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Emerging market multinational companies and internationalization: the role of home country urbanization

Emerging market multinational companies and internationalization:

The role of industry internationalization and

home country urbanization[1]

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[1] The authors acknowledge important discussions on these issues with Klaus Meyer and Tomek Mickiewicz, as well as excellent research assistance by Maria Bytchkova. The paper was presented at the Association for International Business Conference in Vancouver 2014 and Copenhagen Business School; any remaining errors are our own.

Abstract

This paper furthers our understanding of the role of contextual conditions influencing internationalization of emerging market multinational companies (EMNCs). We develop a multilevel theoretical framework for investigating the role of contextual factors at home country as well as industry level for EMNC international expansion. We propose two new factors to explain internationalization of EMNCs, namely firms' financial strength and home country urbanization, neither of which has been used previously in the international business context. Our hypotheses focus primarily on moderating effects at the different levels of analysis. The empirical counterpart studies the internationalization of 592 EMNCs from 18 different countries in 2010. Our findings confirm that EMNCs from countries that are highly urbanized are more likely to internationalize. However, while urbanization increases the proclivity of financially strong firms to internationalize, it decreases the positive association between firm level intangible resources and internationalization, highlighting the importance of paying attention to urbanization forces when studying international behavior of emerging market firms.

Keywords: Emerging market multinationals, internationalization, home country effects, urbanization, financial strength, cross-classified, multilevel modeling

Emerging market multinational companies and internationalization: The role of industry internationalization and home country urbanization

Introduction

Emerging market multinational companies (EMNCs) are an increasingly important phenomenon in international business (Gammeltoft, Barnard, Madhok, 2010; Hoskisson et al., 2013). The share of world foreign direct investment (FDI) outflows from developing countries rose from 6.2 percent to 32 percent between 1980 and 2010, and reached $468 bn. out of a global total of $1354 bn. in 2014 (35%) (UNCTAD, 2015). But what drives the internationalization of EMNCs? Theory proposes that MNCs undertake outward FDI when they have specific resources and capabilities that they can transfer and exploit across international markets. These have been clearly identified for MNCs from developed economies (Dunning, 1993) but are at first sight less obvious for firms from emerging markets (Rugman & Nguyen, 2014). Scholars have suggested that they might include operational capabilities of particular relevance in emerging markets, such as the ability to function effectively in challenging institutional environments (Verbeke & Kano, 2012) or developing capabilities in 'frugal innovation' which generate new products initially designed for emerging markets, while also enabling entry into niches in developed economies (Govindarajan & Ramamurti, 2011). Others have discussed capabilities in managing dispersed value chains and labor-intensive manufacturing processes (Ramamurti, 2012).

The literature has taken less account of industry specific and home country contexts as drivers of EMNC internationalization, especially in the ways that they might moderate the impact of firm specific capabilities on internationalization (Jormanainen & Koveshnikov, 2012). This paper seeks to

further our understanding of the specific contextual conditions that form the basis for EMNCs ability to expand internationally. We do this with particular reference to a key variable in the development economics and economic geography literatures, which has not previously been used in the international business field, namely urbanization.

Urbanization, the share of the population in urban areas, has been linked with clusters of firms and resources as well as deeper and more complex market structures (Rosenthal & Strange, 2004). Moreover, since Porter's (1990) path breaking work, the globalization of markets and industries has further changed the competitive conditions facing firms when they internationalize (Buckley & Ghauri, 2004). Hence each country can be thought of as having a unique configuration of economic and institutional factors which set the context for firm internationalization. While both home country institutional environment, and to a far lesser degree industry globalization, have been studied in isolation with regards to firm internationalization, to our knowledge, no empirical studies exist that explore the impact of urbanization and the interaction of firm, industry and home country effects on internationalization in the context of emerging market countries.

Emerging markets are typically characterized by institutional voids (Ghemawat & Khanna, 1998; Khanna & Palepu, 2000) which raise the transactions costs of doing business. A significant example of institutional voids is poorly developed market-supporting structures such as weak property rights or the absence of external finance; these are argued to influence the balance of advantage in the firm's "make or buy" decision in favor of internalization, thus leading to the emergence of business groups (Khanna and Rivkin, 2001). Moreover, though they are frequently treated together, there is actually great heterogeneity in the business environments of the countries from which EMNCs originate, affecting both the development of firm specific capabilities and the ability of firms from different contexts to exploit them. Thus, it is now recognized that even the BRICs (Brazil, Russia, India

and China) differ widely in the specific configurations of home country institutional environments (O'Neill, 2012) and the variance in contexts increases further when we widen our scope to consider the full range of emerging markets including countries from Central Asia and Africa (Estrin & Prevezer, 2010; Hoskisson et al., 2013). This variation influences EMNCs ability and proclivity to expand internationally. International business scholars such as Peng et al. (2008) have focused on levels of development and institutional heterogeneity as key home country phenomena affecting internationalization strategies. We use transactions cost theory to extend the range of variables characterizing emerging economies to include urbanization, arguing that more urbanized environments, with their agglomerations of resources and customers, relax the constraints imposed on the development of resources within EMNCs by institutional voids, providing firms with an additional impetus to internationalization.

The paper makes the following contributions to the international business literature. First, our paper identifies theoretically and empirically a new home country factor – urbanization – which drives EMNC internationalization directly, as well as influences the way that firm specific resources influence expansion in global markets. Furthermore, we do this within a multilevel theoretical framework for investigating the importance of contextual factors at the home country and industry level that may act as either enablers or barriers to firms' international expansion. The multilevel analysis also allows us to disentangle the specific country- and industry level effects that combine with firm level sources of competitive advantage to propel EMNCs abroad; allowing for country, industry, and firm-level variance greatly improves our ability to isolate specific characteristics that may help or hamper firms in their efforts to internationalize. Our unique empirical study of 592 EMNCs from 18 different countries represents one of the first truly comprehensive investigations of EMNC international expansion,

allowing us to draw wide-ranging conclusions regarding EMNCs more generally as opposed to the often single-country studies in this literature (Jormanainen & Koveshnikov, 2012).

We establish that all three levels of analysis – country, industry and firm – are needed in a comprehensive explanation of the drivers of firm internationalization. Such theorizing helps unravel the complex interplay between multiple dimensions of firm, industry and home country factors that may act as opportunities or constraints when firms expand beyond their national borders. We use variance decomposition to show that all levels are important independent and inter-related drivers of internationalization; 49% variance is at firm level while the remaining 51% are at industry and home country levels. Multi-level modeling with cross classified nesting represents a more accurate way of modeling the complex influences of different level factors pertaining to firm internationalization (Andersson, Cuervo-Cazzura & Nielsen, 2014; Nielsen & Nielsen, 2010). We illustrate the importance of this novel methodology to IB phenomena and partake in the ongoing debate in the IB literature concerning methodological development (Wiersema & Bowen, 2011).

