

Do we need different frameworks to explain infant MNEs from developing countries?

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**Do we need different frameworks to explain infant MNEs from
developing countries?**

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Do we need different frameworks to explain infant MNEs from developing countries?

Rajneesh Narula

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Abstract: Applying extant IB theory, I argue that *initial* firm internationalisation is shaped by the interdependence and dynamic interaction between its O assets and the L assets of its home location. Regardless of nationality, the initial O assets of an infant MNE tend to be constrained by the L assets available to them, rather than by their strategy. I also contrast the modus operandi of developing country (DC) infant MNEs with those from advanced economies, highlighting the similarities and differences. The O assets of DC MNEs are largely determined by home country influences. Advanced economy MNEs have a larger set of L assets to draw from, because a wider variety of non-home country influences exist. Strategy and host countries begin to play a greater role once MNEs have moved past the nascent stage. I also take a look at the changes due to globalization and how it has affected the propensity of firms to internationalise. I argue that successful firms (regardless of nationality) will increasingly explore internationalisation, but the basic pre-condition – that of possessing competitive O assets – remains the same. There is also no reason to believe that this is likely to happen disproportionately from the developing countries.

Academic research demonstrates a waxing and waning of interest in particular subjects. The developing country (DC) MNE was a popular research subject from the late 1970s till the early 1990s (see e.g., Lecraw 1977, 1993, Lall (ed) 1983, Kumar and McLeod (eds) 1981, Khan (ed) 1986). Developing country MNEs once again became a fashionable subject of research during the last decade (for excellent reviews, see UNCTAD 2006, Ramamurti 2008a, 2008b and Aulakh, 2007).

My motivation for writing this paper derives from a rather simple set of observations. In both instances, researchers highlighted certain characteristics of these ‘new’ MNEs that differentiated them from conventional MNEs. At both points in time, as well, some scholars called for new theories to explain this phenomenon, expressing the view that IB theory was insufficient to explain these growing numbers of exceptions to conventional wisdom.

A broader question arises here: what purpose does IB theory serve? Frameworks that constitute the canon of IB ‘theory’ such as the Uppsala model, the eclectic paradigm, internalisation theory, etc are designed with the aim of explaining how the actions of a majority of firms engaging in cross-border activity can be explained. Firms are economic actors that are not always rational, not imbued with perfect information, while also being

heterogeneous and idiosyncratic. It is true that IB theory has not the all-encompassing gravitas of Newton's *Principia Mathematicae* or Darwin's *The Origin of the Species*. However, the certitude provided by laws as in physics (but not biology¹) give inviolable cause and effect associations with reliable predictability. IB theory and the social sciences in general do not share this blissful state. What IB theory does do is provide a useful set of tools to systematically disaggregate cause from effect, and a referential system whereby well-understood relationships between social science phenomena may be successfully applied to understand the systematic intent and the consequent outcomes associated with the actions of *the majority* of MNEs. It borrows across disciplines, as needed, rather than create specific one-size-fits-all theories.

A general (and yet more specific) IB theory that does more, is to expect too much: IB theory is very much a quilt work of concepts and principles that derive generously from economics, politics, psychology, sociology and a host of other disciplines to explain patterns of behaviour of firms and the actions of their managers in an international setting, within our complex ecosystem. The 'average' firm is the unit of analysis, although there are important variations. As with all ecosystems, change occurs, perhaps because new organisms evolve, others mutate, altering established patterns of behaviour of the various participants who need to adapt in response. IB theory is similar to other social sciences in this respect: it does not do especially well in explaining the choices and actions of firms at the individual level, not least because they are heterogeneous.

That such a large variation in the action of firms exists is ultimately because firms consist of human beings who are endlessly complex and interact and evolve with their external milieu. Managers are not omniscient; neither gifted with the wisdom of sages, nor the foresight of Nostradamus. The strategic directions they choose reflect their personal beliefs and biases as much as objective analyses. Besides, successfully implementing even the most carefully considered strategy is quite a different matter.

The 'new' organism on the block (so to speak) is the developing country MNE, and it is not entirely coincidental that there are novel, previously unobserved interactions and interdependencies between various actors within the ecosystem. My objective here is to

¹ Darwin's work is a perfect example of similar imprecision: it provides important principles, but non canonical relationships (Shapin 2010). The myriad application and testing of evolutionary theory are extensions that borrow across fields, as indeed IB theory does, combining Darwinian ideas with further insights from Herbert Simon, Karl Marx, and Joseph Schumpeter, among others.

answer the question, ‘do developing country MNEs really need new theories to explain them?’

It is a common mistake to presume that all MNEs are created equal. As Ramamurti (2008a:420) persuasively argues, they evolve gradually from a small international footprint, simple structures (infant MNEs) towards an increasing cross-border intensity and complex organisations. The advanced economy MNE archetype is regarded as being a ‘mature MNE’ and the recent vintage of most DC MNEs suggest they are infant or adolescent MNEs. However, it is apparent that advanced economy MNEs are not all mature: these home countries also spawn infant MNEs. I will contrast the behaviour of DC firms that venture abroad to become MNEs with those of advanced economy firms seeking to do the same thing, highlighting the similarities and differences.

I acknowledge that the ‘ecosystem’ has changed: Globalization allows accelerated internationalisation and new opportunities for domestic firms to become MNEs. But these changes are not obviously unique to developing countries. It is also true that globalisation has not made home countries identical: the initial conditions associated with DC infant MNEs are different from similar infant MNEs from advanced economies.

I will argue that the principles behind a firm becoming an MNE have not changed. First, internationalisation requires knowledge assets, and the ability to be competitive in overseas markets depends on acquiring, maintaining and developing these firm-specific assets. Second, the home country plays a significant role in constraining and defining the kinds of assets an infant MNE possesses, and this is true not just developing economies. Third, because these initial conditions vary considerably between home countries, there are inevitable differences in the early internationalisation of MNEs from different home countries. These initial conditions constrain the internationalisation process, but the necessary assets and the principles upon why internationalisation takes place are no different from their advanced economy counterparts.

This paper seeks, in particular, to emphasise two things, relying largely on the eclectic paradigm. First, that investment choices and opportunities for expansion reflect individual firms’ strategies, and these are heterogeneous and varied because firms are also heterogeneous and varied. However, every firm has a specific set of firm specific assets. Such assets evolve slowly, thereby establishing cognitive limits to what firms can and cannot do at any given point in their evolution *as MNEs*. Its initial set of firm-specific assets act as an

envelope for the early stages of internationalisation of MNEs (of whatever nationality), no matter what the strategy of the firm might be. A firm may expand abroad despite (or because of) these limits, but there is a certain threshold of ownership-specific (O) assets that the firm must possess for such international expansion to be sustainable in the long run. This is a fundamental principle that applies to all firms regardless of nationality.

Second, the O assets of MNEs are constrained and shaped by the Location-specific (L) characteristics of their home country. To be more precise, *the initial O assets of a MNE tend to be constrained to a greater extent by the L assets of the home country more than by the strategy they choose*. Strategies of MNEs can affect the evolution of their assets in future time periods, but they do not nullify these constraints. It is also the case that there is not only a strong interdependence between the O assets of firms of a given nationality and the L characteristics of its home location, but also a dynamic interaction between the two. When it ventures abroad, the infant MNE's portfolio of O assets closely resemble those that are associated with the home economy, where the majority of its value-adding is undertaken.

This paper proceeds along the following lines. The next section revisits the eclectic paradigm which forms the primary basis of this study, offering some clarifications on the nature of O and assets. I then proceed to examine the interaction between firm-specific assets and L assets of countries taking an evolutionary perspective on the process of competitive advantage upgrading of infant MNEs. His paper then proceeds to examine how infant MNEs from advanced economies and developing countries differ. The penultimate section looks at what changes globalization might have had in the way in fundamentally altering the O-L interaction. The final section draws some conclusions, and looking towards the future, considers the outlook for DC MNE activity, and avenues for future research.

Some clarifications on the nature of advantages and assets

The various conceptual approaches collectively identified as 'received IB theory' rely on the eclectic paradigm and internalisation theory. These approaches hold that entrepreneurial firms with particular kinds of assets are able to make use of conditions and circumstances available in foreign locations to engage in value-adding activities in those locations. These assets are variously described as ownership-specific (O) advantages or firm-specific assets. Assets that are not specific to a particular firm but are potentially available to all economic

actors in a specific location (and are not readily mobile) are termed location-specific (L) advantages or country-specific assets. Although each pair of terms is used interchangeably, will seek to clarify and expand on their nature, also explaining in the process why I believe the terms ‘ownership-specific (O) assets’ and ‘location-specific (L) assets’ are more accurate.

