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Chinese and Indian M&As in Europe: The relationship between motive and ownership choice

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Our empirical analysis relies on a dataset of M&As undertaken by Chinese and Indian MNEs in high and medium-high tech sectors, in the period 2003-2011. We use content analysis of public announcements and company reports for classifying the main motivation of the acquisitions, and econometric analysis for testing our hypotheses. Our results confirm the expectations.

JEL codes: F23; G34; O32

Keywords: Cross-border acquisitions; Ownership choice; Foreign direct investment motives; Emerging market firms

CHINESE AND INDIAN M&As IN EUROPE: THE RELATIONSHIP BETWEEN MOTIVE AND OWNERSHIP CHOICE

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CHINESE AND INDIAN M&As IN EUROPE: THE RELATIONSHIP BETWEEN MOTIVE AND OWNERSHIP CHOICE

INTRODUCTION[†]

Emerging Country Multinational Enterprises (EMNEs) are increasingly involved in a process of international expansion in Europe through Foreign Direct Investment (FDI), in the form of greenfield investments and mergers and acquisitions (M&As). Although EMNEs suffer latecomer disadvantages and lag behind incumbent Multinational Enterprises (MNEs) (Child and Rodrigues 2005), they become global players within a very short space of time. For example, since the mid 2000s they have been influential actors in the international scenario, challenging advanced country MNEs (AMNEs) in many different industries (Awate *et al*. 2012; Narula 2012; UNCTAD 2012).

This rapid and peculiar evolution has led to a flourishing literature focused on the characteristics and strategies of the EMNE internationalization process (among many others, see Ramamurti 2008, 2012). EMNEs have few accumulated firm-specific advantages and their strengths rely mainly on their specific home country advantages (e.g. low factor costs, state support). Therefore, their expansion abroad, especially in advanced countries, is likely to be driven by the search for technology, management and strategic skills, brands and commercial knowledge, which often are lacking in their home countries (Rugman 2009). In fact, their internationalization can be considered

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mainly as a strategy aimed at accumulating resources (see among others: Awate *et al.* 2012; Child and Rodrigues 2005; Li *et al.* 2012; Makino *et al.* 2002) and appropriating strategic assets (Dunning 1993). Cross-border acquisition of companies in advanced countries is considered the fastest and most effective means of accessing strategic assets and key capabilities (Chung and Alcacer 2002).

EMNEs investing in more advanced economies face technological and commercial competitive disadvantages (Deng 2009; Gammeltoft *et al.* 2010). In addition, they also suffer from the *liability of emergingness* due to lack of reputation and legitimacy (Madhok and Keyhani 2012; Yildiz 2013), and the disadvantage with respect to advanced country firms of a knowledge gap which may severely limit their absorptive capacity to acquire and incorporate external knowledge (Cohen and Levinthal 1990).

Within this context, a crucial trade-off in EMNEs' acquisition of local companies is the extent of equity ownership, which has major implications for resource commitments, performance and risk (Anderson and Gatignon 1986; De Beule *et al.* 2014). The Resource-based View (RBV) and Transaction Cost Economics (TCE) approaches suggest that complete acquisition of the target company provides access to embedded knowledge and competences and minimizes transaction costs through full control over the foreign activities (Barney 1991; Williamson 1975). However, partial acquisition may be preferable because takeover implies radical organizational change and may result in the dispersion of the core competences developed by local managers and key employees (Cannella and Hambrick 1993). In this case, EMNEs may prefer to maintain

a local partner, particularly when if the main motive for investment is acquisition of knowledge and competences.

In this paper, we develop an empirical analysis of EMNEs' ownership choices in M&As undertaken in Europe, and investigate the relationship with the underlying motives. We investigate the relationship between the ownership choices of EMNEs acquiring firms in advanced countries and the motivation for their investment. The analysis is focused on Chinese and Indian acquisitions in Europe between 2003 and 2011. In particular, we relate ownership choice, that is, the level of commitment of Chinese and Indian MNEs to the target companies, to the motives underlying their investments. Data on M&As come from a newly created database, EMENDATA (Emerging Multinationals Events and Networks DATAbase**)** that combines data from BvD Zephyr and SDC Platinum. Information on motives is based on companies' public announcements published in Lexis-Nexis. We conduct qualitative content analysis, which shows that Chinese and Indian acquisitions in Europe are motivated by the search for knowledge, market and legitimacy. We propose an econometric model to investigate the relationship between motive and ownership choice in order to provide new quantitative evidence on the technological upgrading strategies pursued by EMNEs in Europe.

