Abstract

Purpose – The purpose of this paper is to show that existing theories, principally Dunning’s OLI model, Mathews LLL model and Rugman’s version of internalization theory are unable to explain the rise of emerging market multinationals (EMNEs). The reason is that they over-emphasize the strategic importance of intangibles and ignore that of complementary local assets. Taking complementary local assets into account makes it possible to understand why EMNEs are able to finance their intangible-buying sprees and, often with the help of their governments, to swap market access for technology.

Design/methodology/approach – This is a conceptual paper based on the bundling model (JIBS 2009) and backed by the case histories of four EMNEs.

Findings – The author shows that EMNEs have much better prospects vis-à-vis established MNEs than generally thought in Western Europe and the USA and that they will become serious competitors.

Originality/value – This is, as far as the author knows, the first explanation of why EMNEs have the bargaining power and the resources necessary to swap or buy technology from established MNEs.

Keywords Emerging market multinationals, Bundling model

Paper type Conceptual paper

Introduction

As multinational firms based in emerging markets[1]—the emerging market multinationals (EMNEs)—are increasingly making foreign direct investments (FDIs) in developed countries, International Business (IB) scholars have started to debate whether these investments require new theories, or whether they can be explained within the three theoretical frameworks that were developed in the last three decades of the 20th century to explain the rise of multinational enterprises (MNEs) based in developed countries, namely, the OLI paradigm of Dunning (1988); the internalization model developed by Buckley and Casson (1976) and popularized by Rugman (1981) and Rugman and Verbeke (1990); the transaction cost model developed by Hennart (1982) and updated in 2009 with his bundling model (Hennart, 2009, 2012; Hennart et al., 2015). The goal of these three theories is to explain the existence and the footprint of MNEs, or in other words, why firms based in one country coordinate international interdependencies by having employees in other countries rather than by using market arrangements.

I discuss whether existing theories can adequately account for the existence and growth of EMNEs. My answer is both yes and no. I argue that the existence and growth of EMNEs is not compatible with the OLI paradigm as it stands now, but can be explained by the transaction cost model of the MNE (Hennart, 1982, 2010, p. 200). EMNEs do not fit the OLI paradigm because it posits that FDIs, and hence EMNEs, require that the investor possesses firm-specific advantages (FSAs). EMNEs possess few FSAs. Indeed, some of their FDIs are motivated by the search for FSAs, not by their exploitation. I argue that, on the other hand, FSA-seeking FDIs are compatible with a transaction cost view of the MNE (Hennart, 1982, 2010, 2015a).

The second reason why OLI has difficulty explaining EMNEs is that it assumes that the complementary local resources (CSAs) that foreign investors need to access in order to
exploit their intangibles in host markets are available on the same terms to local firms and foreign investors alike (OLI theory calls them location or country-specific advantages, hence specific to a country but not to a firm). I show that this is not the case, and that location advantages can be firm-specific and can provide strategic advantages to local firms. As shown by my bundling model (Hennart, 2009, 2012; Hennart et al., 2015), control of location advantages gives emerging market firms the time and the resources needed to catch up with developed country MNEs (DMNEs), and hence allows them to strengthen their bargaining position, and to eventually become EMNEs.

I first outline the OLI paradigm and show why it cannot account for the asset-seeking FDIs of emerging market firms. I then discuss how IB scholars have reacted to this disconnect. I argue that the transaction cost model of the MNE can handle these FDIs. Next I explain how the OLI assumption of freely accessible location advantages has prevented IB scholars from seeing that control of location advantages, which I call CSAs, can provide FSAs that are similar to the traditional intangible-based FSAs which are central to the OLI paradigm. Using four examples, I show how emerging market firms have used their control of key complementary resources to obtain access to cutting edge technology and valuable brand names, and how they have subsequently used these intangibles to compete globally. I conclude by stating some of the boundary conditions of my model, by developing some of its implications for the future of EMNEs, and by suggesting some avenues for further research.

Why the OLI model cannot account for FDIs by emerging market firms
Scholars who have discussed whether FDIs by emerging market firms can fit into existing theories have taken the OLI paradigm as their reference point (e.g. Dunning, 2006; Narula, 2006; Mathews, 2006a, b; Rugman and Li, 2007; Lessard and Lucea, 2009; Rugman, 2009; Ramamurti, 2009; Guillen and Garcia-Canal, 2009; Contractor, 2013; Grosse, 2016). The goal of the OLI paradigm—like that of internalization and transaction cost theories—is to account for “the extent and pattern of value added by MNEs outside their national boundaries” (Dunning, 1988, p. 21), i.e. to explain why firms produce goods and services in foreign countries with their own employees as opposed to exporting to these countries or licensing or franchising local producers. For Dunning (1988), there are three necessary and sufficient conditions for the existence of MNEs: firms must have ownership advantages, location advantages, and internalization advantages[2].

First, a firm must possess ownership advantages—these are also called FSAs (Rugman and Verbeke, 1990). FSAs are new product and process technologies and strong brand names (Dunning and Lundan, 2008, p. 101). The reason why foreign investors must have FSAs is that they face higher costs than local rivals when operating abroad and must offset these added costs with FSAs (Hymer, 1976).

However, having FSAs is not a sufficient condition for being an MNE because the firm could exploit its FSAs without having employees in the target foreign country. It could serve that market through exports handled by independent agents, in which case it would not be an MNE because it would not have employees in the target country. It must therefore be more profitable to locate production in the foreign country than at home. In other words, the target country must have location advantages that make it more efficient to locate production there than to export from home. Location advantages (also called country-specific advantages, or CSAs) are what Hennart (2009) calls complementary local resources, i.e. resources that are needed to exploit FSAs in the target foreign country, for example land, utilities, raw materials, local workers, local customers, as well as government permits (Dunning and Lundan, 2008).

