DOES CONCENTRATED OWNERSHIP IN PARENT TRIGGER OWNERSHIP CONCENTRATION IN THE FOREIGN SUBSIDIARY? A STUDY OF BRAZILIAN FIRMS

Yingdan (Catherine) Cai[a,b]
Sathyajit Gubbi[b]
Kees van Veen[b]
Hans van Ees[b]

ABSTRACT

Weak governance conditions prevailing in emerging and developing economies tend to encourage concentrated over diffused ownership structures in firms. In this paper we investigate whether the ownership structures in the home market are also replicated in the foreign subsidiaries or are subject to other factors. We contend that firms with concentrated ownership structures in emerging economies tend to prefer partial over absolute ownership in the foreign subsidiaries. This preference is more pronounced in investing firms who are affiliated to business groups. An examination of 317 cross-border acquisitions by Brazilian acquiring firms in different host countries suggests that acquirer ownership concentration, business group affiliation as well as the joint effects of the two factors all appear to be correlated with lower equity ownership in the foreign target firm.

Keywords: Ownership concentration; business group affiliation; entry mode; cross-border M&As; emerging market firm; Brazil

Author Affiliations:
a: University of the West of England Bristol, the UK
b: University of Groningen, the Netherlands
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Does Concentrated Ownership in Parent Trigger Ownership Concentration in the Foreign Subsidiary? A Study of Brazilian Firms

INTRODUCTION

The choice of international entry mode[i] and establishment mode, i.e., the ownership structure of a foreign subsidiary, has been a central focus of research in International Business (IB) (Brouthers & Hennart, 2007; Anderson & Gatignon, 1986). Specific to foreign subsidiary ownership structures, previous scholarship has identified several drivers, including transaction costs (Zhao, Luo & Suh, 2004), OLI model (Agarwal & Ramaswami, 1992), national characteristics (e.g. Erramilli, 1991; Hennart & Larimo, 1998), legitimacy (e.g. Chan & Makino, 2007), rights of control over operations and strategic decision-making (e.g. Caves, 1982; Anderson and Gatignon, 1986) and investor's bargaining power and experience (Lecraw, 1984; Gomes-Casseres, 1990; Li & Meyer, 2009).

Most of these prior studies argue from a developed market perspective analyzing the entry mode choices of multinational firms headquartered in strong home institutional contexts. However, multinational firms originating in emerging economies, or Emerging Multi-National Corporations (EMNCs) have not only become globally visible in large numbers, but also escalated their investments abroad aggressively and repeatedly, often in the form of Cross-Border Acquisitions (CBAs) (UNCTAD, 2013; Luo & Tung, 2007; Gubbi et al, 2010). The literature related to internationalization of EMNCs is relatively nascent; there is much less covered on the relationship between ownership structures and internationalization behavior of EMNCs (Bhaumik, Driffield & Pal, 2010). This issue assumes importance since past studies indicate that the weak governance conditions in emerging economies increases preference for concentrated ownership structures in the home-country, which may in turn influence their internationalization behavior (La Porta et al., 1997; Filatotchev et al, 2008). Related to risk-preferences and strategic decisions, concentrated ownership structures and more specifically those affiliated to Business Groups (BGs), there has been a mismatch between theoretical predictions and empirical evidence (see Gomez-Mejia et al., 2011 for a review). Therefore, it is important to know whether the ownership structure at the EMNC headquarters plays a role in determining the foreign subsidiary ownership structures.

There is a research gap regarding how influences of domestic ownership structures will translate abroad. In this paper, we propose that, unlike in the EMNC's home market where weak governance conditions is countered by concentration of ownership, the greater need to preserve valuable resources invested abroad, the lack of foreign operational experience and, the greater cross-national information asymmetries negate the desire for concentrated ownership in the foreign subsidiaries. In other words, greater the concentration of the ownership in EMNC parent firm, greater is the preference for partial over full ownership in the foreign subsidiary acquired. Also, EMNCs affiliated to BGs when compared to non-BG firms are more likely to prefer partial over full acquisitions. This is because retention and protection of group wealth within the network is vital to BG's principal owners. Hence, we anticipate the preference for partial over full acquisitions to increase further with increasing concentration of ownership in BG affiliate.

We test our propositions in the context of CBAs by EMNCs from Brazil, or the 'Multilatinas' (Multinationals from Latin America) as suggested by some scholars (Cuervo-Cazurra, 2008). CBAs are high-risk and high-control investments (Shimizu et al., 2004) and thus well suited for examining agency related issues in cross-border investments due to greater scope for information asymmetry between the principals and agents involved (Malhotra & Gaur, 2013). Brazil provides an appropriate empirical setting for several reasons. First, the number of EMNCs from Brazil is

on the rise and the phenomenon is relatively new (Lima & de Barros, 2009). According to Jormanainen and Koveshnikov (2012), there is a lack of studies on EMNCs from Brazil despite their scale of operations and presence in the international markets. Second, concentrated ownership structures are widely prevalent in Brazil and very often firms are affiliated to a BG. But at the same time, there is enough variety in the home market in terms of industries ownership structures and strategic preferences (Lima & de Barros, 2009).

