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Overcoming the liability of foreignness without strong firm capabilities – the value of market-based resources

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ABSTRACT

The concept of “liability of foreignness” – the costs of doing business abroad – has been known and discussed since the mid-1970s. At the core of these discussions is the role that firm capabilities play in overcoming or limiting these costs. This raises the question of how firms with inappropriate, limited or constrained capabilities relative to their host environment overcome the liability of foreignness. This paper focuses on the subsidiaries of “emerging multinationals” and how they manage the demands of a technologically and economically highly developed host country. A host location with sophisticated markets and well-developed institutional infrastructure may be a highly challenging environment for firms that have grown their organizational capabilities in less developed contexts. This paper explores that situation and considers how resources available on the market – for example through supplier inputs – assist subsidiaries to benefit from their presence in a munificent location. Despite the acknowledged limitations of a transaction-based approach, this paper presents evidence that purchasing knowledge provides an accessible strategy for overcoming some liabilities of foreignness.

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1. Introduction: overcoming the liability of foreignness without strong firm capabilities – the value of market-based resources

The concept of “liability of foreignness” – the costs of doing business abroad – has been known since the work of Hymer (1976), and a variety of authors (e.g. Mezas, 2002a,b; Zaheer and Mosakowski, 1997) have expanded on the concept. A central finding of the literature is the importance of firm capabilities in overcoming or limiting the liability of foreignness (Nachum, 2003; Zaheer, 1995), raising the question of how firms with less appropriate or even more limited firm capabilities relative to the host environment overcome the liability of foreignness.

This paper investigates how subsidiaries of “emerging multinationals” – developing country multinational corporations (MNCs) – manage the demands of a technologically and economically highly developed host country. It finds that the richness of a host location presents firms from less developed countries with a double-edged sword: firms that have often honed their organizational capabilities in underdeveloped contexts (Cuervo-Cazurra and Genc, 2008) do not necessarily benefit from the sophisticated markets and well-developed institutional infrastructure of an advanced economy. However, resources that can be purchased on the market – e.g. through better inputs from suppliers – are useful to allow subsidiaries to benefit from their presence in the munificent location. The limitations of a transaction-based approach within the context of knowledge acquisition are well understood (Kogut and Zander, 1992). However, this paper presents evidence that the purchase of knowledge is an accessible (if not optimal) mechanism for overcoming some liabilities of foreignness.

Where the purpose of foreign direct investment (FDI) is to augment firm-specific assets, the largely unexamined assumption is that “more is better” in a host country: firms are believed to have more additional benefit, the more competitive the host economy; the more skilled its workers; and the better the regulatory framework and industry associations to be found there. The capabilities of a subsidiary to benefit from the resources in the host location are often not seriously considered; instead, there tends to be an

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assumption that weaker MNCs may not gain, but will at least not be disadvantaged if the resources of a location are much richer than the “absorptive capacity” (Cohen and Levinthal, 1990) of their subsidiaries.

However, the large body of literature documenting the dynamic interrelationship between country and firm-specific assets suggests that location should not be assessed on its own, and that the interaction between the location and the subsidiary is critical. The bulk of this literature (Frost, 2001; Patel and Vega, 1999; Pearce, 1999) emphasizes how firm-specific assets are *created* in interaction with a given location, but the dynamic interaction between the subsidiary and its location need not necessarily result in learning and technological advancement. It can also challenge or even destroy capabilities, for example, if subsidiaries do not survive in very competitive host locations.

MNCs from developing countries have gained recent attention for the speed with which they are internationalizing (Ramamurti and Singh, 2008a; Sauvant, 2008). However, they tend to have much smaller asset bases than the long-established MNCs; for example, the average asset base of the top 100 leading MNCs from the developing world is about 15% of their counterparts from the developed world (World Investment Report, 2008). The entry of firms that are generally viewed as still “emerging” into the USA therefore provides a useful setting for assessing the interaction between a location and firms with resource bases that were developed in very different contexts, and which may well be more limited than those of their counterparts in the developed world.

I analyze which locational factors the subsidiary heads of emerging multinationals identify as important to their capability development in the USA, and my findings present evidence that “more” is not necessarily “better.” Indeed, subsidiaries of emerging multinationals in the developed world are most likely to develop into centers of excellence for the firm overall in the globally relatively less competitive US industries, and neither strong competition nor institutional factors contribute to the development of centers of excellence. However, factors that can be acquired on the market, i.e. skilled employees and specialized suppliers, do contribute meaningfully to center of excellence status.

2. Review of literature and hypotheses

The literature on the liability of foreignness emphasizes that the resources of a host country are often not available to firms from other countries. Mezias (2002a,b: 268) defines the liability of foreignness as “benefits denied to foreign firms that are enjoyed exclusively by domestic firms,” while Eden and Miller (2004) refer to a “discrimination hazard” faced by foreign firms. Indeed, the profitability or even survival of foreign firms can be negatively affected by a variety of factors. Zaheer identifies four costs that subunits of firms often bear in a foreign country:

- costs directly associated with spatial distance, such as the costs of travel, transportation, and coordination over distance and across time zones;
- firm-specific costs based on a particular company’s unfamiliarity with and lack of roots in a local environment;
- costs resulting from the host country environment, such as the lack of legitimacy of foreign firms and economic nationalism; and
- costs from the home country environment, such as the restrictions on high-technology sales to certain countries imposed on US-owned MNEs (Zaheer, 1995).

In addition, Calhoun (2002) identifies a cultural dimension to the liability of foreignness; Sethi and Guisinger (2002) put forth a lack of understanding of the general business environment of the host country; and Mezias (2002a,b) elaborates on the disadvantages presented by regulatory requirements in a foreign host country.