The paper progresses in the following way. First, we develop a multilevel theoretical framework for the influence of home country and industry contextual conditions on EMNC internationalization and derive testable hypotheses. Specifically, we identify home country urbanization and global industry internationalization as contextual factors that together with specific firm-level resource provisions combine to influence EMNCs proclivity to internationalize. Next, we empirically test the framework on a sample of the world's largest EMNCs from 18 countries and finally discuss findings, implications, limitations and future research directions.

A multilevel framework for the influence of urbanization and industry internationalization on firm internationalization

Firm resources and internationalization

It is well known that firms expand internationally where they can redeploy their internationally-transferable proprietary resources and capabilities to both exploit and explore their resource base (Barney, 1991). The resource-based view (RBV) focuses on differences in idiosyncratic firm characteristics and conceives of internationalization as a mechanism for firms to appropriate international rents from their unique and valuable resources such as technological capabilities, brand names and scientific knowledge. Thus resources already possessed by the firm can be deployed in a wide variety of marketplaces, achieving economies of scale, scope and production rationalization (Hitt, Hoskisson, & Kim, 1997), as well as balancing the risks incurred overseas due to greater managerial complexity and liability of foreignness (Tseng et al., 2007).

For MNCs in developed economies, intangible assets with public good properties, most notably R&D and marketing capabilities, have been identified as the key ones to build unique technological capabilities and generate rent streams through international expansion (Dunning, 1993; Kotabe, Srinivassen & Aulackh, 2002). Knowledge assets such as the fruits of R&D can be exploited throughout the multinationals network of subsidiaries generating scale economies, while the larger size permitted by internationalization allows the sunk costs of R&D to be spread around more widely (Aswicahyono & Hill, 1995). However, it is sometimes argued that EMNCs do not possess substantive intangible resources because they originate from home countries with relatively low levels of economic and technological development. This observation has led to theoretical work suggesting that FDI by EMNCs primarily aims to *create* resources and capabilities rather than to exploit them (Rugman, 2009). Foreign investments are undertaken to strengthen firm capabilities not only in the local market,

but in its global operations, providing for example advanced technologies that strengthen the firm's competitive position vis-à-vis its competitors back home; the so-called 'springboard investments' (Li, Li & Shapiro, 2012; Luo & Tung, 2007). However, even from this perspective R&D resources remain important for the internationalization of EMNCs because the ability of a firm to absorb external technology depends on its own prior R&D efforts (Kafouros & Buckley, 2008).

It has been noted that access to financial resources enables or constrains the ability of firms to develop, explore and exploit their intangible resources on an international scale (Feinberg & Phillips, 2003; Harrison & McMillan, 2003). Firms may face difficulties in attracting capital for R&D projects because they have volatile returns. Since lenders do not share in the upside returns, access to external capital is likely to be poor. Moreover, there are information asymmetries between firms and potential investors because R&D projects are hard to evaluate and insiders may have better information about the true prospects. Surveys of emerging market companies indicate that lack of finance is a major obstacle to investment and innovation activities, including R&D and international diversification (Hall, 2002; Harhoff & Korting, 1998). Forssbaeck and Oxelheim (2008) argue that financial resources and capabilities such as access to equity or a good credit rating are important in explaining FDI. Developed economy multinational corporations may have access to lower cost financing because their technologies or brands enable them to overcome these information asymmetries in capital markets that make investment opportunities difficult to evaluate (Fazzari, Hubbard, and Petersen, 1988).

Financial resources are also important for undertaking FDI itself (De Maeseneire &Claeys, 2012). Returns are risky which may militate against the use of debt finance, especially for firms lacking in collateral. Once again there are problems of information asymmetries, in this case evaluating the business prospects of distant locations. FDI usually involves sinking costs into assets which have low resale value, such as foreign market analysis, legal consulting services, translation of documents,

adapting products to host markets, travel expenses or the costs of setting up a foreign sales channel. Thus, foreign direct investment is made easier in firms which have good access to capital, strong balance sheets and financial resources and are able to leverage their financial muscle.

Financing constraints may apply to all firms undertaking FDI but are likely to apply with particular force in emerging markets where a weaker financial market is one of the key indicators of the level of development (Peng, Wang & Jiang, 2008; Meyer, et al., 2009). Indeed, as noted by Bhaumik, Driffield and Pal (2010), the institutional weaknesses of emerging markets have pronounced effects on both the ownership structures and internationalization strategies of EMNCs. This is because the deficiencies in the capital market mean that there are fewer banks, and these are not necessarily going to lend on the basis of return but may instead focus their priorities towards for example state owned firms (if the banks are also state owned; see Tian & Estrin, 2007) or towards the business groups to which the banks belong (Khanna & Rivkin, 2001).

Hence, financial strength within the firm becomes a key resource in emerging markets, because debt is much less available and on much stricter terms. This is because institutional weakness increases the risks born by creditors and exacerbates asymmetries of information between borrowers and lenders, especially with respect to R&D or FDI projects. Thus, deficiencies of property rights in general (Khanna & Palepu, 2000) and especially of intellectual property rights enforcement mean that the ability of external lenders to obtain a return from uncertain projects is brought even more into question (Henisz, 2002). Moreover, weaknesses of corporate governance imply lower levels of transparency and monitoring of firms than would apply in developed economies (Wright et al., 2005), which exacerbate further the information asymmetries restricting the supply of external finance to projects that might foster internationalization. In this emerging market environment, firms must rely even more on their own internal financial resources than in developed economies. Thus financial strength is likely to be

especially associated with EMNE's ability to internationalize. We will argue below that the influence of these firm level factors will be contingent upon particular industry and country level contexts.

Home economy context; urbanization, firm level resources and internationalization

Much of the literature on outward FDI from emerging markets has focused on issues of locational choice and therefore the characteristics of host economies, mainly with reference to EMNCs' search for strategic assets (Li et al., 2012; Luo & Tung, 2007). The main exception has been a focus on specific firm capabilities which have been developed in reaction to the local context, notably weak institutions, for example skills in in handling the dangers and threats from corruption. Such capabilities may initially contribute to attaining competitive advantages locally but can later become a foundation for international expansion into other emerging markets with similar market imperfections; for example similar institutional conditions (Cuervo-Cazurra & Genc, 2008; del Sol & Kogan, 2007; Cuervo-Cazurra & Ramamurti, 2014). Less attention has been paid to the impact of other key characteristics of the home economies in which EMNCs are based, or to the way that these interact with resources of the firm in accelerating or hindering internationalization. This is a serious deficiency because there is great diversity of business environments in emerging markets, much more so than between developed economies (Acemoglu & Robinson, 2012), and relatively few of the central characteristics have been explored in the international business literature.