A firm can have FSAs, and the country to which it wants to sell can have the CSAs that make local production desirable, but it may decide to license or franchise its FSAs to a local firm. In that case there will be no FDI, but an arm’s length relationship with local firms, and
hence no MNE. Exploiting FSAs through employees must therefore be more efficient than through a licensing or franchising contract with an independent local firm. A third condition must therefore be that investors have what Dunning calls an “internalization advantage.” He argues that it is advantageous to internalize when markets for FSAs suffer from inefficiencies.

The OLI paradigm posits that firms will make FDIs when they possess FSAs, when the country in which they want to sell has CSAs, and when the most efficient way to exploit FSAs is through FDIs as opposed to market contracts. As a number of authors have noted, this makes it difficult for OLI to explain FDIs made by EMNEs because while OLI posits that firms only make FDIs to exploit their FSAs, it is generally recognized that very few EMNEs have strong FSAs. Rugman (2009, p. 61), for example, writes that “there is little evidence that emerging economy MNEs have developed sustainable FSAs.” Ramamurti (2009, p. 409) adds that “the image of the typical EMNE is that of a late globalizing firm possessing few intangible assets, such as cutting edge technology or strong brands. And for Contractor (2013, p. 306), “many EMNEs do not necessarily possess FSAs in the early stage of their international growth” (see also Bonaglia et al., 2007; Mathews, 2002a). Consequently EMNEs should not be making any FDIs since, as we have seen, OLI is clear: “No firm specific capabilities, no multinationals” (Guillen and Garcia-Canal, 2009, p. 34).

Faced with this clear disconnect between the predictions of OLI and the empirical evidence, IB scholars have taken three positions: some have stayed true to OLI and predicted that FDIs by emerging market firms are a flash in the pan. They have argued that they are made on the back of country-specific advantages, but that these advantages are not sustainable because they are available to all firms operating in their home country. Discussing the case of Chinese firms, Rugman and Li (2007, p. 333) note:

Basic theory suggests that multinational enterprises succeed when they develop knowledge-based capabilities, often called firm-specific advantages (FSAs). In China’s case its large MNEs have few such knowledge-based FSAs. Instead, they are building scale economies based on China’s country-specific advantages (CSAs) in relatively cheap labor and natural resources [...]. However there needs to be more than economies of scale in the case of China’s MNEs, as such scale advantages reflect a country factor available to all firms, rather than being an FSA.

Accordingly, Rugman and Li predict that the FDIs of EMNEs are likely to be short-lived and that the emergence of real EMNEs will have to wait until emerging market firms develop true FSAs, something Rugman (2009, p. 53) predicts will, in the case of Chinese firms, “take 10 or 20 years.”

The second way to reconcile OLI with EMNE foreign investments is to argue that EMNEs possess FSAs, but of a different type than those of established MNEs in the USA, Europe and Japan. For Cuervo-Cazurra and Genc (2008), EMNEs have accumulated special capabilities to operate in countries with weak formal institutions, allowing them to expand to countries of similar level of institutional development. Guillen and Garcia-Canal (2009, p. 34) take a similar position, arguing that the EMNEs’ international expansion “was possible due to some valuable capabilities developed in the home country, including project execution and political and networking skills”[4]. Zeng and Williamson (2007) and Williamson and Yin (2013) argue that Chinese EMNEs, while they have not achieved fundamental technological breakthroughs have developed five types of innovations that they can exploit overseas.

A third position is to reject OLI altogether. For Mathews (2002a, b, 2006a, b), the expansion of EMNEs is incompatible with OLI because EMNEs do not expand abroad to exploit FSAs but instead to acquire them. As we have seen, OLI posits that possession of FSAs is a necessary condition for FDIs. Mathews proposes a new model which he calls the
linkage, leverage, and learning framework (LLL), which argues that EMNEs go abroad to acquire FSAs. Luo and Tung (2007) take a similar position with their springboard model.

None of these three positions are fully satisfactory. First, it is obvious by now that a number of emerging market firms are bona-fide MNEs successfully competing with their US, European and Japanese counterparts. One can think of Haier, the world’s largest white goods producer which recently acquired General Electric appliance business or Bimbo, the world’s largest baked goods manufacturer with major foreign investments in Latin America and the USA. Second, and as the above examples show, the direct investments of EMNEs are not confined to emerging markets, as would be the case if their main FSA was an ability to operate in countries with weak formal institutions. Third, while Mathews and Luo and Tung show convincingly that a number of FDIs by EMNEs are not undertaken to exploit FSAs but instead to acquire them, they do not explain why the emerging country firms making these FDIs are able to spend time and resources acquiring the FSAs of their rivals, while at the same time competing with them in their home market. How does one survive going abroad to learn while your teachers are attacking your domestic market share?

In the following pages I show that having FSAs is not a necessary condition for making FDIs. Hence the FSA-seeking FDIs of EMNEs do not require a new theory. My second point is that one can explain how emerging market firms can make asset-seeking FDIs and still successfully compete with developed-market MNEs if one relaxes the peculiar OLI assumption that CSAs (location advantages) are country-specific, or, in other words, that they can be accessed by local and foreign firms on the same terms.

The transaction cost theory of the MNE and the bundling model

Asset-seeking investments

In contrast to OLI, the transaction cost theory of the MNE (Hennart, 1982, 2000, 2015a) is able to accommodate both asset-exploiting and asset-seeking FDIs because it focuses on the characteristics of the interdependence between actors rather than on the actors themselves. Consider two firms, A and B, located in country 1 and 2. A has developed a process that could profitably be used in country 2, but that process is based on tacit knowledge and hence is non-patentable. The lack of patent means that B may not be able to evaluate the value of A’s process, and hence may be unwilling to pay the sum that A expects. This may lead A to take over B so as to be able to profitably exploit the process by manufacturing in country 2 products that incorporate it. Another possibility is for B to take over A so as to acquire knowledge of the process. In other words, when the market sale of an intermediate good such as tacit knowledge entails high transaction costs, then that intermediate good is both difficult to sell and difficult to buy. Consequently, buyers and sellers will attempt to facilitate its transfer by coordinating it within a firm. They will do it through acquisitions (A acquires B or B acquires A), joint ventures between A and B, a greenfield manufacturing investment by A into country 2 or a greenfield R&D investment by B in country 1. Hence both asset-seeking and asset-exploiting FDIs can be explained by the same theoretical argument, which is that the interdependence between A and B is more efficiently organized within a firm than across markets.