Eden and Molot (2002) argue that, in an era of increased globalization, the legitimacy of a firm in a given country may matter more than its home country identity: they document that the early MNC entrants into the Canadian auto subsidiary had greater legitimacy than the late entrants – and used that legitimacy to keep other foreign competitors at bay. Whether framed as a domestic/international or an insider/outsider tension, there is robust evidence that a subsidiary from a firm that is newly internationalizing will not necessarily have meaningful access to the resources in another country.

In contrast, the literature on knowledge-seeking FDI provides quite a positive assessment of the value of investment in another country. Although a variety of terms are used to refer to FDI whose purpose is to gain from the capabilities and knowledge resources in a location (rather than, for example, its markets or natural resources), there is a remarkable consensus about the qualities that can be found in locations where created or strategic asset-seeking (Cantwell and Piscitello, 2000; Dunning, 1998), knowledge-seeking (Chung and Alcacer, 2002), competence-creating (Cantwell and Mudambi, 2005), home-base- or asset-augmenting (Kuemmerle, 1999) FDI takes place.

Munificent locations are characterized by a strong economic base, for example the size of the overall market, the income level of the population and industry strength (Chung and Alcacer, 2002; Kuemmerle, 1999) and scientific capability – for example number of universities, research institutes or PhDs in an area (Almeida et al., 2002; Pearce, 1999). Work on national innovation systems and clusters also suggests that locations benefit from competitors (Cantwell and Piscitello, 2002; Lundvall, 2002). Competitors can spur innovation when there is cooperation between rivals (Schrader, 1991; Von Hippel, 1986) but can also result from direct competition and rivalry (Anand and Kogut, 1997; Porter, 1998).

Evidence from the literature suggests that the seemingly contradictory findings about the benefits versus the costs of accessing resources in a foreign location can be resolved by taking into account firms’ own capabilities. The work of Cohen and Levinthal (1989, 1990) provides compelling evidence that firms’ own capability bases are critical in realizing the potential resources in a location. Because the development of new capabilities takes place in interaction with existing ones (Patel and Vega, 1999; Pearce, 1999), firms benefit from being in munificent locations to the extent that they have their own strong pre-existing capabilities.

The value of firms' own capabilities is also recognized in work in the liability of foreignness tradition: [Nachum \(2003\)](#) points out that both firm-specific advantages and the advantages of multi-nationality *per se* help overcome the liability of foreignness, while [Zaheer \(1995: 360–361\)](#) finds that “firm-specific advantage, as embodied in imported organizational practices, may be a more effective way for multinational enterprises' subunits to overcome the liability of foreignness than imitation of local practices.”

[Kogut and Zander \(1996\)](#) provide an important reason why foreign firms benefit when they do not need to rely too heavily on capabilities that are newly created in the host country, but can draw on pre-existing capabilities. Using a lens of organizational sociology, they argue that firm learning takes place within a context of shared values and expectations. While this shared sense of identity facilitates coordination (there is an understanding of how “we” respond in certain types of situations) and learning, the consequences of being a member of an out-group are severe. Thus, [Rangan and Drummond \(2004\)](#) provide evidence that European MNCs outperform MNCs from the USA in Brazil if there are prior historical and linguistic ties, but that firm-specific advantages allow US MNCs to outperform the European MNCs.

However, it can happen that firms suffer from a liability of foreignness, and at the same time, have a pre-existing capability base that is either inappropriate or too weak to be of use in a given host country. Subunits of such a foreign firm would need to overcome two simultaneous challenges: foreignness and a generally weaker capability base than that of other firms in the host location. Understanding how firms overcome such a dual liability is the purpose of this paper. By documenting that such firms rely especially on market-based resources, the study advances literature on the liability of foreignness and how it is overcome. It also highlights one boundary condition for the capability-based view of the firm. Because of the importance of tacit knowledge, direct interaction and joint engagement are critical to developing firm capabilities ([Teece, 2000](#)). However, resources that are available on the market seem to be an effective way of overcoming the liability of foreignness if firms are “outsiders” ([Kogut and Zander, 1996](#)) and have few capabilities that are useful in the host country.

The recent and quite rapid internationalization, especially into the developed world, of multinational corporations from developing countries (“emerging multinationals”) provides a useful setting to investigate this question. Emerging multinationals have in recent years garnered a lot of attention for their visible and often rapid internationalization ([Mathews, 2002](#); [Ramamurti and Singh, 2008a,b](#); [Sauvant, 2008](#)). There has been debate in the academic community whether emerging multinationals have redefined the rules of engagement internationally ([Mathews, 2006](#)) or whether their increased prominence is simply the result of largely predictable progress along the Investment Development Path ([Narula, 2006](#)).

Although emerging multinationals are often tracked separately from established multinationals, the empirical evidence suggests that categories are far from distinct. Among UNCTAD's leading 100 MNCs worldwide ([World Investment Report, 2008](#)) can be found a number of firms from “Asian Tiger” countries (Hutchinson-Whampoa from Hong Kong, Singtel from Singapore, and Samsung and Hyundai from South Korea), firms from other developing markets (Cemex from Mexico and Petronas from Malaysia), and firms with South African origins that have shifted their primary stock exchange listings to the developed world: Anglo-American, SABMiller and, to some extent, BHP Billiton. Firms from the last category are not included in the UNCTAD list of leading MNCs from developing countries; the other firms are. Clearly, there is no essential quality defining multinationals as “emerging.” Moreover, to the extent that firms continue to evolve, the distinction is likely to become even more blurred over time.