The economic geography and development economics literatures have focused considerable attention on one indicator of agglomeration effects and market depth in emerging markets, but which has so far been ignored by international business scholars; namely urbanization. Urbanization is an important element of economic development and therefore a significant but underexplored phenomenon in our understanding of emerging markets (Henderson, 2003; Moreno-Monroy,

2012).Though there are a number of possible measures, urbanization is usually conceptualized around the proportion of a national population that lives in cities. In some development models, the movement of labor from the countryside to cities indicated by urbanization captures the process of industrialization itself; the transfer of labor from the agricultural to the industrial and service sectors (Lewis, 1954). Indeed, the relationship between economic development and urbanization has been seen as central to national economic growth and to the evolution of firm growth (Jacobs, 1984; Henderson, 2003). However, while levels of urbanization are associated with GDP per capita, Bloom, Canning and Fink (2005) find no direct relationship between urbanization and economic growth; they argue that the benefits of scale economies and deeper market structures in more urbanized societies may be offset by overcrowding and environmental degradation. Nonetheless, the central role of cities in economic growth via various agglomeration effects, with firms benefiting from proximity with each other and with key scarce resources including skilled labor and managerial talent, has been recognized since Hall (1966) and Sassen (1991; 1994), and more recently linked to location of FDI by MNCs (Goerzen, Asmussen & Nielsen, 2013).

Our approach builds on the central role of urbanization in development but focuses on the ways that large cities provide EMNCs with advantageous contexts facilitating the development of resources significant for their internationalization. These advantages are specific to emerging markets; MNCs from developed economies do not benefit from these phenomena. This is because emerging markets are characterized by institutional voids (Khanna & Palepu, 2000) that increase the transactions costs of doing business. We have already noted that institutional voids may initially contribute to attaining competitive advantages locally but can later become a foundation for international expansion into other emerging markets with similar institutional conditions (Cuervo-Cazurra & Genc, 2008; del Sol & Kogan, 2007). Here, we consider how higher levels of urbanization act to reduce transaction costs in

key areas of resource development, allowing firms in such environments to develop superior capabilities than their counterparts in less urbanized countries. We argue that the advantages conferred via urbanization are of less importance in developed economies because transaction costs in developing capabilities are lower and markets work more effectively.

Urbanization entails the agglomeration of skills, talents and resources into a single location, thereby providing for urban firms external economies of scale that can reduce the cost of doing business and increase productivity and competitiveness, the precondition for internationalization (Caves, 1996). Agglomeration economies are argued to operate across industries because as firms operate closer together in industrial space, the potential for their production interaction increases (Glaeser et al., 1992). Urban areas thus attract numerous well-educated workers, who believe that their chances of being continuously employed are higher than in rural areas. But once in cities, they develop skills and talents working within and across industries which further strengthens their capabilities and deepens the talent pool.

The geographic mechanism relates to reduced distance and therefore cost of operation (Rosenthal & Strange, 2003). For example, cities can support a wider range of business services (accounting, legal, consulting, etc.) than found in rural areas, and these services improve the likelihood that other businesses will survive and succeed (Sassen, 1991; 1994). This helps to counter the impact of institutional voids generic to emerging markets. Metropolitan areas also provide infrastructure-related advantages to firms in terms of their ability to supply customers, with high density of consumer demand and lower costs of advertising and making consumers aware of product offerings. Distribution strategies (including for emerging markets issues of logistics such as transportation delays, adequate warehousing facilities and insurance costs) are also relatively easier for firms based within cities as the time and distance required to complete the transactions is reduced.

Finally, the temporal effects operate via learning, with individual and firm performance over time having a path dependency related to the possibilities for interaction and exchange, which are enhanced in the urban environment (Glaeser et al., 1992). We have noted that institutional voids, in particular the poor availability and ability to develop key resources such as skilled labor, management and business services as well as costs of marketing and distribution, may hinder the evolution of firm level capabilities in emerging markets that foster successful entry to global markets. However, more highly urbanized emerging economies create contexts in which the relatively higher transaction costs generated by these voids may be compensated for by the external economies and agglomeration effects within large conurbations (Rosenthal & Schwarz, 2004). While urbanization yields the same benefits to firms operating in developed economies, these are not constrained in the first place in their internationalization strategies by institutional voids.

Asmussen, Goerzen, and Nielsen (2013) propose that urbanization in the *host* economy provides mechanisms to overcome the liability of foreignness. Here we essentially make the opposite argument; firms from more highly urbanized countries are subject to location-specific advantages related to access to logistics, services, customers, cosmopolitanism and agglomeration effects which endow them with the ability to internationalize more easily (Freeman, Styles, Lawley, 2012). In practice, the vast majority of large firms (other than certain resource companies[2]) are predominantly located in large cities. Thus we find that globally 34% of all large firms (revenue greater than $1 billion), from emerging markets and developed economies combined, are located in only 20 cities in the world, and more than 80% in the largest 100 cities (McKinsey, 2013)[3]. Thus, the level of home

[2] Resource companies are excluded from our sample.

[3] These arguments may pertain whether or not companies are located in the cities because even firms located outside the cities can draw on the international infrastructure (access to harbors, airports etc.) as well as services and skilled labor force in order to internationalize(Freeman et al., 2012).

country urbanization will largely accelerate the process of EMNC - but not developed economy MNC - internationalization, primarily through a variety of agglomeration effects which overcome institutional voids and thereby assist firms in exploiting scale economies and provide access to key scarce resources (Rosenthal & Strange, 2001). Urbanization provides emerging markets firms with a context to develop their own business advantages in such a way as to enhance their capabilities for internationalization:

Hypothesis 1: In emerging markets, firm internationalization is positively associated with the level of urbanization in the home country.

Urbanization may also have indirect effects on firm internationalization by influencing the ways in which particular firm-specific resources provide advantages in the global marketplace (Krugman, 1980). However, the direction of the moderating effects of urbanization on firm strategy depends upon whether the resource or capability being exploited is impacting internationalization primarily via the firm's process of production and supply, or upon the firm's comparative advantage with respect to consumers. Higher levels of urbanization generate agglomeration effects in terms of company resources which mean that a firm's given capabilities, for example in R&D and innovation, have an enhanced effect on its productivity and performance, thereby improving its international competitiveness (Rosenthal & Strange, 2004). However, urbanization also implies greater and more densely crowded numbers of consumers in the home economy, generating agglomeration effects of marketing that are provided through personal communication and crowd learning. In this latter case, the external benefits of operating within larger cities benefit the profitability of meeting domestic demand, and therefore act to crowd out potential internationalization strategies.

Consider firms that seek to internationalize on the basis of the exploitation of R&D investment. We argued previously that agglomeration effects in emerging markets, especially in terms of the quality and supply of inputs such as scarce skilled labor, would enhance the firm's productivity and hence its international competitive advantage (Chubarov & Brooker, 2013). Moreover, EMNCs that invest heavily in R&D may be motivated to seek to exploit these capabilities through international diversification in order to spread the fixed costs around larger numbers of potential consumers. However, this process may be offset in highly urbanized home countries because urbanization also crowds out some of the internationalization advantages that EMNCs accrue from their firm-specific R&D capabilities. This is because increasing urbanization may also change the balance of advantage between satisfying home and foreign demand via agglomeration effects from the scale of the home market (Glaeser, Kolko, Saiz, 2001).

