatial dimension of IB activity (Shaver and Flyer, 2000; Nachum, 2000). Traditionally, IB has viewed spatial heterogeneity in terms of distance between countries, while consideration of sub-national level spatial heterogeneity has been lacking (Andersson et al., 2011). Our adoption of a sub-national perspective also contributes to the literature on BG internationalization. Previous analyses of why BGs internationalize has mainly focused on managerial resources and product-diversification strategies (Tan and

Meyer, 2010; Gaur and Kumar, 2009; Kumar, Gaur, and Pattnaik, 2012). In relation to EMs, a number of studies adopt a sub-national perspective (Tan and Meyer, 2011; Meyer and Nguyen, 2005), but these studies typically look at the sub-national dimension in relation to inward FDI. Our analysis advances this research by providing theoretical and empirical insights into the role played by domestic geographical scope in influencing outward FDI, and it answers the call for research on the impact of the home country on the internationalization strategies of domestic firms (Cuervo-Cazurra, 2011).

This study's second contribution concerns the debate on the merit of traditional IB theories when analyzing EM firms' internationalization. In particular, we provide theoretical and empirical support for the view that "internationalization requires knowledge assets, and the ability to be competitive in overseas markets depends on acquiring, maintaining, and developing these firms-specific assets ... or ownership-specific ... assets" (Narula, 2012: 189). Our findings show that successful internationalization requires firm-specific knowledge of how to organize and manage activities across space. This knowledge can be acquired through domestic geographical dispersion and then exapcted to international contexts. In addition, we illustrate the significant role of assets specific to the home location in constraining and defining the kinds of assets an organization possesses for internationalization (Narula, 2012). Along these lines, we show that the influence of domestic geographical dispersion is contingent on the portfolio of sub-national areas in which an organization is located.

Finally, we have discussed the role of domestic geographical scope as an important antecedent to BGs' OFDI. In this sense, our study supports the view that EM organizations gradually evolve from a small international footprint and simple structures toward increasing cross-border intensity and complex organizational structures (Ramamurti, 2009).

## **5.2 Limitations and future research**

The study suffers from some limitations, which in turn serve as suggestions for future research. A first limitation relates to the directionality of BGs' OFDI. Our analysis treats internationalization as a monolithic phenomenon, although extant studies have acknowledged that firms target both developed and developing countries when going abroad (Tallman, 1991; Rangan and Drummond, 2004). Future research may analyze whether the domestic geographical scope of firms influence the directionality of BGs' OFDI. Unfortunately, with regard to our data, the size of OFDI from India prevents this type of analysis.

Second, our focus on a single country might limit the generalizability of our findings. At the same time, the coexistence of different definitions of BGs across the world constrains cross-country comparisons of BG-related phenomena (e.g., Fisman and Khanna, 2004). Nevertheless, large EMs (such as the BRIC countries) represent interesting laboratories for testing our arguments, given the substantial presence of BGs and the internal heterogeneity typical of these countries. Furthermore, it would also be interesting to extend the focus of research to large, decentralized advanced economies. We are confident that our analysis can guide future studies on BG internationalization in this sense.