However, it would also be an oversimplification to deny that there are differences between emerging and established multinationals. The same report provides evidence that the average asset base of the top 100 leading MNCs from the developing world is only about 15% of that of their counterparts from the developed world ([World Investment Report, 2008](#)). The substantial differences in assets – the South African MNC Sasol has estimated that the intellectual property budget alone of one of its competitors equals its entire operating budget ([Bromfield and Barnard, 2010](#)) – challenges emerging multinationals' freedom to operate. Fewer employees translate into smaller sales forces and R&D departments, while lower income limits firms' ability to establish new, or subsidize struggling, subsidiaries, engage in mergers and acquisitions (M&As), or make other investments.

In addition, some characteristics of emerging multinationals reflect the fact that they have developed in countries that are economically and technologically less advanced than the industrialized world. For example, [Ravamurti \(2008a: 422\)](#) points out the dominance of emerging multinationals in medium (rather than high or low) research-intensive industries, arguing that the capabilities of emerging multinationals are generally not at the technological frontier, although they have globally competitive capabilities in better established industries.

The term “adversity advantage” ([Ramamurti, 2008a,b](#)) is used to point out that emerging multinationals are not necessarily disadvantaged by their background in less developed countries. For example, [Cuervo-Cazurra and Genc \(2008\)](#) document that emerging multinationals have a competitive advantage in the least developed countries. But their firm capabilities may not be appropriate in the developed world. Thus, South African Breweries (SAB) was long known as a brewer for the developing world, and it developed deep capabilities in how to operate in regions with very limited infrastructure, whether water, electricity, transportation or telecommunications. One of the reasons why SAB acquired Miller was because they recognized that other capabilities (such as more sophisticated marketing) are needed to succeed in the US beer market.

This suggests that even when emerging multinationals have a level of resources comparable to that of their counterparts, their capabilities may not be appropriate (or, therefore, particularly useful) in highly developed countries. Most emerging multinationals have only fairly recently started to internationalize ([Ravamurti, 2008a](#)), and as newcomers they are likely to suffer from the “outsider” status that [Eden and Molot \(2002\)](#) document. Finally, [Zaheer \(1995: 343\)](#) reiterates previous work that “the liability of foreignness is likely to be particularly acute in a simple, market-seeking, horizontal MNE” – exactly the type of FDI in which most emerging multinationals engage ([World Investment Report, 2006](#)).

There are, therefore, a number of reasons why developing country firms in a highly developed host country are likely to suffer the dual liability of foreignness and fewer (appropriate) firm-specific advantages. In terms of the liability of foreignness, they tend

to engage in the type of FDI where the liability of foreignness is particularly acute. Moreover, they have only relatively recently started to internationalize, and as newcomers they are at risk of being outsiders. In terms of their firm-specific advantages, they have typically smaller asset bases overall than their counterparts from the developed world, and because their firm capabilities have been developed in very different contexts, those capabilities may not be appropriate in an advanced economy.

It is difficult to measure the success of a subsidiary. To the extent that subsidiaries engage in market-seeking FDI – as most of the subsidiaries of emerging multinationals do – it is less appropriate to focus on knowledge flows between the subsidiary and the parent. But [Mezias \(2002b\)](#) points out that sales measures, even if they can be obtained, are complicated by transfer pricing. Moreover, although the mandate of a subsidiary may be primarily to secure a foothold in a lucrative market, useful knowledge could be developed in the course of that process.

The “center of excellence” concept ([Frost et al., 2002](#)) provides a useful multi-dimensional view of the value of a subsidiary. Centers of excellence are defined in terms of the “basis for creating value” ([Frost et al., 2002: 1000](#)) that they provide to the firm overall. Value can be delivered in a variety of ways – for example through basic research, new product development or manufacturing – and Frost et al. do not regard the type of value created as central in their definition of center of excellence. Rather, the three core elements determining center of excellence status are the extent to which subsidiaries have (a) advanced resources that are (b) recognized by the parent organization as (c) useful. This also implies that center of excellence status is a subjective assessment. Two equally capable subsidiaries could operate in the same location, and one could be acknowledged as a center of excellence by its parent, and the other not. But precisely because the concept is multidimensional and subjective, it captures the nuanced functioning of subsidiary mandates. Subsidiaries’ capability development is intertwined with their charter, and not all subsidiaries are tasked with becoming centers of excellence ([Birkinshaw and Hood, 1998](#)).

It remains somewhat unusual for emerging multinationals to establish a subsidiary in a more developed country – most FDI by developing country firms go to areas of equal or lower levels of development ([Barnard, 2008a; Ravamurti, 2008b](#)). FDI into an advanced host country is therefore likely to represent an attempt at creating some type of “center of excellence,” although there is also likely to be substantial variation in the type of value that the firm as a whole hopes to create from its presence in the developed world. [Ravamurti and Singh \(2008a: 126–127\)](#) point out that firms pursuing such different strategies as “low-cost partners,” “global consolidators” and “global first movers” may locate in the developed world. One subsidiary may be tasked with developing the sales and marketing skills to generate revenue from existing products or services in a location, while another may represent an attempt to move up the value curve in an industry.

Research consistently finds both external factors (specifically a munificent location) and internal, firm-level factors to be significant in explaining the emergence of centers of excellence. Thus work on Swedish MNCs ([Andersson and Forsgren, 2000; Andersson et al., 2002](#)) find external embeddedness correlated with capability development and the firm-wide recognition of capabilities, while [Cantwell and Mudambi \(2005\)](#) find that the extent to which a subsidiary gains a competence-creating (as opposed to competence-exploiting) mandate is explained by firm-specific factors such as subsidiary mandate and group-level determinants, as well as the attractiveness of the location.