Urban consumers are usually regarded as more sophisticated than their rural counterparts. This implies that they will be more willing to try new products and technologies, and more open to change and learning, including from their peers. This, in turn, means that the rate of dissemination of information about new products will be faster, generating earlier adoption. Such factors will be of particular relevance to firms whose capabilities are based relatively more on R&D activities, because their markets and their product lines are likely to turn over more rapidly. Furthermore, the concentration of population and the higher density of consumers lead to lower costs of distribution and ease of supply in more urbanized emerging markets (Rosenthal & Strange, 2004). This implies that the relative profitability of exploiting firm resources to satisfy domestic demand, as against foreign demand, is shifted in favour of the former. Hence, other things being equal, multinational firms in more urbanized countries with stronger R&D capabilities will pay relatively more strategic attention to the home market over international markets. Thus, as the level of urbanization increases these firms may

find it increasingly less profitable to leverage their R&D advantages across international borders due to home market competition and the aforementioned development of the home market customer base. Essentially, firm level intangible resources become less important as driver of internationalization for EMNCs originating from urbanized countries as the level of urbanization itself increases. Hence:

Hypothesis 2a: In emerging markets, firm internationalization is on balance less likely for firms with stronger intangible resources that originate from counties with higher levels of urbanization.

Financial resources play a different role in EMNC internationalization strategies; one where the agglomeration effects enhance firm level resources strengths without the offsetting crowding out effects. Capital market institutions tend to be concentrated in urban centres (Sassen, 1991). This is partly a consequence of the availability of skilled and educated workers, of the type required for the complex and sophisticated tasks of modern banking and lending. It is also because of the importance of agglomeration effects and externalities in the financial sector; the problems of asymmetries of information can to some extent be addressed through informal networks but these require scale and very low levels of distance in order to work (Glaeser et al., 1992; Porter, 1986). Finally, financial institutions tend to gather in particular locations because the services upon which they rely to function – lawyers, accountants, analysts – are there; this is an even greater benefit in emerging markets where institutional voids imply that these capabilities are hard to find, rare and expensive (Khanna & Palepu, 2000). Moreover, the large firms as well as the state agencies who provide the capital markets with the bulk of their business (McKinsey, 2013) are also located in cities.

As argued above, especially in emerging markets, firms that build capabilities in financial management will be able to develop a stronger balance sheet, in the sense of relying relatively more on

equity to finance foreign investment. Their stronger internal financial resources can be used to implement internationalization strategies using their superior financial resources to overcome liabilities of foreignness and to exploit for example scale economies across locations (Cuervo-Cazurra & Ramamurti, 2014). Such a strategy relies on greater financial sophistication, which in turn requires matching competences in firms and banks, better use of collateral and reduction of informational asymmetries between financial institutions and firms. The existence of a larger pool of trained financial workers in more urbanized countries, available for recruitment by firms as well as banks and potentially moving between them to reduce informational asymmetries, is an important aspect of this type of spill-over effect (Chubarov & Brooker, 2013).

Firms that operate in more urbanized home country environments will therefore likely have access to more financial institutions and to more sophisticated ones, better able to evaluate risks and analyze proposed business plans, including ones for internationalization. At the same time, these firms have a supply of more sophisticated financial workers available, many of whom may have previously worked in the financial sector, who can devise strategies for the strengthening of the EMNCs financial muscle. Urban centres are also likely the favoured location for foreign workers with the appropriate skill sets, and for returnee workers from developed economies, all of whom can be recruited to help the EMNC in the task of developing their financial capabilities as well as diversify internationally. Evidence suggests that firms with internationally experienced top management teams are more likely to internationalize, (Carpenter & Fredrickson, 2001), perhaps in part because of superior financial know-how, and such internationalized leaders also tend to locate in urbanized areas. Hence we propose:

Hypothesis 2b: In emerging markets, firm internationalization is even more likely for firms with stronger financial resources that originate from counties with higher levels of urbanization.

The impact of firm resources and industry internationalization on firm internationalization

The acceleration of globalization and market integration is leading to increased internationalization of most industries (UNCTAD, 2013). Such industry globalization tendencies are likely to affect the competitive environment surrounding EMNCs and thus may affect their proclivity to diversify internationally. Essentially, industry internationalization may provide opportunities for expanding abroad to reap benefits of scale and scope, while at the same time it also exposes the firm to fierce global competition. Balancing these forces is the essence of management for EMNCs as international expansion becomes not only a viable strategic alternative but also increasingly a priority in the face of industry internationalization (Bartlett & Ghoshal, 1989).

Porter (1986, 1990) stresses that industries vary in their international competitiveness according to the level of global integration that is the extent to which a firm's competitive position in one country significantly affect its position elsewhere. Industry internationalization captures the extent to which competition within an industry is characterized by high levels of foreign direct investments on a global scale. Highly internationalized industries typically are characterized by a combination of scale economies, comparative advantage and clustering effects in various countries (Oster, 1999). Moreover, industry internationalization is often driven by globalized competitors (Yip, 1989).

A number of factors underlie the variation in the potential of industries to become globalized (Wang, Hong, Kafouras & Boetang, 2012). FDI is often more pronounced in sectors where technological advances are renewed quickly. The need for internationalization is particularly high in industries that are experiencing rapid deregulation, such as telecommunications because firms can expand more easily by acquisitions. These factors influence all firms in these industries.

Porter (1986) contends that firms faced with globalized industries frequently are forced to mimic or follow their competitors by internationalizing in order to remain competitive. Similarly, institutional theory (e.g., DiMaggio & Powell, 1983) argues that mimetic isomorphism may lead firms to conform to practices of other firms in their population in order to increase legitimacy and thus improve their resources and chances of survival (Meyer & Rowan, 1977). This is particularly important for firms in emerging economies as these firms face high levels of uncertainty in regards to their ability to compete in international markets. Under such circumstances it is a natural response to imitate the behavior of seemingly successful firms within the industry. Hence, as industry internationalization increases, it is likely that firms in emerging markets will look to their peers in the (global) industry and follow suit. Consistent, Mauri and Michaels (1998) showed that firms are inclined to imitate common strategies within their industry.

In the context of internationalization, several studies have shown that firms often mimic others within their industry when making foreign direct investment decisions (e.g., Lu, 2002; Yiu and Makino, 2002). Johanson and Yip (1994) found evidence that firms respond to industry internationalization by adopting more global strategies and Wiersema and Bowen (2008) found industry globalization to be positively related to firm international diversification for American firms. Similarly, the literature on new venture internationalization has produced empirical evidence for a positive relationship between industry internationalization and firm internationalization (e.g., McDougall, Oviatt & Shrader, 2003; Shrader, Oviatt, & McDougall, 2000). Hence, industry internationalization will likely be positively related to EMNC internationalization.