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## Tables

Table 1. Descriptive statistics and correlation matrix (5,816 observations)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
1) BG OFDI																		
2) Domestic geographical dispersion <sub>t-1</sub>	0.105																	
3) OFDI experience <sub>t-1</sub>	0.328	0.131																
4) BG units in HU <sub>t-1</sub>	-0.003	-0.259	-0.012															
5) BG units in LU <sub>t-1</sub>	-0.030	-0.006	-0.049	-0.359														
6) Export experience <sub>t-1</sub>	0.043	-0.053	0.130	0.007	0.015													
7) JV experience <sub>t-1</sub>	0.094	0.037	0.127	0.011	-0.014	0.012												
8) Industrial diversification <sub>t-1</sub>	0.074	0.301	0.101	-0.023	-0.046	-0.131	0.022											
9) Profitability <sub>t-1</sub>	0.003	-0.020	0.004	-0.008	0.004	0.013	0.001	0.002										
10) R&D investments <sub>t-1</sub>	0.002	-0.006	0.011	0.005	-0.005	0.016	-0.001	-0.005	0.001									
11) Marketing investments <sub>t-1</sub>	-0.005	-0.014	-0.006	0.020	-0.008	-0.022	-0.003	-0.014	0.000	0.006								
12) Advertising investments <sub>t-1</sub>	0.022	-0.001	0.022	0.010	-0.011	-0.020	0.022	-0.045	0.001	0.002	0.111							
13) Age <sub>t-1</sub>	0.075	0.215	0.088	0.079	-0.051	-0.151	0.030	0.294	0.007	-0.022	0.007	-0.014						
14) Size <sub>t-1</sub>	0.117	0.103	0.194	0.039	-0.021	-0.021	0.065	-0.056	0.002	-0.003	0.017	0.032	0.122					
15) Service <sub>t-1</sub>	0.058	-0.071	0.031	-0.011	-0.101	-0.069	0.039	-0.074	0.012	-0.016	0.052	0.090	0.018	0.104				
16) Market saturation <sub>t-1</sub>	-0.022	0.098	-0.045	-0.169	0.263	0.001	-0.014	-0.017	0.007	-0.018	-0.020	-0.025	-0.028	-0.031	-0.173			
17) BG in Delhi <sub>t-1</sub>	0.133	0.297	0.174	-0.503	-0.046	-0.052	0.050	0.142	0.005	-0.016	0.019	0.020	0.129	0.062	0.156	-0.025		
18) OFDI <sub>t-1</sub>	0.308	0.093	0.612	-0.007	-0.028	0.049	0.124	0.070	0.003	0.002	-0.002	0.013	0.074	0.130	0.035	-0.023	0.129	
Mean	0.045	-0.630	0.081	0.787	0.034	0.137	0.007	-0.540	-319.701	0.003	0.148	0.016	46	4336	0.384	0.081	1.338	0.042
Standard deviation	0.286	0.276	0.307	0.410	0.180	0.196	0.092	0.267	15455	0.037	2.966	0.164	29	34384	0.487	0.160	3.329	0.279
Minimum values	0	-1	0	0	0	0	0	-1	-1164189	0	0	0	2	0	0	0	0	0
Maximum values	8	-0.102	3.045	1	1	1.000	2	-0.123	40124	1.652	150.9	10	1851285115	1	1	1	39	8

**Table 2. Zimb model, sample split by OFDI experience**

	<i>BGs with OFDI experience</i> <sup>10</sup>		<i>BGs without OFDI experience</i>	
	Model 1	Model 2	Model 1	Model 2
	Coeff.	Standard error †	Coeff.	Standard error †
Domestic geographical dispersion <sub>t-1</sub>	1.117	(0.726)	1.529	(0.452)
BG in HU <sub>t-1</sub>	0.045	(0.397)	0.383	(0.360)
BG in LU <sub>t-1</sub>			-13.425	(0.435)
Export experience <sub>t-1</sub>	1.071	(0.646)	0.858	(0.845)
JV experience <sub>t-1</sub>	0.229	(0.277)	0.364	(0.888)
Industrial diversification <sub>t-1</sub>	1.937	(0.776)	1.471	(0.544)
Profitability <sub>t-1</sub>	0.000	(0.000)	0.000	(0.000)
R&D investments <sub>t-1</sub>	2.304	(3.101)	-0.238	(0.728)
Marketing investments <sub>t-1</sub>	-0.307	(0.203)	-0.419	(0.250)
Advertising investments <sub>t-1</sub>	-0.117	(0.365)	1.622	(0.535)
Age <sub>t-1</sub>	-0.000	(0.006)	-0.003	(0.004)
Size <sub>t-1</sub>	0.000	(0.000)	0.000	(0.000)
Service <sub>t-1</sub>	0.593	(0.278)	0.509	(0.240)
Market saturation <sub>t-1</sub>	0.061	(1.771)	-2.051	(1.287)
BG in Delhi <sub>t-1</sub>	0.042	(0.028)	0.067	(0.033)
OFDI <sub>t-1</sub>	0.304	(0.112)		
Year dummies	YES		YES	
Constant	-1.108	(1.381)	-3.476	(0.772)
Inflate				
Export experience <sub>t-1</sub>			-69.611	(115.586)
Constant			.836	(.502)
Observations	451		5.365	
Wald chi <sup>2</sup>	143.12		2457.68	
Lnalpha	-3.65	(.479)	2.034	(.341)