In terms of locational attractiveness, the variety of resources in an advanced economy may resemble a cornucopia to firms from less developed locations, and authors who emphasize locational benefits are quite optimistic about the extent to which the munificent resources of the developed world can help accelerate the technological upgrading of emerging multinationals ([Chen and Chen, 1998; Mathews, 2006; Moon and Roehl, 2001](#)). However, empirical work, especially from South Korea, highlights “firms engaged in a painstaking and cumulative process of technological learning: a hard slog rather than a leapfrog” ([Hobday, 1995: 200](#)). FDI into the developed world was one of the factors that helped firms like Samsung ([Lautier, 2001](#)) and Hyundai ([Kim, 1998](#)) to become world-class competitors, but it took considerable firm effort to realize those benefits.

This prior history suggests that emerging multinationals may not benefit from the presence of actors in a highly developed location that directly challenge them to become more competitive, even though rivalry is a key element of competitiveness ([Porter, 1998](#)). Where firms are strong enough to respond well to competitors, it strengthens their own capability bases: in industries rich in technological opportunities, competition among firms induces them to invest in research and development, which augments their technological capabilities ([Anand and Kogut, 1997: 448](#)).

However, the benefits of competition are not evenly felt. In their work on FDI from more to less developed countries, [Lall and Latsch \(2001\)](#) document the presence of a threshold effect: the entry of foreign MNCs into a developing country resulted in the decline of the weaker domestic firms, but a strengthening in those sectors where firms had already accumulated some capacity and could respond in a meaningful way to the foreign competition. A similar type of threshold effect is likely to operate in the reverse case, when emerging multinationals expand into a developed location. As outsiders from economically and technologically underdeveloped areas, emerging multinationals are likely to face additional tensions in terms of their liability of foreignness. They will need especially robust firm-specific advantages to overcome those liabilities, before even considering benefitting from rivalry. To the extent that they have not accumulated adequate expertise to do so, subsidiaries of emerging multinationals are likely to be disadvantaged rather than advantaged by the rivalry that contributes to the dynamism of an advanced host country.

But even when emerging multinationals do not suffer an overall lack of capabilities vis-à-vis their competitors, they may have less appropriate capabilities. [Cuervo-Cazurra and Genc \(2008\)](#) argue that emerging multinationals develop capabilities in the course of working under poor regulatory conditions. They get used to poor governance and weak rule of law to the point where, as Cuervo-Cazurra and Genc point out, in the least developed countries they perform relatively better than MNCs from the developed world. However, the capacity of emerging multinationals to use networks to overcome a haze of bureaucratic requirements ([Khanna and Yafeh, 2007; Lorenzen and Taeube, 2008](#)); to enter into contracts without the presumption that they can be enforced ([Choi et al., 1999; Hoskisson et al., 2000](#)); and generally to operate as if there is not a government, is not of use in a well-developed location.

On the contrary, emerging multinationals' subsidiaries in advanced countries may have to invest considerable resources to comply with government expectations about such matters as workplace safety, environmental protection, working conditions and so on. They do stand to benefit from improved infrastructure such as transportation and power. But resources may be consumed complying with the more stringent regulatory requirements of the developed world, rather than remaining available to improve the competitive position of the subsidiary. And to the extent that this happens, the “better” quality of government in the developed world may limit the extent to which a subsidiary can develop into a center of excellence for its firm. [Zaheer \(1995\)](#) points out the value of importing domestic firm routines to overcome the liability of foreignness in a host country. However, if the bulk of home country developed capabilities are inappropriate, firms cannot use this particular strategy.

To the extent that their capabilities are inadequate or inappropriate, emerging multinationals are less likely to benefit from interaction with actors in a highly developed host location. In fact, the more competitive and more rigorous institutional environment is likely to disadvantage subsidiaries from emerging multinationals.

I hypothesize:

H1a. The competitive environment in a developed host location is negatively correlated with the emerging multinational's subsidiary being recognized as a center of excellence.

H1b. The institutional environment in a developed host location is negatively correlated with the emerging multinational's subsidiary being recognized as a center of excellence.

The dual challenge of the liability of foreignness and a less appropriate or weaker firm resource base may limit the benefits that emerging multinationals obtain from interaction in a developed host location generally, but resources that can be procured on the market, for example technology embedded in capital goods, are likely to function differently.

In addition to firm capabilities that may be too weak, or inappropriate for the developed world, the liability of foreignness suggests that emerging multinationals would struggle to transfer “relational assets” ([Dunning and Narula, 2004](#)) such as trust or social networks from their home countries and regions. However, they can transfer funds generated in those contexts. To the extent that the internationalization of Chinese and Middle Eastern firms is supported by the strong trade balances of their home countries, they present an extreme example. However, the importance of market-based resources is not unique to those firms. [Barnard \(2008b\)](#) points out that the most important predictor of performance in the USA of emerging multinationals is investment in capital assets. Emerging multinationals in general are likely to be better able to access market-based rather than relational assets because the liability of foreignness is less likely to affect the process of acquiring market-based assets.

The limitations of a transaction-based approach within the context of knowledge acquisition are well understood (e.g. [Kogut and Zander, 1992](#)), and form some of the central arguments why less developed countries stand to benefit from investment by leading MNCs ([Lall, 2001](#); [Narula and Dunning, 2000](#)). However, the purchase of knowledge is an accessible – if not optimal – mechanism for upgrading. Two market-based resources are likely to be particularly valuable in allowing subsidiaries to become centers of excellence for the emerging multinational: the employees and the suppliers of an economically advanced country.