Industrial organization theory recognizes that industries differ widely on factors like barriers to entry, market structure and global competition which are likely to influence firm's motivation, ability and propensity to internationalize (Porter, 1986; 1990). From a comparative advantage perspective,

EMNCs may seek to exploit location differences in national resource endowments (Kogut, 1983) in order to gain competitive advantage under conditions of industry internationalization. By leveraging their firm-level resources, EMNCs may achieve economies of scale and scope across markets. Hence, the extent to which firm level resources are advantageously deployable in foreign markets may depend on the level of competition among firms within the global industry (Porter, 1990).

However, industry internationalization may lead to different requirements for firm-specific advantages being of primary importance when EMNCs seek to diversity internationally. As global markets converge and competition becomes more international among multinational firms, EMNCs are faced with increasing pressures in terms of access to resources upon which to build their competitive advantage. While traditionally low labor costs have provided such advantages for EMNCs, in highly internationalized industries this is no longer a source of unique advantage as competing multinational firms increasingly locate their labor-intensive activities in these same low cost countries. Moreover, MNCs from developed countries are more likely to modularize their activities in order to gain returns on global flexibility and arbitrage (Ghemawat, 2007). In such globally integrated and competitive industries, EMNCs find themselves forced to compete in terms of their ability to innovate and thus knowledge-based intangible resources, often embedded through R&D, are likely to drive internationalization of EMNCs. Hence:

Hypothesis 3a: In emerging markets, firm internationalization is more likely for firms with stronger intangible resources when the enterprises operate in highly internationalized industries.

Moreover, in highly internationalized industries EMNCs are facing fierce competition and increasing pressures to lower (production) costs in order to survive (Rose & Ito, 2008). This may

require EMNCs to invest in upgrading their upstream activities (e.g., production equipment, R&D facilities etc.) in order to utilize their unique resources more efficiently. At the same time, internationalized industries also create a competitive environment characterized by lower profits as a result of higher costs of competing down-stream (e.g., advertising, sales and service expenses). Together, these forces put a premium on EMNCs ability to generate capital in order to compete in highly internationalized industries. In a weak institutional business context, such as emerging market economies, where debt finance is relatively difficult, EMNCs may have fewer opportunities to raise capital through local banks for (risky) international ventures. Hence, the greater the financial resources available to firms internally, the more likely they are to expand abroad in highly internationalized industries. Thus:

Hypothesis 3b: In emerging markets, firm internationalization is more likely for firms with stronger internal financial resources when the enterprises operate in highly globalized industries.

INSERT FIGURE 1 HERE

Methodology

Sample and data

The study sample consist of the largest firms from emerging markets[4] drawn from a population of the World's top 5000 MNCs based on sales in 2010. The firms in our sample originate from the following countries; Argentina, Brazil, Chile, China, Czech Republic, Hungary, India, Indonesia, Mexico,

[4] Various definitions and lists exist regarding emerging markets; we based our choice of countries on the World Bank and IMF, which lists some 40 countries. Of these, 18 countries appeared in our dataset of the world's largest MNCs.

Philippines, Poland, Russia, Singapore, Slovakia, South Africa, South Korea, Thailand, and Turkey. The number of companies per country was not equal (with China, India and Russia represented with the largest number of companies), yet basing the choice on firm size made the companies in our sample comparable across countries. Country level data was obtained from the *Global Competitiveness Report* published by the World Economic Forum. *Thomson One Banker/Worldscope* was the source for firm and industry level data. Our final sample upon which we test our hypotheses was 592 firms representing, 167 industries (three-digit SIC code) and 18 different home countries.

Variables and measures

Firm internationalization is a composite measure that accounts for the degree of international activities, consisting of the dimensions: (1) foreign sales to total sales ratio (FSTS) and (2) foreign assets to total assets ratio (FATA) (for reviews on measurement, see Oh, 2009; Sullivan, 1994). Following conventions in the literature, we computed the average of the two ratios so that our final measure of internationalization had a range between 0 and 1. To gauge firm intangible resources, we followed prior studies and measured *R&D intensity* as annual R&D expenditure divided by total sales (Hennart, 2007; Hitt et al., 1997; Tallman & Li, 1996)[5]. We measure firm internal *financial strength* by the ratio of a firm's financial resources to its total assets.

We use primary industry affiliation (three-digit primary SIC code) for industry measures. *Industry internationalization* is the average foreign assets to total assets (FATA) of the World's 5000 largest MNCs within the three-digit industry categorization. This measure captures the extent to which

[5] Since this variable was missing for a relatively large proportion of the sample, we followed prior research (e.g. Singh, 2008) and recoded all missing values of R&D with 0 and added a dummy variable indicating whether data on R&D was available or not.

competition within an industry is characterized by high levels of foreign direct investments on a global scale. Based on data from the *Global Competitiveness Report*, which is one of the most widely used sources of country level data, we measured *urbanization* as the percentage of total population living in urban areas. Using the list of all economies, developed and emerging, from the IMF, we find that developing countries have significantly more variation in levels of urbanization. The coefficient of variation of emerging economies is 20.6% as against 14.0% for developed economies, significantly different at the 95% level using the Levene F-test of CVs. All independent variables were lagged one year to reduce issues of reverse causality.

Following previous research, we controlled for a number of factors that might drive firm internationalization at the enterprise, industry and home country levels. *Firm size* was measured as the natural logarithm of total sales. *Advertising intensity* was captured by annual marketing and advertising expenditure divided by total sales. At the industry level, we controlled for natural *resource industries*, operationalized as a dummy variable for industries with SIC codes smaller than 1500. We also controlled for the instability or volatility presence in the environment via *industry dynamism*, measured by dividing the standard error of the regression slope coefficient by the mean value of sales (Dess & Beard, 1984). We further controlled for two aspects of the home economy that may influence firm internationalization, namely its economic development in terms of *GDP per capita* (Delios & Henisz, 2003) and its political system *polity* using Polity IV's (Marshall & Cody, 2011) measure of political regimes ranking from -10 (most authoritarian) to 10 (most democratic). We also controlled for the level of *government spending*, which may influence urbanization and infrastructure development. Finally, since our study period (2008-2010) may be influenced by the global financial crisis, we controlled for *change in GDP* relative to the peak (2008) which captures the effect of the GFC in a particular country

on the internationalization of firms[6]. For robustness, we further controlled for China, India, South Korea and Singapore and the results remained consistent[7].