To the best of our knowledge, ours is one of the first papers to examine the relationship between ownership concentration in the parent and foreign subsidiary in the context of EMNCs. The paper identifies the scope for agency-related tensions arising due to differences in institutional conditions and, hence, the risk-preferences in foreign countries and outlook of the principal actors involved. Thus, our paper makes an important contribution to comparative corporate governance literature (Aguilera & Jackson, 2003; Filatotchev et al., 2008; Bhaumik et al., 2010) by revealing that concentrated ownership has a bearing on the decision to invest abroad, especially in CBAs by EMNCs. Second, our paper contributes to both corporate governance and acquisition literature. In particular, while a vast majority of studies in IB have drawn comparisons between various modes of entries such as greenfield, joint-ventures and acquisitions, our paper focuses on one form of entry mode, namely, CBAs. Our paper is one of the few (e.g. Chen & Hennart, 2004; Chari & Chang, 2009; Cuypers, Ertug & Hennart, 2015; Jakobsen & Meyer, 2008; Malhotra & Gaur, 2013) to distinguish partial from full acquisitions and identifies important criteria, namely, types and forms of ownership structure at headquarters, for selecting one over the other. In the rest of the paper, we discuss the related literature, propose our theoretical model, present our empirical data and analysis, and conclude.

THEORY AND HYPOTHESES

We are interested in exploring whether EMNCs can translate their ownership structures in foreign subsidiaries. EMNCs operate in a different context than multinationals in developed economies. This issue is important since recent advances in corporate governance suggest that owner identities, interests and controls are shaped by institutional attributes such as property rights, financial systems and inter-firm networks (Aguilera & Jackson, 2003). In line with above reasoning, when formal institutions are weak or underdeveloped, as commonly observed in the context of emerging economies, there is weaker protection of (minority) investor rights making enforcement of agency contracts costly and problematic.

Mechanisms to reduce the effects of divergence of interest could include ownership structures such as ownership concentration and BG affiliation. Prior studies have looked at the effects of these ownership structures in domestic markets and the relationships between ownership structure, firm strategies and performance+. However, the effectiveness of ownership structures is questionable when firms operate beyond their national boundaries, IB scholars have long noted that MNEs doing business abroad face costs arising from the unfamiliarity of the environment, known as the “liability of foreignness” (Hymer, 1976; Kogut & Singh, 1988). Due to this liability, cross-country differences such as culture, legal environments and accounting standards will increase transaction costs in foreign markets (Markides & Ittner, 1994). From an ownership perspective, it also increases the information asymmetry towards the executives and increases the agency problems between owners and executives. Due to organizational inertia, the advantages of concentrated ownership structure and the familiarity of running such an ownership structure

would encourage such firms to mimic similar ownership and control strategies in their foreign subsidiaries. However, the many complexities of internationalization and the related costs of managing assets abroad (Cuervo-Cazurra et al., 2007) can render concentrated ownership less effective and more exposed to managerial opportunism. The growth of the firm across borders offers business opportunities, but simultaneously strengthens the power base of executive vis-à-vis the owners. It provides the ideal setting for the managers to engage in empire-building and self-serving activities. This dilemma is more acute in the context of EMNCs who have been aggressively and repeatedly acquiring firms abroad (UNCTAD, 2013; Luo & Tung, 2007; Gubbi et al, 2010). These firms face greater barriers to foreign market entry on account of their inexperience, newness, foreignness and, weaker home-country perception abroad (Cuervo-Cazurra et al, 2007; Luo & Tung, 2007). Moreover, the critical resources required for setting up foreign subsidiaries abroad are scarce in the home market (Khanna & Palepu, 1997) and, hence, need to be safe guarded. Hence, for these firms, foreign subsidiary governance decisions are less straightforward and the risks for concentrated owners are larger.

In addition to the above known issues with internationalization specific to EMNCs, the challenges are greater in CBAs since the acquirer may also be unfamiliar with the potential targets (Reuer, Shenkar & Ragozzino, 2004). Compared to other modes of international investments, EMNC acquirers find it difficult to assess the true value of target resources during the due-diligence phase and are subjected to unexpected integration challenges during the post-acquisition phase. Therefore, the managerial challenges both during pre-investment phase and in the post-investment phase in the case of CBAs by EMNCs are greater when compared to similar investments by their advanced country counterparts. Moreover, CBAs are expensive investments for most firms. EMNCs often tap into their own sources of funding since the external market for financial capital at home is weak (Leff, 1978; Khanna & Rivkin, 2000). This further increases the exposure of these firms to risks of foreign acquisitions. In concentrated ownership structures or business group affiliation, the bulk of the internal capital rests with a few individuals and families. As a result, there is a tendency to safeguard and protect wealth from erosion due to sub-optimal decisions.

We highlight one specific important but underexplored issue in CBAs: Acquiring firms have a choice between acquiring the entire equity in the target (full acquisition) and creating a wholly-owned subsidiary[ii], or to acquiring partial equity in the target (partial acquisition). This decision is commensurate with the appetite for risks of the actors involved and the time horizon for the anticipated gains (Chen & Hennart, 2004; Chari & Chang, 2009). We argue that this distinction between partial and full acquisitions can be seen as part of the agency between owners and managers. The prevailing explanation why M&As in general do not generate positive shareholder value can be attributed to agency theory-the conflict of interest between managers and owners (Bhaumik & Selarka, 2012).