Employees, whether of own or competitor firms, have been identified as important sources of knowledge ([Almeida and Kogut, 1999](#); [Saxenian, 1994](#); [Song et al., 2003](#)). Because of better-functioning education systems in the developed world, the skills level of those employees is typically greater than in the developing world. Also, because employees benefit through continued employment and advancement to the extent that their firms succeed, they have an incentive to contribute to the capability expansion of the firms where they are employed. Similarly, firms benefit from more competent and skilled suppliers ([Dyer, 1996](#); [Florida and Kenny, 2000](#)). Because partners within a vertical supply chain benefit from strengthening each other, it is likely that developing country firms will find their suppliers valuable sources of useful capabilities. Moreover, because suppliers interact with a range of firms in the same industry, they can also provide information about the industry overall, including competitors.

Of course, neither of these relationships is purely market-based. The relationship with both employees (e.g. [Rousseau and Parks, 1992](#)) and suppliers (e.g. [Rinehart et al., 2004](#)) often involves a variety of relational elements, to the extent that the official contracted part may end up being a very small element of the relationship overall. The hybrid transactional/relational nature of these relationships is probably a key reason why they are so effective. Firms need not be highly competent insiders to access those resources, but contracts with employees and suppliers can evolve into relationships that support the type of learning allowing the subsidiary to become a center of excellence for the firm overall. I hypothesize:

H2. The inputs of skilled employees and specialized suppliers in a developed host location are positively correlated with the emerging multinational's subsidiary being recognized as a center of excellence.

3. Methodology

Quantitative data were gathered through a mail survey of the population of emerging multinationals in the US. The survey consisted mainly of existing items, although some items had been adapted, and a few new items added, in response to interviews with executives. A pre-test of the survey was conducted with senior executives of a globally active South African IT firm, and unclear items were dropped or changed. The group included both South Africans and executives of other nationalities.

3.1. Data-gathering process

A list of subsidiaries was obtained from the 2004 edition of the Uniworld Directory of Foreign Firms Operating in the US. Subsidiaries were contacted by telephone to verify contact details, and it often proved that subsidiaries had ceased operations in the USA, or consisted of little more than a front office. Those firms were removed from the database. To limit firm effects, where multiple subsidiaries of the same firm were listed, firms were asked to identify the leading subsidiary. Firms that were not true developing country firms, but listed in tax havens in developing countries (e.g. the Bahamas), were also eliminated. A total of 441 surveys were sent out, with the geographic breakdown of home countries of subsidiaries as follows:

- Africa and the Middle East – 108 firms
- Asia excluding Japan – 223 firms
- Latin America and the Caribbean – 110 firms

Surveys were marked for the attention of the local executive officer. In spite of multiple contacts by mail and telephone, the response rate was low: 53 surveys, or 12%. Although low, the response rate is not atypical for research on multinational subsidiaries (Frost et al., 2002; Harzing, 2000; Harzing, 1997) and probably reflects the dual difficulty of obtaining responses from executives and from developing country firms, both of which are known to be challenging populations for survey-based data gathering (Bartholomew and Smith, 2006; Hoskisson et al., 2000).

To determine the likelihood of non-response bias, differences in the response rate of firms from different countries, regions and industries were examined. At the national level, there is a slight over-representation of South African firms (probably because initial contact was made by a South African researcher) that compensates for the under-representation of most African and Middle Eastern firms. Similarly, there was under-representation of Chinese firms – quite a number of individuals from Chinese firms seemed concerned about permission to complete the survey, possibly reflecting the effects of government control. This was balanced out by (slight) increased response rates from South Korean, Taiwanese and Indian firms. However, at both the regional and industry level, differences between respondents and non-respondents were not significant. It therefore seems unlikely that the survey suffers from non-response bias, and the primary limitation of the small number of respondents is in terms of the available degrees of freedom, which limits the specificity of the analysis. Table 1 documents the breakdown per country and industry-type (to ensure anonymity of respondents, specific industries are not indicated).

3.2. Measures

Recognition as a “center of excellence” is a multidimensional, subjective measure that captures how well subsidiaries are fulfilling the mandates they have been given. Given that subsidiaries in this study are from a variety of very different countries and industries, the center of excellence construct provides a sufficiently inclusive measure to be used as the outcome variable in the study. In addition, centers of excellence are characterized by the need for the “connectivity of the unit to key actors and resources in the host country” (Frost et al., 2002: 1002) and it is therefore particularly appropriate for a study on the liability of foreignness.

Table 1

Sample characteristics.

Country	GDP/capita	HDI	Total firms in sample	General services	Knowledge-intensive services	Low research-intensive manufacturing	Medium research-intensive manufacturing	High research-intensive manufacturing
Brazil	10 100	0.807	6		1	1	3	1
Chile	14 000	0.874	2	1		1		
China, mainland	6 000	0.762	3	1		1		1
China, Hong Kong	43 800	0.942	4		2			2
India	2 800	0.609	5		4		1	
Israel	28 200	0.930	4		2		1	1
Mexico	14 200	0.842	5	1		1	3	
Pakistan	2 600	0.562	1	1				
Panama	11 600	0.832	2	1	1			
Philippines	3 300	0.745	1		1			
Saudi Arabia	20 700	0.835	2	1			1	
Singapore	52 000	0.918	1	1				
South Africa	10 000	0.670	4	1	1	2		
South Korea	26 000	0.928	6	3	1		1	1
Taiwan	31 900	0.932 ^a	4			2	2	
United Arab Emirates	40 000	0.903	1	1				
Venezuela	13 500	0.826	1	1				
Country not stated			1	1				
USA	47 000	0.950						

GDP/capita data from CIA World Factbook, HDI data calculated by the United Nations, as a composite of life expectancy, education and GDP/capita.

^a Because Taiwan is not recognized as a separate country, the estimate from the National Statistics office of Taiwan is used.

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Following Frost et al. (2002), subsidiaries were asked to identify which functions they perform (research, development, production, marketing, sales, logistics, distribution and purchasing). For all the functions performed at a subsidiary, they were asked to what extent capabilities were (a) advanced, (b) recognized by and (c) useful for the parent organization (see Appendix A for the items).