\*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1. † Robust standard errors based on observations clustered on the BG identity.

<sup>10</sup> To test H1a and H2, we transform *OFDI experience* into a dichotomous variable, in order to distinguish between BGs with and without OFDI experience (i.e., *OFDI experience* greater than or equal to 0, respectively).

**Table 3. Zimb model, full sample (OFDI experience as a continuous variable)**

	Model 3		Model 4		
	Coeff.	Standard error †	Coeff.	Standard error †	
Domestic geographical dispersion <sub>t-1</sub>	1.419	(0.391)	***	1.580 (0.388)	***
OFDI experience <sub>t-1</sub>	1.228	(0.153)	***	1.464 (0.175)	***
DGD x OFDI <sub>t-1</sub>				-0.360 (0.106)	***
BG in HU <sub>t-1</sub>	0.243	(0.253)		0.274 (0.257)	
BG in LU <sub>t-1</sub>	-14.127	(0.361)	***	-14.218 (0.364)	***
Export experience <sub>t-1</sub>	0.307	(0.546)		0.128 (0.541)	
JV experience <sub>t-1</sub>	0.127	(0.474)		0.119 (0.436)	
Industrial diversification <sub>t-1</sub>	1.265	(0.450)	***	1.247 (0.448)	***
Profitability <sub>t-1</sub>	0.000	(0.000)	*	0.000 (0.000)	*
R&D investments <sub>t-1</sub>	0.229	(0.570)		0.262 (0.564)	
Marketing investments <sub>t-1</sub>	-0.759	(0.341)	**	-0.698 (0.313)	**
Advertising investments <sub>t-1</sub>	1.116	(0.911)		1.102 (0.938)	
Age <sub>t-1</sub>	-0.001	(0.003)		-0.002 (0.003)	
Size <sub>t-1</sub>	0.000	(0.000)	*	0.000 (0.000)	*
Service <sub>t-1</sub>	0.555	(0.193)	***	0.504 (0.189)	***
Market saturation <sub>t-1</sub>	-1.746	(0.990)	*	-1.625 (0.989)	*
BG in Delhi <sub>t-1</sub>	0.040	(0.020)	**	0.044 (0.020)	**
OFDI <sub>t-1</sub>	0.130	(0.129)		0.163 (0.112)	
Year dummies	YES			YES	
Constant	-3.090	(0.597)	***	-2.975 (0.600)	***
Inflate					
Export experience <sub>t-1</sub>	-52.824	(30.828)	*	-46.514 (22.809)	*
Constant	1.233	(.402)	***	1.242 (.389)	***
Observations	5,816			5,816	
Wald chi <sup>2</sup>	3926.05		***	4108.48	***
Lnalpha	.631	(.316)	**	.547 (.364)	**

\*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1. † Robust standard errors based on observations clustered on the BG identity.