From an EMNC owner's perspective, a partial acquisition can reduce the resource commitment and the size of initial investment compared to a full acquisition (Contractor, Lahiri, Elango & Kundu, 2014; Chari & Chang, 2009). Given the scarcity of resources available to the EMNC investors, the need to minimize investment exposures in unfamiliar markets is vital to their interests. Besides, partial acquisitions tend to reduce *ex-ante* screening costs and mitigate *ex-post* integration pressures (Chen & Hennart, 2004). To be specific, willingness to retain equity stake by the original owners of the target firm signals confidence in the quality of the assets. This

helps reduce the ex-ante screening costs of the EMNC acquirers. Moreover, ex-post integration is subsequently facilitated since partial acquisitions provide original owners with residual rights of control and aligns their interest with the acquirers (Chari & Chang, 2009). Thus, partial acquisitions enlist targets to commit to the post-acquisition integration, facilitate integration and knowledge transfer across the combined units. Finally, partial equity creates a hostage effect (Chen & Hennart, 2004) wherein both parties have to work together. Given the fact that full acquisitions are riskier, costly and irreversible compared to their partial counterparts (Lahiri et al. 2014), and given the relative inexperience of EMNCs in global markets, investing firms would attempt to derive maximum advantages of the hostage effect to ensure that the investment is a success.

By contrast, the perspective of the managers towards CBA is likely to be different from those of the owners. To begin with, EMNC managers will perceive CBAs as an opportunity to acquire global recognition, enhance their self-image and financial status. This is in line with the behavioral assumption of agency models which suggests that managers prefer to build empires. In this regards, larger the cross-border deal, better for the managers to gain media attention and enhance their self-image. Besides, CBAs provide the ideal platform for the executives to become national champions and gain attention of the other stakeholders (Hope & Thomas, 2008). Moreover, as documented by Ozkan (2012), top executives tend to financially gain more in foreign acquisitions than domestic acquisitions since they tend to have larger compensation following a foreign acquisition (regardless of how poor firm performance is). Thus, executives of EMNC prefer large acquisitions preferably with full equity so as to exercise complete control of the acquired assets. Second, full acquisitions are more straightforward to manage and easier to communicate than partial acquisitions. Acquiring a partial equity stake requires a more complex ex-ante negotiation process with the target, which can be a difficult and time-consuming task for managers. Third, managers can ensure their position in the combined entity in a full acquisition and control key positions of the target. Whereas in a partial deal, managers of the acquiring firm have to cooperate with the managers of the target, which is more sensitive to disagreements and conflicts. So overall, it seems likely that EMNC managers or agents prefers full over partial acquisitions.

Previous discussion suggests that the stakes are high and the potential for divergence between EMNC owners and managers' agenda is ample in the context of CBAs. Given the conflicting preferences of owners and managers, a classical agency problem emerges (Dalton, Daily, Certo & Roengpitya, 2003). Agency theory predicts that managers, make self-maximizing decisions often against shareholder interests when they are not properly monitored by shareholders. We focus on two particular ownership structures in this essay: ownership concentration and business group affiliation.

Ownership Concentration

Ownership concentration in the hands of a few individuals or activist groups serves as an alternative internal solution to mitigate such agency problems (Shleifer & Vishny, 1986; Wright, Ferris, Sarin & Awasthi, 1996; La porta et al., 1998; Dharwadkar, George & Branders, 2000, Young et al., 2008). In other words, concentrated ownership increases the *incentive* and the *ability* to monitor and curtail managers' propensity to behave opportunistically and take

suboptimal investment decisions (Shleifer and Vishny, 1997; Jiang & Peng, 2011). With concentrated ownership, free-rider issues can be reduced (Shleifer & Vishny, 1986).

We argue that the corporate governance characteristics of EMNCs not only affect their home-country affairs, but also changes the decisions related to cross-border activities. Empirical evidence available does indicate that ownership concentration plays an important role in the internationalization decisions. For instance, Oesterle, Richta and Fisch (2013) shows that concentrated ownership affects the degree of internationalization of firms and their target country selection. Similarly, Bhaumik et al. (2010) find that Indian acquirers with concentrated ownership structures are more reluctant to invest abroad.

We add that concentrated ownership structures give EMNC owners the necessary incentive and the power to overrule managerial preferences and seek partial over full acquisitions and propose that

Hypothesis 1. *In cross-border acquisitions by emerging market firms, acquiring firms with concentrated ownership structures are more likely to prefer partial over full acquisitions.*

Business group affiliation

Another mechanism that will affect foreign M&A decisions is BG affiliation. A BG is a set of legally independent firms 'bound together by a constellation of formal and informal ties' (Khanna and Rivkin, 2001: 47–48) and coordinated by a central or core entity (Leff, 1978). There is a body of research that identifies the conditions that give rise to BGs as a distinct organizational form in certain economies (see Granovetter, 1995 and Yiu et al., 2007, for reviews of this literature). BGs are known to emerge as an organizational response to strategic factor market and investor protection imperfections in developing economies (Leff, 1978; Khanna and Rivkin, 2001; Almeida and Wolfenzon, 2006). In the absence of institutional intermediaries, BGs evolve over time and become a dominant form of organization in developing or emerging economies. BG affiliation will tend to fill in the institutional voids by generating their own internal markets for financial capital and managerial talent. Therefore, BG's core entity has an incentive to retain wealth generated from economic activities within the confines of the group and use it as the internal source of capital to fuel further growth by diversification. In this regard, poor investor protection also allows BG's core entity to manipulate retained earnings of a firm under its control and further diversify by setting up new firms with lower security benefits (Almeida & Wolfenzon, 2006). In other words, not only do BG's core entities retain capital within the group network, they also expropriate other minority shareholders of the firm under its control by creating new investments with lowered security.