Multilevel Analysis

Multilevel analysis is recommended for analysis of data with a nested structure. Such analysis accounts for the lack of independence among observations and helps avoid potential type I and type II errors (Arregle et al., 2006). Datasets with a nesting structure such as for instance firms nested within countries and/or industries contain variability at each level of nesting and the purpose of multilevel analysis is to explain such variability. Multilevel modeling is an extension of the multiple regression model that includes nested random coefficients (Snijders & Bosker, 1999; Raudenbush & Bryk, 2002). In research on firm internationalization, scholars typically sample in one or very few countries and/or industries (recent reviews, see Jormanainen & Koveshnikov, 2012; Kirca at al., 2011). In the few studies that include multiple industries and/or countries, variability is often assumed away by simply controlling for higher-level factors through the use of industry or environmental dummies. Even studies that explicitly model country and industry variables as explanatory variables treat them as firm level variables. This approach artificially increases sample size and increases the probability of type I and type II errors (Arregle et al., 2006). Multilevel methodologies allow researchers to investigate how observed proposed relationship between independent and dependent variables at firm level varies with higher level characteristics (such as industry or home country). Multilevel analysis is preferable to split sample approach when studying interaction effects among factors at different levels. Whereas splitting

[6] We thank an anonymous reviewer for suggesting this important control.
[7] We included controls for South Korea and Singapore as these countries are sometimes categorized as newly industrialized countries (NIC).

the sample assumes homogeneity of firms within a particular type of context, multilevel analysis allows a researcher to account for the heterogeneity of firms within each industry and country and to model cross-level interactions between firm and industry/country variables.

A cross-nested (or cross-classified) multilevel analysis is appropriate when higher levels are nested in two or more cross-cutting hierarchies. An example of such nesting is industry and country which are both higher levels to firms yet are not hierarchically nested within each other (industries are considered global rather than country specific). Cross-nested multilevel analysis isolates the effects of both levels (e.g., country and industry) on the dependent variable (e.g., internationalization). Portioning the variance among cross-cutting hierarchies is particularly important when higher levels are associated. If industry characteristics are important determinants of internationalization but the industry level of analysis is left out of the model, the country level effects may 'draw to themselves' some of the effects attributable to industry. Applying cross-nested structures to multilevel modeling can help avoid such model misspecifications and result in unbiased statistical estimates (Goldstein, 2011).

Results

Variance decomposition presents the raw variances at different levels of nesting. In a cross-nested multilevel model, firm observations (i) are cross-nested within countries (k_1) and industries (k_2). Interclass correlation (ICC) is calculated on the bases of the estimated variance components at each level, and is used to assess the main sources of variation in the data. The percentage variance at the firm level (between firm variance) is 49 percent; country level (between firms within home country) variance is 25 percent; and industry variance (between firms within industry) is 10 percent. The remaining 16 percent is industry by country variation. As a general rule of thumb, variance components

at 10 percent or more at each level warrant multilevel empirical treatment in order to avoid type I and type II errors (Rabe-Hesketh & Skrondal, 2012). Moreover, all variance estimates are significant further pointing to the importance of adequately accounting for the nesting of the data.

Table 1 below shows the descriptive statistics. Not surprisingly, we observe moderate levels of correlations between urbanization and several of the other country level variables, yet all are below 0.6.

INSERT TABLE 1 HERE

Next, we proceed to test the hypotheses in a cross-nested multilevel model using the xtmixed command in Stata12 (Rabe-Hesketh & Skrondal, 2012). We used group mean centering at level 1; for all higher level variables we used grand mean centering (Enders & Tofighi, 2007). Table 2 shows the results of our analyses.

INSERT TABLE 2 HERE

Model 1 reports the results of the control variables only. Our results are largely consistent with those found in the literature. Thus, we confirm that internationalization in EMNCs is positively associated with the size of the firm, in terms of revenue, as well as the development of the economy measured as GDP per capita. Model 2 reports the main effects model. First, we observe that both industry internationalization ($\beta=0.005$, $p<0.01$) and home country urbanization ($\beta=0.057$, $p<0.01$) are positively related to EMNC internationalization, confirming our main contention that context matters; the decision to internationalize is influenced in important ways by both industry and home country factors. The direct significant effect of urbanization is consistent across all models, thus confirming hypothesis

1. While these findings are interesting per se, next we proceeded to consider the interactions of firm level resources with industry internationalization and home country urbanization in order to provide a comprehensive test of our multilevel theoretical framework (see figure 1 above).

In Model 3 we report the final analysis of the full multilevel model (Andersson, Cuervo-Cazurra & Nielsen, 2014). We find support for H2a (β=-0.015, $p<0.05$), which suggests that the relationship between R&D intensity and EMNC internationalization will be weaker when firms originate from highly urbanized countries. H2b is also supported (β=0.048, $p<0.05$), suggesting a positive interaction between firm financial strength and home country urbanization. With regards to industry internationalization, we find support for H3a (β=0.003, $p<0.05$) that is firm level R&D is more important as driver of EMNC internationalization in highly internationalized industries. On the other hand, H3b predicting that firm level financial strength would interact with industry internationalizing did not find support. Hence, while both firm tangible and intangible resources arguably play an important role as drivers of EMNC international diversification, only R&D intensity appears to be moderated by industry internationalization perhaps providing testimony to the primary importance of intangible resources as a source of ownership advantage that can be leveraged across international markets. All in all, these results provide support for our theorized model of multilevel influences on internationalization of emerging market multinational firms.

Discussion

This paper develops and empirically verifies a multilevel model that specifies how firm level resources that may propel or restrict emerging market firms from international expansion must be viewed in the context within which the firms are embedded. Specifically, we theorize that EMNC are subject to

particular configurations of home country and global industry environments that affect their propensity to internationalize.

While it has been long accepted that the level of development is an important home country contextual factor, we have proposed urbanization as a central indicator of home country resources, combining development factors with agglomeration effects. Urbanization has rarely been considered previously in the analysis of contextual factors relevant for internationalization, yet we have highlighted a number of processes whereby higher levels of urbanization in general improve company competiveness and thus propel EMNCs into international activities. However, the moderating effects between firm and home country effects through urbanization are complex because two forces are at work. More urbanized home markets can provide EMNCs with key inputs and scarce resources in terms of labor and finance more cheaply and easily, thus accelerating internationalization. At the same time, emerging markets which are more urbanized present for certain types of firms – those relying on more sophisticated and flexible consumers – a relatively more attractive and profitable home base, which shifts firm strategies towards domestic markets and away from international ones. Our results provide examples of both of these effects simultaneously and highlight the importance of paying attention to urbanization forces when studying international behavior of emerging market firms.

Specifically, our finding that home country urbanization decreases the positive association between firm level intangible resources (R&D) and internationalization provides important new insights into the role of home country context. Our multilevel analysis allows us to tease out both independent and interactive effects of variables across firm, industry and home country levels and clearly illustrates how home country urbanization may reduce the importance of certain firm resources in explaining EMNC internationalization. While both firm R&D intensity and home country

urbanization, by themselves, increase the proclivity of EMNCs to expand abroad, the combination of these two factors appear to reduce the effect of strong intangible resources, though the effect is still positive. At the same time, we find evidence that home country urbanization increases the likelihood of financially strong EMNCs expanding abroad. Urbanization appears to complement or support in important ways EMNCs ability to raise capital in the home country financial market, which in turn increases their ability and proclivity to internationalize. This finding is in line with contentions in developmental economics (Henderson, 2003; Rosenthal and Strange, 2001) of the importance of a well-developed urban infrastructure for access to- and utilization of firm-specific resources (Mukkala, 2004). Financial resources are important for EMNCs in pursuing international diversification and urbanization provides a contextual mechanism for improving the access and availability to such financial instruments through larger (and often foreign) banks, lending agencies and other means (Yaprak & Karademir, 2010; De Maeseneire & Claeys, 2012).