The concept of ‘advantage’ reflects the path dependency of the eclectic paradigm and its provenance as an extension of trade theory. Advantages imply superiority in the same sense as comparative and absolute advantage, but not in the Ricardian context used in trade theory. In the context of trade theory, L advantages would be taken to mean the relative strength or weakness of economic activity within a specific industry within a specific location. Instead, IB theory takes the concept of L advantages to be relative in the sense of comparing between locations, and is subjective in its assessment. Likewise, the generic definition of O advantages is that they provide as a net cost advantage to foreign-owned firms over indigenous firms in the relevant local market (Dunning 1993).

The definition of O advantages as originally stated is dated. In a world of global markets, firms moving abroad are faced not just with competition from domestic firms in the same industry but also with MNEs of other nationalities located in that market. However, more generally, advantages imply a comparative aspect that implicitly draws from neoclassical economics: those economic actors are rational and have perfect information. For instance, in the case of firm-specific assets, it is difficult for a firm to be able to judge that its assets are superior to those of incumbent firms (of whatever nationality). Firms rarely have objective information about the tangible and intangible assets of their competitors, since such information is often uncodified, embedded in routines, equipment, and brands, embodied in individuals, and guarded jealously. The superiority of a technology or a specific knowledge asset over a rival’s version is hard to judge, even after close examination. Indeed, it is even difficult to value one’s own assets in absolute or relative terms. Comparison is difficult even where knowledge is codified (say, patents).

The literature on O advantages emphasises the importance of transaction-type O advantages (Ot) in addition to more physical assets. These derive from (a) the knowledge to create efficient internal hierarchies (or internal markets) within the boundaries of the firm and (b) being able to efficiently utilise external markets. Ot assets form a necessary and (and sometimes sufficient) basis for a firm to remain competitive (Narula 2003). Ot assets also include the knowledge of institutions, because familiarity of institutions plays an important

part in reducing the coordination costs, shirking costs and other transaction costs (James 2001, Santangelo and Meyer 2011). However, in many cases estimating whether a given firm's organisational assets provide it with superiority relative to other firms is almost impossible to determine ('is Iberia a better managed airline than British Airways?').

Besides, O assets can also be country-specific, or they can be mobile. The concept of an 'advantage' presumes these are available for use in any location by the MNE – that is, they are mobile O assets. However, not all assets are equally mobile. *Location-bound* O assets allow the firm to generate profits from these assets but only in a specific location, or in similar locations. This may be due to government-induced incentives, such as privileged access to specific natural resources, to capital, or specific infrastructure. In other cases, market entry may be restricted providing the firm with a monopoly or a pseudo-monopoly, and consequent opportunities to generate rent (e.g., telecoms licenses, petroleum drilling rights).

Location-bound O assets may also derive from specific (non-government) L assets which the firm is able to access only in the given location, the use of which requires physical presence in that specific location. MNEs can be part of large industrial group at home (sometimes with cross-holdings and common ownership) with interests in several industries. O assets can also derive from privileged access to intra-group transactions and intermediate goods within the same family of firms, but these advantages are not necessarily available when they move abroad. These may also derive from knowledge of institutions, by virtue of being an 'insider'. They may have close relationships with state-owned organisations, ministries and policy makers, and be able to influence domestic policy. They may be able to shape the technology and science infrastructure to their own needs, and in many cases, these will have evolved around and with their own domestic activities, often over a long period of time. Such linkages confer the basis to generate economic rent for incumbents, and are a cost to new entrants or those less entrenched in the domestic milieu. These advantages are not transferable to foreign markets, and establishing 'membership' in business and innovation networks in new locations is not costless (Narula 2002).

It is worth noting that knowledge of institutions can be seen at two levels. *Knowledge of similar institutions* needs to be separated from *knowledge of specific institutions*, which are highly context-specific. An Indian manufacturing firm may have considerable experience in dealing with a very slow bureaucracy in its home country. This general experience may be

useful in adjusting expectations in a country with similar conditions such as Nigeria, but the specific circumstances and the solutions to the bottlenecks will be different, in much the same way as for a British firm who wishes to enter this market (who may have experience in Ghana, where conditions are similar). Indeed, this knowledge of similar institutions may not be an advantage at all relative to a British incumbent. In short, informal location-bound O assets tend to provide limited opportunities to internationalise. Cuervo-Cazurra (2008) goes further, describing location-bound O assets as being *institution-dependent*. That is, they provide the basis for rent-generation in not just the home country, but other countries with similar institutions, thereby reconciling the tendency for MNEs to demonstrate a strong regional bias in their international activities to the relatively limited opportunities (relative to more distant but institutionally-different locations) that may be associated with culturally and psychically proximate countries.

To describe something as an ‘advantage’ is problematic particularly when it comes to firm-specific assets. Advantages are often statically estimated and temporary: firms exist in a dynamic learning environment, and what is perceived an advantage can dissipate rapidly. Other MNEs may be about to enter the same market. Incumbent MNEs that have other subsidiaries (or partners) in other locations may have similar assets. Future intra-MNE knowledge flows by rival MNEs can quite rapidly neutralise an ‘advantage’ (Narula 2010). It is important to distinguish between the assets of a particular MNE at large, and those associated with individual establishments or subsidiaries. All units/subsidiaries within a multi-unit firm, or all subsidiaries within a MNE do not have equal access to the same breadth of assets, and this differs on whether the firm has a federal structure or operates as a globally integrated network firm (Astley and Zajac 1990).

Likewise, with L advantages, full information about a specific location may not be readily available, and to compare the relative merits of one location over another requires the ability to access and analyse a vast variety of data which may not be available for all locations. L advantages are also associated with the potential spillovers from incumbent firms, and this once again requires knowledge of the firm-specific assets of these firms.

Even where some information may be available, there are costs associated with accessing this knowledge. This knowledge will of course be available to incumbents (whether domestic or foreign), by virtue of their existing activities in that location, but this is often acquired through experience (Narula and Santangelo 2012). Location-specific assets are ‘public’

because they are not private goods, but that does not always mean they are ‘public goods’: they are not freely available, and may not be used by others without (some) detriment to their value. They may be described as ‘quasi-public goods’. This knowledge may be available to incumbents (whether domestic or foreign), by virtue of their existing activities on that location, and acquired through experience.

L assets may be made available differentially by the actions of governments that seek to restrict (or encourage) the activities of a particular group of actors by introducing barriers to their use of certain location-specific assets. These may be for commercial reasons, or for strategic reasons such as national defence, or to reflect the influence of interest groups who are able to influence government policy. These represent a subset of the ‘liability of outsidership/foreignness’, because L assets may be available to local and foreign firms at differential costs (Zaheer 1995, Johanson and Vahlne 2009)

The point of the above discussion is this: the term ‘advantage’ is flawed in the way it is commonly used (perhaps this reflects the challenges of empirical testing). Firms cannot determine their superiority or that of specific locations with any degree of confidence. The best that firms can hope to do is determine whether they have the firm-specific assets in their portfolio of capabilities that allows them to generate a rent in a specific foreign location. They can only act on a conviction (or a perception) based on incomplete information, which may turn out to be wrong *ex poste* (because competitors turn out to possess superior assets after all, their O assets and location-bound, or because it turns out that these advantages are quickly eroded). They act on their *belief* of superior relative assets and internationalise (Narula 2010). Whether they are able to address these shortcomings after internationalising is a matter of how they are able to develop and upgrade their O assets, and internalise the use of L assets. Certain L and O assets are separated only by internalisation. Location-bound assets that are transferred to the private domain (i.e., they are internalised by firms), become O assets, since they assist rent generation by specific actors to the exclusion of other economic actors.

In short, O and L assets do not just interact, but they function as complements.

The impact of home countries on the O advantages of infant MNEs

Much of IB builds around evolutionary concepts, and all subscribe to the principle that knowledge assets define the ability of firms' ability to sustainably compete, from the Uppsala model to the knowledge-based theory of the firm (See variously Johanson and Vahlne 1977, 2009, Cantwell 1989, Kogut and Zander 1993, Teece and Pisano 1994, Makadok 2001). At a broader level, these same principles also apply to countries and indicate a similar propensity for firms and countries to respond to opportunities and challenges incrementally. At the MNE level, the spatial and industrial distribution and intensity of their foreign-based activities is also regarded as following similar principles. Ownership-specific assets – be they technological in the narrow sense, or organisational – all share the common characteristic that they are cumulative, and evolve over time.