CONCEPTUAL FRAMEWORK AND RESEARCH HYPOTHESES

Ownership choices

A difference between EMNEs' and AMNEs' international expansion is that in the former case it is aimed not at exploiting existing ownership advantages (Dunning 1993), but rather at building sustainable global competitive capacity by from extending their

networks of relationships and boosting their home country advantages (Buckley *et al.* 2007; Mathews 2006; Ramamurti 2008; Rugman and Li 2007). EMNE investment in more advanced countries is usually market- and/or strategic asset-seeking FDI (Deng 2009; Luo and Tung 2007). Acquisition is often chosen in order to access technological knowledge and other strategic resources in advanced market companies. It can enable direct access to sophisticated competences and skilled labour, and allow exploitation of local knowledge and development of formal and/or informal collaborations and networks with local actors such as suppliers, customers, universities and research centres (Cantwell and Mudambi 2011; Li *et al.* 2012).

When acquiring a company, a critical consideration is the level of equity ownership in the acquired company. The level of ownership in the target firm represents the level of commitment to the foreign activity (Chari and Chang 2009). Degree of ownership affects several factors such as the effective transfer of tacit and tangible assets, risk sharing between the acquiring and target firms, resource commitment, and control over activities (Anderson and Gatignon 1986; Barkema and Vermeulen 1998; Brouthers and Hennart 2007).

According to the RBV (e.g. Barney 1991), full acquisition of the local target company allows the investing firm to access the knowledge and competences embedded in the company (Barkema and Vermeulen 1998). Similarly, TCE theorizes that a higher level of control is needed to reduce the transaction costs involved (Madhok 1997). Based on these arguments, foreign investors generally should prefer a high level of control to

achieve complete access to the knowledge and technological competences rooted in the acquired company.

However, MNEs often choose to low levels of equity ownership and there are theoretical and empirical explanations for shared ownership (Chari and Chang 2009; Mariotti *et al.* 2014). Complete acquisition of the target firm implies radical organizational changes and can disrupt its embedded core competences and result in huge losses for the acquirer (Jemison and Sitkin 1986). In the case of full acquisition, the acquiring firm may find it difficult to motivate the acquired firm's managers and employees, who may underinvest in new competences, behave opportunistically and hold up the transfer of critical tacit assets such as technological knowledge, or even leave their jobs (Chen and Hennart 2004). There is a large literature (e.g. Cannella and Hambrick 1993) showing that turnover rate in acquired top management teams is significantly higher than the normal turnover rate, and that exit of managers after an M&A involves loss of critical knowledge resources, thus, lowering the performance of the target firm. Alternatively, partial ownership gives the acquiring company the opportunity to share investments and risks (Anderson and Gatignon 1986; Kogut and Zander 1993). This is likely to be more relevant in the case of EMNEs investing in advanced countries where *liability of emergingness* represents an additional disadvantage that hinders the acquisition of legitimacy and capabilities (De Beule *et al.* 2014; Madhok and Keyhani 2012). The different host country environment, limited absorptive capacity and lack of reputation increase the EMNEs' need to rely on local employees and managers who embody competences and know-how which may be tacit and difficult to acquire. Hence, our first hypothesis is:

Hypothesis 1. EMNEs are more likely to acquire a lower equity share in cross-border M&As motivated by knowledge seeking.

However, the chosen level of ownership in the target company depends also on the characteristics of the target firms. In particular, the degree of uncertainty in cross-border acquisitions may be higher if the dissimilarity (in terms of culture, knowledge base, managerial style and labour skills) among the partners is high. Specifically, the literature highlights three types of dissimilarity between target and acquiring company (Barkema and Vermeulen 1998; Chari and Chang 2009).

The first is cultural distance, and evidence on its relationship with level of ownership commitment in the target company is mixed. On the one hand, a culturally distant environment can hinder the transfer of intra-organizational practices, thus, encouraging full ownership and greater control of the parent company. On the other hand, in unfamiliar environments, MNEs may prefer shared equity with local partners to ease their adaptation to the local context (Barkema and Vermeulen 1998; Hennart and Larimo 1998). In the case of EMNEs acquiring firms in advanced countries facing high uncertainty due to high cultural distance, we expect they will recognize the importance of local resources and choose a lower level of equity ownership to retain the local partner.

The second is dissimilar knowledge bases, which may influence the acquirer's equity ownership decision. It is well known that the transfer of routines and knowledge can be difficult in a new environment (Cohen and Bacdayan 1994), and firms expanding into

unrelated businesses may encounter several problems related to absorption of acquired technological capabilities (Harrison *et al.* 1991; Ranft and Lord 2002). The transfer of competences and capabilities may require very close cooperation with the acquired company to achieve learning by the acquiring firm. When EMNEs invest in unrelated sectors, partial ownership may mitigate knowledge transfer problems.