While internationalization theory highlights the importance of in particular intangible resources as a source of ownership advantage that may be leveraged across international markets in the pursuit of competitive advantage, our results paint a more nuanced picture with regard to EMNCs. Specifically, we find that while R&D intensity is driving internationalization of EMNCs, such intangible resources increase the likelihood of internationalization when firms operate in highly globally integrated industries. We interpret this finding as supporting industrial organization theory in its attention to industry characteristics as drivers of firm strategy and behavior (Porter, 1990) and, in particular, the institutional view of mimetic isomorphism (DiMaggio & Powell, 1983) that points to the imitative behavior of firms when facing uncertainty. As industries globalize and become more internationally integrated, EMNCs appear to adopt similar strategies as their international competitors and thus diversify internationally. EMNCs with strong R&D capabilities are further motivated to

internationalize as a result of a combination of competitive and mimetic pressures. Industry internationalization implies global integration of value chains, including suppliers and customers, and EMNCs competing on R&D may seek to both leverage and source their intangible resources abroad. At the same time, we find no indication that financially strong ENMCs are influenced in a significant way by industry internationalization in regards to their propensity to expand abroad. While industry internationalization arguably increases competitive pressures and thus may raise the capital needs, EMNCs are unlikely to base their competitive advantage on tangible (financial) capabilities in the first place. Given already scarce financial resources, industry internationalization does not appear to affect such firm's motivation to expand abroad.

Together, these findings clearly point to the importance of correctly nesting and accounting for the variance at the appropriate levels of analysis in studies of firm internationalization. Neglecting to do so could easily have overestimated the importance of firm level resources as a driver of (E)MNC internationalization. For instance, leaving home country (or industry) un-specified may artificially inflate firm level variance and lead to erroneous conclusions regarding the drivers of firm internationalization strategies. As such, our findings are not only relevant for EMNCs, originating from a variety of countries with great heterogeneity in home country environments, but also for internationalization theory per se, as it indicates the importance of including relevant contextual factors in models predicting MNC internationalization.

Limitations and future research directions

The literature has discussed extensively the motives, strategies and resources that influence the EMNC in its quest for foreign markets, to the extent of questioning whether the frameworks developed

to explain the behavior of multinational corporations from developed economies can be usefully applied in the emerging market context (for recent discussions, see Meyer & Thaijongrak, 2013; Xu & Meyer, 2013). However, though some of the key characteristics distinguishing developed and emerging markets rest with national institutions, there has been relatively little exploration of specific home country contextual effects to explain EMNC strategies, and even less attention has been paid to industry factors that may impact EMNC internationalization in important ways. This paper develops a framework for exploring how firm resources, industry characteristics and home country factors interact to drive internationalization of EMNCs.

Notwithstanding, there are a number of limitations to our study which must be acknowledged. First, we chose urbanization in this study as it relates particularly to emerging market MNCs; in studies of other samples, such as the developed world, it may be appropriate to include other home country characteristics. For instance, in studies of MNC internationalization from developed countries, home country labor market policies, human capital abundance, or corporate governance provisions may act as important drivers (or repellants) of firm internationalization; potentially in different ways for small versus large firms. We leave such investigations to future studies.

At the level of theory, we have argued that certain capabilities notably with respect to access to internal financial funds will play a greater role in EMNC internationalization than for other MNCs originating from economies with more developed and sophisticated financial markets. Our empirical work has indicated that this argument has empirical merit. However, our data prevents us from exploring this issue more deeply. Future research may seek to unpack firm financing further.

Another limitation concerns the character of our dataset, which is restricted to large firms. We recognize that much internationalization from emerging markets is undertaken by small and medium-sized firms (SMEs), which are not captured in our sample (Kektar & Acs, 2013). Our findings are

therefore specific to relatively large companies, and may not generalize to smaller firms. Moreover, as our sample was drawn from the world's largest MNCs, these tend to come from the larger emerging markets. The firms in our sample originate from 18 countries. While these countries are heterogeneous with respect to institutions and level of development, enabling our study, they do not cover the full range of emerging markets. In addition, given the cross-sectional nature of our data, issues of causality are always present. Though we attempt to remedy this by lagging all independent variables and controlling for the global financial crisis, future studies may benefit from access to longitudinal data.

Finally, while we succeed in modeling three levels of heterogeneity (firm, industry and home country), as well as the cross-classified nesting of our data (Andersson, Cuervo-Cazurra, Nielsen, 2014), an important limitation remains in the fact that we do not have data on the host countries which the EMNCs in our sample expand into. Future research may seek to include host country characteristics in order to explore how particular combinations of home- and host country characteristics may condition internationalization (Nielsen & Nielsen, 2010).

Our analysis could form the basis for further research in several other directions. For example, there are a number of interpretations of our findings with respect to financial strength of firms and internationalization. One might be that we have identified the effects of financial support for their own firms offered by particular forms of ownership common in emerging markets, namely business groups and state ownership (Bhaumik, Driffield & Pal, 2010). A second is that firms which invest in internal capabilities of financial management are better placed to internationalize. The positive moderating effect between financial strength and urbanization indicates that perhaps the latter predominates but to resolve this requires further theorizing and richer data on financial strength and capabilities.

Similarly, urbanization represents a complex set of development processes, not all of which favor economic development (Yuki, 2007). Our work has suggested that international business

scholars, when analyzing MNC strategies in and from emerging markets, should take into account the degree of urbanization in addition to the level of economic development. However, much more research is needed to understand how EMNCs can simultaneously exploit the scale economies and agglomeration effects from urban centres to drive internationalization while simultaneously balancing the relatively greater attractiveness of the domestic market. Moreover, we make the assumption that firms benefit from urbanization equally, regardless of their location and proximity to a major city. While most large firms in emerging markets (and indeed developed) are located within or close to large urban centres, and may benefit from these even if they are not when internationalizing, future studies may include specific measures of proximity to major cities to further explore this assumption.

