Innovation and internationalization – Indian firms' choice of entry into foreign markets

Opsahl, Hanna Maria Dohlen

Toulouse Business School Research Center/IAE Toulouse

hanna.dohlen-opsahl@tbs-education.fr

Lacoste, Denis

Toulouse Business School Research Center

d.lacoste@tbs-education.fr

Résumé :

Cet article aborde la question de l'internationalisation des entreprises des pays émergents (EMNE) en mettant l'accent sur la façon dont le niveau d'innovation de ces entreprises influence leurs choix de mode d'entrée sur les marchés étrangers. Le nombre croissant d'EMNE et la hausse de l'investissement direct étranger venant de ces pays illustrent la croissance importante de ces entreprises au niveau mondial. Les EMNE rencontrent une pression pour innover; l'innovation est une source substantielle d'avantage concurrentiel. Certaines EMNE améliorent leurs niveaux d'innovation, mais elles souffrent d'inconvénients liés à leurs entrées tardives sur le marché international et le « liability of emergingness ». Pour concurrencer les entreprises des pays développés (DMNE) à l'échelle mondiale, les EMNE doivent relever ces défis. Ainsi, dans le contexte d'entreprises des pays émergent, la réduction de l'écart avec les DMNE est une motivation pour s'internationaliser. Nous soutenons que cela affecte leur choix de mode d'entrée. En mettant l'accent sur les entreprises d'un pays émergent, l'Inde, nous avons étudié le rôle des alliances stratégiques internationales par rapport à celui des acquisitions dans leur internationalisation. Nous avons examiné les opérations à l'étranger des 221 entreprises indiennes sur une période de dix ans. Nos résultats montrent que le niveau d'innovation des EMNE a un impact positif sur leur niveau d'internationalisation par des alliances stratégiques. Ces résultats suggèrent que les entreprises indiennes ayant un niveau d'innovation plus élevé préfèrent l'internationalisation par des partenariats au lieu des acquisitions. L'importance accrue des EMNE et le fait qu'elles se rattrapent rapidement avec les DMNE font que nous devons améliorer les connaissances de leur comportement et stratégies internationales. Avec cette recherche, nous espérons contribuer à la connaissance des stratégies d'internationalisation et des modes d'entrée des EMNE, et plus particulièrement des entreprises indiennes.

Mots-clés : Modes d'entrée, innovation, entreprises des pays émergents, internationalisation

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INTRODUCTION

EMNEs have started to play an important role in global markets. This is mainly illustrated by two recent phenomena; the rapid increase in the amount of foreign direct investments coming from emerging markets (WIR, 2013; 2015), and the growing number of EMNEs operating on an international scale (KPMG, 2010). These emerging giants meet challenges related to competing internationally since they suffer from liabilities of emergingness and latecomer disadvantages (Guillén & García-Canal, 2009). Among other reasons, these challenges arise from institutional voids in domestic markets (Khanna and Palepu, 2004, 2010). Liability of emergingness and latecomer disadvantages lead to low levels of innovation capabilities and little international experience for EMNEs (Luo & Tung, 2007), and thus competitive disadvantages compared to developed market counterparts (Wright, Filatotchev, Hoskisson, & Peng, 2005).

The disadvantages from which EMNEs suffer impact the motives they have to enter foreign markets (Luo & Tung, 2007), and also their choice of entry modes. While firms traditionally internationalize with market-, efficiency-, or resource-seeking motives, EMNEs are found to be strategic asset-seeking (Meyer, 2015). By getting their hands on strategic assets, such as advanced technology, knowledge, brands and capabilities, they can overcome their latecomer disadvantages (Mathews, 2006), and thus improve their international competitive positions. They internationalize by "springing" into foreign markets (Luo and Tung, 2007). In this context, acquisitions and ISAs are good means for rapid foreign market entry (Guillén and García-Canal, 2009).

Although both acquisitions and ISAs have been found to be EMNEs' principal modes of entry (Guillén and García-Canal, 2009) into foreign markets the main focus in the academic literature has been on acquisitions (Deng and Yang, 2015; Lebedev, Peng, Xie, and Stevens,

2014). The literature has looked at how foreign acquisitions, primarily in developed markets, help EMNEs to overcome barriers related to their latecomer disadvantages (Deng and Yang, 2015). At the same time, inward ISAs and joint ventures have played an important role in EMNEs' internationalization. These alliances have given them experience from working with foreign firms in their own domestic markets (Xia, Ma, Lu, and Yiu, 2014). Experience from alliances may lead to alliance capabilities (Kale and Singh, 2007), which increase the chances of success, and enhance learning in future alliances (Inkpen, 2000). During the last years EMNEs have undertaken several ISAs in foreign markets. In order to improve our understanding of EMNEs' international strategies we therefore argue that it is necessary to study both ISAs and acquisitions.