The third type of dissimilarity is related to the external business environment. A turbulent business environment can increase uncertainty and is especially relevant in high tech compared to low tech sectors. Firm acquisitions in high tech industries are more likely to represent opportunities for learning and accessing knowledge-intensive assets such as specialized human resources, innovative technologies and specialized knowledge (Chen and Hennart 2004). The high uncertainty and risk of adverse selection in high tech industries drive the acquiring firm to pursue a lower level of commitment (Reuer *et al.* 2004). Therefore, we expect EMNEs acquiring firms in high tech rather than low-tech industries to pursue a lower level of commitment in the target company .

Accordingly, our second set of hypotheses is:

Hypothesis 2a. EMNEs equity shareholding will be lower in more culturally distant compared to culturally closer target firms

Hypothesis 2b. EMNEs acquire lower equity shares in target firms operating in unrelated sectors.

Hypothesis 2c. EMNEs equity shareholding will be lower in acquired high-tech target firms compared to their shareholding in low-tech companies.

Motives and ownership choices

According to the extant literature, firms' ownership choices may be related to the motive and strategies underlying the acquisition as well as the types of activities, strategies and structures of the firms involved (for a survey, see Brouthers and Hennart 2007). Firms with fewer technological capabilities generally undertake knowledge-seeking investments to fill their technology gap through the acquisition of innovative firms and access to their resources (Wesson 2004). Thus, for EMNEs seeking to acquire superior technological capabilities, the local advanced country partner plays a strategic role. Indeed, cooperation with the foreign target company mitigates problems related to the liability of foreignness and cultural differences, and the knowledge gap between the acquiring and target firms (Chen and Hennart 2004). The tacit nature of the knowledge and the highly sophisticated capabilities required in high tech industries mean that the learning processes of EMNEs need to be supported by the acquired firms. Therefore, if the EMNE's motive for investment is knowledge-seeking we expect the effect of dissimilarity between target and acquiring firm to be stronger since it will hinder the efficient transfer of knowledge. In this case, the EMNE will be likely to rely on the local partner to acquire knowledge and, thus, will prefer a lower level of commitment in the target company. Our third hypothesis is:

> **Hypothesis 3.** Hypotheses 2a-2c will be more likely to hold if EMNEs invest for knowledge seeking reasons.

DATA

The sample

The empirical analysis is based on acquisitions undertaken by Chinese and Indian companies, in high and medium high tech industries in the 27 European countries in 2003-2011. Data on acquisitions are from EMENDATA, which combines BvD Zephyr and SDC Platinum records and provides deal level information (e.g., type, date, value, degree of ownership) and general information on the target and acquiring companies (e.g. country, region and city of origin, activities, sectors). The initial sample includes 230 acquisitions: 76 (33%) from China and 154 (67%) from India.

Previous studies provide empirical evidence that investments for knowledge sourcing reasons are particularly relevant in high tech manufacturing industries (Cloodt *et al.* 2006), and especially in the case of EMNEs investing in advanced economies (Awate *et al.* 2012; Govindarajan and Ramamurti 2011). Therefore, we focus on knowledge-intensive manufacturing acquirers in high and medium-high tech sectors, identified on the basis of the Eurostat-OECD (2007) classification (King *et al.* 2008).[1]

The sample excludes: 1) deals undertaken by individual or unknown investors; 2) operations with undisclosed acquirers and/or targets; 3) investments where the acquirer is a sovereign wealth fund (SWF), or the global ultimate owner (GUO) is not from China or India. It also excludes acquisitions for which we have insufficient information to identify the main underlying motive. The final sample includes 170 acquisitions, representing 74% of the initial sample: 53 (31%) undertaken by Chinese firms and 117 (69%) by Indian MNEs. Table 1 presents sample characteristics by year and host

[1] The 2-digit manufacturing industries according to the NACE Rev. 2 classification included in the sample are: pharmaceuticals (20), chemicals (21), computer, electronic and optical products (26), electrical equipment and components (27), machinery and other equipment (28), motor vehicles (29) and other transport equipment (30).

country. The acquisitions in the sample involve 18 target European countries, among which the UK, Germany and France are the most popular for Chinese and Indian MNEs.

[Insert Table 1 here]

Motives

To classify the main motive for each acquisition, we perform qualitative content analysis to categorize the textual information provided by companies' public announcements. We rely on a deductive category application (Weber 1990) to analyse the text in these announcements in order to identify the main motive underlying each acquisition.