I calculate a composite measure that follows Frost et al. (2002) in all but two respects. First, in terms of recognition by the parent, they use formal head office recognition, and include informal recognition only to test for robustness (finding similar results). I include both formal and informal recognition by the parent organization in the measure, weighting formal recognition more heavily. Because this paper deals with emerging multinationals, and subsidiaries may still be emerging as centers of excellence, the adapted measure seems more accurate: subsidiaries may well be fulfilling their mandate vis-à-vis the parent, even though the recognition has not been formalized. Similarly, I conceptualize center of excellence status not as a binary variable, but as a continuous variable. Frost et al. (2002) comment:

The dichotomous nature of our variable seems to us to capture the essence of the center of excellence construct as used in practice, although we recognize that it may also be valid to conceptualize them in terms of degree, i.e., as a continuous variable (Frost et al., 2002: 1005).

In the case of emerging multinationals, centers of excellence are rarely so clearly defined, and a continuous variable seems better to capture their emergent nature. Because the emergence of centers of excellence is partly a decision of the parent company – the parent generally mandates the kind of activities, e.g. marketing/production/R&D, etc., that its foreign subsidiaries should undertake – a study would ideally control for parent characteristics, e.g. a resource-rich versus resource-poor parent. Because the study does not control for parent characteristics, the study suffers from some specification bias.

To operationalize the institutional, competitive and supplier/employee environment, respondents are asked which of the resources and pressures in the host country help the subsidiary to develop better products, processes and services that allow the subsidiary to become more efficient and competitive. The specific elements are taken from studies that map locational richness, firstly the work of Porter (1991) and others that build on it (e.g. Frost et al., 2002) and secondly work on national innovation systems (Dosi, 1999; Lundvall, 1998; Nelson, 1993). The competitive environment score reflects the average of respondents' response about rapid technological change and increased competition; the institutional environment score reflects the average of the extent to which government institutions and stricter government regulations help the unit become more efficient and competitive. Finally respondents are asked about the role played by skilled employees and specialized suppliers.

Because home country conditions help shape the nature and extent of firm capabilities, I control for two home country factors: GDP/capita (an indicator of the economic level of development of the home country), and the institutional similarity of the home country relative to the USA. Emerging multinationals from institutionally more similar countries to the USA (e.g., South Africa) are more likely to have appropriate firm capabilities that they can draw on in the USA than firms from institutionally less similar countries (e.g., Saudi Arabia). To assess the dissimilarity (similarity) of the institutional environment of developing country firms' home countries relative to that of the USA, I calculate for each country the difference between their home country and the USA for the average of three indicators: the constraints on executive decision-making powers; the use of institutions (rather than force or illegal means) to maintain law and order; and the feasibility of policy change (as determined by Henisz, 2002). The greater the value, the greater is the dissimilarity between the institutional environment of the firm's home country and the USA.

To control for the capability base in a given industry in the US, I use the proportion of US exports relative to world exports in that particular industry (at a 3-digit SIC code level). Data are drawn from UNCTAD's Handbook of Statistics.

Research intensity has been linked to competitiveness (Fagerberg, 1996; Lall, 1998), and I, therefore, control for the research intensity of the industry, using the OECD classification into high, medium and low research-intensive manufacturing, general services, and knowledge-intensive services (OECD, 2001). Because the most prominent emerging multinationals are in medium research-intensive industries (Ravamurti, 2008a: 415), this setting is used as the baseline category.

Following previous research (e.g. Andersson and Forsgren, 2000; Frost, 2001; Frost et al., 2002), I control for the age (years since the establishment of the subsidiary) and size (number of employees) of the firm.

Finally, firms were asked about their motives for setting up subsidiaries in the USA (natural resource-seeking, efficiency-seeking, market-seeking or created asset-seeking). All but one firm had market-seeking as the only motive, and the exception was dropped from the analysis. All of the firms in the study were greenfield subsidiaries, and the study therefore does not provide insight into the increasingly common phenomenon of M&A-driven FDI into the developed world. However, the study does provide insight into how market-seeking subsidiaries from emerging multinationals overcome the liability of foreignness (presented by the dual challenge of their outsider status and relatively less extensive or less appropriate capabilities) in a technologically and economically highly developed host country.

All variables are standardized to enable beta strengths to be compared with each other. Table 2 presents the bivariate Pearson correlation matrix of the variables in the study (in each case, the correlation is indicated on top, and its significance below it). As can be expected, the dimensions that constitute locational munificence – the skills from suppliers and employees, as well as the institutional and competitive environments – are correlated, but that is the most important incidence of correlation. In the analysis, cases with missing data were dropped.

For the sake of robustness, a variety of alternative specifications of core variables were used. All three dimensions of the host environment were framed more and less positively, e.g. in terms of competitive pressures, "lead users" (Von Hippel, 1986) versus "demanding customers"; in terms of institutional factors, "favorable regulatory environment" versus "stricter government regulations"; and in terms of suppliers, "specialized suppliers" versus "higher costs of material and equipment." The Human Development Index rather than GDP/capita was used to estimate the level of home country development, and regional dummies were included to account for a

Table 2
Correlations.