Innovation is becoming increasingly important for firms to compete globally. It is perceived as a driver of competitive advantage (Kumar, Mudambi, and Gray, 2013). Emerging market multinationals (EMNEs) have for a long time been perceived as low-cost manufacturers (Gammeltoft, Barnard, & Madhok, 2010), and not as innovative firms. However, EMNEs have started to improve their innovation potential and one starts seeing firms from emerging markets move from low-cost manufacturers to innovative firms that compete on an international scale (Elango & Pattnaik, 2007), some even in innovation intensive industries (Awate, Larsen, & Mudambi, 2012). This is shown through the increasingly important role in knowledge creation that EMNEs have started to play during the last years (Meyer & Peng, 2016). Some illustrations are India's Reliance group that has become a global, innovative firm (Kumar et al., 2013), or China's Lenovo that has, partly thanks to its acquisition of IBM's PC business, become a global competitor (Lebedev et al., 2014) to PC manufacturers from western countries. Also, South-Korea's Samsung (Duysters, Jacob, Lemmens, & Jintian, 2009) is today one of the leader in the mobile phone industry. Nevertheless, several EMNEs suffer from latecomers disadvantages (Luo and Tung, 2007; Guillén and García-Canal, 2009), both in terms of internationalization (WIR, 2015) and innovation. We argue that even though some EMNEs to an extent have overcome the latecomer disadvantages from which they suffered, some still lack innovation capabilities and legitimacy, the latter caused by liabilities of emergingness.

The increased importance of EMNEs and the fact that they rapidly catch-up with DMNEs do that we need to improve our knowledge about EMNEs' behavior and international strategies.

Indeed, it has been argued that more research is needed to understand how EMNEs overcome barriers to internationalization (Meyer & Peng, 2016) and to how they become global competitors (Gupta & Wang, 2009). In this paper, we study how EMNEs' level of innovation impacts their chosen foreign entry modes. To our knowledge, this has not previously been studied. With this research we hope to contribute to the knowledge of EMNEs' internationalization strategies and entry modes, and then particularly of Indian firms.

We studied 221 Indian firms and their foreign operations through acquisitions and outward ISAs over a ten year period, from 2004 to 2013. By doing linear regressions we looked at how firms' level of innovation, measured as R&D intensity, impacted their ISA- and international acquisition intensities. We found that firms' innovation level has a positive impact on their ISA intensity, which shows that firms with higher levels of innovation enter more ISAs than acquisitions in foreign markets. In the case of acquisitions we find no significant results. These results suggest that Indian firms with higher level of innovation prefer internationalization through partnerships instead of acquisitions.

The remainder of this article is structured as follows. Section 2 gives an introduction to the theoretical background and the development of hypotheses. Section 3 gives an overview of the data and the methodology. Section 4 shows the results and section 5 the discussion and conclusion.

1. THEORETICAL BACKGROUND AND HYPOTHESES

Both media and the academic literature have during the last two decades paid increased attention to EMNEs and their rapid international development. One important question that should be addressed is whether EMNEs should be studied under another lens than DMNEs. First, the motives that EMNEs and DMNEs have for undertaking foreign operations are found to diverge (Luo and Tung, 2007). EMNEs suffer from a lack of technological capabilities and knowledge. They internationalize to improve their capabilities (Guillén and García-Canal, 2009), to increase knowledge, and to overcome their latecomer disadvantages and liabilities of emergingness (Luo and Tung, 2007). Second, there is an ongoing discussion regarding the theories that can explain EMNEs' international behavior (Wright et al., 2005). It has been discussed whether traditional internationalization theories, like the Uppsala model (Johansson

and Vahlne, 1977), new venture theory (Oviatt and McDougall, 1994) or Dunning's OLI framework (Dunning, 1988) can be used in the context of EMNEs (Hennart, 2012). It has been argued that EMNEs' increased international presence starts to test the limits of these theories (Gammeltoft et al., 2010).

In the following sections we discuss literature on EMNE internationalization and we develop our hypotheses. We have a closer look at the role of innovation to EMNEs, and at how Indian firms' innovation level impacts their choice of entry into foreign markets.

1.1. EMNE INTERNATIONALIZATION

To have international operations has been viewed as a requirement for doing successful business (Kumar et al., 2013). EMNEs are no exception to the rule and have during the last decades started to increase their global footprints and to play an increasingly important role in global markets. They have entered both developed- and other emerging countries (Gammeltoft et al., 2010). As an illustration of their increased global presence only 27 companies on the Fortune's 500 global companies listing came from the BRICS countries in 2005 (KPMG, 2010). In 2014 the number had reached 118. These firms have overcome problems related to weak institutional environments, or institutional voids, at home, and now compete internationally (Khanna and Palepu, 2004, 2010). The rapid increase in the number and importance of EMNEs has started to question whether their internationalization processes should be addressed differently from the ones of DMNEs (Wright, Filatotchev, Hoskisson, and Peng, 2005). It is thus important to understand the reasons behind EMNEs' international diversification strategies and the modes of entry into foreign markets.