The management of internal capital, expropriation and, risk diversification is appealing in a home market with weak governance conditions. However, when diversifying across geographical markets, especially into more advanced markets, the investment is less fruitful and riskier as far as BGs are concerned. For instance, the challenges of internationalization (Cuervo-Cazurra et al., 2007) faced by EMNCs can offset the advantages of risk diversification to BG owners. Besides, foreign direct investments are subject to greater scrutiny by the authorities both at origin and destination and less amenable to manipulations of any sort. More importantly in the context of emerging economies, since the external market for capital is deficient and the local currency is less fungible across national boundaries, EMNCs are forced to use internal sources or borrow from global markets by pledging ownership share. Given the advantages of ownership control to

BG's core entity under weak investment protection regimes and the many risks of geographic diversification, BG's core entity would rather avoid high costs of establishment abroad to the extent possible. Extending this line of thought in the context of CBAs by EMNCs, we propose that, both from agency perspective and BG considerations, investing firms are more likely to prefer foreign entry modes with minimum exposure to investment risks.

EMNCs employ CBAs to acquire competitive assets and capabilities in the post-market reform period, as suggested by some (Gubbi et al, 2010; Luo & Tung, 2007). Compared to non-BG firms, BG affiliated firms face lower need for acquiring competitive assets and capabilities since these firms already have access to group-wide resources. Besides, by creating an internal market for products and resources within the group network, BG affiliated firms are insulated from exogenous shocks triggered by market reform process (Hoskisson et al, 2004). Therefore, the perceived need for CBA may be lower for the BG affiliated firms. Even if BG affiliates do undertake CBAs—for instance, to acquire technology or brands not available in the home market-- they are more like to opt for partial ownership structure than full ownership structure in the foreign subsidiary. Just like other EMNCs with concentrated ownership structure, BG affiliates prefer to minimize investment exposures, especially if the funding source is internal to the group. Moreover, as mentioned earlier, BG firms would be less keen to raise finance from global markets since foreign creditors would seek some collateral in the form of owner's equity. In the event of a default during repayment of the loans raised from foreign markets, the creditors can sell off the equity to recover their loans and to that extent the BG's ownership in the firm would be diluted. This is something BG owners would want to avoid given the benefits they derive with existing ownership structure.

Lastly, the costs of monitoring and control of managerial activities worsen in the case of BG affiliated firms as foreign subsidiaries get added due to the already diversified nature of the group (Vissa, Greve & Chen, 2010). The BG owners would rather prefer local owners involved in host markets to help alleviate the monitoring and control costs. For the above reasons, we hypothesize that,

Hypothesis 2. *In cross-border acquisitions by emerging market firms, acquiring firms affiliated to business groups are more likely to prefer partial over full acquisitions.*

Joint Effects

We further explore the joint effects of BG affiliation and ownership concentration. Khanna & Rivkin (2001) suggests that markets for risk-sharing are prone to failure with underdeveloped capital markets and poor protection of minority shareholders. In emerging markets, some BGs can use pyramidal group structures to maximize the dilution of outside shareholding. So we further speculate on the joint effects of ownership concentration and BG affiliation.

In line with Khanna & Rivkin (2001), previous arguments related to lower preference for full acquisition in the context of BG affiliated firms will get more pronounced if the focal EMNC happens to bear a concentrated ownership structure. In other words, compared to a BG affiliation with dispersed ownership, earlier arguments relating to greater preference for partial acquisitions in CBAs are likely to amplify further if the concentrated acquiring firm happens to be a BG affiliate. Therefore, we anticipate the negative relationship between ownership concentration and full acquisition to be moderated by BG affiliation. Accordingly, we propose that

Hypothesis 3. *In cross-border acquisitions by emerging market firms, the relation between concentrated ownership and preference for partial acquisition is stronger for acquiring firms affiliated to business groups than for unaffiliated firms.*

METHODOLOGY

Data and Sample

Our sample consists of 317 CBAs by 109 Brazilian acquirers announced between Jan 1st 2000 and December 31st 2013. We compiled our database from several sources. Deal information was derived from SDC Platinum (Thomson Reuters) and Zephyr database of Bureau van Dijk (BVD). We excluded greenfield joint ventures from our sampled data. For the deals that are contained only in one database, a manual search was conducted for supplementary data in other secondary sources. We removed toehold deals where less than five percent of the target shares was acquired. Firm-level variables were manually collected from Orbis database, company websites, annual reports, company presentations, analysts' reports, BM&FBOVESPA[iii] announcements and other business media coverage of these activities. In addition, we collected country-level variables from additional sources such as World Development Indicators and World Governance Indicators. In total, our final sample includes 317 cross-border deals by Brazilian firms with relevant information available for analysis.

Insert Table 1 about here

Table 1 provides details of the sample distribution. Of the 317 CBAs in the sample, 140 is partial deals (44.16%) by 58 acquiring firms. The number of deals per year increase after 2003 and peaked at 2008. The number drop dramatically in 2009 due to the financial crisis but recovered soon in 2010. Half of the deals involved targets in other Latin American countries (Argentina, Uruguay, Chile, Mexico, Colombia) and the rest is mostly located in advanced countries (U.S., U.K., Australia). The percentage of full deals is higher in developed countries compared to developing countries. In terms of acquirer industry distribution, 154 deals (48.6%) belong to the manufacturing sector and different types of services accounted for 93 deals (29.3%). In terms of owner categories, 200 deals (63%) belonged to acquiring firms affiliated with BGs.