In the main, firms acquire knowledge by exploring in the vicinity of their existing knowledge assets which leads to incremental innovations. Knowledge is acquired by interaction with its external environment. In the case of firms it may be through interaction with customers, suppliers, competitors, government agencies. Firms are generally averse to radical change, in that they are likely to 'stay close' to successful patterns of learning and interaction that have been successful in the past. This is referred to as routinised learning which adds to the existing knowledge and competencies of a firm without fundamentally changing the nature of its activities. Non-routinised learning involves changes in company routines and experimentation with new alternatives (see e.g. Dodgson, 1993; March, 1991). Although important exceptions exist (Johansson and Vahlne 2009), MNEs proceed in roughly similar ways from being 'infant' MNEs to 'adolescent' MNEs and to 'mature' MNEs (Ramamurti 2008a) based on a combination of the nature of their O assets and their strategy.

Evolutionary processes do not occur in a vacuum, by which I mean to emphasise that firms and their milieu interact. Firms exist as part of 'systems'. They are embedded through historical, social and economic ties to other actors in the same location, and these constrain their actions. Furthermore, all actors – whether firms, public organisations or countries - have finite resources. There are cognitive limits to what a firm can and cannot do, because it is constrained by its asset base or its potential to acquire them. Likewise, countries have specific resources and assets, which cannot be changed in the short run.

Firms and countries are systemically bound together: firms are constrained by the kinds of assets they can absorb, acquire and internalise by the extent of their absorptive capabilities (Cohen and Levinthal 1990) which in turn is shaped by their external environment. The skills

to do so are non-trivial. In other words, firms are constrained in what they can learn *by what they know* (Narula 2003).

Countries, too, evolve as they grow, with and through broadly similar processes and constraints. The upgrading of location-specific assets occurs through a variety of means and interactions. Broadly speaking, there is a movement away from labour- and natural resource-intensive activity towards capital intensive activity, and later to more knowledge-intensive activity (Dunning and Narula 1996).

The comparative advantages of a specific country and the competitive advantages of its firms show a large degree of path dependence and interdependence. A strong initial comparative advantage in a specific natural resource biases a country's economic structure in future periods towards industries that utilise this initial advantage. Clusters tend to build around such specialisations, and evolve to more complex and related sectors, both upstream and downstream (Porter 1990). Other country-specific characteristics can also constrain industry specialisation, which may derive from a combination of demand and government policies.

Firms of each country tend to embark on a path of technological accumulation that is shaped by its home country characteristics, by and large sustain a distinct profile of national technological specialisation (Cantwell 1989). It is worth noting that countries' technological specialisation changes very slowly, and likewise, because firms are embedded in the home country systems, they demonstrate strong inertia due to these linkages, and as a result, also close overlap with the technological specialisation of their home country. Indeed, globalisation has not shown to have weakened the ties to the home country innovation systems and industrial structure and specialisation (Narula 1996, 2003). As a literature inspired by Rugman and Verbeke (2004) have shown, firms continue to show a strong bias to home countries and regions, even where they have ostensibly become 'global'

It is not my intention to revisit the literature on learning and technological change here. Suffice to say, the *process* of interaction between O and L assets exists in every location, and they are not just concatenated, but also co-evolutionary. These *processes* are also broadly similar for all firms regardless of nationality. The O assets of firms in any given period tend to be a function of the home country's L assets (figure 1). Firms typically build their original resource endowments in their home country and this original resource endowment drives their initial international growth (Tan and Meyer, 2010). To understand the initial O assets

that a firm uses to internationalise, it is useful to understand the industrial and economic structure of a country.

****Figure 1 about here ****

It is axiomatic that the structure of countries and the industrial and technological specialisations of their industries vary quite considerably. Nascent internationalisation by infant MNEs from countries at different economic structures will reflect these underlying differences in L assets, even where they are in the same industry.

Figure 1 helps to summarise the interactivity of O and L assets, and how – as L assets evolve – the kinds of O assets available to infant MNEs also change. For simplicity I have taken three types of countries. First, those that do not possess a certain threshold of L characteristics, and consequently, have underdeveloped domestic commercial and investment activity (and what exists is largely state-owned), limited inward investment, and wide ranging market failure. These are low-income developing countries (LDCs), such as Tanzania, Vietnam, Bolivia, etc. A country with no discernible location-specific assets beyond resource endowments, poorly developed basic infrastructure, limited knowledge infrastructure, weak markets for capital, limited domestic entrepreneurship and economic activity, etc, will spawn few firms with sufficient O assets to engage in outward FDI. Such economies are peripherally linked to the global economy at large, having severely limited inward FDI (with the possible exception of extractive FDI), given the absence of domestic demand. In short, there are few private firms with O assets. As Figure 1 shows, O assets will depend almost exclusively on L assets of their home country:

$$O \text{ assets} = \text{fn} [L \text{ assets (home)}]$$

The second group (figure 1) represents countries that can be described as ‘emerging economies’ that have achieved a certain threshold of L assets, are home to relatively successful well-developed domestic economic actors, (private and public), both domestic and foreign. Most or all of these are middle-income countries. The O assets of domestic firms are still a function of the L characteristics, but these include the O assets of incumbent MNEs which may have created clusters or other agglomerations of economic activity. In addition, there are growing collaborative links to other economies’ knowledge infrastructures through the ‘non-firm sector’ (which includes universities and public research organisations). Domestic firms will also be engaged as suppliers and customers within global value chains

(whether through FDI or non-equity modes), and this also represents a source of O assets. Outward FDI is unlikely to be significant or intense enough to generate reverse knowledge transfers:

O assets = fn [L assets (home) + FSA (MNE) + transfers through value chains/non-equity modes]

The third group are advanced economies (among which I also include Korea, Singapore, Taiwan and Hong Kong). Such countries are home to knowledge-intensive firms, and possess strong advanced knowledge infrastructure, universities, public research organisations, well regulated and efficient business support sectors. Firms from such countries are deeply embedded in value chains and also have a significant presence through outward FDI, and the organisational skills to be able to effectively utilise reverse knowledge transfer. In the case of North America and Europe, participation in deep integration schemes confer the benefits of being part of larger *de facto* markets which effectively allow all countries participating access to a large pool of L assets:

O assets = fn [L assets (home) + FSA (MNE) + foreign operations of domestic MNEs + L assets of foreign locations]

It is important to stress that the L-O interaction is not the only issue: strategy and the actions of firms plays a role. However, especially for developing countries, macro-level, home country assets have very important influences on firm-level success: the L assets of home countries constrain (but do not always determine) the O assets of firms and their associated internationalisation activities. This linkage will weaken as these MNEs evolve towards greater maturity and international intensity and experience, and strategy plays a growing role.

The point here is that in the normal course of events, the portfolio of assets of an infant MNE from a LDC will be considerably limited compared to an equivalent advanced economy infant MNE. The initial home conditions from which it begins to internationalise shapes its assets, and therefore the character (in terms of geographical spread, sector, and mode of investment) of its outward activity. The advanced economy MNE from the same industry with the same products has a different (stronger) set of L assets to draw from, but these are to a lesser extent dependent upon the home country because there are a wider variety of non-home country influences on these firms prior to internationalisation, and these non-home

country influences are still greater as they expand abroad. We discuss this in greater detail in the next section.

Firms (of any nationality) can be proactive in responding to their lack of O assets if they desire to internationalise. They may seek to acquire assets by a variety of means. DC MNEs have the option to utilise asset augmentation to overcome their limited initial O assets, in many cases through M&A. Augmenting assets through M&A by buying ready-made networks and managerial skills associated with the acquired firm is a more rapid option to establishing internal R&D. However, the acquisition of externally generated knowledge through M&A has limits. Firms cannot absorb outside knowledge unless they simultaneously invest in their own R&D, because it can be highly specific to the originating firm, since it has a partly tacit nature (Cantwell and Santangelo 1999). The extent to which a firm is able to exploit external sources of knowledge thus depends on its absorptive capacity which is assumed to be a function of its R&D efforts, and the degree to which outside knowledge corresponds to the firm's needs as well as the general complexity of the knowledge. An important determinant of absorptive capacity is the availability of appropriate supply of human capital, which in turn is not always specific to firms, but also associated with the capabilities of the knowledge infrastructure of countries that supplements and supports firm-specific innovation.