Internationalization is a way of directly competing with global rivals both in foreign- and in domestic markets (Khanna and Palepu, 2010). EMNEs have different motives from DMNEs behind their international expansion (Luo and Tung, 2007). DMNEs search to maximize ownership advantages (Kogut, 1985), to obtain economies of scale (Hennart, 2007), to reduce risk (Hennart, 2007; Hitt, Dacin, Levitas, Arregle, and Borza, 2000), and to access cheap resources and low labor costs (Khanna and Palepu, 2010). They are mainly market-seeking, resource-seeking or efficiency-seeking (Meyer, 2015). Market-seeking firms search to access or develop new markets to sell existing products, resources-seeking firms search for natural resources that they cannot obtain in current locations, and efficiency-seeking firms search to

lower costs, for instance by moving production to a country offering the latter (Conti, Parente, & de Vasconcelos, 2016). DMNEs exploit abroad resources developed at home (Mathews, 2006; Nielsen and Gundergan, 2012). Exploitation is when firms build upon their own capabilities when they go international.

EMNEs, by contrast, are found to explore when they go international (Marchand, 2015). Exploration is related to accessing new knowledge, advanced technology, brands or capabilities non available in domestic markets (Conti et al., 2016). It has been argued that EMNEs mainly search for strategic assets (Deng and Yang, 2015; Luo and Tung, 2007; Meyer, 2015). Strategic asset-seeking firms internationalize to access assets that they cannot obtain at home, but which are crucial for their long-term strategy (Benito, 2015). In addition, Luo and Tung (2007) claim that EMNEs enter foreign markets to overcome market- and domestic institutional constraints, such as lack of protection of intellectual property rights (Dikova and van Witteloostuijn, 2007; Gaur and Kumar, 2009). Also, EMNEs are found to lack firm-specific advantages; a necessity for foreign expansion (Dunning, 1988; Forsgren, 2008). Finally, institutional voids push EMNEs out of home markets (Yamakawa, Peng, & Deeds, 2008) since internationalization is a mean to escape from the lack of stable institutions at home (Cuervo-Cazurra and Ramamurti, 2015).

Some of the problems from which EMNEs suffer, such as latecomer disadvantages, arise from late liberalization of their economies and from institutional voids (Khanna and Palepu, 2004; 2010). Among other consequences, institutional voids leads to a lack of protection of intellectual property rights (Dikova and van Witteloostuijn, 2014; Meyer and Peng, 2016; Zhang et al., 2007), and difficulties related to financing (Khanna and Palepu, 2010; Hitt el al., 2000; Chittoor et al., 2009). EMNEs search to overcome these disadvantages by rapidly catching-up with western incumbents (Buckley and Hashai, 2014; Guillén and García-Canal, 2009).

Over the last years there has been an increase in innovative, high-tech EMNEs (Srholec, 2007). However, the fact that EMNEs are latecomers, that they lack technological capabilities, and that they have important knowledge gaps with DMNEs, impact the ways in which they internationalize (Awate et al., 2012). EMNEs internationalize rapidly to overcome their latecomer disadvantages; they “spring” into foreign markets (Luo and Tung, 2007) and

"leapfrog from their latecomer position" (Demirbag, Tatoglu, and Glaister, 2009, p.452). By leapfrogging into new markets and industries, EMNEs can leap over some steps of internationalization and innovation (Mathews, 2006). Since the motives EMNEs have for undertaking internationalization strategies diverge from the ones of DMNEs, a special interest should be given to EMNEs' internationalization.

1.2. THE ROLE OF INNOVATION FOR EMNES

In global markets there is an increasing pressure on firms to continuously innovate. Rapid technological change demands quick response from firms to develop new innovations. Firms have to invest in R&D to improve their innovation levels and thus enhance their competitiveness (Zhang et al., 2007). A firm's level of innovation depends upon its capacity to access knowledge and resources from multiple countries (Hitt, Hoskisson, and Kim, 1997). The literature has for a long time mainly focused on EMNEs as low-cost manufacturers operating in mature industries (Gammeltoft et al., 2010). During the last years, however, it has been argued that innovation in emerging countries is starting to play an important role in global innovation outputs (Kumar et al., 2013). This is shown through the fact that several EMNEs have moved up the value chain and started to compete in high-tech industries (Elango and Pattnaik, 2007) in same terms as global industry leaders. Nevertheless, EMNEs are latecomers in terms of internationalization and innovation, and now catch-up, or aim to achieve parity, with DMNEs (Nair et al., 2015).

International expansion can be a mean for EMNEs to overcome the latecomer disadvantages from which they suffer and acquire technological capabilities (Luo and Tung, 2007). Several EMNEs suffer from important technological gaps with their developed market counterparts. This gap may be even more difficult to catch if they aim at competing in innovation intensive industries. Even if several EMNEs start catching-up at the product level they lack innovation capabilities, and thus the possibility of taking on a leading position in certain industries. In order to become industry leaders EMNEs have to develop new innovations; they have to become innovators instead of imitators (Awate et al., 2012), but to develop innovations takes time (Van de Ven, 1986). However, being a latecomer is not always seen as a disadvantage. As latecomers EMNEs can leapfrog the initial stages of innovation, and thus avoid costs that already have been incurred by DMNEs (Hennart, 2012). In addition, it has been argued that

the possession of specific advantages are not necessary for international expansion of EMNEs since they can be acquired in foreign markets (Hennart, 2012).