This approach can explain all the major types of FDIs made by EMNEs. Just like their advanced country counterparts, EMNEs have invested abroad to acquire natural resources—such as minerals—and parts and components. They have done so because of their inability to obtain the needed supplies through spot market purchases or long-term contracts. They have also integrated into foreign sales subsidiaries to handle their exports whenever they could not contract for adequate distribution services. As pointed out by Mathews, Luo and Tung, and others, they have also made FDIs in developed countries to acquire intangibles, both technology and trademarks, setting up
Greenfield research laboratories and acquiring intangible-intensive firms. All of these types of investment can be easily explained by the transaction cost theory of the MNE (Hennart, 2000, 2010).

**Explaining how EMNEs can afford the time and the resources to make asset-seeking investments: the bundling model**

As we have seen, OLI states that for FDIs to take place, a firm must have FSAs, the target market must have country-specific advantages, and the most efficient way to exploit FSAs must be through internalization, that is, through an extension of the firm into the foreign location. OLI makes an interesting distinction between FSAs and country-specific advantages (CSAs). FSAs are proprietary to firms. Whenever they cannot be sold or rented on efficient markets to foreign firms, their owners will exploit them by integrating into the manufacture of goods and services incorporating the FSA. CSAs, on the other hand, are not proprietary to firms; they are deemed to be properties of a given country (its natural resources, market size, labor costs, etc.). They are “specific to a particular location [...] but available to all firms” Dunning and Lundan (2008, p. 96), or in the words of Lessard and Lucea (2009, p. 283) “common to all firms located in a country.”

This asymmetric treatment of FSAs and CSAs in OLI is puzzling. Why assume that CSAs are accessible to all comers, domestic and foreign, on an equal basis, while FSAs are not? In the next paragraphs I discuss my bundling model, which explores the possibility that CSAs may be firm-specific, in the sense that some firms may obtain exclusive access to them.

The starting point of the bundling model (Hennart, 2009, 2012; Hennart et al., 2015) is that the successful exploitation of any intangible (FSA) requires its bundling with CSAs such as land, natural resources, customers, utilities, permits, etc. For example, the successful sale of Apple’s iPhone in China would have been impossible if Apple had not been able to access a distribution system which made the phone available to Chinese customers. An MNE intent in bundling its intangibles with CSAs can access four markets to do so: the market for the inputs needed to produce the assets—for example, to access distribution, a firm can hire salespeople and build up a company-owned salesforce; the market for assets (e.g. warehouses); the market for services from assets—distribution contracts with local firms; the market for firms: the MNE can access distribution by buying firms with distribution networks, taking over the employment contracts of the salesforce of the acquired firm. These four markets are substitutes, and the MNE will use those that are most efficient in the specific country and industry entered.

Table I, taken from Hennart (2009, 2012), shows the relative role played by foreign MNEs and local firms in a given foreign market. It predicts which party will own equity. The columns give the transaction characteristics of the intangible the MNE wants to exploit in that country and the rows those of complementary local resources. For simplicity both sets are assumed to be either easy to transact (or to steal) or hard to transact and to steal. Assume that the intangible is knowledge: it can be embedded in patents with either strong

<table>
<thead>
<tr>
<th>Complementary local resource held by local owner</th>
<th>Low market transaction costs</th>
<th>High market transaction costs</th>
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<tbody>
<tr>
<td>Intangible held by MNE</td>
<td>1. Indeterminate</td>
<td>3. MNE takes full equity =</td>
</tr>
<tr>
<td></td>
<td></td>
<td>wholly-owned affiliate of</td>
</tr>
<tr>
<td></td>
<td></td>
<td>the MNE</td>
</tr>
<tr>
<td></td>
<td>2. Local firm takes full equity =</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>wholly-owned operations of local firm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Joint venture between MNE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>and local firm</td>
</tr>
</tbody>
</table>

**Source:** Adapted from Hennart (2012)
or weak enforcement. If enforcement is strong, the MNE is likely to sell or rent its knowledge to local firms, especially if the CSAs these local firms control are difficult for the MNE to access through any of the four markets described above. Then local firms that control CSAs will bundle them with acquired intangibles (cell 2). If, on the other hand, the knowledge held by the MNE is difficult to sell or rent on any of the four markets, and cannot be easily stolen by local firms, then the MNE will want to exploit it directly in the target market. It will integrate into manufacturing using any one of the four markets available to access the needed complementary local resources. If it can efficiently access them, it will set up a wholly-owned subsidiary (cell 3). If this is not possible, the MNE may have to enlist the cooperation of the local owner of complementary local resources through an equity joint venture in which the MNE contributes the intangible and the local firm access to complementary resources (cell 4).

The model shows clearly the challenges faced by both MNEs and local firms. Local firms (cell 2) often control access to complementary local resources—they may, for example, be the sole owner of a country’s oil deposits. Their challenge is to access up-to-date knowledge on how to exploit these local resources. MNEs may have this knowledge—for example, they may be experts in the management of oil prospecting and production—but these intangibles are worthless unless bundled with access to oil deposits. If these intangibles are sold in inefficient markets (they are difficult to describe to buyers or they are not well protected by patents), then MNEs will have to get access to oilfields to exploit this know-how.

The bundling model can therefore explain the asset-seeking FDIs made by EMNEs. These firms go abroad to source current knowledge needed to leverage the complementary local resources they control. As Child and Rodrigues (2005) note, that knowledge can be obtained through a variety of ways. The local firm can buy technology embedded in parts, it can hire individuals with the requisite experience, it can in-license and in-franchise foreign technology and brands, it can trade market access for foreign technology in domestic equity joint ventures. All of these forms do not result in FDIs. For FDI to be the chosen solution, two conditions must be met: (a) knowledge must be embedded in employees and (b) these employees must be more efficiently located abroad than at home. If local firms cannot persuade knowledge workers to come to them, then they will have to set up greenfield R&D affiliates at the foreign locations where the knowledge workers live or acquire the foreign firms for which they work (Hennart, 2012).