**Table 4. Zimb model, sample split by OFDI experience and state urbanization**

	BGs with OFDI experience <sup>11</sup>			BGs without OFDI experience					
	BG in LU			BG in HU					
	Model 5	Model 6	Model 7	Model 7	Model 8	Model 8			
	Coeff.	Standard error †	Coeff.	Standard error †	Coeff.	Standard error †			
Domestic geographical dispersion <sub>t-1</sub>	-1.448	(1.937)	1.116	(0.726)	2.019	(1.317)	1.477	(0.446)	***
Export experience <sub>t-1</sub>	2.650	(1.865)	1.086	(0.614)	-1.617	(1.517)	0.824	(0.864)	
JV experience <sub>t-1</sub>	1.816	(1.585)	0.231	(0.281)	-26.130	(2.048)	***	0.379	(0.892)
Industrial diversification <sub>t-1</sub>	2.812	(1.733)	1.948	(0.782)	-2.170	(1.308)	*	1.505	(0.553)
Profitability <sub>t-1</sub>	0.001	(0.001)	0.000	(0.000)	0.008	(0.005)		0.000	(0.000)
R&D investments <sub>t-1</sub>	-2.872	(5.307)	2.157	(2.742)	10.963	(15.561)		-0.231	(0.735)
Marketing investments <sub>t-1</sub>	-0.945	(0.939)	-0.304	(0.202)	-2.146	(5.165)		-0.409	(0.256)
Advertising investments <sub>t-1</sub>	-0.522	(0.835)	-0.125	(0.379)	-2.857	(7.841)		1.646	(0.540)
Age <sub>t-1</sub>	0.020	(0.020)	0.000	(0.005)	-0.041	(0.016)	***	-0.002	(0.004)
Size <sub>t-1</sub>	0.000	(0.000)	0.000	(0.000)	0.000	(0.000)	***	0.000	(0.000)
Service <sub>t-1</sub>	0.371	(0.561)	0.600	(0.264)	-0.019	(0.577)		0.499	(0.241)
Market saturation <sub>t-1</sub>	-4.250	(4.913)	0.051	(1.777)	-3.894	(2.301)	*	-2.156	(1.316)
BG in Delhi <sub>t-1</sub>	0.010	(0.040)	0.040	(0.020)	0.209	(0.095)	**	0.045	(0.025)
OFDI <sub>t-1</sub>	-0.858	(0.302)	***	0.306	(0.112)				
Year dummies	YES		YES		YES		YES		
Constant	0.916	(1.719)	-1.078	(1.398)	-1.616	(1.267)		-3.164	(0.680)
Inflate									
Export experience <sub>t-1</sub>					-5.424	(3.232)		-68.609	(112.844)
Constant					2.196	(.534)	***	.863	(.492)
Observations	98		451		1,143			5,169	
Wald chi <sup>2</sup>	35.76		**	142.44			***	110.49	
Lnalpha	-2.742	(6.817)	-3.60	(.477)	-15.068	(.538)	***	2.073	(.332)

\*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1. † Robust standard errors based on observations clustered on the BG identity.

<sup>11</sup> To test H1a and H2, we transform *OFDI experience* into a dichotomous variable, in order to distinguish between BGs with and without OFDI experience (i.e., *OFDI experience* greater than or equal to 0, respectively).

## Appendix

Table A1. Zinb, marginal effects and incidence-rate ratios (IRR) 12

	Model 1		Model 2	
	Marginal effects	IRR	Marginal effects	IRR
Domestic geographical dispersion <sub>t-1</sub>	0.187	3.005	0.007	4.615
BG mainly in HU	0.014	1.089	0.002	1.467
BG mainly in LU			-0.062	0.000
Export experience <sub>t-1</sub>	0.265	5.148	0.004	2.358
JV experience <sub>t-1</sub>	0.039	1.255	0.002	1.438
Industrial diversification <sub>t-1</sub>	0.319	6.536	0.007	4.355
Profitability <sub>t-1</sub>	0.062	1.440	.0002	1.064
R&D investments <sub>t-1</sub>	0.250	4.356	-0.001	0.788
Marketing investments <sub>t-1</sub>	-0.055	0.722	-0.002	0.658
Advertising investments <sub>t-1</sub>	-0.019	0.893	0.007	5.063
Age <sub>t-1</sub>	-0.029	0.841	0.012	0.080
Size <sub>t-1</sub>	.0002	1.002	.0001	1.012
Service <sub>t-1</sub>	0.097	1.772	0.002	1.663
Market saturation t-1	-0.013	0.928	-0.009	0.129
BG units in Delhi <sub>t-1</sub>	0.007	1.043	.0003	1.070
OFDI <sub>t-1</sub>	0.051	1.347		

<sup>12</sup> The variables *profitability*, *age* and *size* in table A1 have all been rescaled (i.e. divided by 1000) in order to get coefficients of a scale comparable with the rest of the variables.