In emerging markets late economic liberalization (Kumaraswamy, Mudambi, Saranga, and Tripathy, 2012) and institutional voids have inhibited internationalization and investments in R&D, and consequently EMNEs' opportunities to compete in global markets (Gaur and Kumar, 2009). Late economic liberalization offered protection from foreign competition for EMNEs (Elango and Pattnaik, 2007; Kumaraswamy et al., 2012). In some countries the big companies were state-owned (Yamakawa et al., 2008), and thus operated with a monopoly status (Gammeltoft et al., 2010). EMNEs therefore lack, to a large extent, technological capabilities to innovate at the same level as DMNEs (Wu, 2013). Internationalization is a way to acquire technological knowledge and to gain experience in how to conduct in-house research and development (Gaur and Kumar, 2009), and thus to compete in technology-intensive industries. Competing in such industries implies getting access to technological know-how and financing (Chittoor, Sarkar, Ray, & Aulakh, 2009). This can be obtained by entering foreign markets.

1.3. CHOICE OF ENTRY MODES FOR EMNES

EMNEs are found to internationalize mainly through ISAs or acquisitions (Guillén and García-Canal, 2009) in foreign markets. Luo and Tung (2007) argue that EMNEs use acquisitions to overcome institutional constraints at home and to rapidly access assets they need to obtain a competitive position. Mathews (2006) focuses on ISAs and on how alliances can help EMNEs to build ties with DMNEs, leverage those partnerships and learn from their foreign partners to successfully internationalize and compete in global markets.

Acquisitions by EMNEs, and then especially in developed markets, have received attention both in media and in the academic literature during the last years (Deng and Yang, 2015; Meyer and Peng, 2016). It has been highlighted that EMNEs use acquisitions to access strategic assets in foreign markets (Deng and Yang, 2015).Through acquisitions EMNEs have got access to advanced technology, capabilities, and brands that have helped some overcome the liabilities from which they suffer. Acquisitions of western targets has also been seen as question of pride for (Hope, Thomas, & Vyas, 2011), and a part of their dream to become global giants and to build empires (Deng & Yang, 2015). Outward ISAs, on the other hand,

have received less attention in the literature even if they also have been a way for EMNEs to access intangible assets abroad (Guillén and García-Canal, 2009). Recently, the rapid rise in the number of ISAs has received increased attention in the academic literature (Das, 2014). ISAs can be defined as agreements where the partnering firms in different countries make joint decisions (Li, Qian, and Qian, 2013). They can be equity- or non-equity agreements (Gulati, 1995), and take form as joint ventures, cooperative marketing arrangements, licensing or joint R&D projects (Sun and Lee, 2013). In this article we only focus on alliances that have been signed and operate in foreign markets by Indian firms and a foreign partner.

Several factors motivate creation of strategic alliances. First, through alliances firms can access external knowledge (Hagedoorn and Duysters, 2002), generate new knowledge (Inkpen, 2000), share resources with a partner (Hitt, 2015) and transfer knowledge-related capabilities (Nielsen, 2010). The knowledge generated in an alliance can be used by the partner firms to enhance strategy and operations, also in areas that are unrelated to the alliance. Also, this knowledge can be applied to new geographical markets, products, and businesses (Inkpen, 2000). By sharing resources with a partner, firms can increase both productivity and innovation (Hitt, 2015). Mathews (2006) argued that EMNEs succeed in foreign markets by entering through partnerships or joint ventures to access the resources they lack at home. Second, cost is found to be an important factor (Nielsen, 2010). Several EMNEs are suffer from lack of access to financing (Khanna & Palepu, 2010), and may therefore have a preference for options encountering lower costs. Third, in several cases, EMNEs have prior international experience from joint ventures with foreign firms in home markets (Prevot and Meschi, 2007; Sun and Lee, 2013) which have provided them with valuable experience and alliance capabilities. Fourth, EMNEs can increase their level of legitimacy by engaging in alliances because alliance partners automatically profit from the other partner's legitimacy (Olk and Ring, 2010). Furthermore, firms in industries with rapid technology change prefer more flexible organizational forms (Hagedoorn and Duysters, 2002). It has been argued that firms in highly innovation competitive environments have to increase speed of learning, knowledge acquisition (Inkpen, 2000), and that this can be achieved by entering ISAs (Inkpen, 2000; Wu, Wang, Hong, Piperopoulos, & Zhuo, 2016).