Springing into intangible-seeking FDIs from control of complementary local resources

A major question left unanswered by springboard/LLL authors (Luo and Tung, 2007; Mathews, 2006a, b; Deng, 2007; Rui and Yip, 2008) is how emerging market firms, which they say are “starting from behind without […] skills and knowledge” (Mathews, 2006a, p. 6), can manage to find the time and resources needed to acquire cutting edge technology when they are competing in their home market with the very same firms from which they are trying to learn. As these emerging market firms go about making FDIs to acquire knowledge, what keeps MNEs from pushing them out of their domestic market?

The bundling model provides an explanation. Emerging market firms can find the time and the resources to make intangible-seeking FDIs because their domestic market share is protected from foreign MNE competitors by their control of complementary local resources. This control provides two ways to obtain the intangibles they need: it makes them desired partners in domestic joint ventures with foreign MNEs in which they can capture these MNE intangibles, and, it allows them to make asset-seeking FDIs—foreign greenfield investments, acquisitions of foreign knowledge intensive firms, and foreign country-based joint ventures with foreign firms. Through these arrangements emerging market firms can
swap access to key complementary local resources for the knowledge they need; or they can buy it with the profits they earn from selling access to complementary local resources to other firms, including DMNEs.

Table II maps the division of the gains derived from selling a bundle of intangibles-cum-complementary local resources in a given market. The party that has the higher bargaining power is the party holding the resource with the fewer substitutes. Hence in cell 3 the MNE is facing many potential suppliers of the complementary local services it needs. It is therefore likely to strike a good bargain in buying access to such complementary resources and hence will capture the bulk of the gains derived from selling the final product on the local market. In cell 2, the local firm (the soon-to-be EMNE) controls access to the complementary resources the MNE needs to exploit its intangibles. It is therefore in a position to extract the bulk of the gains generated by selling the product on the local market. These gains can be used to buy foreign intangibles. In cell 4, both parties have similar bargaining power and they can be expected to swap access to key complementary resources for technology within domestic joint ventures.

**Some empirical evidence**

Is there empirical evidence supporting the view that control of complementary local resources is what has allowed emerging market firms to acquire the technology needed to counter developed-country MNEs in their home market, and then to start competing worldwide? Let us look at four examples, three of an emerging market firm that has consolidated more or less on its own its hold on a key complementary local resource, and one where this has been accomplished with government help.

Before going into the cases, it is important to note that most emerging markets were closed to foreign investors until relatively recently (Ramamurti, 2009). For instance, restrictions on foreign ownership of distribution were not fully lifted by China until 2004, forcing foreign MNEs to use local distributors. These distributors were able to gain first mover advantages by preempting strategic distribution assets (Lieberman and Montgomery, 1988), and by gaining first-hand knowledge of the tastes of emerging market customers, knowledge from which MNEs were shut off. When local distributors started to became manufacturers, this knowledge allowed them to offer products and services better adapted to local tastes and conditions than those of their MNE competitors, thus gaining customer loyalty, another defense against MNE competition.

**Legend/Lenovo**

Lenovo provides a good example of the process by which an emerging market firm can consolidate its control of a key complementary local resource, distribution, and use it to obtain the technological and marketing know-how needed to compete globally. Lenovo is

<table>
<thead>
<tr>
<th>Complementary local resource held by local firm</th>
<th>Weak bargaining power (many substitutes)</th>
<th>Strong bargaining power (few substitutes)</th>
</tr>
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<tbody>
<tr>
<td>Intangible held by MNE</td>
<td>Weak bargaining power</td>
<td>Strong bargaining power</td>
</tr>
<tr>
<td>1. Consumers capture most of the value of the bundle</td>
<td>3. Technology owner captures most of the value of the bundle</td>
<td>4. Technology owner and local firm share the value of the bundle</td>
</tr>
<tr>
<td>2. Local firm captures most of the value of the bundle</td>
<td></td>
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</table>

**Table II.**

Who captures the value from the bundle?

Source: Adapted from Hennart (2012)
now a bona-fide MNE. It is the world’s largest PC vendor by unit sales and has operations in more than 60 countries.

In 1992, the two largest sellers of personal computers (PCs) in China were AST, with 27 percent of the market, and Compaq with 18 percent. By 2016, Lenovo was the market leader in China with a one-third market share (Lenovo, 2016).

In the early 1980s when the Chinese government was starting to allow quasi-private enterprises, the Institute of Computing Technology (ICT) of the Chinese Academy of Sciences created a small unit named NTD to commercialize the Institute’s technology. Chuangzi Liu, a researcher at the Institute, became its director. He started a small scale business selling imported PCs to government agencies. In 1987, NTD introduced an add-on card which could be inserted directly into a PC motherboard and which made it possible to run Chinese applications on English-language operating systems, something none of the foreign MNEs in the industry had thought of doing. The card had been developed by ICT scientists and was sold under the Legend brand. The card was very successful and gave NTD (which Liu renamed Legend) the credibility to sign contracts for the Chinese distribution of Hewlett-Packard printers and AST PCs—at that time foreign-owned PC makers were not allowed to have their own distribution system in China. Legend had by then also accumulated significant experience in selling ICT products in China, and its considerable marketing skills helped make AST the top PC vendor in China with a 30 percent market share.