More recently, Mathews (2006) and Goldstein (2007) have noted that partnerships and 'linkages' with foreign firms helped DC MNEs to overcome their O asset limitation. But it is important to note that the concept of asset-augmentation implies that firms have existing assets which they wish to augment (Narula 2006). It is also a reasonable principle that firms (regardless of their nationality) are rarely ever altruistic in how they select partners to cooperate, and advanced economy firms would expect something in return for their technological assets, whether it be complementary assets or market access. In the days of import substitution a useful leverage to acquire technologies was to offer access to markets that were closed to MNEs unless they had a local partner. Such options are now rarely available in a WTO world.

This is not to say that there are no islands of competence and capital from developing economies. There are interest groups, firms and wealthy entrepreneurs (as well as state-owned firms) with privileged access to, or ownership of, location-bound assets, such as land, natural resources, etc. However, access to capital and resources does not necessarily imply

organisational and managerial knowhow, and given the low absorptive capacities including the paucity of skilled staff, they are unlikely to sustainably invest abroad unless they rely entirely upon expatriate management and staff, or a joint venture partner. Infant MNEs from such countries must rely on location-bound assets to overcome their lack of transaction-type O assets. For instance, potential MNEs that have access to subsidised capital are able to engage in much more rapid and intensive internationalisation. They may be cash-rich from monopoly rents acquired in the past, and are able to sustain short term or even medium losses from internationalisation. Privately held companies or state-owned firms that are not publicly traded have the privilege of sustaining adventures abroad more easily without having to respond to shareholder advocacy. The point here is this: such infant MNEs happen despite the weak L assets of the home countries, not because of it: by definition, they are exceptions. These exceptions derive from utilising location-bound O assets as a springboard for internationalisation.

Location-bound O assets allow the firm to generate profits but only in a specific location. This may be due to government-induced incentives, such as privileged access to specific natural resources, to capital, or specific infrastructure. Location-bound O assets may also derive from specific (non-government) L assets which the firm is able to access only in the given location, the use of which requires physical presence in that specific location. Many DC MNEs are amongst the largest in their home markets, and are themselves part of large industrial groups (sometimes with cross-holdings and common ownership) with interests in several industries, and also derive location-bound O assets from privileged access to intra-group transactions and intermediate goods within the same family of firms. Indeed, this may help with internationalisation: where other members of the same domestic networks (even in the absence of formal ties) have international operations, their knowledge and competences of foreign activities positively influence internationalisation (Yiu *et al* 2007, Elango and Pattnaik 2007).

By virtue of their size and importance in the home economy, infant MNEs (again, of any nationality) may have close relationships with parastatals, state-owned organisations and policy makers (thereby able to influence domestic policy). In many cases, the knowledge infrastructure has evolved around and with their own domestic activities, often over a long period of time (Granovetter 1985). Such linkages confer the basis to generate economic rent for incumbents, and are a cost to new entrants or those less entrenched in the domestic milieu. These advantages are not transferable to foreign markets, and establishing ‘membership’ in

business and innovation networks in new locations is not costless (Tallman et al 2004). Such institutional inertia acts as an inhibitor to internationalisation where such links are strong, but encourages internationalisation where they are weak (Narula 2002).

In general, location-bound O assets tend to provide limited opportunities to internationalise, except through exports. Most often DC infant MNEs engage in resource-seeking activity, driven by the need to acquire important scarce inputs abroad that are not as cheaply available through the market. Given that their home economies are often largely dependent upon the primary sector, their FDI is also similarly focused. Nevertheless, it has been much noted that small economies with limited resource endowments and markets tend to have a greater propensity to go abroad to seek markets and resources (see e.g., Benito et al 2002).

Some location-bound O assets are more mobile than others, but only in specific circumstances. Aulakh (2007) and Cuervo-Cazurra and Genc (2008) has alluded to the advantages derived from operating in similar institutional conditions which are predominated by complex, informal institutions which create greater uncertainty or institutional ‘voids’ (Khanna and Palepu 2006). That is, emerging country MNEs are able to discount the greater risk of operating in such environments because they have more experience – either at home or in other similar countries – which provides them location-specific O assets not necessarily available to investors from developed countries. Del Sol and Kogan (2007) point to the ownership assets that Chilean MNEs have in ‘liberalisation know-how’. Chile underwent liberalisation much earlier than other Latin American countries, and firms were able to leverage this knowledge in other regional markets. Outward FDI may also be a means to exit institutional constraints at home (Witt and Lewin 2007). This is reflected in the number of the ‘early’ DC MNEs in the first wave that later withdrew or pared down their presence in developed markets. This is particularly so for those firms that relied on rents from protected home markets to subsidise their international expansion. As competition at home increased post-liberalisation, there was considerable restructuring of their foreign operations, some withdrawing from foreign markets others by paring down their foreign assets.

Why infant MNEs from developing countries and advanced economies are different

The preceding discussion suggests that the internationalisation of by nascent MNEs follows similar principles of interaction between O assets and L assets, regardless of nationality.

However, while their O assets may be constrained by their L assets of their home country, they are *differently* constrained for developing and advanced economies. Take the case of the initial conditions of two enterprises, both engaged in the production of (say) toothpicks from Bangladesh and Denmark. One will demonstrate a preference for labour-intensive manufacturing, and the other, capital-intensive technology. They are both infant MNEs, and they will each tend to venture abroad consistent with the predictions of the Uppsala model: where cultural, political and social conditions are most similar to their home countries, but this means fundamentally different locations. Also, the speed and nature of this internationalisation will also be shaped by their home country L assets. For instance, Denmark has access to the EU market, and may supply key European markets through exports. If it decides to manufacture in (say) Spain, it has easier access to financing, insurance, incentives, and government guarantees than its equivalent Bangladeshi firm.

The point here is the following: there are important nuances between developing and advanced home economies that shape the nature of internationalisation of potential MNEs. These go beyond resource endowments, the efficacy of business and innovation systems, and the challenges of market and government failure. Some derive from the legacy of import-substitution (in the case of developing economies), but most reflect fundamentally different institutional conditions that inevitably shape the L assets of countries differently. This leads to a clear differentiation in further constraining infant MNEs from developing and advanced economies differently (table 1).

****Table 1 1 about here ****

First, there are different ‘centrifugal’ drivers of outward FDI associated with developing home countries that are not present in advanced economy home countries. These are mainly associated with developing countries’ underdeveloped infrastructure and institutions, in addition to a higher degree of political instability (and a consequent fear of radical policy shifts). Advanced economies do not need to seek to overcome weaknesses in the knowledge infrastructure that are absent or underdeveloped at home (relatively speaking, in the same industry) and in general, face a policy milieu that is largely stable over the long run. In many cases, it has not necessarily been strong regulation that has detracted FDI, but the lack of *consistent* regulation (Narula and Dunning 2000). Child and Rodriguez (2005) have noted that Chinese firms may pursue outward FDI as a means to minimise disadvantages of having a purely domestic footprint. Advanced economy firms might regard stable policy

environment of their home region to be a centripetal force, relative to establishing operations in a developing country.

Second, imperfect markets for capital and poorly enforced (and organised) property rights regimes can also be a centrifugal force for DC MNEs, who find that expansion abroad allows them to access international capital markets, and protect their O assets as regulatory citizens of a host country that has better developed enforcement and protection mechanisms. Guillen and Garcia-Canal (2010) note that certain Spanish firms might not have been able to expand as rapidly in Latin America had they not had access to credit markets of the Eurozone.

Third, advanced economy firms enjoy an ‘insider’ status in most of the other countries of the Triad, either because of bilateral treaties, or due to other regional integration schemes such as NAFTA, the EU, the EEA and so on. They do not face the regulatory requirements for trade that a DC MNE might face in venturing to an advanced economy. Even where they are not ‘true’ insiders (say, a Canadian firm investing in Germany), the regulatory environment and laws are similar enough, relative to those faced by a similar investment by an infant Indonesian MNE.

Institutional inefficiencies affect entrepreneurial activity and can impede or speed up internationalisation. Although there is no reason to believe that people of any given country are inherently more entrepreneurial, the red tape facing many developing country start-ups and SMEs makes the cost of doing business especially onerous in their home countries. The time to start a new business in 2010 in Suriname was 694 days, compared with 29 days in India, 13 days in Ireland and 3 days in Singapore². These costs are disproportionately shouldered by smaller firms. It may behave such firms to internationalise earlier to other, more business-friendly locations. Institutional inefficiencies can be costly and can act as a reason to exit through outward FDI. Advanced country entrepreneurs may more easily start up firms (the average time for the OECD area is 14 days). There is greater firm heterogeneity in most advanced economies, if for no other reason than the greater opportunities for entrepreneurs to enter the formal sector due to better institutional support for SMEs. By extension, there is more potential for internationalisation, and fewer reasons to internalise as an ‘exit’.