Measures

Dependent variable.

The main dependent variable is a dummy variable *full acquisition*, taking the value of 1 if the deal is a full acquisition and 0 if otherwise. We define acquisitions as full acquisitions if the acquirer acquired at least 95% stake in the target firm[1]. This is in line with previous studies on equity ownership in foreign subsidiaries (Jakobsen & Meyer, 2007; Chen, 2008). Following Chen (2008), we also use actual stakes acquired using Tobit model in order to validate and has been reported under additional analysis section.

Independent variables.

We operationalize *firm ownership concentration* variable by converting the ownership independence indicator in Orbis database into an ordered variable: highly concentrated (Largest

[1]

owner >50%), moderately concentrated (Between 25% and 50%) and, dispersed (<25%). This indicates how the degree of equity ownership held in the acquiring firm concentrated in a controlling shareholder. A highly concentrated company is one where a single shareholder has owned directly/indirectly no less than 50% of the voting capital. In companies with moderate concentration, the largest shareholder held between 25% and 50% of the share. The direct and total percentage of shares held by the largest shareholder (*extent of single largest holding*) denotes the extent of concentration in the acquirer. La Porta et al. (1998) and Claessen et al. (2000) have used a 20 percent cut-off in their studies to indicate that the owners may exert some kind of effective control at this level of ownership.

Besides the concentration of ownership, *the percentage of total equity shares* held by the largest owner further indicates the level of control of shareholders over managerial decision making. The higher the stake of the largest owner, the greater voting power and dominant influence the owner will tend to have in decision-makings; and the lower will be the managerial options to maneuver politically to meet their personal interests. Moreover, a higher stake of the largest owner increases the vulnerability of other minority shareholders to have a say in the firm. In Brazil, studies show that the minority shareholders have very limited opportunity to have an influence on the strategy of the companies. For example, Rabelo & Vasoncelos (2002) provides clear evidence that there is considerable scope for the expropriation of minority shareholders in Brazil's system of corporate governance due to lack of power. Therefore, we also code the percentage of total equity shares held by the largest shareholder.

We code the variable *BG affiliation* as a dummy variable taking the value of 1 if the acquirer is affiliated with a BG and 0 otherwise. The list of BGs in Brazil is obtained from Colpan, Hikino and Lincoln (2010). This widely cited book chapter on Brazilian BGs builds on Valor Grandes Grupos, which broadly defines a BG as a group of firms that, in addition to being strictly controlled by the same entity. For firms not included in the list, we manually used individual company websites to identify "grupos" from company reports, business media and other relevant sources.

Control variables.

Extant literature suggests that several firm-, industry- and transactional- characteristics can affect entry mode decisions and deal structures in CBAs. Accordingly, we control for the *firm size* of the acquirer, which is measured as the logarithm of firm total assets in the year prior to the CBA. We include *firm age* of the acquirer calculated by taking the difference between the year of acquisition and the year of incorporation. Private acquirers may behave differently from publicly listed acquirers and hence need to be identified in the model (Bargeron, Schlingemann, Stulz & Zutter, 2008). We create a dummy variable *acquirer public listed* taking value of 1 if the firm is publicly listed in a stock exchange and 0 otherwise. We measure *firm performance* by ROA (Return on Asset) ratio in the year before the acquisition. Further, since detailed R&D data is not available for Brazilian firms in the Orbis database, we use high-tech industry[iv] as a proxy for *firm R&D intensity* of the acquirers.

In addition to above firm-specific factors, we control for deal-specific factors by using a dummy variable for the method of payment, i.e., whether *method of payment* (*cash payments)* were made. Previous research proposes a *contingency pricing effect* by using share as the method

of payment when the bidder is uncertain about the target's value and force target shareholders to share risk (Martin, 1996).

We also control for *industry relatedness* by considering both primary and secondary industry lines. Following Haleblian and Finkelstein (1999), we assigned the value of 6, 4, 2 score, respectively, if the acquirer and target firm has the same 4-, 3-, 2-, digits of primary US SIC codes. We then assigned 3, 2, 1 score, respectively, if one business line of the acquirer matched with one line of target at the 4-, 3-, 2- digit level. The value of industry relatedness is the highest value of the two scores. This indicator not only captures primary industry, but also captures diversification.

Host country institutions play an important role in determining governance choice in the target. Confirming to prior literature, we are interested in the difference between institutional quality between the home country (Brazil) and a variety of different host countries. At the country level, we control for *institutional distance* between acquirer and target countries. This index measures the difference of formal governance quality between Brazil and the host countries and is based on World Governance Indicators[v] and Kaufmann, Kraay and Mastruzzi (2009) identified six dimensions (voice and accountability, political stability, government effectives, regulatory quality, rules of law and control of corruption). The value of each dimension ranges between -2.5 and +2.5. A higher value indicates a higher level of governance quality. We followed Dikova (2009) to calculate a composite to capture the institutional distance. Lastly, we include *year dummies* to control for the influences of macroeconomic conditions on entry mode choices.