Based on the main FDI motives suggested by Dunning's (1977, 1993) eclectic paradigm, and using an iterative process (feedback loops), we identified market and strategic-asset-seeking investments, which are the typical types of FDI from emerging to advanced economies (Buckley *et al.* 2007; Ramamurti 2008). We also identified the motive of global-legitimacy seeking, which is a quite relevant motive for EMNEs investing in Europe and in advanced countries more generally (Cui and Jiang 2009). We developed explicit definitions, examples and coding rules (Table 2) for each deductive category in order to determine unequivocally under what circumstances an announcement can be coded to a certain category (Weber 1990). The qualitative analysis consists of reading, analysing and methodologically assigning a unique category to each announcement.

[Insert Table 2 here]

Following the defined coding rules, two trained researchers carefully read each document to identify the main motive for the investment, and hand-code it. The reliability of the codification process was tested by measuring the level of agreement between coders and showed 87% correspondence (Neuendorf 2002).

The primary source for public announcements and deal information is LexisNexis, which provides access to billions of searchable documents and records from more than 45,000 legal, news and business sources. We integrated this information with the annual reports and official websites of both acquirer and target firms. Table 3 reports the distribution of acquisitions across the three main investment motives, distinguishing between Chinese and Indian MNEs. Total acquisitions are classified as: knowledge seeking 60 (35.29%), market-seeking 57 (33.53%) and global-legitimacy-seeking 53 (31.18%).

[Insert Table 3 here]

The procedure described above is an application of direct content analysis appropriate when 'existing theory or prior research about a phenomenon that is incomplete would benefit from further description […]', with the aim '[…] to validate or extend conceptually a theoretical framework or theory' (Hsieh and Shannon 2005: 1281). Most studies of cross-border investment motives use approaches developed for AMNE contexts, that is, they use host country characteristics to proxy for FDI motives, and categorize FDI in low cost countries as resource/labour-seeking, and FDI in large markets as market-seeking. However, Wang et al. (2012) point out that these aggregate

measures may be inadequate for understanding how acquisition motives differ from firm to firm. Therefore, in the present analysis we introduce complementary definitions of FDI motives, using firm- and deal-level data to combine traditional FDI explanations with the peculiar characteristics of EMNEs.

ECONOMETRIC ANALYSIS

Dependent variable

The dependent variable is *Share of equity* acquired by the EMNE in the target company. Table 4 presents the minimum, maximum, mean and standard deviation of the dependent variable values, distinguishing between Chinese and Indian acquirers. In Table 4, full acquisitions are represented by *Share of equity* taking the value 1 (100%); if the dependent variable is lower than 1 (i.e. acquisition of less than 100% of the target firm's equity) this is a partial acquisition. The high incidence of complete ownership is consistent with prior research showing Chinese and Indian firms' preferences for full ownership control over foreign operations (De Beule *et al.* 2014; Sun *et al.* 2012).

[Insert Table 4 here]

Explanatory variables

Knowledge-seeking M&As

The variable *Knowledge-seeking* is a dummy that takes the value 1 if the principal motive for the acquisition is access to the technology and knowledge embedded in the target company, and 0 otherwise (i.e. if the acquisition is primarily market-seeking or global-legitimacy-seeking). We showed that 60 out of 170 (35.39%) investments were for knowledge-seeking purposes. Since EMNEs need to cooperate with the local partner

to ensure smooth transfer of knowledge and competences, it is likely that they will seek a lower level of commitment in the target company. Therefore, we expect a negative relationship between the dummy *Knowledge-seeking* and our dependent variable.

Cultural distance

To measure the cultural distance between China/India and each host country we adopt the traditional index of cultural distance[2] based on Kogut and Singh (1988), which includes the four cultural dimensions of power distance, uncertainty avoidance, masculinity/femininity, and individualism, introduced by Hofstede (1980). Thus, cultural distance is defined as:

$$Cultural\ Distance\ (CD)_{jh} = \frac{(I_{ij} - I_{ih})}{V_i}$$

where $Cultural\ Distance\ (CD)_{jh}$ is the cultural distance between the home country h and the host country j, I_{ij} is the cultural distance index ith for the jth host country, I_{ih} is the cultural distance index ith for hth home country, and V_i is the variance of the cultural distance index ith. The data come from Hofstede Centre (www.http://geert-hofstede.com/the-hofstede-centre.html). Given that higher values of the cultural distance index indicate larger differences between China/India and the host country, we expect a negative correlation between the CD index and the dependent variable.

Relatedness and dissimilarity

[2] Note that, sine the effect of distance is a central issue in international management and international business, alternative measures have been suggested. However, and despite some critiques (e.g. Shenkar 2001), the Kogut and Singh index has proved the most popular so far (for a recent focus on the issue of distance in international management, see Special Issue of the *Journal of International Management* on "The Concept of Distance in International Management Research" 2014).