² The number of calendar days needed to complete the procedures to legally operate a business. If a procedure can be speeded up at additional cost, the fastest procedure independent of cost is chosen. <http://data.worldbank.org/indicator/IC.REG.DURS>

It is not entirely accidental that internationalising firms tend to be among the largest firms in developing countries. The combination of a high degree of market imperfections, government failure, the consequent complex institutional setting, capital controls have resulted in a strong conglomerated industrial group sector (often built around families, or state-supported) as a common feature of developing countries (Khanna and Palepu 2000) – for instance, a recent report suggested that roughly 80% India’s listed firms are either family- or state-controlled³. Such firms enjoy state-support, whether due to state ownership or as a result of a (prior or current) status as a national champion. They tend to benefit from lower cost of capital and state guarantees, and are considered to be ‘too big to fail’ (Buckley et al, 2007, Huang, 2008). Because of their conglomerate nature, they are also able to cross-subsidise their domestic operations where necessary, as well as to expand abroad. However, on the one hand, they have fewer reasons to exit because they enjoy such a strong domestic position. Indeed, the inclination of most MNEs is to maintain a strong bias towards their home economies (Benito et al 2011). On the other hand, they are able to sustain poorly performing foreign operations for longer periods, unlike smaller firms, and also benefit from a range of supportive government policies to promote their internationalisation (Giroud et al., 2009, Fortainer and van Tulder 2009, Kumar and Chadha, 2009).

That these large domestic firms have replaced internal markets for external ones has depended upon the astute substitution of informal networks and institutions for poorly functioning (or absent) formal institutions and state regulation. Mathews (2002) notes this as one of their primary distinguishing features, and while this may well serve as an initial advantage, such networks rarely provide similar benefits abroad in the long run. However, when investing in other developing countries with similar institutions understanding the importance of informal networks does provide them with an edge. Advanced economy infant MNEs come from an institutional environment that is exactly the reverse: strong formal institutional frameworks and efficient external markets. While this is not an especially ‘portable’ O asset when investing in developing countries, it gives them an advantage when in other advanced economies.

Large family/state owned conglomerates from which many infant DC MNEs derive often do not have to be as responsible to shareholders when foreign assets underperform (Hemrit 2011). Indeed, acquisitions can provide prestige as ‘trophy FDI’ (Globerman and Shapiro

³ The Economist, 22 October 2011 ‘Adventures in Capitalism’.

2009). While enhancing the investor's reputation, they make little economic sense. Child and Rodriguez (2005) argue that a considerable share of Chinese outward FDI is driven by the government's mandate to enhance China's economic and political power in the world and expand China's international trade relations, rather than the goal of economic returns.

Advanced economy firms can internationalise by exporting rapidly to take advantage of potential opportunities (the median lead time to export from the EU economies is 2.1 days, compared with 4.8 days for lower middle income countries). Indeed, they have at their disposal large *de facto* opportunities in their home regions to export to, without considering FDI. By contrast, SMEs from developing countries may find the constraints associated with regulatory requirements towards exports, leading to FDI rather than exports. In short, as Cuervo-Cazurra (2008) points out, advanced economy firms have the advantage of having richer economically and geographically proximate, and at the same time are faced with lower risk and lower costs.

What has globalisation wrought? Why do we observe deviations? Has it changed the playing field?

Globalisation – taken here to mean the growing cross-border interdependence of markets for goods, services and capital –has much to do with economic liberalisation and the associated dismantling of economic models that relied on import substitution. Contemporaneously, de fact and de jure economic integration through supranational agreements and treaties has also played a role.

As I have alluded to throughout this paper, in understanding the internationalisation of developing country firms, policy and institutions associated with import substitution have played an important role in shaping the L assets of countries, and subsequently the O assets of their firms. To quote two important examples: closed domestic markets meant that advanced economy MNEs seeking access were obliged to offer access to technologies in exchange for market access (this still remains the case in China). Limited competition at home meant developing country firms had an avenue to develop their own assets without being crowded out by MNEs (Amsden 2008). However, closed markets also meant little pressure of competition, and subsequent underinvestment to keep up with the state-of-the-art. Still, the opportunity to generate rents through pseudo-monopolies created cash-rich domestic firms which that later were able to expand abroad through M&A. Such opportunities have dwindled with liberalisation, but there remains a path-dependence of institutions and policy.

Some oligopolies persist, and the interest groups that benefitted most from import substitution continue to wield considerable wealth and influence. Such opportunities did not of course benefit advanced economy firms in the same way, which moved away from economies built around national champions with the end of Second World War.

Nonetheless, 20 years have lapsed since liberalisation. There is also a generation of developing country firms that did not come from an import substitution background, or benefitted from internationalisation opportunities from privatization in other developing countries. How has globalisation tempered or shaped newer developing country international expansion, or modified the behaviour of the older investors?

Pro-market reforms have acted as an important push factor for the upgrading of the O assets, going hand-in-hand with accelerated internationalisation (Cuervo-Cazurra 2008, Cuervo-Cazurra and Stal 2010, Dau 2011). Globalisation has promoted O asset upgrading through three important (and interrelated) means.

First, there has been a growing role of inward MNE activity in the developing world. This has not always been through FDI, but also through exports, intra-firm and inter-firm. MNEs have been able to penetrate smaller markets through exports that were previously unattractive or unavailable to them. Although this has not necessarily been an even process, there have been – through linkages and spillovers, as well as through demonstration effects, in the countries with the relevant absorptive capacities – positive effects on the portfolio of assets of the more competitive domestic firms in some developing economies (Luo and Tung 2007). Nonetheless, there has also been some ‘crowding out’, where domestic firms are displaced, out-competed or acquired by foreign MNEs. A positive effect occurred when MNE subsidiaries that had higher productivity spurred domestic competitors to raise their productivity in order to compete effectively. Positive effects predominated in economies where the technology gap between the MNEs and their domestic counterparts was relatively small. In other words, the LDCs with poor L assets tended to benefit less from inward FDI, while the emerging countries with better-developed knowledge infrastructure saw a gradual net crowding-in, as some domestic firms sought to upgrade their O assets to compete better with MNEs (Narula and Dunning 2010).

Second, some developing country firms have sought to ally with foreign MNEs to survive in their home markets, while simultaneously upgrading their existing assets to weather the increased competition through greater investment in R&D. This has also acted as a ‘push’ to

internationalise. Globalisation has meant that firms in all countries (whether developing or developed) now had potential access to larger markets, and such international expansion becomes necessary for firms to justify the higher costs of innovation. Providing similar products across larger *de facto* markets becomes essential to defray the costs and risks of high R&D sunk costs, as firms need larger scale economies of scale and a higher minimum efficient scale.

However, it is important to highlight that – especially in newer, fast moving sectors - the gradual building-up of firm-specific assets through R&D or through joint ventures has its limits. Those firms with the capital to do so have augmented their O assets by M&A abroad, although this particular route to upgrading is fraught with challenges. It requires considerable transaction and organisational O assets

Indeed, this is the challenge of successful asset augmentation through reverse knowledge transfer. In order to generate reverse knowledge flows, the MNE subsidiary must be able to access the network of local firms and institutions in order to learn about customers and technologies and then transfer it internally within the firm. That is, the subsidiary needs to be embedded within the local milieu as well deeply integrated within the MNE network (Meyer et al 2011), which is a challenge for even the most experienced of MNEs. In general, benefits from exploiting L assets from host countries only become significant after MNEs have become substantially internationalised.

Third, inward MNE activity has led to domestic firms' O assets being enhanced as part of global supply chains and production networks of MNEs. Such associations are distinct from traditional equity-based cooperation, being driven through non-equity modes (NEM) (UNCTAD 2010). Some of this is associated with outsourcing, as firms have begun to utilise a variety of quasi-internal options in areas such as R&D through open innovation, but also in other aspects of the value chain as well. Final-goods producers find that while they can manufacture components for themselves, the per-unit cost is higher than for specialized suppliers (Grossman and Helpman 2003). As transaction and coordination costs have fallen, whole new industries have sprung up that seek to meet this need, particularly in the emerging economies, which have themselves begun to integrate forwards and establish operations in the advanced economies (for instance, in the BPO, IT, software, and garment industries) Whether as outsourcers or as part of distinct production networks, spillovers through MNE linkages have assisted in the upgrading of O assets. Some are able to leverage their

competences to act as suppliers to the MNE in other countries, thereby promoting earlier internationalisation (Li 2007, Klein and Wocke 2007).