Although the collected data resembles panel data, due to multiple deals in the same year panel data techniques cannot be used. Instead, we test our econometric model using pooled sample limited dependent variable techniques. As our dependent variable is a binary variable, we employ nonlinear method of binomial logistic regression. Since we have multiple deals for some acquirers, we cluster observations by acquirer name, thus correcting for heteroscedasticity and within-firm correlation. Our full econometric model is as follows:

$$\begin{aligned} Full\ acquisition &= \beta_0 + \beta_1 Acquirer\ ownership\ concentration \\ &+ \beta_2\ business\ group\ affiliation + \beta_3 Acquirer\ ownership\ concentration \\ &* business\ group\ affiliation + Controls + Year\ dummies + \varepsilon \end{aligned}$$

We conduct a specification test in Stata for model specification. The results from this test suggest that our model has meaningful predictors, strong predictive power and does not have specification errors.

RESULTS

Descriptive Statistics and Regression Results

Insert Table 2 about here

The correlations and descriptive statistics are shown in Table 2. The Variance Inflation Factors (VIF) show range from 1.08 to 2.43 and are well below the standard cut-off level of 10 (Hair et al., 1995). Barring the variables *firm ownership concentration* and *extent of single largest holding*, where the correlation expectedly is high (.78), the other variables in the model have low

correlations. In order to avoid any issues with multicollinearity, we model the two variables with high correlations separately. We study the share of the largest shareholder as an extension to H1a, but only include the category in further analysis. Since we are more concerned about different types of ownership structures in the acquiring firms, instead of the actual level.

Insert Table 3 about here

Table 3 presents the results of logistic regressions with robustness error estimates. Model 1 is the baseline model comprising of only the control variables. In the subsequent models (2-4), we add the hypothesized constructs one by one. Model 2-4 augments the baseline model by including additional variables of interest. Model 5 is the fully specified model with all variables. Our Hypothesis 1 proposes a positive relationship between acquirer ownership concentration and the likelihood of partial over full acquisitions. In Model 2, the coefficient for the acquirer ownership concentration is negative and significant (β=-0.392, $p<0.077$), indicating that concentrated acquirers tend to prefer partial deals. We also find that the model is highly significant ($p<0.001$) and R-square increases compared to the baseline model, suggesting improvements in the predictive ability of the model. We also compare the log likelihood ratio of Model 2 compared to Model 1. We thus claim support for Hypothesis 1 regarding Brazilian acquiring firm ownership concentration and preference for partial acquisitions in foreign markets. Similarly, we expect the proclivity for partial CBAs to sustain with increasing equity of the single largest shareholder. The coefficient of the variable *extent of single largest holding* is negative and significant (β=-0.0105, $p<0.065$), thus, again conforming Hypothesis 1.

Our Hypothesis 2 states that BG affiliated acquirers are more likely to choose partial over full acquisitions. Our analyzed sample supports Hypothesis 2 since the corresponding coefficient for BG affiliation is negative and significant (β=-0.701, $p<0.044$).

We further examine the joint effects of ownership concentration and business group affiliation. In the fifth column of Table 3, the interaction term of BG affiliation and acquirer ownership concentration is negative and significant, supporting our Hypothesis 3 on the joint effects.

To further check the robustness of the results, we re-run our analyses using *actual percentage of stakes acquired* estimating a Tobit model instead of a dummy dependent variable in a logit model. Although the sample size reduces slightly due to missing data, the results remain robust with actual equity acquired in a deal using the Tobit specification. The last column in Table 3 indicates that the significance level in Model 6 improves compared with previous model (Model 5), thus reconfirming the empirical results.

Interpretation of the marginal effect of an interaction between two variables in a logit model is complex and can differ across observations (Hoetker, 2007). Therefore, graphical analysis of the interaction is recommended to present a better interpretation. We graph (see Figure 1) the joint effects of BG affiliation and ownership concentration on the likelihood of full over partial CBA in our sampled data. Figure 1 indicates that when ownership is highly and moderately concentrated, firms affiliated with BGs are more likely to choose partial compared to unaffiliated firms. Although there is a cross-over of the lines, it is relevant to mention that in the context of this study, the majority of the sample will belong to moderate and high concentration. So the left-side of the figure (highly dispersed) is not very relevant here in the context of emerging markets.

So the figure reinforces our results that there is a combined effect of ownership concentration and BG affiliation for EMNCs.

Finally, the control variables show some interesting results. A positive institutional distance between Brazil and host countries mean the acquisition is made in an advanced country, so there is highly likelihood of a full acquisition in all models ($p<0.01$). Secondly, we would expect that industries with high levels of R&D intensities need to protect their property rights by choosing full acquisitions.

Robustness Checks

We carry out a series of robustness checks for alternative explanations on risk-taking that hasn't been considered in the main models. Firstly, contrary to partial acquisitions, acquiring firms can potentially invest in small deals. For those observations where data is available, we include the deal size as a control and rerun the regressions. Deal size can be measured either as absolute size in terms of deal value (in Mil USD) or a percentage size which is target size relative to the acquiring firm. Our results remain robust when we include additional deal value variable both as absolute or relative measure.

Secondly, the choice for partial acquisitions could potentially due to legitimacy reasons in foreign markets instead of actual differences in formal institutional differences. So we examine whether cultural distance between home and host countries influence our reported results. Following precedence, we construct the measure using Hofstede's national cultural dimensions (individualism, uncertainty avoidance, power distance, and masculinity/femininity) following Kogut and Singh (1988). Replacing institutional distance with cultural distance has no visible impact on our reported results.