**PART 6:**  
**THESIS CONCLUSIONS**

**1. Findings and contribution**

The present Ph.D. dissertation studies some internationalization issues of firms based in home-country contexts, which are characterized by interesting peculiarities. The aim of the Ph.D. thesis is to be a context-specific study that does not provide context-specific implications, but that rather aims at advancing general IB theory. In the case of studies focused on firms coming from EMs, this can be done with a research approach that places firms' internationalization in context and avoids an *a priori* stereotypization of both these firms and their home contexts. EMs offer indeed a unique laboratory for the study of many phenomena, an understanding of which can sharpen and extend our knowledge on firms' internationalization patterns in general. In this sense, I do not focus on the case of internationalizing firms from EMs as a forcefully emerged topic, but rather as an opportunity to extend current IB theory.

With this Ph.D. thesis, I therefore aimed at opposing the stereotypes that might emerge when studying EM firms, as stated in the first research paper of the thesis (Stucchi, 2012), where I underline the importance of including both traditional explanations and factors capturing the peculiarities of EM home-countries. Assuming stereotypes of EM and advanced market firms would be indeed rather misleading: in reality, there is significant variation in almost any dimension among both EM and advanced market firms. In fact, both types of firms do not follow "one way of internationalizing" but many different paths; by considering the heterogeneity of both EM firms and advanced market firms we overcome the temptation to give radical, sometimes oversimplified, explanations to some firms' internationalization issues.

The Ph.D. thesis also contributes in terms of refinement of the implemented research methods. All the research papers rely indeed on the appropriate modeling techniques and discuss assumptions, strengths and weaknesses of the followed methodology.

The study provides also implications for practitioners and policy makers, as explained in every of the different research papers of the Ph.D. thesis. In particular, the first paper can help EM firms' managers have a more rational perception of the need to match the motivations of foreign investments with the antecedents their firms possess. In addition, the paper can incentivize the managers to invest in relevant assets and in better understanding the local contexts when venturing into institutionally dissimilar host countries.

The second paper provides some managerial implications as well, since the firms' earlier access to the potential benefits of internationalization can be beneficial, but the impressive growth of EM firms might lead their managers to perform inaccurate strategic analyses. The paper works against this risk, highlighting the factors that should support a reduced time to internationalization.

The third research paper provides instead some practical policy implications: according to the paper's findings, government investments, which aim at attracting and supporting overseas nationals, should be worth the effort. The creation of supportive institutions and policies addressing this type of shareholders is indeed clearly fundamental.

Finally, the fourth paper provides significant findings that are expected to be particularly valuable for policy makers of large and diversified countries. This covers for instance the impact of policies in terms of urbanization, which definitely plays a role on the internationalization of homeland organizations.

The final contribution of every study of this type will of course depend on how the researched home-country contexts are grouped and how the subsequent generalization of the study will be made. The Ph.D. thesis shows indeed that it is possible to develop a good understanding of the



context and at the same time generalize a single-country study to the benefit of enriching general IB theory. The generalization is not necessarily to be done *a priori* with other EMs, just for the attractiveness that this label might have; it should instead be done depending on the research aims and contexts of analysis. This Ph.D. thesis' findings could for instance be extended to contexts that experienced critical institutional changes or substantial diasporic phenomena or to large and diversified countries, as shown by the last three research papers.