Apart from outsourcing, there is also the phenomenon of 'insourcing'. Companies can 'buy-in' the technical, management and organisational skills needed by the astute and wholesale use of expatriate staff, in addition to the necessary equipment. The success of the 'superconnector' airlines from the Middle East, such as Etihad, Emirates and Qatar Airways suggests that such a strategy is indeed possible. This is akin to the large-scale turnkey projects commissioned as part of the import-substitution programmes of many developing countries, which were supposed to be gradually transferred into indigenous hands within a specified timeframe, except of course, in these cases no handover is planned.

These developments are not unassociated with the fragmentation of the value chain. It is no longer necessary for infant MNEs of any nationality to use the pre-liberalisation FDI model where foreign affiliates are largely 'miniature replicas' of the parent firm, embodying all aspects of the value chain. Thus infant MNEs may (for instance) internationalise only their marketing and sales activities, which require a limited set of (more mobile) assets, leaving the activities that are associated with location-bound assets at home (Cuervo-Cazurra 2007). This is not unique to DC MNEs. Fine-slicing of the value chain has been an important source knowledge transfer to DC MNEs, as advanced economy MNEs have entered into partnerships and non-equity relationships with developing country firms, undertaking the standardized tasks associated with high-knowledge activities (Mudambi, 2008; Jensen and Pedersen, 2011).

Globalisation is also associated with liberalisation of the service industry, through agreements such as the generalised agreement on trade in services (GATS) and various bilateral and multilateral initiatives that have come into force since the beginning of the 21th century. Telecommunications, insurance, banking, real estate are sectors that have hitherto had limited cross-border activity. Some of the growth in service industry MNEs is 'strategic' because banks and insurance companies need to maintain overseas operations in financial centers such as New York and London, and be capitalized or at least be registered as having a legal presence in those locations. Yet others have invested abroad to maintain a proximity to clients, who may themselves be infant MNEs from the same home country. Mobile telephony service providers from developing countries have been able to utilize their O assets in other developing countries with similar institutions especially efficiently. Advanced economy

MNEs have limited historical advantage (and no first-mover advantage) Liberalization of services has created a level playing field for both advanced economy and developing country firms.

It is unlikely that the use of informal networks by developing country firms to overcome inefficient formal institutions will continue to be an advantage. Developing countries that have moved towards more transparent and structured business-friendly formal institutional frameworks have seen a decline in the dependence on informal networks. Pananond (2007) highlights the changing dynamics of Thai MNEs after the 1997 Asian financial crisis. Pre-crisis, international expansion relied more on networking capabilities rather than industry-specific technological capabilities. Post-crisis, Thai MNE strategies included increased investment in capabilities, in addition to transforming their personalized, relationship-based networks to more transparent and formal ties.

Financial liberalisation has played an important role in promoting outward FDI as well. Prior to liberalisation, the international expansion of developing country MNEs was constrained by complex regulations inhibiting outflows, such as capital controls. Banks and public institutions in a liberalised global economy are able to borrow capital with much greater ease, both at home and abroad without complex red tape. Indeed, many home countries encourage outward FDI by providing capital for this purpose at subsidised rates.

Whither now? What the future holds for theory and infant MNEs

The speed with which some DC MNEs have evolved from being domestic players to international players is nothing short of amazing. However, this also reflects a selection bias: for every success story there are countless examples of failed infant MNEs, of whatever nationality. Our basic point is this: there are few obvious reasons to predict that DC MNEs are of unique character, and as they evolve as MNEs the observable differences between DC MNEs and advanced economy MNEs will diminish. It is worth noting that some of the success stories from Korea, Singapore and Taiwan increasingly resemble their advanced economy counterparts in almost every way, just as Japanese MNEs had done a few decades previously. Amongst the 'new' MNEs, some are already moving there, such as India's Tata, Brazil's Embraer, and China's Huawei, which increasingly resemble mature MNEs in

organizational structure and complexity. Some are not even new: Tata & Co had offices in Hong Kong as early as the 1880s to facilitate their trading activities in China⁴.

My focus has been specifically on ‘nascent MNEs’. The relationship between home country assets and O assets of firms is deterministic. However, once past the infant MNE stage, as MNEs become more mature, differences in their *modus operandi* due to their initial home country conditions become less significant (Rugman 2008). MNEs’ firm-specific assets are influenced by a myriad of other factors. As they become embedded in new locations abroad, the O assets of MNEs are influenced by multiple sets of L assets, and create the challenge of multiple embeddedness (Meyer et al. 2011). Mature MNEs that have a more global outlook have to interact frequently with other actors in each host country. All these interactions have the potential to change the O assets of the various participants. Such interactions vary in intensity, depending upon a variety of factors. The greater the scope and competence of an MNE subsidiary in a given location and the more they are embedded in the host location, the greater the interaction with other actors. This implies managing a portfolio of activities in multiple, heterogeneous, local contexts (Figueiredo 2011).

What is clear is that certain opportunities have permitted some DC firms to internationalise have derived from a pre-liberalisation, import-substitution setting. However, two decades after liberalisation, new DC firms cannot expect to rely on such opportunities, although fresh ones in new and emerging sectors present themselves. However, such opportunities are more likely to benefit firms from those developing countries whose governments have invested in creating a supportive institutional and knowledge infrastructure that encourages entrepreneurship and innovation. I am arguing that there will indeed be more DC MNEs, but only where the home economies demonstrate the capacity to sustainably provide the appropriate L assets. Globalisation has undoubtedly also made it both necessary and possible that fewer successful firms will maintain purely domestic footprint. At the same time, there is no reason to believe that this is likely to happen disproportionately from the developing countries.

Conceptually, there are some important unanswered questions. It seems clear that firms can survive in the absence of superior technological assets, generating rent simply from its superior knowledge of markets and hierarchies, inter alia through the astute use of arbitrage. Exactly what constitutes entrepreneurial ability as a sustainable firm-specific asset is not

⁴ <http://www.legco.gov.hk/1886-87/h870325.pdf>

entirely clear. Entrepreneurship is not only about identifying new opportunity for rent generation, and the ability to bear the associated risk, but also the capacity to coordinate activities associated with such opportunities.

Furthermore, although it has been argued that entrepreneurial assets be seen as a complementary set of assets to knowledge-based O assets (Cantwell and Narula 2001), can one class of O assets substitute for another? Can infant MNEs with an over-abundance of capital and specialised technological assets overcome a deficiency in transaction-type O assets?

The most significant limitation of this paper has been deliberate. I have not spoken at any length about the growing popularity of non-equity modes in a globalising world. This relates to the third pillar of the eclectic paradigm - the internalisation advantage – and how this interacts with L and O assets, and influences the upgrading of firm-specific assets.