Thirdly, we also include experience as moderating factor for preference for partial acquisitions. Previous studies have proposed that inexperienced firms are more likely to prefer partial foreign ownership. As firms gain experience, they tend to change to full modes of international ownership in subsidiaries. We study two types of experience: total international experience measured as the number of deals before the focal deal and country-specific experience measured as the number of deals in a particular host country. Our results indicate that the main effect of acquirer ownership concentration remain similar for acquirer experience ($\beta=-0.428$, $p<0.05$) and acquirer country specific experience ($\beta=-0.412$, $p<0.056$).

Further, firm industry may influence strategic choices, so we conducted sub-sample analysis using manufacturing and service firms. Barring minor changes in the significance level due to reduced sample size, the direction of proposed relationship remains similar to those reported. Overall, additional tests conducted did not reveal any issues with our chosen measures or the sampled data.

DISCUSSION AND CONCLUSION

The objective of this paper is to examine whether ownership concentration in EMNCs affect the choice for full over partial ownership in CBAs. More specifically, we wish to explore whether the affiliation of EMNCs to a BG also has a role to play in the preferred equity-ownership mode in foreign countries. The fundamental starting point of our argument is that in an EMNC context of weak institutional environment, concentrated ownership serves as a substitute internal control mechanism to allow for close monitoring of EMNC operations. We extend the point and argue

that EMNC owners face increased information asymmetry and costs of monitoring when it concerns managerial activities abroad. As a consequence, EMNC block holders might want to minimize the risk of expropriation and managerial opportunism in CBAs by adopting suitable entry mode, in this case the choice between full versus partial acquisitions. We test our theoretical model using a sample of 317 CBAs by Brazilian firms over the period 2000-2013 and find support for our hypotheses.

Our paper makes several important theoretical contributions. Firstly, we contribute to the comparative corporate governance and adds to agency theory with an international dimension. The literature in corporate governance has documented that in other emerging markets, the direct monitoring of managers by a small number of large owners is common (Bhaumik & Selarka, 2012; Demirag & Serter, 2003). We develop detailed arguments regarding how the benefits of ownership concentration in the domestic market translates into international markets, which is overlooked in current literature. We are among the first to contribute to the agency theory in an international perspective on detailing (in the context of EMNCs) how managers and owners may prefer different international strategies in foreign subsidiary ownership structures. We provide details on the factors on decision-making and propose that with bulk of the firm's equity residing with few shareholders, EMNC acquirers prefer partial over full international deals. Moreover, with increasing concentration of ownership, i.e., with the equity resting with the single largest shareholder increasing in the acquiring firm, the preference for partial over full acquisition sustains. The empirical evidence suggests a negative relationship between acquirer ownership concentration and the likelihood for full acquisitions.

Secondly, we contribute to the literature on BGs. A number of articles on BGs have brought to the fore the need for ownership by the family, clan or the community (see Yiu et al, 2007; Almeida & Wolfenzon, 2006), which constitutes the core entity of the BG. These studies have also shown that BGs manipulate ownership structures in the firms under their influence, especially when the external mechanism for monitoring and control is missing or weak. In this respect, our study reveals a hitherto unknown aspect of BG dynamics in foreign markets, i.e., the influence of BG affiliation on the foreign subsidiary ownership structures. Our finding points to the importance of distinguishing BG affiliated firms from others since the group dynamics are unique to these firms (Cuervo-Cazurra, 2006). Our sampled data support our contention that when the acquirer is affiliated to a BG, the preference for partial ownership is further enhanced. More importantly, the effect of ownership concentration visible in EMNCs is further reinforced by BG affiliation.

Thirdly, we also contribute to the IB literature by exploring how firm heterogeneities influence foreign market entry strategies. Previous studies on entry modes have suggested that MNCs prefer partial equity ownership when the external environment is uncertain (Reuer et al. 2004). Partial ownership allows firms to reduce initial entry costs, bundle with complementary local assets and mitigate risk in the host countries (Brouthers & Hennart, 2007). Our study reveals we should not only consider host country institutional factors and transaction-related factors, we should also take into account the heterogeneity of acquirers in ownership and governance structures. It is important to note that although impoverished institutional environment are characterized by concentrated ownership structures, not all firms in emerging markets are concentrated owned. There are still considerable differences between firm structures and possible governance outcomes. We point to the importance of incorporating ownership structures such as

ownership concentration and BG affiliation in studying foreign market decisions. Our empirical results concur that in the case of Brazil, *ceteris paribus*, concentrated acquirers prefer sharing of ownership in the foreign subsidiary rather than seeking full control when venturing abroad.

Taken together, we argue that concentrated ownership will increase the relevance of value-creation consideration over managerial preferences in foreign strategic decisions, such as CBAs. Under the assumption that the interests of managers and owners are not aligned in the context of CBAs, alternative ownership structures may create alternative strategic decisions and hence may explain that why the internationalization behavior of EMNCs might be different from the MNCs. The analysis also indicates that the owners of EMNC acquirers appear to adopt distinct ownership structures at home and abroad. This is not surprising due to distinct home and country environment and national governance system. Our study makes an important contribution here by revealing agency considerations as the determinants of entry mode choices in the context of EMNCs. The results can be potentially generalized to other EMNC embedded in similar institutional environments. However, such considerations are less likely in the case of MNCs from advanced countries since the external mechanisms to curb managerial opportunism are robust and strong. It is not clear whether the same argument applies for advanced country MNEs. Future studies can explore whether this is the case for acquirers embedded in advanced countries. Do their international strategies in other advanced markets differ than in the domestic advanced market? If not, we could be confident that the effects we capture here are due to differences in the institutional environment, as we propose. But if so, potentially the effects we speculate here could be due to the information asymmetries in international market.