To account for whether ownership decisions are affected by dissimilarity between the knowledge bases of the acquiring and target firms (Harrison *et al.* 1991), we include a dummy variable, *Target service sector,* which takes the value of 1 if the primary NACE code of the target firm is in a service sector industry (NACE two-digit Rev.2 45-96 inclusive), and 0 otherwise.[3] In our sample, 28 out of 170 (16.47%) are acquisitions of a service sector target firm operating and 142 (83.53%) are manufacturing sector acquisitions. Data on the primary industry of the target company are from BvD Zephyr and SDC Platinum. Since manufacturing MNEs suffer from higher uncertainty (caused by differences in knowledge bases) if the target company is specialized in services, they will likely commit to lower level equity than if the target is a manufacturing company (Barkema and Vermeulen 1998). Therefore, we expect a negative relationship between the dummy *Target service sector* and our dependent variable.

Technological intensity of the target company

To account for the technological intensity of the target company, we introduce the dummy variable *Target tech industry,* which takes the value 1 if the target company operates in a high or medium-high tech industry according to the Eurostat-OECD (2007) classification, based on data provided in BvD Zephyr and SDC Platinum. Table 5 shows the distribution of the 170 acquisitions between high and non-high tech industries. We expect a negative relationship between the dummy *Target tech industry* and our dependent variable *Share of equity.*

[Insert Table 5 here]

[3] Note that, although the concept of relatedness refers to the applicability of the resources and capabilities owned by the company to the new business (Piscitello 2004; Robins and Wiersema 2003), it generally is operationalized by proximity within the SIC-defined system. Thus, although our proxy refers to a rather aggregated industrial classification, it is in line with the measures employed in the literature.

Control variables

Host-country variables

To control for market growth in the host country, we introduce the variable *GDP growth.* According to previous empirical analyses (e.g. Barkema and Vermeulen 1998; Gomes-Casseres 1990), host market growth influences the level of ownership commitment; shared ownership is preferred over full acquisition in host countries showing high market growth. We measure host country GDP growth as host country annual GDP growth rate in the year before the acquisition (based on World Bank Development Indicator data).

The variable *Host cross-border M&As* measures the relative attractiveness of the host country with respect to entry by foreign firms. The international business literature has highlighted that rival companies' presence in a host country is based on a strategy of achieving global market presence, especially in markets regarded as attractive (Hamel and Prahalad 1985). Previous studies suggest also that the relative attractiveness of the host country market may affect the level of commitment in cross-border acquisitions (Chari and Chang 2009; Folta 1998). Thus, following Chari and Chang (2009), we measure *Host cross-border M&As* as the percentage of worldwide cross-border M&As in the target country in the year prior to the focal acquisition. Data are from the UNCTAD Cross-Border M&A database.

Industry of the acquiring firm

In order to control for industry-specific effects that might influence the M&A ownership decision we introduce four sectoral dummies (*Electronics, Machinery,* and *Transport* with *Chemicals* as the benchmark) based on NACE two-digit Rev. 2 20 and 21. In our sample, 60 acquisitions (35.39%) are in the chemical and pharmaceutical industry, 30 acquisitions (17.65%) in the electronic and electrical manufacturing sector, 31 (18.24%) in the machinery industry, and 49 (28.82%) in the transport industry. Data on the acquirer's primary industry come from BvD Zephyr and SDC Platinum.

Year dummies

Finally, since we pool data over a 9-year period characterized by strong macroeconomic turbulence, we control for the years of the financial crisis by adding two dummy variables for acquisitions in 2006 or 2007 (*Year* t for t = 2006, 2007). In this way, we account for macroeconomic shocks that might affect the cross-border investment activity. During the financial crisis, there is a general tendency for aggressive takeover of foreign firms by EMNEs, that exploit their liquidity advantages and home country government support, and capitalize on the financial exigencies of – especially advanced country - target firms (Peng 2012).

Model and methodology

To test our hypotheses, we employ the following model:

$$Share\ of\ equity_i = \beta_0 + \beta_1\ Tech\text{-}seeking_i + \beta_2\ Cultural\ distance_i + \beta_3\ Target\ service\ sector_i + \beta_4\ Target\ tech\ industry_i + \beta_5\ Controls + \varepsilon_i$$

where i=1, 2, …, 170 are the acquisition events.