- Amsden, A. (2008) Does firm ownership matter? POEs vs. FOEs in the developing world, In Ramamurti, R. and Singh, J. (eds), *Emerging Multinationals from Emerging Markets*. Cambridge: Cambridge University Press.
- Astley, W. and Zajac, E. (1990) Beyond dyadic exchange: functional interdependence and sub-unit power, *Organization Studies*, 11, pp. 481-501.
- Aulakh, P.S. (2007). Emerging multinationals from developing economies: Motivations, paths and performance. *Journal of International Management*, 13(3): 235 – 240.
- Benito, G.R.G., Larimo, J., Narula, R. and Pedersen, T. (2002). 'Multinational enterprises from small economies: Internationalization patterns of large companies from Denmark, Finland and Norway'. *International Studies of Management and Organization*, 32, 57-78.
- Benito, G.R.G., Lunnan, R. and Tomassen, S. (2011). Moving abroad: foreign located division headquarters in multinational companies. *Journal of Management Studies*,
- Buckley, P.L, Clegg, J., Cross, A., Liu, X., Voss, H, Zheng, P. (2007). The determinants of Chinese outward foreign direct investment. *Journal of International Business Studies*, 38: 499 – 518.
- Cantwell, J. (1989) *Technological Innovation and Multinational Corporations*, Oxford: Basil Blackwell.
- Cantwell, J., G.D. Santangelo (1999), 'The frontier of international technology networks: sourcing abroad the most highly tacit capabilities'. *Information Economics and Policy* 11(1) 101-123.
- Cantwell, J., Narula, R. (2001). The eclectic paradigm in the global economy. *International Journal of Economics of Business*, 8: 155-172.
- Child, J., Rodriguez, S. (2005). The internationalization of Chinese firms: a case for theoretical revision? *Management and Organization Review*, 1: 381 – 410.
- Cohen, W.M.; Levinthal, D. (1990). "Absorptive capacity: a new perspective on learning and innovation", *Administrative Science Quarterly*, Vol. 35, pp.128-
- Cuervo-Cazurra, A., Genc, M. (2008). Transforming disadvantages into advantages: developing countries MNEs in the least developed countries. *Journal of International Business Studies*, 39: 957 – 979.
- Cuervo-Cazurra, A and Stal, E. (2010) extending the investment development path explanation of outward foreign direct investment of developing countries: the role of pro-market reforms and regulatory escape, paper presented at the 2nd Copenhagen conference on 'emerging multinationals' 25-26 November
- Cuervo-Cazurra, A. (2008) The multinationalization of developing country MNEs: The case of Multilatinas. *Journal of International Management*, 14: 138-154.
- Cuervo-Cazurra, A. (2007) Sequence of Value-added Activities in the Multinationalization of Developing Country Firms, *Journal of International Management*, 13, 258- 277.
- Dau, L. (2011) reforms, multinationalization, and profitability, unpublished paper presented at the SMS extension conference, Miami
- Del Sol, P. Kogan, J. (2007). Regional competitive advantage based on pioneering economic reforms: the case of Chilean FDI. *Journal of International Business Studies*, 38: 901 – 927.
- Dodgson, M. (1993) 'Organizational Learning: A Review of some Literatures', *Organization Studies*, vol 14, pp. 375-94.
- Dunning, J.H, Narula, R. (1996). The investment development path revisited: some emerging issues. In Dunning, J.H. and Narula, R. (eds.), *Foreign Direct Investment and Governments: Catalysts for Economic restructuring*. London: Routledge.
- Dunning, J.H. (1993), *Multinational Enterprises and the Global Economy*. Addison-Wesley, New York.
- Elango, B., Pattnaik, C. (2007). Building capabilities for international operations through networks: a study of Indian firms. *Journal of International Business Studies*, 38: 541 – 555.
- Figueiredo, P. (2011), 'The role of dual embeddedness in the innovative performance of MNE subsidiaries: evidence from Brazil'. *Journal of Management Studies*.
- Fortanier, F. and van Tulder, R. (2009) Internationalization trajectories—a cross-country comparison: Are large Chinese and Indian companies different? *Industrial and Corporate Change*, 18 (2), 223-247

- Giroud, A. Mirza, H., Wee, W. (2009). FDI from developing to developing countries: key role of institutions and future prospects. *Paper presented at AIB – UKI – 2009*.
- Globerman, S. and Shapiro, D. (2009) Economic and strategic considerations surrounding Chinese FDI in the United States, *Asia Pacific Journal of Management*, Vol 26, 163-83
- Goldstein, A. (2007) *Multinational Companies from Emerging Economies. Composition, Conceptualization and Direction in the Global Economy*, London: Palgrave Macmillan.
- Granovetter, M. (1985) "Economic Action and Social Structure: The Problem of Embeddedness." *American Journal of Sociology*, Vol. 91, pp. 481-510.
- Grossman, E and Helpman, E. (2003) outsourcing versus FDI in industry equilibrium, *Journal of the European Economic Association*, Volume 1, Issue 2-3, pages 317–327
- Guillen, M. And Garcia-Canal, E. (2010) *The New Multinationals*, Cambridge University Press
- Hemrit, M (2011) *Beyond the Bamboo Network: The Internationalization Process of Thai Family Business Groups*, PhD dissertation, Stockholm School of Economics
- James, J. (2001) "Information technology, cumulative causation and patterns of globalization in the third world." *Review of International Political Economy*, 8, 147-62.
- Jensen, P. and Pedersen, T. (2011). 'The economic geography of offshoring: the fit between activities and local context'. *Journal of Management Studies*,
- Johanson, J. and Vahlne, J.-E. (1977). 'The internationalization process of the firm - a model of knowledge development and increasing foreign market commitments'. *Journal of International Business Studies*, 8, 23-32.
- Johanson, J. and Vahlne, J.-E. (2009). The Uppsala internationalization process model revisited: From liability of foreignness to liability of outsidership, *Journal of International Business Studies* 40, 1411–1431
- Khan, K.M. (ed). 1986. *Multinationals of the South: New Actors in the International Economy*. London: Frances Printer Publishers.
- Khanna, T. and Palepu, K. 2000. The future of business groups in emerging markets: Long-run evidence from Chile, *Academy of Management Journal*, 43(3): 268-285.
- Khanna, T., Palepu, K. (2006). Emerging giants: building world class companies in developing economies. *Harvard Business Review*, 84(100): 60 – 70.
- Klein, S. and Wocke, A. (2007) Emerging Global Contenders: the South African Experience, *Journal of International Management*, 13, 319- 337.
- Kogut, B. and Zander, U. (1993). 'Knowledge of the firm and the evolutionary theory of the multinational corporation'. *Journal of International Business Studies*, 24, 625-45.
- Kumar, K., McLeod, G. (eds) *Multinationals from Developing Countries*. Lexington Books.
- Kumar, N., Chadha, A. (2009). India's outward foreign direct investment in steel industry in a Chinese perspective. *Industrial and Corporate Change*, 18: 249 – 267.
- Lall, S. (1983). *Third World Multinationals*. Chichester, John Wiley.
- Lecraw, D. (1977). Direct investment by firms from less developed countries. *Oxford Economic Papers*: 442 – 457.
- Lecraw, D. (1993). Outward direct investment by Indonesian firms: motivation and effects. *Journal of International Business Studies*, 24(3): 589 – 600.
- Li, P. (2007), Toward an Integrated Theory of Multinational Evolution: the Evidence of Chinese Multinational Enterprises as Latecomers, *Journal of International Management*, 13 (3), 296-318.
- Luo, Y. and Tung, R. (2007). International expansion of emerging market enterprises: A springboard perspective. *Journal of International Business Studies*, 38(4): 481 – 498.
- Makadok, Richard. 2001. Toward a synthesis of the resource-based and dynamic-capability views of rent creation. *Strategic Management Journal*, 22(5): 387.

- March, J. (1991) 'Exploration and Exploitation in Organizational Learning', *Organizational Science*, vol 2, pp. 71-87.
- Mathews, J. (2002). *Dragon Multinational: Towards a New Model of Global Growth*. New York: Oxford University Press.
- Mathews, J.A. (2006). Dragon multinational: New players in 21st century globalization. *Asia Pacific Journal of Management*, 23: 139-141.
- Meyer, K., Mudambi, R. and Narula, R. (2011) MNEs and Local contexts: location, control and value creation, *Journal of Management Studies*, 48(2), 253-277.
- Mudambi, R. 2008. Location, control and innovation in knowledge-intensive industries. *Journal of Economic Geography*, 8(5): 699-725.
- Narula, R. (1996). *Multinational investment and economic structure*. London: Routledge.
- Narula, R. (2002). Innovation systems and “inertia” in R&D location: Norwegian firms and the role of systematic lock in. *Research Policy*, 31: 795 – 816.
- Narula, R. (2003) *Globalisation and Technology: Interdependence, Innovation Systems and Industrial Policy*, Cambridge: Polity Press.
- Narula, R. (2006). Globalization, new ecologies, new zoologies, and the purported death of the eclectic paradigm. *Asia Pacific Journal of Management*, 23(2): 143.151.
- Narula, R. (2010), 'Keeping the eclectic paradigm simple'. *Multinational Business Review* 18(2) 35 - 50.
- Narula, R., Dunning, J.H. (2000) *Industrial Development, Globalization and Multinational Enterprises: New Realities for Developing Countries*. Oxford Development Studies, 28(2): 141 – 167. bhhhhhh
- Narula, R., Dunning, J.H. (2010). Multinational enterprises, development and globalization: some clarifications and a research agenda. *Oxford Development Studies*, 38(3): 263 – 287.
- Narula, R., G.D. Santangelo (2009), 'Location, collocation and R&D alliances in the European ICT industry'. *Research Policy*, 38(2) 393-403.
- Narula, R., G.D. Santangelo (2012) New Insights on the Role of Location Advantages in International Innovation, *Multinational Business Review*, in press
- Pananond. P. (2007) The changing dynamics of Thai multinationals after the Asian economic crisis. *Journal of International Management*, 13(3): 356-75.
- Porter, M. (1990) *The Competitive Advantage of Nations*, New York: The Free Press. 341-363.
- Ramamurti, R. (2008a). What have we learned about emerging MNEs? in Ramamurti, R. and Singh, J. (eds). *Emerging Multinationals from Emerging Markets*. Cambridge, UK: Cambridge University Press.
- Ramamurti, R. (2008b). Why study emerging-market multinationals? In Ramamurti, R. and Singh, J. (eds), *Emerging Multinationals from Emerging Markets*. Cambridge: Cambridge University Press.
- Rugman, A. (2008) In Ramamurti, R. and Singh, J. (eds), *Emerging Multinationals from Emerging Markets*. Cambridge: Cambridge University Press.
- Rugman, A.M. and Verbeke, A. (2004). A perspective on regional and global strategies of multinational enterprises. *Journal of International Business Studies*, 35: 3-18.
- Santangelo, G.D., K.E. Meyer (2011), 'Extending the internationalization process model: Increases and decreases of MNE commitment in emerging economies'. *Journal of International Business Studies* in press.
- Shapin, S. (2010) The Darwin Show, London Review of Books, Vol 37, pp3-9
- Tallman, S., Jenkins M, Henry, N., and Pinch, S. (2004) Knowledge, Clusters and Competitive Advantage, *Academy of Management Review*, Vol. 29, pp 258-271
- Tan, D. and Meyer, K.E. 2010. Business group’s outward FDI: a managerial resources perspective, *Journal of International Management*, 16(2): in press.
- Teece, David & Gary Pisano. 1994. The Dynamic Capabilities of Firms: an Introduction. *Ind. Corp. Change*, 3(3): 537-a-556.
- UNCTAD (2006). *World Investment Report, 2006*. Geneva: United Nations.