	Center of excellence status	GDP/capita of home country	Institutional similarity of home to host country	Export competitiveness of US industry	Subsidiary age	Subsidiary size	Skilled employees and suppliers	Institutional environment	Competitive environment
Center of excellence status	1								
GDP/capita of home country	-0.150	1							
Institutional similarity of home to host country	0.179	-0.161	1						
Export competitiveness of US industry	0.205	0.258		1					
Subsidiary age	-0.265	0.224	-0.164		1				
Subsidiary size	0.056	0.113	0.244	0.207	-0.081	1			
Skilled employees and suppliers	0.739	0.266	0.154	0.578	0.154	0.578	1		
Institutional environment	-0.071	-0.056	0.046	0.087	-0.118	0.418	0.012	1	
Competitive environment	0.625	0.702	0.755	0.550	0.547	0.935	0.409**	0.003	1
	0.342*	0.172	-0.206	-0.081	-0.089	0.012	0.555**	0.314*	0.026
	0.014	0.233	0.148	0.574	0.420	0.136	0.000		
	-0.083	0.000	-0.044	-0.091	0.119	0.216	0.000		
	0.561	0.998	0.761	0.524	0.420	0.136	0.000		
	0.108	0.151	-0.224	-0.011	-0.207	0.106	0.000		
	0.454	0.300	0.118	0.938	0.162	0.474	0.000		

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

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

possible regional effect, especially given the recent rise of China and India in Asia (Rugman, 2008). As outcome variable, the knowledge developed in the USA and shared with the parent in the home country was used as an alternative to center of excellence status, even though none of the subsidiaries in the study had created asset-seeking as a core motive.

Results throughout were substantively the same, but none of the models fit as well as the one presented. For example, signs would remain in the expected direction, but there would be a loss of significance. Given the challenges of obtaining significance with such a small sample size, the model estimation seems robust.

3.3. Results

I use Ordinary Least Squares regression to estimate the predictors for center of excellence status of emerging multinationals in the developed world. Table 3 presents the results. Even with the small sample size, the model is significant, with an F-value of 2.49. The adjusted R-square of the model is 0.28. Multi-collinearity is not a concern.

Table 3
Results.

Dependent variable: Center of excellence status	Standardized beta	t	Sig.	Collinearity statistics	
				Tolerance	VIF
(Constant)		0.915	0.367		
GDP/capita of home country	-0.259	-1.770	0.086	0.731	1.367
Institutional similarity of home to host country	-0.202	-1.353	0.185	0.700	1.430
Export competitiveness of US industry	-0.306	-1.865	0.071	0.580	1.723
General services	0.193	1.132	0.266	0.539	1.855
Knowledge-intensive services	0.039	0.211	0.834	0.454	2.204
Resource-based and low research intensity manufacturing	0.031	0.202	0.841	0.687	1.456
High research intensity manufacturing	0.346	1.856	0.072	0.451	2.216
Subsidiary age	0.079	0.540	0.593	0.725	1.380
Subsidiary size	0.002	0.015	0.988	0.812	1.232
Skilled employees and suppliers	0.535	2.942	0.006	0.473	2.114
Institutional environment	-0.161	-1.007	0.321	0.614	1.628
Competitive environment	-0.032	-0.173	0.864	0.459	2.180
R	R-square			Adjusted R-square	
0.684	0.468			0.28	
Model	Sum of squares	df	Mean square	F	Sig.
Regression	4756.791	12	396.399	2.490	0.018
Residual	5411.762	34	159.169		
Total	10168.553	46			

Three of the control variables are significant, all of them marginally so. Presence in a high research-intensive industry is positively and marginally significantly correlated with the likelihood that a subsidiary in the developed world will be recognized as a center of excellence, suggesting the importance of the developed world as a “basis for creating value” – per Frost et al. (2002: 1000) the core of the center of excellence concept – especially for the “global first movers” (Ravamurti and Singh, 2008a), working close to the technological frontier.

The non-significance of age and size may be linked to the fact that the better established firms in the host economy tend not to be in high research-intensive industries, but additional research is required to establish the mechanisms at play.

An interesting paradox is evident from the fact that recognition of centers of excellence is more likely for subsidiaries from emerging multinationals from less developed countries (as measured through GDP/capita), operating in globally less competitive US industries (as measured through export competitiveness). At the country-level, the greater relative munificence of the location seems to help the subsidiary, provided that the specific industry is not so globally competitive that emerging multinationals are overwhelmed. This result is discussed in greater detail in the Discussion section.

Neither the competitive ($\beta = -0.161$) nor the institutional (-0.032) environment contributes significantly to center of excellence status, although the signs are negative as hypothesized. However, the role of market-based resources, skilled employees and suppliers, is highly significant (t -value = 2.942) and also has a very high positive coefficient value ($\beta = 0.535$), providing clear support for Hypothesis 2.

4. Discussion

The liability of foreignness literature documents that not all firms benefit from presence in another country. Whether they are disadvantaged through their own ignorance of host country requirements, or whether they fall victim to some kind of discriminatory treatment, firms from abroad cannot presume that they will benefit from their presence abroad. One of the most commonly cited mechanisms that firms use to overcome that liability is to draw on their own firm capabilities (Nachum, 2003; Zaheer, 1995). But what if firms have limited own capabilities or “firm-specific advantages,” as argued by Rugman (2008)? Although increasing numbers of emerging multinationals have become notable successes in the global economy, many others are still finding their footing. This paper explores what those emerging multinationals do to overcome the dual liability of foreignness and limited (or less appropriate) firm capabilities.

There is a complex relationship between emerging multinationals and an advanced host economy. The fact that a subsidiary from a less developed home country is more likely (marginally significantly, but in a small sample) to become a center of excellence for the firm overall suggests that the relative munificence of the host location is important. But there is also a slightly stronger likelihood that the center of excellence will be in industries in which the host country is globally less competitive, suggesting that too big a technology gap does not benefit emerging multinationals. In other words, a munificent location represents a double-edged sword: on the one hand, there are substantial and potentially very valuable locational benefits. But on the other hands, the environment is generally more demanding of the actors located there. How do firms with weaker or less appropriate capability handle that double-edged sword?