Unable to obtain a license to manufacture PCs in China, Liu decided Legend should joint venture with other companies to acquire a motherboard manufacturing company in Hong-Kong. Legend Hong-Kong quickly expanded the production of motherboards and add-on cards. In 1988, it was allowed to start PC production in mainland China and by 1990 was selling its branded PCs there. At the same time Legend continued to expand its distribution business adding to its existing distribution agreement with HP new ones with Apple, Sun, IBM and Canon, and the exclusive distributorship of Toshiba laptops (Chen et al., 2001, p. 6). This not only allowed Legend to become the dominant PC distributor in China, but also gave it the opportunity to study the products of competitors and how Chinese customers responded to them. “By 1990 Lenovo had approximately 50 authorized distributors in each of the seven regions in which it divided the Chinese market, and each distributor had its own reseller network. Altogether there were approximately 2000 resellers in Lenovo’s distribution system in addition to its 130 one+one PC specialty shops in major cities. IBM by contrast had about ten tier-one distributors, and primarily in large cities” (Xie and White, 2004, p. 413).

In 1992 following the signing of an agreement between the Chinese and US Governments that sharply reduced the tariffs China had put on computers and peripherals, foreign PC makers such as Compaq, IBM, Acer and HP successfully increased their Chinese market share from one-third to close to two-thirds, putting extreme pressure on Legend and other domestic manufacturers. While its foreign rivals were focusing on sales to businesses, Legend introduced products better adapted to the Chinese consumer (Xie and White, 2004, Table III), and sold cutting edge PCs at prices Chinese consumers could afford, as much as one-third below its foreign competitors (Xie and White, 2004, p. 412). This allowed Legend to increase volume and gain scale and learning curve economies. The introduction in 1996 of a Pentium-based PC at a 30 percent price discount made it possible for Legend to pull ahead of IBM and other foreign vendors which refused to match Legend’s prices, giving Legend even greater visibility (Sull and Wang, 2008). By 1997 Legend was China’s top PC seller, a position it has been able to hold up to this day.

Most observers agree that Legend’s control of distribution and its superior knowledge of Chinese consumers has protected it against its competitors and that its first mover advantage in setting up what is the largest and most efficient dealer network in China’s IT
industry is unassailable. Xie and White (2004, p. 418) note that “Lenovo [in 2003 Legend changed its name to Lenovo] accumulated customer knowledge and created a distribution network that has proven nearly impossible for foreign and even most domestic competitors to replicate. It has continued with this strategy as it has extended its capabilities into manufacturing and R&D.” Chen et al. (2001, p. 5) add that “Legend had emerged as the dominant player in the Chinese PC market because of its huge distribution network. This network helped the company compete successfully against MNCs as well as local companies.”

While distribution and local market knowledge has proved to be very difficult for established MNEs to imitate, Lenovo has been successful in accessing cutting edge technology and marketing expertise. It has done so through a mix of internal and external means. In the PC industry, technology is basically embedded in components and in manufacturing equipment, which are available on competitive markets (Xie and White, 2004, p. 413). Lenovo has also used the profits it has derived from its dominance of the Chinese market to substantially increase its R&D investments and to build up its brand (Xie and White, 2004, p. 414). Through its 2005 acquisition of IBM’s PC division it obtained two R&D laboratories, the right to use IBM’s Think brand, and marketing and financial support from IBM global financing, warranty, and maintenance service organizations (Williamson and Zeng, 2009). The Lenovo brand also acquired notoriety through the firm’s sponsorship of the 2006 Olympic Games.

**Grupo Bimbo**

Grupo Bimbo was established in Mexico City in 1945. It is now the world’s largest baking company with operations in the Americas, Europe and Asia (Wikipedia, 2017b).

Bimbo started as a baker of packaged bread, initially gaining market share by wrapping its bread in clear cellophane, rather than in wax paper as its competitors did, so the freshness of its products would be apparent. The company quickly grew. In 1955, it expanded into pastries and cakes and in the early 1970s into snacks, chocolate, candy and tortillas (Siegel, 2008, pp. 4-5). By the late 1990s, Bimbo had a dominant market share in most of the products it sold in Mexico. It had a 90 percent market share in packaged bread and snack cakes, was the second largest seller of cookies and snacks, and the third of chocolate and candies (Sunder, 1998, p. 15).

Many Mexicans eat fresh bread daily, sweet bread at breakfast and dinner and bolillos at noon[5]. To ensure freshness, they buy it daily from neighborhood stores. Bimbo responded to these needs by managing to mass-produce versions of traditional Mexican bakery products that tasted as good as their artisanal versions (Siegel, 2008, p. 5) and by delivering them fresh to its customers via an extensive in-house distribution system. In the late 1990s Bimbo was using 14,000 trucks to make 420,000 daily deliveries to 350,000 clients (Ager, 1998, p. 5).

Bimbo’s dominant position was no doubt initially helped by the early protectionist policies of the Mexican government. But observers attribute its ability to fight off its competitors after NAFTA opened the Mexican market to US and Canadian competition to its control of distribution. In 1991, PepsiCo entered the Mexican bakery market by acquiring a number of Mexican firms which competed with Bimbo in each of its product categories except tortillas (Ager, 1998, p. 4). Bimbo managers realized that their best defense was their ability to satisfy their customers’ demand for fresh products using their extensive distribution network. Bimbo increased its level of service and was able to maintain its market share in each segment (Dawar and Frost, 1999, pp. 123-124).

Bimbo’s home market dominance has allowed it to develop or acquire FSAs. It has acquired or licensed major brands from its competitors, Wonder Bread and Sunbeam, for example, for use alongside its own brands in its domestic market (Sunder, 1998, p. 2).
Bimbo’s domestic business has financed its foreign forays (Hoshino, 2009, p. 10). Beginning in 1989, Bimbo began expanding in Central and South America. It is now the largest or second largest seller of bread in every Latin American country. It started to acquire small US bakeries in the late 1980s to cater to the 43 million Hispanics living in the USA and nostalgic for Mexican products. In 2008, it bought the Weston Foods division of George Weston, and became the largest bakery company in the USA. The firm’s US footprint was further enlarged in November 2010 with the acquisition of Sara Lee’s North American Fresh Bakery Group. With these acquisitions Bimbo acquired a number of well established brands, such as Entenmann’s, Stroehmann, Thomas, and Sara Lee.