By building on the factors that motivate creation of strategic alliances and the fact that (i) innovation is becoming increasingly important in global markets, (ii) that EMNEs suffer from

latecomer disadvantages and liabilities of emergingness, and the (iii) fact that ISAs are a good mean to access innovation, we argue that EMNEs' level of innovation positively impacts their ISA intensity. By entering ISAs they can increase the speed of learning, acquire new knowledge and thus improve the level of innovativeness. In addition, they may profit from the level of legitimacy of their foreign partner (Olk & Ring, 2010), which is crucial in overcoming the liability of emergingness.

Hypothesis 1: EMNEs' level of innovation positively impacts their ISA intensity

The main part of FDI from emerging markets is through mergers and acquisitions (Deng and Yang, 2015). It has been argued that EMNEs shop for assets in foreign markets (WIR, 2015) to overcome their competitive disadvantage (De Beule, Elia, and Piscitello, 2014). They often do this through acquisition of targets in financial distress and by paying high acquisition premiums (Hope, Thomas, and Vyas, 2011).

However, EMNEs suffer from lack of experience in managing foreign acquisitions, particularly of targets in developed markets (Meyer and Peng, 2016). Several factors are found to play a role in firms' choice of acquisitions in foreign market entry. Firms in industries with rapid technological change tend to prefer more flexible organizational forms (Hagedoorn & Duysters, 2002) when entering new markets because of high levels of uncertainty. In addition, Hennart (2012) argues that the costs related to accessing knowledge may be high when EMNEs undertake foreign acquisitions, because the knowledge is embedded in the acquired firm. This is mainly explained by three factors. First, host country governments may block these acquisitions for emerging market firms. Second, it may be difficult for the EMNE to digest the acquired firms because the assets sought may be closely linked to other unneeded assets. Third, emerging market firms may lack managerial skills to carry out foreign acquisitions. In this case, the firms should focus on other entry modes, such as strategic alliances. This should mainly be done through equity joint ventures where the EMNEs bring with it access to complementary local assets and the developed country partners contributes with proprietary knowledge (Hennart, 2012).

We thus argue that firms' level of innovation not will significantly impact Indian firms' international acquisition intensity. First, EMNEs often lack capabilities of managing foreign

acquisition (Meyer & Peng, 2016), but have experience from alliances (Sun & Lee, 2013). Second, firms that search for innovation may prefer cooperation over acquisitions since they mainly need certain assets. Instead of acquiring entire firms they will prefer alliances. Alliances provide access to advanced technology and innovation capabilities of partnering firms (Olivier, 1997). Third, ISAs may be a cheaper option since firms can access the needed assets without acquiring an entire firm, and thus lower integration costs.

Hypothesis 2: EMNEs' level of innovation does not impact their acquisition intensity

2. DATA AND METHODS

2.1. DATA AND SAMPLING

Doing research in the context of EMNEs is challenging. Thite, Wilkinson, Budhwar, and Mathews, 2016) argue that EMNEs represent the "greatest challenges for scholarship" (p. 435). One issue is the high level of heterogeneity and the wide range of definitions given to emerging markets. Emerging countries can be defined as *"low-income, rapid-growth countries using economic liberalization as their primary engine of growth"* (Hoskisson et al., 2000, p. 249). The issue of heterogeneity of emerging markets makes generalization difficult (Gammeltoft et al., 2010). In order to respond to this problem we decide to focus on firms from only one emerging country in this research.

India is an emerging country characterized by high institutional- but low infrastructure- and factor developments (Hoskisson, Wright, Filatotchev, and Peng, 2013). In the period 1947 to 1991 the Indian government developed plans to modernize the economy with the goal of developing (industry) infrastructure and to reduce the level of foreign dependence (Elango and Pattnaik, 2007). These plans inhibited competition from foreign firms since entry by foreign actors solely were allowed in certain industries, and then under strict regulations, like licensing agreements. However, in the beginning of the 1990 the liberalization phase of the economy commenced. Government intervention became less frequent. Several state-owned companies were privatized and foreign firms were allowed to enter. Entry of foreign competitors increased competition for domestic firms (Elango and Pattnaik, 2007) and challenged their domestic foothold (Gupta and Wang, 2009).

Another factor was that Indian firms used outward FDI to overcome the country's lack of infrastructure (Hoskisson et al., 2013). Also, internationalizing was a way of responding to domestic institutional change (Chittoor et al., 2009).

During the last years, India has experienced a rapid internationalization (WIR, 2015). It is today one of the BRIC countries with the highest numbers of finalized overseas deals (WIR, 2010), and high levels of successful integration of foreign operations (Gupta and Wang, 2009). The country has a large proportion of privately owned firms that operate in knowledge- and technology intensive industries (Nair, Demirbag, and Mellahi, 2015). The majority of India's outward FDI investments come from private firms (Thite, Wilkinson, Budhwar, & Mathews, 2016). However, it has been argued that Indian MNEs experience greater difficulties in becoming global giants than, for instance, Chinese firms (Gupta and Wang, 2009). While several Chinese firms have moved up the value chain and become competitive in innovation intensive industries, Indian firms have had greater difficulty achieving this up-grade. India is, because of these reasons, an interesting context for this research.