## **2. Limitations**

In the four papers included in this Ph.D. thesis is certainly possible to identify limitations that should be overcome by future research, and that will be addressed as the review process of the currently unpublished papers proceeds. First of all, some critiques can be moved to the first research paper, despite the fact that it is already published. For instance, it would have been possible to discuss more explicitly how to empirically test the acquisition strategies. In particular, given the prescriptive approach of the paper, I could have tested the performances of those firms with characteristics matching with the right acquisition strategies, and vice versa.

The second paper has also some limitations that should guide future research. For instance, it would be interesting to perform a similar study on the Chinese context and analyze whether and how the theoretical framework suggested in the paper could be potentially strengthened. Moreover, the paper does not look at the long term consequences of earlier versus later internationalizing firms, which might be interesting to incorporate in the study in the future.

One limitation of the third paper is instead that I do not know where the overseas nationals are located abroad – and how this might influence their investment decisions. This could be an interesting study to pursue in the future, together with cross-diaspora comparisons of different ethnic group characteristics. Although there are similarities, there are also significant differences among and within different communities of overseas nationals.

Finally, the fourth paper has some limitations too, since for instance it does not take into account the directionality of business groups' OFDI. Moreover, it would again be interesting to test the generalization of the paper's findings in a different single-country context.

More in general the Ph.D. thesis certainly overlooks some aspects; for instance, I do not study the political impact of the international emergence of the studied EM firms. In addition to this, I do not study whether the EM firms investing abroad are successful or not. At the moment, I indeed do not study the performance effects of internationalization. Finally, the secondary data used to test the hypotheses of this Ph.D. thesis have some limitations too, but having combined different data sources and performed numerous robustness checks, the final results are considered robust and reliable enough.

### **3. Future research on emerging market firms**

The present Ph.D. thesis answers some research questions but certainly also generates some venue for future research. Given the contribution of the research papers in this PhD thesis, it is indeed interesting to reflect on the future research beyond them.

In general, the emergence of these firms from EMs is not likely to be temporary, but rather it is likely to be an irreversible process that is worth studying and understanding in terms of implications for the established theory while it is still in its infancy. At the same time, the evolution of the global context will certainly have to be taken into consideration; the current global financial crisis for instance is likely to affect also the internationalization of firms from EMs, in terms of reduced capacity to finance ventures abroad and in terms of the FDI regulatory framework. In this sense, all the empirical tests in the Ph.D. thesis are based on internationalization activities that took place before 2011; new, more updated data might better reflect the effect of the global context on these investments. In any case, most likely EM firms are and will be important worldwide players in the future.

Certainly the academic interest in the topic has recently increased substantially; this can be seen also in terms of single-context studies (e.g. Liu, Buck and Shu, 2005; Deng, 2009; Sutherland, 2009). Hopefully the research interest on this topic will not decrease but will instead translate into even more single-country studies.

Future research will also probably reduce its bias in the discussions, for instance in terms of the advantages of firms from advanced markets versus the disadvantages of EM firms. This is at least one of the many issues that will have to be solved in the future (Xu and Meyer, 2012). Future research should indeed avoid old debates, and rather try to move the IB field forward.

Moreover, in order to overcome the current data challenges, more primary data will probably have to be collected. This would move the discussion on different questions, such as the motivations of specific foreign investments.

To conclude, the literature and interest on this topic has evolved rapidly and extensively. I have clearly experienced this, starting from when I began working on the Ph.D. project in 2010 until now. I hoped with this Ph.D. thesis to enter this evolution and inspire some future reflections on the value of EMs as research contexts.

Obviously, the ones analyzed in this Ph.D. thesis are only few cases of the internationalization issues that can be studied in EM contexts. One can think of many other examples in which EMs would serve as valuable research environments for studies of issues that are not necessarily unique to EMs, but which are more widespread, visible or easily accessible in these countries. I hope this Ph.D. thesis contributes to a better understanding of how researchers can take advantage of the many opportunities available for conducting profound, insightful studies into the contexts of EMs.

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