CVRD-Vale
The beginnings of Companhia Rio de Vale Doce (CVRD) were a true OLI story. In 1891, Brazil’s first Republican constitution gave landowners rights to the subjacent minerals—a radical break with current practice, since in most countries, especially those with civil law based on Roman law, the state has property rights on any subsoil resources (Chaddad, 2003; Khanna et al., 2010). The law also allowed mineral deposits to be worked by foreign firms. This made it possible for British, French and Belgian foreign investors to exploit their FSAs (advanced technology and privileged access to finance and customers) by accessing Brazil’s complementary local resources (its superior mineral resources) through the competitive market for land. A British firm, the Brazilian Hematite Syndicate, found very rich iron ore deposits at Itabira (Minas Gerais), and bought a controlling stake in a railroad which was being built by another British firm in the vicinity. In 1942, the British and US Governments, eager to obtain new sources of iron ore for the war effort, signed an agreement with Brazil in which the British Government bought out the British shareholders of the mine and gave the mine and railroad to the Brazilian Government in exchange for a promise to develop the mine and supply the UK and the USA with iron ore (the US Government supplied financing). The Brazilian Government then established a partly state-owned company, CVRD, to carry out the project. CVRD developed the mine, and built a railroad and a harbor to export the ore and by 1949 was responsible for 80 percent of Brazil’s iron ore exports. In 1952, the Brazilian Federal Government took full control (Chaddad, 2003, p. 3).

CVRD used the considerable profits from its quasi-monopoly of high grade Minas Gerais ore to vertically integrate into hydroelectric power plants for its mining operations, and into railroads, harbors and ships (Docenave) to transport its iron ore, first to Europe, and then to Japan. The company also created a prospecting subsidiary, Docegeo, which found the world’s largest and richest iron ore deposit in Carajas in the Amazon. In 1977, the government granted CVRD exclusive mining rights to the mine reinforcing its quasi-monopoly of Brazilian iron ore. The company built a railroad to export the ore and by 1986 was selling it to Japan and Germany.

Between 1999 and 2007, the company further consolidated its Brazilian iron ore quasi-monopoly by acquiring a series of Brazilian iron ore mines. By 2007, CVRD (which changed its name to Vale that year) was responsible for 85 percent of Brazil’s total iron ore production and was the country’s sole iron ore exporter. It is now the world’s largest iron ore producer (Wikipedia, 2017a).

CVRD’s bargaining power vis-à-vis its foreign customers and competitors was established and continues to be supported by the Brazilian government. In 1997, when CVRD was privatized, the government made sure that the shares went to a Brazilian consortium and kept a blocking minority stake (Khanna et al., 2010, p. 4). Vale has made many FDIs, among which a 50 percent stake in California Steel Industries, a ferro-alloy plant in France, an iron ore pelletizing facility in Oman, and stakes in Chinese pelletizing plants. In 2006, it bought Inco, and is now the world’s largest nickel producer (Wikipedia, 2017a).
The Lenovo, Bimbo and Vale cases show emerging market firms painstakingly building control over complementary local resources, customer access in the case of Lenovo and Bimbo, ore deposits in the case of Vale. Our fourth case shows that the same goal can be achieved by emerging market governments. In many countries the state is the sole buyer of a range of goods and services. That power can be used to demand that sellers transfer their technology. This is how the Chinese firm CRRC obtained up-to-date high-speed railroad technology.

Starting in the mid-1990s, China’s ministry of railways (MOR) initiated a plan to increase the speed of Chinese trains by building a 9,700-kilometer bullet train network by 2020. MOR solicited bids from the major high-speed train makers (Alstom, Siemens, Bombardier and a consortium of Japanese firms led by Kawasaki) to build high-speed train sets. Some of the sets were to be exported to China and some were to be built in Sino-foreign joint ventures where foreigners could only hold a 49 percent stake. MOR skillfully played the foreigners against each other to get them to agree to transfer their latest technology and to have 70 percent of each system made in China in foreign-Chinese joint ventures. In the meantime, MOR had consolidated all Chinese train manufacturers into two state-owned companies, CSR and CNR (Hout and Ghemawat, 2010) which were merged into CRRC in 2015. The Chinese firms successfully absorbed and digested foreign technology and they have started to compete with their teachers, winning bids for high-speed lines in Turkey, Indonesia, Thailand and Russia (Tang, 2016).

These four cases show a very similar pattern. First, the firm (either on its own or with the help of the home government) consolidates control of a key complementary local resource, access to customers for Lenovo, Bimbo, and CRRC and iron ore deposits for Vale. This provides the firms the bargaining power and the financial resources to obtain foreign cutting edge technology through foreign acquisitions and through domestic and foreign joint ventures. Having acquired the requisite technology, the firm becomes a member of the global oligopolies in which mature MNEs compete with each other. For reasons explained elsewhere, it then makes sense for them to expand internationally (Hennart et al., 2017).

There are many other examples of firms following this pattern. A partial list would include Haier, Huawei and Ningbo Bird in China, Acerlik in Turkey and Aramex in the Middle East.