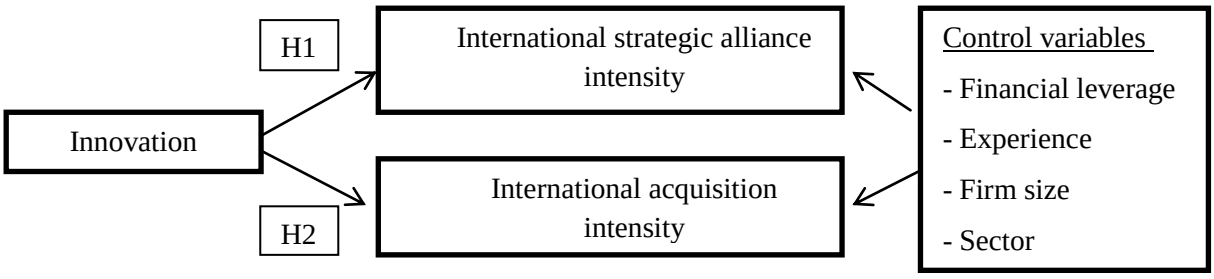
Several strategically important acquisitions have been undertaken by Indian firms during the last years. Some examples are the acquisitions of the companies Novelis and Jaguar Land Rover by ABG and Tata group respectively. These acquisitions were a part of a strategic-asset seeking strategy where the firms were searching for intangible assets (Thite et al., 2016). Important strategic alliances have also been signed between Indian firms and firms in foreign markets. India has through learning in partnerships with foreign firms built capabilities to operate in international markets (Elango and Pattnaik, 2007). Asian Granito, an Indian tile manufacturer, entered a joint venture with Panaria, an Italian company in the same industry, in 2013. This joint venture was created to enhance technical know-how and product quality in addition to increase presence in global markets (Asian Granito, annual report 2013-2014, p. 19). Strides Arcolab, a pharmaceutical company, entered a joint venture with the US firm Sagent Holding Company to jointly develop new pharmaceutical products in the US market.

Our population is Indian publicly listed firms from the Indian CNX S&P Index on December 31st 2013. This index comprises 500 firms (498 at December 31st 2013) that represent approximately 95% of the total capitalization of the Indian National Stock Exchange. To work

on publicly listed firms facilitate access to data, since publicly listed firms have to make public their financial information. We removed firms that have more than 50% state-ownership, firms that were subsidiaries of foreign firms and firms that were incorporated outside India in order to assure that only "pure" Indian firms were left in the final sample. In the population 54 firms were state-owned, 56 were subsidiaries of foreign firms, and 65 were financial firms. Also, we had difficulties finding data for all firms. Due to missing data, our final sample consisted of 221 Indian firms, both manufacturing and service firms. In total, 136 firms were manufacturing firms and 85 service firms. 94 of these firms operated in innovation intensive industries, while 127 operated in non-innovation intensive ones.

The data on the firms' foreign operations (acquisitions and ISA) were collected from SDC Platinum, which has been used by several scholars studying acquisitions and strategic alliances (Elango and Pattnaik, 2007; Li and Ferreira, 2008). Firm-level data were collected from inFinancials, the firms' annual reports and firms' websites. We do two different regression models (Hair, Black, Babin, and Anderson, 2014), one testing the impact of our dependent variable on ISA intensity and one on the acquisition intensity.

Figure 1 Research model



2.2. MEASURES

2.2.1. Dependent variables

The dependent variables, ISA- and acquisition intensities, are count variables (Deng & Yang, 2015). ISA intensity is measured as the number of outward ISA that the firms have entered in the period 2004-2013, while acquisition intensity represents the number of foreign acquisitions the firms have undertaken in the same period.

2.2.2. Independent variable

Several variables can be used to measure firms' level of innovation. Both number of patents (Sun & Lee, 2013) and R&D intensity (Buckley & Hashai, 2014) have been used to proxy firms' innovation level. In this article we focused on innovation level as a firm characteristic and used the average R&D intensity, measured as R&D expenditures on sales (Buckley and Hashai, 2014) over a period of ten year, as a proxy.

2.2.3. Control variables

We included several other variables that are found to impact firms' chosen mode of entry, both at the firm- and industry level. First, we controlled for financial leverage that we defined as financial debt on equity. We used the average number for the period 2004-2013 for each firm. It is important to control for debt structure because it may affect the firm's investment decisions (Tong, Reuer, and Peng, 2008). Second, we controlled for firm experience that we measured by firm age (Chittoor, Sarkar, Ray, and Aulakh, 2009), defined as the number of years since the firms' incorporation and until 2009, which is halfway through our time period of interest for this research. Third, we controlled for firm size that we measured as the average of the natural logarithm of firms' net sales (Hitt et al., 1997) for the period 2004 to 2013. Firm size can directly impact firms' strategies since bigger firms' often have more available resources for new investments (Tong et al., 2008). Fourth, we controlled for the sector (manufacturing- versus service firms) that we coded as a dummy. It has been argued that different sectors have different levels of efficiency and opportunity exploitation (Du & Boateng, 2015). The sector of the firm can thus have an impact on the type of internationalization. Fifth, we controlled for the innovation level of the industry. To measure innovation level of the industry we used a dummy variable that takes the value 1 if the industry was a high-tech or knowledge intensive industry and 0 if it was a non-high-tech or non-knowledge intensive industry. We followed the classification of Eurostat. It is argued that firms that operate in innovation intensive industries have a preference for alliances since uncertainty may be higher (Hagedoorn & Duysters, 2002).