Figure 1: Multilevel framework for EMNC internationalization

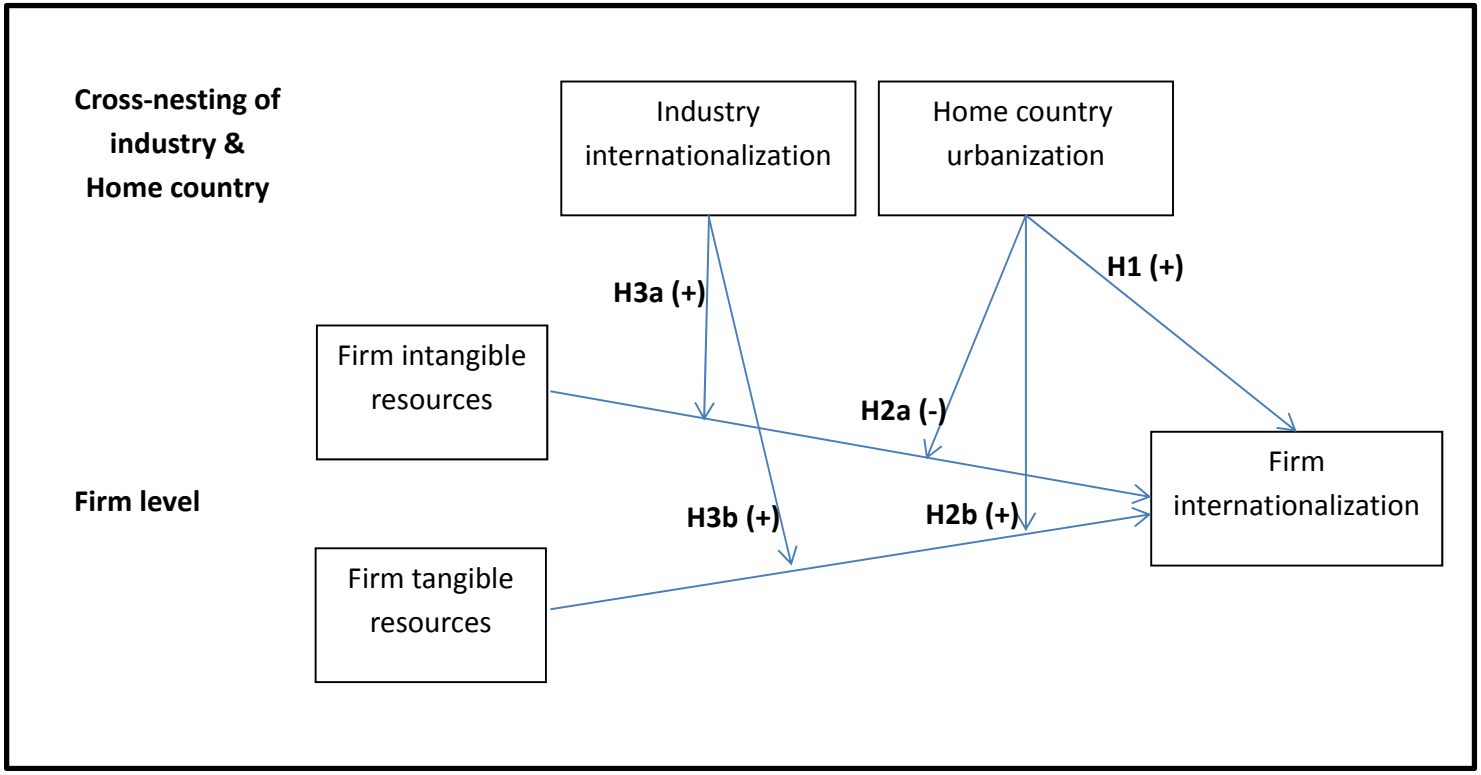

Table 1: Descriptive statistics

Variable	Mean	Std. Dev.	1	2	3	4	5	6	7	8	9	10	11	12	13
DOI	0.22	0.28	1												
R&D intensity	0.47	1.29	0.16	1											
R&D presence	0.42	0.49	0.11	0.40	1										
Adv. intensity	0.11	0.10	-0.05	0.08	-0.03	1									
Financial strength	113.28	240.31	0.10	0.07	0.09	0.05	1								
Firm size	8.23	0.98	0.10	-0.00	0.05	-0.04	-0.06	1							
Industry dynamism	2.18	2.15	-0.03	-0.03	-0.08	0.07	-0.04	0.01	1						
Industry DOI	13.91	9.28	0.17	0.14	0.13	-0.03	-0.09	0.01	-0.03	1					
Resource industries	0.06	0.24	0.02	-0.05	0.03	-0.09	-0.06	0.07	-0.03	0.53	1				
PolityIV	4.50	6.45	0.17	0.02	0.09	0.16	-0.03	-0.03	0.05	-0.00	-0.04	1			
GDP per capita	8.92	0.97	0.34	0.01	0.02	0.12	-0.02	0.09	0.06	0.05	-0.05	0.21	1		
Change in GDP	-2.12	7.01	0.10	-0.03	-0.07	0.16	-0.03	-0.01	0.03	-0.06	0.01	0.65	0.43	1	
Urbanization	6.68	1.24	0.22	-0.15	-0.06	0.02	0.07	0.04	0.04	0.45	0.06	-0.44	-0.29	-0.59	1
Gov. spending	79.84	13.33	0.21	0.11	0.06	-0.17	-0.06	-0.03	-0.03	0.03	-0.04	-0.41	-0.09	-0.19	-0.32

All correlations above 0.07 are significant at the 0.05 level.

Table 2: Cross-classified Multilevel Estimations of Firm Internationalization

		MODEL 1		MODEL 2		MODEL 3	
	R&D intensity			0.016 (0.007)	**	0.089 (0.044)	**
	R&D presence			0.011 (0.019)		0.011 (0.019)	
	Adv. Intensity	-0.027 (0.098)		-0.079 (0.096)		-0.079 (0.097)	
	Financial strength			0.080 (0.031)	**	0.139 (0.115)	
	Firm size	0.035 (0.008)	***	0.036 (0.009)	***	0.035 (0.009)	***
	Ind. Dynamism	-7.670 (1.10)		-6.560 (1.070)		-6.690 (1.050)	
	Res. Industries	0.042 (0.048)		-0.048 (0.056)		-0.028 (0.056)	
	Industry DOI			0.005 (0.002)	***	0.004 (0.002)	***
	Polity	0.015 (0.008)		0.020 (0.007)	***	0.020 (0.007)	***
	GDP per capita	0.097 (0.038)	**	0.034 (0.039)		0.036 (0.040)	
	Change in GDP	-0.004 (0.003)		-0.002 (0.003)		-0.002 (0.003)	
	Gov. spending	0.002 (0.002)		0.002 (0.002)		0.002 (0.002)	
H1	Urbanization			0.067 (0.025)	***	0.076 (0.026)	***
H2a	R&D x Urbanization					-0.015 (0.008)	**
H2b	Financial strength x Urbanization					0.048 (0.023)	**
H3a	R&D x Industry DOI					0.003 (0.001)	**
H3b	Financial strength x Industry DOI					0.000 (0.000)	
	Constant	-1.160 (0.423)	***	-1.048 (0.367)	***	-1.110 (0.384)	***
	Log Likelihood Observations	79.11 592		80.69 592		80.99 592	

* p<0.1; ** p<0.05; *** p<0.01

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