Given that our dependent variable is bounded between 0 and 1, we estimate a Tobit regression model, which accounts for both left-and right censoring of *Share of equity* (Green 1993). Since some of the deals in the sample (53 observations, 31.18% of the whole sample) are acquisitions made by the same firm, we control for lack of independence between observations. Similar to the approach in Chari and Chang (2009) and Folta and Miller (2002), we use the cluster option which corrects for this problem by computing robust standard errors that account for observations clustered by firms. Table 6 provides the descriptive statistics of the dependent and explanatory variables; Table 7 presents the correlation matrix. Variance inflation factor rules out multicollinearity problems influencing our results.

[Insert here Tables 6 and 7]

RESULTS

Table 8 presents the estimated coefficients in our econometric models. Column 1 (Model 1) reports the results of the basic equation model. Note that the variable *Knowledge-seeking* has a negative and significant coefficient (at $p<.05$), showing that EMNEs prefer a lower equity share when investing to acquire knowledge and competences. This confirms Hypothesis 1.

In relation to the characteristics of investors, we analyse the impact of cultural distance. The coefficient of *Cultural distance* is not significant, which does not support Hypothesis 2a. With respect to the impact of dissimilarities in the knowledge base and the relatedness between the target company and the acquirer, on the dependent variable, *Target service sector* is significant (at $p<.10$) and negatively affects the level of

commitment of EMNEs. Thus, according to Hypothesis 2b, dissimilarities in the knowledge base between the acquiring and the target firms lead to a lower level of ownership (Barkema and Vermeulen 1998). For the industry-specific effect, we find that the coefficient of *Target tech industry* is negative and significant (at $p<.10$). This supports Hypothesis 2c that the acquiring firm prefers lower level of ownership if the target firm is specialized in a high tech industry.

In order to test Hypothesis 3, we split the sample of acquisitions into two sub-samples, distinguishing between knowledge-seeking and other investments (Models 2 and 3, respectively). The results show that target firm- and industry-specific variables have different impacts on the dependent variable if the acquisition is aimed at acquiring knowledge. In line with our expectations, we find that the sign on cultural distance differs between the two acquisition sub-samples. The coefficient of *Cultural distance* is negative in Model 2 but in Model 3 turns positive, although not significant at the conventional level. The variables *Target service sector* and *Target tech industry* are negative and significant (at $p<0.1$) only if the acquisition is aimed at gaining knowledge. In other words, if the EMNE acquisition is to access know-how and technical competences embodied in the target firm, then the presence of a local partner is preferred (i.e. the acquirer has a lower level of commitment to the acquired firm) to maximize the opportunities for learning especially in the case of unrelated knowledge bases.

Among the control variables, the coefficient of *Host cross-border M&As*, that is, the presence of foreign M&As in the host country, is positive and significant ($p<.05$) only

in Model 3, and seem to have no impact on ownership choice for acquisitions aimed at knowledge seeking.

[Insert here Table 8]

As a robustness check, we test our hypotheses using an alternative econometric specification. We categorize the dependent variable *Share of equity* into three ordered categories (100%, equal to or greater than 100% but below 50%, and below 50%) running a robust Ordered Probit regression. The results show similar behaviour of the explanatory variables which increases our confidence in the findings.[4]

CONCLUSIONS

Acquisitions of European companies by Chinese and Indian MNEs have increased dramatically in the last decade. The literature emphasizes that this activity is aimed mainly at acquiring strategic assets and competences from more advanced companies. However, MNE acquisitions of firms in foreign markets can be based on different strategies and different levels of commitment; they may involve fully buyout, or partial acquisition of the target company and retention of an important role for the local partner. Research shows that this choice depends on firm-, country- and industry-specific factors. This paper contributes by including the acquisition motives and their influence as a moderating factor in the relationship with ownership choice.

This paper contributes to the literature on entry mode by investigating the level of equity and control in cross border acquisitions, a topic that has been largely neglected so far. We also add to the empirical literature on EMNEs' internationalization strategies

[4] The results of this analysis are available from the authors upon request.

and work on acquisitions of advanced country firms (e.g. De Beule *et al.* 2014). Our empirical analysis shows that, Chinese and Indian MNEs prefer less control if the objective of the acquisition is technological competences rather than a customer base or established brand name. We show also that firm-level and industry-level characteristics have different impacts on the ownership decision depending on the reason for the acquisition. To classify deals according to their main aim, we introduced a novel methodology based on content analysis applied to the information provided in public announcements and company reports. We find that when acquiring companies in Europe with the aim of accessing technical competences, EMNEs prefer a low level of commitment because of the prospective partner's dissimilar knowledge and highly specific resources.