**Conclusions**

The rise in FDIs by firms based in emerging markets has led some IB researchers to wonder whether they fit existing theories. While there are three main theories of the MNE, most researchers have focused on only one, Dunning’s OLI paradigm (Dunning, 1988). This paradigm states the necessary and sufficient conditions for FDIs: the firm making them must have FSAs which it finds efficient to exploit internally, and it must find it more profitable to produce the products incorporating its FSAs in the target foreign market than to export them from its home base. IB scholars have pointed out, however, that emerging market firms do not possess many FSAs, and that many of their FDIs are to acquire FSAs, not to exploit them. Faced with this disconnect between theory and evidence, IB scholars have either denied the viability of these FDIs (Rugman, 2009), searched for unconventional FSAs emerging market firms might have (Cuervo-Cazurra and Genc, 2008; Guillen and Garcia-Canal, 2009; Contractor, 2013), or thrown out OLI altogether and replaced it with alternative theoretical explanations, for example, Mathews (2006a) LLL model or Luo and Tung (2007) springboard perspective. These models which explain why emerging market firms make intangible-seeking investments fail to explain how they can afford to make them while competing in their home market with intangible-rich DMNEs. Emerging market firms are springing into foreign asset-seeking forays, but from where?
I argue that OLI’s assumption that ownership of FSAs is a condition for FDI renders it unable to explain many of the FDIs made by emerging market firms, just like it is unable to explain the resource-seeking investments made by DMNEs. This is not the case for the transaction cost theory of the MNE (Hennart, 1982, 2000, 2012, 2015a, b) because it focuses on the characteristics of the interdependence being organized. Transaction cost theory states that FDIs are undertaken to internalize interdependencies between two parties located in different countries, that is, to organize them within a firm using employment contracts. Interdependencies difficult to organize on markets will be organized within a firm, with either of the two parties—or both—taking the initiative. Hence both asset-exploiting and asset-seeking FDIs are explained by the same theoretical argument. Which of the parties will initiate the internalization depends on the transactional properties of the complementary local resources necessary to exploit the knowledge (Hennart, 2009, 2012).

Both the intangible-seeking investments undertaken by emerging market firms and their more conventional vertical FDIs into resource extraction and sales subsidiaries thus fit well into a transaction cost framework. Some emerging market firms have also developed innovations that can find a market in both developing and developed countries (e.g. Williamson and Yin, 2013) and the FDIs made to exploit them are quite consistent with the predictions of the transaction cost model.

I also argue that another tenet of OLI, the assumption that complementary local resources—what OLI calls location, or country-specific advantages (CSAs)—are freely available to all comers, foreign and domestic, makes it difficult to understand how emerging market firms can obtain the intangibles they need to catch up with developed country MNEs, given that they are often competing in their home market with these same firms. If local resources are available to all firms on equal terms, then how can emerging market firms with inferior technology and weak brand names compete with intangible-rich MNEs? The answer is that, contrary to the OLI assumption of equal access, complementary local resources, such as distribution or access to local natural resources, are not always transacted on competitive markets. As I show with four examples, an effective strategy for emerging market firms is to gain bargaining power by monopolizing these complementary resources. That bargaining power can then be used to obtain the intangibles emerging market firms generally lack. Emerging market firms can swap complementary local resources such as market access, for cutting edge foreign technology, as shown in the CRRC case, or they can sell these resources to developed country MNEs and use the proceeds to access intangibles through the takeover of intangible-rich developed country firms or through the setting up of greenfield R&D centers in foreign countries, as shown in the Lenovo case. CVRD/Vale and Bimbo are examples of a third scenario in which emerging market firms gain domestic monopoly power and use the super profits thus earned to buy intangibles abroad.

This catching-up process does not automatically lead to FDIs, and hence to EMNEs, because the intangibles the emerging market firm wants can sometimes be obtained through domestic joint ventures with foreign firms (the CRRC case), through the purchase of foreign brands (but not foreign firms) or their franchising, through the licensing of foreign technology, or the hiring of foreign experts (Child and Rodrigues, 2005; Hennart, 2012). Through this catching-up process, emerging market firms will strengthen their domestic position. The examples I presented show that once this is done emerging market firms start to compete globally and become bona-fide MNEs.

The model outlined here is subject to some boundary conditions. First, not all emerging market firms have needed to access foreign technology. Some Chinese firms, for example, have developed cost innovations on their own. They have re-engineered processes so as to reduce costs—one example being BYD, which replaced expensive components in Li-Ion rechargeable batteries by cheaper ones, and re-engineered the production process so as to be able to make batteries without temperature-controlled “dry rooms” (Huckman and
MacCormack, 2009[6]. Others have found innovative uses for existing technology or products—Williamson and Yin (2013) cite the case of Broad, a privately-owned Chinese firm which found a way to power air conditioners with waste heat and natural gas, with huge reductions in costs and greenhouse gas emissions. These innovations may not be as visible as the cutting edge ones of DMNEs, but they still have value outside their home market and can support strategies of global expansion.

Second, strategies of monopolizing complementary local resources are more effective when emerging market firms are based in a large market, or in a country with a high share of the world’s supply of a particular valuable raw material, because in that case access to these resources is obviously more valuable to developed country MNEs. Hence Vale might not have gained the bargaining power it has were it not for the exceptional quantity and quality of its Brazilian iron ore, and neither would have Lenovo were it not for the large size of the Chinese PC market. An emerging market firm based in a small market may, however, pursue such a monopolizing strategy if it is able to operate in other countries similar to its home base at much lower cost than developed-market MNEs. Hence the unwillingness or inability of developed country courier companies to operate in the Middle East allowed Aramex to gain bargaining power because its extensive logistic network there made it a required partner to large courier companies eager to deliver in that region (Chandanani, 2013).

Third, access to government resources to finance technological catch up may be an alternative or a complementary strategy to a strategy of control of crucial local complementary assets.

The argument developed here applies to emerging market firms whose main market is at home (Lenovo, Bimbo, CRRC) or that are exploiting rich domestic resources (Vale). The strategy may not be available to emerging market firms based in countries with limited domestic market and resources. Control of the Indian market for IT services is probably not of great value for Infosys, for which the main growth opportunities are abroad. The ability and willingness of emerging market governments to leverage access to their domestic market also varies across countries, or even within countries across government ministries, so not all emerging market firms can count on the support of their governments (The Economist, 2017a).

Nevertheless, my framework suggests that they are likely to become formidable competitors to established MNEs. Why? Because I believe the playing field is tilted in their favor. In the preceding pages I have shown that the competition between established MNEs and EMNEs can be seen as a contest as to which firms become the first to successfully assemble the bundle of intangibles and complementary local resources needed to successfully sell products on markets. In that race DMNEs, which typically compete on the basis of their strong reputation and advanced technology, need to line up complementary local resources. The challenge for EMNEs, on the other hand, is to catch up with the technology and level of product quality of their developed country rivals. In that contest, DMNEs have some handicaps. As shown in the model, who of EMNEs or DMNEs ends up controlling the local market depends on the level of transaction costs of their own resources compared to that of the resources they need to access to complete the bundle. Hence it is worth reflecting on the costs that DMNEs face when attempting to access complementary local resources compared to those facing EMNEs in accessing the intangible that will allow them to compete with DMNEs in their home market and elsewhere. As I have argued in Hennart (2012), while access to local complementary assets is not getting any easier, access to technology is.