UNCTAD (2010). *World Investment Report, 2010*. Geneva: United Nations.

Witt, M., Lewin, A. (2007). Outward foreign direct investment as escape response to home country institutional constraints. *Journal of International Business Studies*, 38(4): 579 – 594.

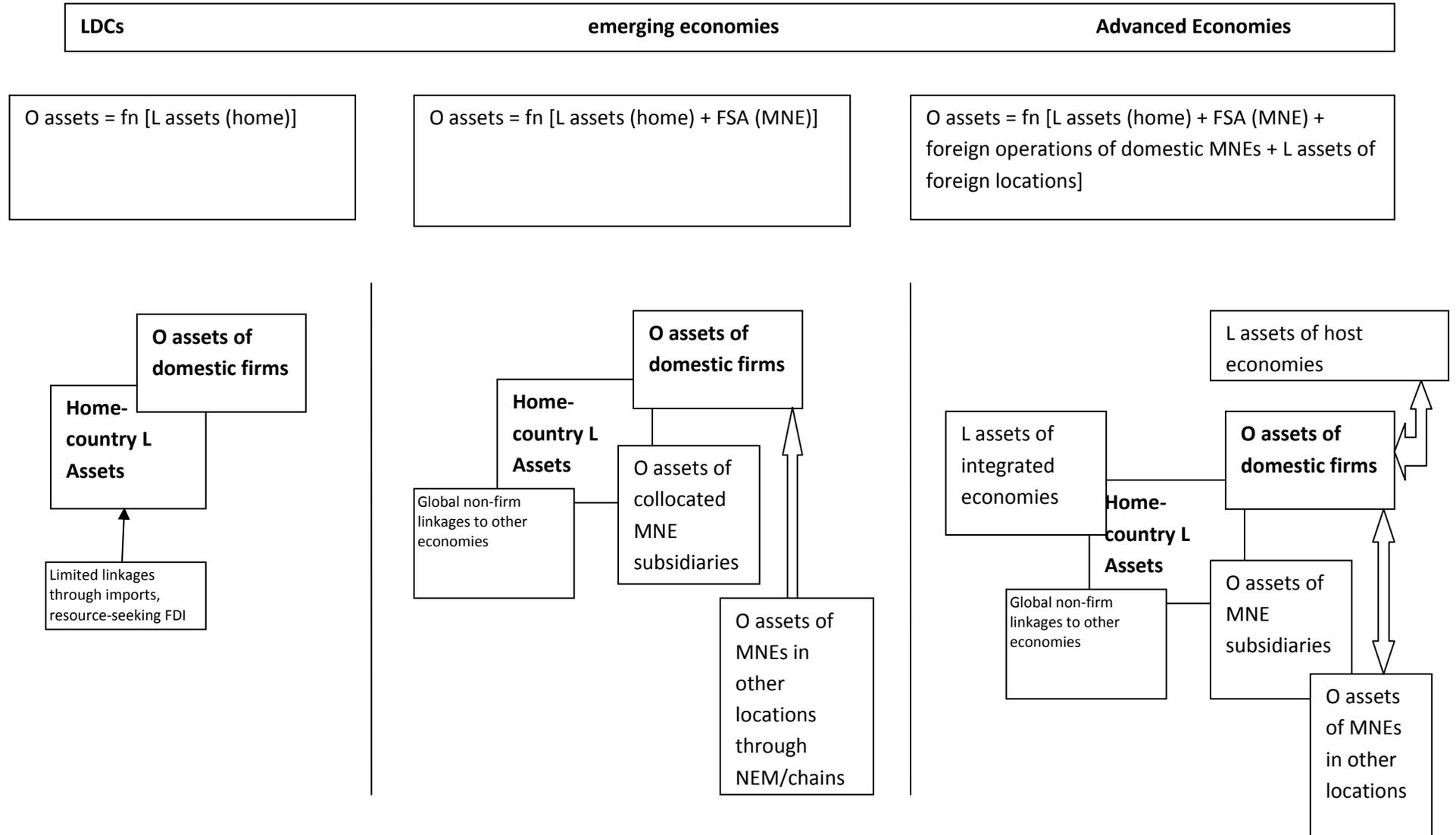
Yiu, D.W., Lau, C., Bruton, G.D. (2007). International venturing by emerging economy firms: the effects of firm capabilities, home country networks and corporate entrepreneurship. *Journal of International Business Studies*, 38: 519 – 540.

Zaheer, S. (1995). 'Overcoming the liability of foreignness'. *Academy of Management Journal*, **38**

Table 1: How L assets of advanced economy and developing country firms affect the O assets of their MNEs differently.

| Developing country L assets | Advanced economy L assets |
|---|---|
| Weak knowledge infrastructure- little R&D activity undertaken by public organisations. Firms must bear the large proportion of R&D costs at home. | State-owned or subsidised organisations and universities undertake a considerable amount of R&D, both independently, and on behalf of private firms |
| Poorly enforced intellectual property rights regimes both at home and abroad (patents at home may not be recognised abroad) | Strong intellectual property regimes that are actively enforced, both at home and abroad |
| Few economies of agglomeration at home - domestic clusters tend to be in labour intensive sectors. | Strong clusters in innovation-intensive sectors |
| Home country stock markets are insufficiently capitalised to support capitalisation of foreign expansion. Capital controls may limit using inter-company flows to finance operations. Banks have limited capital to lend, charging high interest rates. | Capital is easier to raise, from banks and stock markets. Home country banks tend to be highly capitalised, and interest rates are lower. |
| Home governments do not always take an interest in the commercial interests of their MNEs abroad, or do so selectively. They may simply not have the resources to make such interventions. | Home governments have necessary clout (and are willing) to negotiate with host country organisations to ensure national treatment/preferential treatment for their MNEs |
| Political and institutional instability encourages outward FDI to more stable locations | Relatively stable political and institutional milieu acts as a centripetal force on investment. |
| High barriers to FDI in advanced economies due to regulatory requirements, which may include technical/health certifications which are cumbersome and expensive to acquire. These create high initial costs. | Membership of ‘first world’ regional integration schemes means that regulatory requirements to export /set up affiliates to other advanced economies are already fulfilled, or have lower marginal thresholds |
| Geographically proximate/low psychic/economic distance countries in the region tend to be other developing countries. Investments in advanced economies tends to require radical exploratory learning | Geographically proximate/low psychic/economic distance countries in the region tend to be advanced economies. This is exploitative learning. |
| | |

Figure 1: the evolving relationship and nature of O assets of MNEs, with development and stages of MNE growth



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