The study has some limitations that point to opportunities for future research. The major one is the limited number of observations, and the availability of information about the deals, included in the empirical analysis. The problems related to obtaining financial and accounting information about target and acquirer firms reduces the ability to account for relevant firm-specific characteristics such as R&D intensity. Also, although the smaller number of observations allowed hand coding, in larger samples, the procedure could be improved by the use of statistical techniques to identify recurring key words. Another possible limitation is the exclusion of managerial motives in the coding. Further research should examine the applicability of managerial motivations for EMNE acquisitions (for an overview, see Trautwein 1990). Our results could be replicated using alternative measures for cultural distance, although the one applied here is the most frequent in the international business and management literature (Ambos

and Hakanson 2014). Shenkar (2001) points out that most cultural distance indexes and constructs (e.g. Hofstede 1980; Kogut and Singh 1988) oversimplify the relationship between countries, implicitly assuming lack of corporate culture variance (e.g. Hofstede *et al.* 1990). Traditional measures do not assume heterogeneity among individuals and firms (Zaheer *et al.* 2012), despite empirical results that show that corporate culture can modify the behaviour related to national traditions (Weber *et al.* 1996). This issue is particularly evident in cross-border M&As involving emerging and advanced economies companies. Although we tested the impact of the different motives underlying acquisitions on the ownership decision, future research could investigate other possible moderating effects which might play a role in the entry mode choice. It would be interesting to study how different ownership strategies affect the innovative performance of the EMNE with respect to initial motive for the investment and the characteristics of the acquiring company. Finally, this empirical exercise could pave the way to future efforts aimed at crafting a conceptual framework within which EMNEs' behaviour and strategies could be better framed and understood.

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TABLES

Table 1. Distribution of the 170 acquisitions by host country and year of investment (No., %)

Host country	*2003-2005*		*2006-2008*		*2009-2011*		*Total*	
	China	*India*	*China*	*India*	*China*	*India*	*China*	*India*
Belgium (No.)	0	3	2	3	0	2	2	8
%	0.00	9.37	9.09	5.45	0.00	6.67	3.77	6.84
France (No.)	1	4	4	3	5	3	10	10
%	16.67	12.50	18.18	5.45	20.00	10.00	18.87	8.55
Germany (No.)	2	5	6	12	5	4	13	21
%	33.33	15.62	27.27	21.82	20.00	13.33	24.53	17.95
Italy (No.)	1	0	2	7	3	4	6	11
%	16.67	0.00	9.09	12.73	12.00	13.33	11.32	9.40
The Netherlands (No.)	1	2	3	3	4	1	8	6
%	16.67	6.25	13.64	5.45	16.00	3.33	15.09	5.13
Spain (No.)	0	3	1	4	0	2	1	9
%	0.00	9.37	4.54	7.27	0.00	6.67	1.89	7.69
Sweden (No.)	0	1	0	2	3	0	3	3
%	0.00	3.12	0.00	3.64	12.00	0.00	5.66	2.56
The UK (No.)	1	10	3	12	0	12	4	34
%	16.67	31.25	13.64	21.82	0.00	40.00	7.55	29.06
Others (No.)	0	4	1	9	5	2	6	15
%	0.00	12.50	4.54	16.36	20.00	6.67	11.32	12.82
Total (No.)	6	32	22	55	25	30	53	117

Table 2. The coding methodology

Category	Definition	Examples	Coding rules
Knowledge-seeking M&A	The acquiring company searches for R&D capacity, innovative products or production processes, design facilities, patent portfolios of local firms, and knowledge spillovers provided by the target firm.	"Complementary capabilities between Mahindra & GRD will enhance the product development capabilities, provide a solid European footprint for M&M to leverage technologies & skillsets by harnessing the talent pool of designers and engineers," [Mr Pawan Goenka, President of the Automotive Sector of Mahindra Group] (Mahindra & Mahindra Ltd. acquired G.R. Grafica Ricerca Design SRL in 2008). *Source: Mahindra & Mahindra Ltd. web site.*	If at least one of the aspects cited in the definition of *Knowledge-seeking M&A* is mentioned as the main or the only motive of the investment.
Market-seeking M&A	The investment is aimed at reaching local or regional markets, often including neighboring countries. Underlying these types of investments there are trade support reasons, e.g. to access distribution facilities, to facilitate exports, to acquire brand names.	"The acquisition of majority stake in MSI provides immense synergy benefits to both RSB and MSI. RSB, which exports substantial heavy fabrications to Europe, can now have a front-end presence in Europe to consolidate and grow its exports. offered by RSB-MSI combine". [Mr. S. K. Behera, Vice Chairman of RSB Trasmissions India Ltd.] (RSB Transmissions India Ltd. acquired Mechanical Supplies International NV in 2010). *Source: LexisNexis.*	If at least one of the aspects cited in the definition of *Market-seeking M&A* is mentioned as the main or the only motive of the investment.
Global-legitimacy-seeking M&A	The MNE's primary goal in undertaking the acquisition is to become a global player and to gain strategic positions in the global	"The acquisition will significantly strengthen the company's position in the global Passenger Car & Chassis Component business and is a step towards attaining global leadership". [Mr B. N. Kalyani, Chairman and Managing Director of	If at least one of the aspects cited in the definition of *Global-legitimacy-seeking M&A* is mentioned as the