The following equations were used to test the hypotheses:

$$ISA\ intensity = \propto (constant) + b1(R\&D\ intensity) + b2(Financial\ leverage) + b3(Experience) + b4(Firm\ size) + b5(Sector) + b6(Industry) + \varepsilon$$

$$Acquisition\ intensity = \propto (constant) + b6(R\&D\ intensity) + b2(Financial\ leverage) + b3(Experience) + b4(Firm\ size) + b5(Sector) + b6(Industry) + \varepsilon$$

3. RESULTS

Table 1 provides descriptive statistics and correlations between the variables used to test the two hypotheses. We here do Spearman correlations since we have both quantitative and qualitative variables (Hair et al. 2014). The firms in the sample have engaged in between 0 and 16 acquisitions and between 0 and 16 ISAs in foreign markets in the period 2004-2013, with an average of 1.46 acquisitions (S.D. of 2.55) and 0.99 foreign alliances (S.D. of 2.43). We thus see that in average the firms engage in a higher number of acquisitions than ISAs. Table 1 shows the correlation matrix of the variables in the first and second regression. The correlation coefficients among the independent variables are low, so multicollinearity should not cause any problems. The non-significativity of multicollinearity among variables is confirmed by the variation inflation factor for which the highest value is 1.11 (Hair et al., 2014). Table 2 shows the results of the two regression models.

Table 1 Means, standard deviations, and correlation for ISA- and acquisition intensity

	Mean	S.D.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1) Firm level innovation	0.51	2.08	1							
(2) Firm age	41.82	29.73	0.22*	1						
(3) Financial leverage	0.99	0.92	-0,17*	0.02	1					
(4) Firm size	13.13	1.48	0.15*	0.20*	0.29*	1				
(5) Industry innovation	0.43	0.50	0.21*	-0.02	-0.25*	-0.15*	1			
(6) Sector	0.62	0.49	0.31*	0.30*	0.03	0.05	0.04	1		
(7) ISA Intensity	0.99	2.43	0.09	0.11	-0.06	0.29*	0.23*	0.01	1	
(8) Acquisition intensity	1.46	2.56	0.23*	0.13	0.10	0.35*	0.09	0.06	0.37*	1

*p<0.05

Table 2 Linear regression analysis of the impact on innovation on EMNEs' internationalization

	ISAs		Acquisitions	
Variables	β	t	β	t
Firm level innovation	0.19**	3.26	0.09	1.52
Firm age	0.01	0.19	0.04	0.60
Financial leverage	-0.09	-1.46	0.09	1.53
Firm size	0.43***	6.81	0.37***	5.86
Industry innovation	-0.20**	-3.25	-0.87**	-2,60
Sector	0.00	0.01	-0.08	-0.25
R^2	24.1%		18.5%	
Adjusted R^2	22.0%		16.2%	

*p<0.05
**p<0.01
***p<0.001

In the first model, in which we tests our first hypothesis, the results of the regression analysis indicate that the regression equation has acceptably high R^2 value (24.1%, adjusted R^2 = 22%). Table 2, which reports the regression results, shows that the independent variable has a positive coefficient of 0.23 (p<0.001). The firms' level of innovation, measured as R&D intensity, thus has a positive and significant impact on their ISA intensity. These results give support to our first hypothesis. We also see that, as could be expected, the variables firm size (B=0.43, p<0.0001), financial leverage (B=-0.09), and firm age (B=0.01) have a positive impact on the outward international alliance intensity of emerging market firms. Firm size was expected to have a positive impact on ISA intensity because bigger firms also tend to have more available funds to spend on new projects (in this case international projects) (Tong et al., 2008). This impact is statistically significant. However, both financial leverage and firm age have non-significant impacts on our sample's firms' ISA intensity. Regarding the variable industry innovation level we see that the fact of operating in a low innovation-, versus high innovation-, intensive industry, has a negative and significant impact on the ISA intensity (B= -0.20, p<0.005). When it comes to sector we do not find a significant impact of whether the firms being a manufacturing- or a service firm. The results in the first model show that the level of innovation of the firms, measured as R&D intensity, in our sample has a positive and significant impact on their ISA intensity when entering foreign markets.