There are many reasons for this. First, technological catch up offers some advantages over innovating. It is cheaper, as one can skip the pre-paradigmatic phase of product development, and just copy successful designs and business models. In contrast to
incumbents, firms engaged in catching-up typically do not have investments in old technologies that would be cannibalized by the new ones. The relative inefficiency of many local incumbents in emerging markets provides innovating firms with a larger profit potential than is the case in markets where incumbents are more efficient. The development of financial technology (fintech) in China is a case in point: Chinese pioneers like Ant Financial have been able to skip all intermediate stages (checks, giros, credit cards) and go directly from cash to mobile phone wallets. It has also helped that the Chinese banking system is outdated and consumer-unfriendly (The Economist, 1997). A second advantage of EMNEs is that international markets for experts, technology, and finance, three resources needed for catching-up, are very efficient. Nio, a three year old Chinese automotive startup, has recruited employees from 40 countries, including veterans from Ford and Volkswagen. It has obtained funding from both American and Chinese early stage investors (The Economist, 2017b). Technology and skills that cannot be obtained by hiring specialists because they are embedded in firms can be accessed through acquisitions. Catching-up emerging market firms can benefit from a relatively efficient market for corporate control in developed countries. Up to now, EMNES have been able to acquire developed country firms with relatively few restrictions. Because markets for inputs and outputs are relatively efficient, many developed country firms are vertically disintegrated and specialized, which facilitates their acquisition—one does not have to pay to acquire unneeded assets and to dispose of them. Geely, for instance, was able to access state-of-the-art automatic transmission technology by acquiring Drivetrain Systems, a financially distressed Australian firm (Ivarson and Petersen, 2016).

In contrast, accessing complementary assets in emerging markets has, and is likely to remain, more difficult. Many emerging countries were closed to foreign competitors until the 1980s, and many sectors such as distribution remained closed till much later, allowing local firms to get first mover advantages. The acquisition of local firms with distribution assets (or more generally those with a monopolistic hold on complementary local resources) is a way for DMNEs to offset these late entrant disadvantages. But the market for acquisitions is much less efficient in emerging markets than it is in developed markets. Some of this is due to institutional differences. Many emerging markets lack market-facilitating institutions, like independent auditors, or a free press. Whatever public information exists is unreliable or misleading. Local actors rely instead on private information diffused in networks from which foreigners are generally excluded (Hennart, 2015b). As a result, due diligence on targets is extremely difficult to perform. Many firms in emerging markets are family or state-owned, and hence difficult to acquire. Lastly, inefficient internal markets in many emerging markets force firms to be vertically integrated, resulting in bulky and unwieldy targets (see for example, the case of Vale investing in hydroelectricity, ports, and railways). Emerging market government also often put restrictions on acquisitions of local firms by foreigners. As a general rule, governments also play a much larger role in emerging markets: they often are the monopsonistic buyers of a wide range of goods and services and monopolistic sellers of natural resources. Many of them are using this power to support national firms, whether public or private (see Hennart et al., 2015, for the Brazilian case). The Chinese Government, for example, is using its position as main buyer of advanced medical devices to privilege local firms over foreign ones. It aims at 50 percent local content for such devices, and has recently decreased its purchases of Cochlear hearing aid implants to the benefit Nurotron, its Chinese competitor. Countries that sit on large oil deposits like Saudi Arabia have set up national oil companies (NOCs) and given them privileged access to that oil, cantoing the oil majors to the exploration of their more marginal deposits. NOCs can obtain cutting edge technology from independent contractors like Halliburton, Baker-Hughes, and Schlumberger. As a result, some NOCs are at technological parity with the majors, competing with them on big exploration projects outside their home markets (The Economist, 2013).
To sum up, more targeted government policies joined to institutional differences that favor firms located in emerging markets have tilted the playing field to the advantage of emerging market firms. After acquiring a dominant local position, on their own or with the help of their national governments, such firms expand abroad, competing with DMNEs from a secure home base. This poses a major threat to DMNEs that does not seem to have been properly recognized, perhaps because of an overestimation on the part of Western academics and business analysts of the strategic importance of intangibles, and an underestimation of that of local complementary resources.

This paper is a first pass at a complex topic. Further research should investigate the history of a wider sample of emerging market firms based in a variety of industries in both large and small emerging markets to investigate how many of them have followed the pattern outlined here. It would also be interesting to see which complementary local resource they have monopolized. How many of today’s EMNE have followed different strategies, and if so which ones? How crucial has been the role played by emerging market governments? How often have they been as successful in leveraging market access for technology as MOR in the case of China’s high-speed railroads? These are all questions that deserve further study.

Notes
1. Brazil, Russia, India, China, Vietnam, Indonesia, South Africa, Turkey, Argentina, Mexico and Thailand.
2. This is why Dunning’s model is called the OLI paradigm. It is also called the eclectic paradigm because it merges internalization and location theories.
3. Faced with this problem, Dunning added to his earlier intangible-based O advantages (asset advantages or OI) a new category of O advantages called transactional advantages (or OI advantages) “which arise specifically from the multinationality of a company” (Dunning, 1981, p. 27). This is a tautological fix since, in contrast to transaction cost theory, OLI cannot predict when such advantages will arise but infers their presence ex post by the fact that the firm has internalized. I therefore ignore these OI advantages and assume that all O advantages (or FSAs) are intangible based.
4. See also Ramamurti (2009) and Lessard and Lucea (2009) for similar arguments.
5. Bolillos are a shorter version of the French baguette.
6. BYD was able to achieve this by taking apart Sanyo batteries and consulting all battery patents.

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