	value chain, leveraging the international reputation of the target company. These M&As have a global/international strategic orientation rather than a multidomestic/regional one.	Bharat Forge Ltd.] (Bharat Forge Ltd. acquired CDP Aluminiumtechnik GmbH & Co. in 2004). *Source: Bharat Forge Ltd. web site.*	main or the only motive of the investment.

Table 3. Distribution of the 170 acquisitions by main motive of the investment (No., %)

Motive	*China*	*India*	*Total*
Knowledge-seeking (No.)	24	36	60
%	45.28	30.77	35.29
Market-seeking (No.)	16	39	57
%	30.19	33.33	33.53
Global-leg.-seeking (No.)	13	42	53
%	24.53	35.90	31.18
Total	53	117	170

Table 4. Distribution of the 170 acquisitions by entry mode (No., %) and share of equity

	China	*India*	*Total*
Acquisitions			
Full (No.)	31	87	118
%	58.49	74.36	69.41
Partial (No.)	22	30	52
%	41.51	25.64	30.59
Total (No.)	53	117	170
Share of equity			
Mean	0.81	0.89	0.87
Std. Dev.	0.28	0.23	0.25
Min	0.07	0.10	0.07
Max	1	1	1

Table 5. Distribution of the 170 acquisitions by technology intensity of the target company (No., %)

Target sector	*China*	*India*	*Total*
High tech (No.)	38	95	133
%	71.70	81.20	78.24
Low tech (No.)	15	22	37
%	28.30	18.80	21.76
Total	53	117	170

Table 6. Descriptive statistics

	Obs.	*Mean*	*Std. Dev.*	*Min*	*Max*	*Data Source*
Share of equity	170	0.87	0.25	0.07	1	BvD Zephyr/SDC
Knowledge-seeking	170	0.35	0.48	0	1	LexisNexis
Cultural distance	170	2.35	1.07	0.84	5.32	Hofstede Centre
Target service sector	170	0.16	0.37	0	1	BvD Zephyr/SDC
Target tech industry	170	0.78	0.41	0	1	BvD Zephyr/SDC
GDP growth	170	1.81	2.75	-6.80	8.40	World Bank
Host cross-border M&As	170	0.06	0.07	0	0.21	UNCATD

Table 7. Correlation matrix

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1) Share of equity	1						
(2) Knowledge-seeking	-0.230	1					
(3) Cultural distance	-0.140	0.226	1				
(4) Target service sector	-0.065	0.061	-0.058	1			
(5) Target tech industry	-0.193	0.203	0.093	-0.304	1		
(6) GDP growth	0.170	-0.172	-0.194	0.122	-0.111	1	
(7) Host cross-border M&As	0.068	-0.026	-0.239	-0.097	0.061	0.045	1

Note: Correlations over ±.12 significant ($p < .10$).

Table 8. Tobit regression analysis (dep. variable = Share of equity)

			Knowledge-seeking M&As		*Other M&As*	
	Model 1		Model 2		Model 3	
Knowledge-seeking	-0.290	**				
	(0.113)					
Cultural distance	-0.020		-0.070		0.002	
	(0.058)		(0.083)		(0.075)	
Target service sector	-0.289	*	-0.286	*	-0.253	
	(0.165)		(0.168)		(0.272)	
Target tech industry	-0.233	*	-0.318	*	-0.155	
	(0.140)		(0.190)		(0.200)	
GDP growth	0.061		0.067		0.092	
	(0.060)		(0.063)		(0.087)	
Host cross-border M&As	0.070		-0.088		0.239	**
	(0.065)		(0.076)		(0.119)	
Electronics	-0.070		-0.109		-0.045	
	(0.184)		(0.223)		(0.249)	
Machinery	-0.026		-0.208		0.111	
	(0.168)		(0.206)		(0.279)	
Transport	-0.009		-0.061		-0.108	
	(0.146)		(0.228)		(0.211)	
Year	yes		yes		yes	
Cons	1.680	***	1.427	***	1.726	***
	(0.182)		(0.250)		(0.262)	
No.	170		60		110	
Pseudo R-sq.	0.094		0.097		0.073	

Note: Variables have been standardized. Standard errors are robust after adjusting for clustering by acquirer. Standard errors in parentheses.
* p<0.1, ** p<0.05, *** p<0.01.