In model two, testing the impact of firm-level innovation on acquisition intensity, the regression equation shows a R^2 of 18.5% (adjusted R^2 = 16.2%). However, in this model the independent variable, R&D intensity, has a positive (B=0.09, p=0.13), but non-significant impact on acquisition intensity. These results do not allow us to conclude whether R&D intensity has an impact on acquisition intensity or not, and do not allow the acceptation of hypothesis 2. The control variable firm size has a positive and significant (B=0.38, p<0.001) impact on our sample's firms' internationalization through acquisitions, while firm age (B=0.04, p=0.547) and financial leverage (B=0.09, p=0.127) have a negative and non-significant impact. The fact of belonging to a low innovation-, compared to a high innovation-, intensive industry has a negative and significant impact on firms' acquisition intensity (B = -0.17, p<0.0001). Regarding the sector, or whether the firm is a manufacturing or service firm, we find a small negative, but non-significant impact of being a service, and not a manufacturing firm. However, our results indicate that the impact of firms' level of innovation on Indian firms' international acquisitions intensity is non-significant.

Comparing the two models we see that firms' level of innovation has a positive and significant impact the firms in our sample's ISA intensity (B=0.19, p<0.05). In the case of acquisitions, the impact is slightly positive, but non-significant (B=0.09, p=0.13).

4. DISCUSSION AND CONCLUSION

This paper demonstrates that EMNE's level of innovation positively impacts their ISA-, but not their acquisition intensity. EMNEs have been increasingly undertaking foreign operations during the last years. These operations have been a good mean to acquire knowledge and thus improve the EMNEs' competitive position in global markets. EMNEs tend to prefer external modes of growth such as acquisitions and ISAs (Guillén & García-Canal, 2009) when they internationalize. Both acquisitions and ISAs can provide rapid entry into new markets (Luo & Tung, 2007), and can help EMNEs access both intangible and tangible strategic assets (Guillén & García-Canal, 2009), which is one of the drivers behind their international expansion. ISAs have been found to back EMNEs' upgrade in global markets (Guillén & García-Canal, 2009) since they have profited from collaboration and partnerships with foreign firms in their own domestic markets.

Several arguments could be given to why EMNEs would enter more ISAs than acquisitions. First, through strategic alliances in foreign markets the firms can get access to critical resources, such as technological skills, that they have need in order to compete with DMNEs. However, it has been argued that EMNEs may have difficulties accessing and improving innovation capabilities in foreign markets through ISAs. One of the reasons is that they may have problems finding partners, which is mainly explained by gaps in skills (Rabbiosi, Elia, & Bertoni, 2012) between the partnering emerging market firms and the partnering DMNEs. Despite this, several ISAs are signed between emerging market- and developed market partners, both in emerging- and in developed markets every year. Second, it has been argued that EMNEs have problems related to financing that may restrict their international operations. ISAs are seen to be a less costly alternative then acquisition (Hennart & Reddy, 2000). This is explained by several reasons. When firms engage in an acquisition they acquire both needed and unneeded assets. It is argued that EMNEs are mainly strategic asset-seeking. However, in the case of an acquisition they acquire assets that they search for in addition to assets that they do not need. It has shown to be costly to extract the needed assets from the unneeded (Hennart, 2012). Other post-acquisition integration issues may also be met (Madhok & Keyhani, 2012). One problem is that these firms lack capabilities to manage acquisitions, and knowledge related to extraction of resources and capabilities. Third, EMNEs can meet opposition in foreign markets when it comes to acquiring firms, both from foreign governments and employees of the target firms. Strategic alliances, on the other hand, seem to meet less resistance by local governments. Fourth, it has been argued that when the level of uncertainty is high, firms tend to turn towards lower commitment entry modes.

This research has several limitations. First, when EMNEs search for innovation or legitimacy they tend to internationalize into developed countries. Their preference for ISAs could therefore be explained by the institutional stability in these markets. When the institutional environment is stable firms have might prefer entry modes with lower commitment. Since protection of intellectual property rights in these markets tend to be high, the chosen entry mode may tend towards shared ownership as in alliances. However, in this study we do not focus on the type of host country for the foreign operations as we are trying to explain the total number of these two types of entry modes. Second, we only use publicly listed firms. It may be argued that Indian publicly listed firms do not possess the typical characteristics of emerging market firms since they are likely to have higher level of international experience,

access to financing, etc. However, it is challenging to get access to data in an emerging market context. Third, we do not control for legacy, or the extent to whether the firms already have alliance- or acquisition experience. Fourth, we do not have information about whether one type of operation was chosen over another because of lack of available targets in the case of acquisitions or available partners in the case of ISAs. However, we use the number of total operations undertaken by the firms over the last ten years. This gives an indicator of whether the firms have a preference or not for a certain mode of entry. Fifth, we only use R&D intensity as a proxy for firms' level of innovation. In future research it would be interesting to use other measures, such as number of patents for instance, to measure firms' levels of innovation. Sixth, we do not take into account performance. Even if we find reasons to why Indian firms tend to internationalize more through ISAs when they have higher levels of innovation, we do not know whether these strategies lead to higher performance for firms. These limitations could be integrated in future research in order to improve our knowledge of internationalization strategies and choice of entry modes of emerging market firms.

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