Quite simply, firms benefit from being in an advanced host location to the extent that they can buy the resources they need. The evidence suggests that by drawing on more skilled employees and a better supplier base, emerging multinationals' subsidiaries in the developed world are able to develop capabilities useful beyond their immediate location. Often-cited elements like more sophisticated consumers, industry associations and a better institutional infrastructure (Almeida et al., 2002; Anand and Kogut, 1997; Lundvall, 2002; Porter, 1998) do not carry benefits for firms with more limited or less appropriate capability bases. Porter points out that companies “are constantly finding innovative solutions to pressures of all sorts – from competitors, customers, and regulators” (Porter, 1998: 352). However, the examples he mentions are among the most competent in the world, e.g. 3M and the Dutch flower industry. For those firms, pressures typically trigger a process of learning and problem-solving that further consolidates an already substantial competitive advantage. For weaker firms, the competitive or government pressures in a location are more likely to have a negative effect. Where the subsidiary is directly challenged in such a way that it cannot respond to the challenge, or if the challenge does not contribute to the strategic direction of the MNC, pressures from strong competitors or stringent government are likely limit the extent to which it is able to develop into a center of excellence for the MNC overall.

However, there is a different set of mechanisms when firms set out to acquire resources through the market. Rugman (2008) recognizes limitations in the firm capabilities of some emerging multinationals when he suggests that they often rely on country-specific advantages rather than firm-specific advantages to support their internationalization. This study suggests that largely market-based resources in the host location, rather than firm capabilities, are also important to help subsidiaries from emerging multinationals overcome the liability of foreignness and achieve their mandates in the developed world. Indeed, in terms of theory, this study suggests a boundary condition for the widely used capability-based view of the firm.

The evidence suggests that some kind of transaction theory approach should be used alongside the capability-based view of the firm to explain how firms manage the challenge of a liability of foreignness without a strong pre-existing resource base. Previous studies of emerging multinationals have found transaction cost theory useful (e.g. Hoskisson et al., 2000; Mesquite and Lazzarini, 2008) but one of the core concerns about transaction costs economics has been how it accounts for the acquisition of know-how (Kogut and Zander, 1992).

Although a purely market-based approach does not adequately explain knowledge acquisition, transaction cost economics has long recognized that the relationship between the market and hierarchy is blurred (Hennart, 2001). And much as they have a

contractual basis, relationships with employees (Rousseau and Parks, 1992) and even suppliers (Rinehart et al., 2004) have a definite hierarchical dimension. This paper provides evidence of the important role of relationships with a contractual basis in supporting the development of advanced, useful capabilities that are recognized by the parent (which is how the center of excellence definition is operationalized).

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Appendix A. Center of excellence – items

Which of the following activities are undertaken by your unit? (Select all applicable boxes)

- a. RESEARCH – BASIC or APPLIED
- b. DEVELOPMENT of NEW PRODUCTS, PROCESSES/SERVICES
- c. PRODUCTION and/or MANUFACTURING OF GOODS/SERVICES
- d. MARKETING & SALES
- e. LOGISTICS & DISTRIBUTION
- f. PURCHASING
- g. OTHER, PLEASE SPECIFY _____

In the previous question, you have indicated the activities at your unit. Now indicate your unit's level of competence in each of the activities.

(Circle the best answer for each option)

	Level of competence of subsidiary							
	WEAK		AVERAGE				STRONG	
RESEARCH – BASIC or APPLIED	1	2	3	4	5	6	7	n/a
DEVELOPMENT of NEW PRODUCTS, PROCESSES/SERVICES	1	2	3	4	5	6	7	n/a
PRODUCTION and/or MANUFACTURING OF GOODS/SERVICES	1	2	3	4	5	6	7	n/a
MARKETING & SALES	1	2	3	4	5	6	7	n/a
LOGISTICS & DISTRIBUTION	1	2	3	4	5	6	7	n/a
PURCHASING	1	2	3	4	5	6	7	n/a
OTHER AS SPECIFIED	1	2	3	4	5	6	7	n/a

Look at the activities in the previous question that you gave a value of 4 or higher. To what extent do other units in your firm recognize those distinctive competencies?

(Select *all applicable* boxes)

	Recognition by rest of organization		
	HEAD OFFICE FORMALLY RECOGNIZE	HEAD OFFICE INFORMALLY RECOGNIZE	OTHER UNITS INFORMALLY RECOGNIZE
RESEARCH – BASIC or APPLIED	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DEVELOPMENT of NEW PRODUCTS, PROCESSES/SERVICES	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PRODUCTION and/or MANUFACTURING OF GOODS/SERVICES	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MARKETING & SALES	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LOGISTICS & DISTRIBUTION	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PURCHASING	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OTHER AS SPECIFIED	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Again look at the activities that you gave a value of 4 or higher. To what extent are those competencies potentially of use for Head Office and other units in your firm?

(Circle the best answer for each option)

	Potential usefulness for rest of firm							
	NO USE		AVERAGE				VERY USEFUL	
RESEARCH – BASIC or APPLIED	1	2	3	4	5	6	7	n/a
DEVELOPMENT of NEW PRODUCTS, PROCESSES/SERVICES	1	2	3	4	5	6	7	n/a
PRODUCTION and/or MANUFACTURING OF GOODS/SERVICES	1	2	3	4	5	6	7	n/a
MARKETING & SALES	1	2	3	4	5	6	7	n/a
LOGISTICS & DISTRIBUTION	1	2	3	4	5	6	7	n/a
PURCHASING	1	2	3	4	5	6	7	n/a
OTHER AS SPECIFIED	1	2	3	4	5	6	7	n/a

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