This study also has significant practical implications. Despite the growing literature on internationalization of MNEs, to our knowledge, very few studies have looked at Brazil as the home country (Jormanainen & Koveshnikov, 2012). This study contributes by adding empirical knowledge on an important emerging economy. We demonstrate that in the context of emerging economies such as Brazil, ownership structures will influence decision making process and relevant strategic choices. Concentrated acquirers are more inclined to choose partial equity modes in CBAs and hence the potential target owners can gain from this knowledge during the due-diligence phase. Potential shareholders and policy makers can expand the scope of the study to examine the benefits of different ownership strategies in the parent and implications on firm-level decision-makings on foreign markets.

As with other papers, this paper is not without limitations, which at the same time offer potential avenues for future studies. First of all, it might be relevant to incorporate the identity of acquiring firm owners into the analysis and to distinguish between different types of owners. Different identities of owners, e.g. banks, other financial institutions, private equity funds, foreign investors, families, or governments may have different interests, incentives and risk preferences and hence may play a role in firms' governance and shape the nature of corporate risk taking activity abroad (Wright et al., 1996). Secondly, by focusing on a single home country (Brazil), we were able to control for home country features. However, national corporate governance characteristics are different across the globe and may affect various stakeholders such as suppliers, workers and debt holders in different ways. National home country contingencies obviously may have an effect. Future research could collect similar data on other emerging markets to validate the generalizability of our results. Thirdly, we only considered principal-agent problem and did not study principal-principal issues and the consequences in terms of control and

potential rent expropriation. In this article, with low voting power, minority shareholders have limited (if any) power to influence the decisions, future studies could expand in this regard to consider other forms of agency problem and potential negative effects due to ownership concentration (Bhaumik & Selarka, 2012). Fourthly, in terms of equity holding regulations for foreign companies, we assumed that there is neither home country nor host country regulations restricting certain levels of ownership. In reality, the entry mode used may be restricted by government regulations (Gomes-Casseres, 1989) and needs to be factored in.

In addition, it would be interesting to focus on firm-level path dependency and study the propensity for firms to engage in the same deal structures. Future researches can look at the propensity to take full acquisitions in total number of deals and whether firms that conduct full acquisitions will develop a routine and continue to prefer this particular mode of entry. Finally, our paper did not account for the motivation of the acquisition and its implication for risk preference. Firms may choose different modes to enter foreign market depending on whether the acquisition is used to explore assets or to exploit assets. Chen (2008) demonstrated that full acquisitions are driven mostly by capability procurements, whereas partial acquisitions are motivated by other strategic considerations. Whether this extends to EMNCs would be a fruitful avenue for further exploration.

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APPENDICES

Table 1
Sample distribution (N=317)

Top 10 host countries	Number of deals in host countries	Percentage of full deals (%)	Acquirer US SIC Division	Name of Division	Number of deals
Argentina (AR)	54	56	Division A	Agriculture, Forestry and Fishing	2
United States (US)	45	76	Division B	Mining	60
Uruguay (UY)	23	57	Division C	Construction	8
Chile (CL)	19	58	Division D	Manufacturing	154
Mexico (MX)	16	81	Division E	Transportation	16
Colombia (CO)	14	50	Division F	Wholesale Trade	29
Portugal (PT)	13	8	Division G	Retail Trade	4
Peru (PE)	12	42	Division H	Finance, Insurance and Real Estate	37
Australia (AU)	10	40	Division I	Services	7
Spain (ES)	10	60	Division J	Public Administration	0
United Kingdom (UK)	8	100			
Target market status					
Developed host country	128	63			
Developing host country	189	51			

Source: Industry US SIC code based on Unites States Department of Labor Website https://www.osha.gov/pls/imis/sic_manual.html.

Table 2
Correlation table and descriptive statistics (N=317)

		1	2	3	4	5	6	7	8	9	10	11	12
1	Full acquisition dummy	1											
2	Firm ownership concentration indicator	-0.17	1										
3	Extent of single largest holding	-0.10	0.78	1									
4	Business group affiliation	-0.17	0.27	0.00	1								
5	Firm size	-0.21	0.19	-0.15	0.59	1							
6	Firm age	-0.18	0.26	0.06	0.31	0.34	1						
7	Public listed	-0.02	-0.24	-0.53	0.33	0.40	0.14	1					
8	Firm performance	-0.16	0.33	0.12	0.21	0.26	0.35	0.15	1				
9	Firm R&D intensity	0.13	-0.09	0.05	-0.33	-0.45	0.00	-0.13	-0.02	1			
10	Method of payment	-0.08	0.02	-0.02	0.10	0.09	0.05	0.13	0.08	-0.06	1		
11	Industry relatedness	-0.05	-0.15	-0.07	-0.21	-0.19	-0.10	-0.02	-0.10	0.10	-0.15	1	
12	Institutional distance	0.18	0.01	-0.01	0.06	0.10	-0.04	0.04	0.01	-0.16	0.08	-0.06	1.00
	Mean	0.56	2.53	59.37	0.63	8.63	43.86	0.72	9.86	0.29	0.22	3.26	0.22
	S.D.	0.5	0.74	28.87	0.48	2.41	35.34	0.45	11.31	0.45	0.41	2.45	0.18

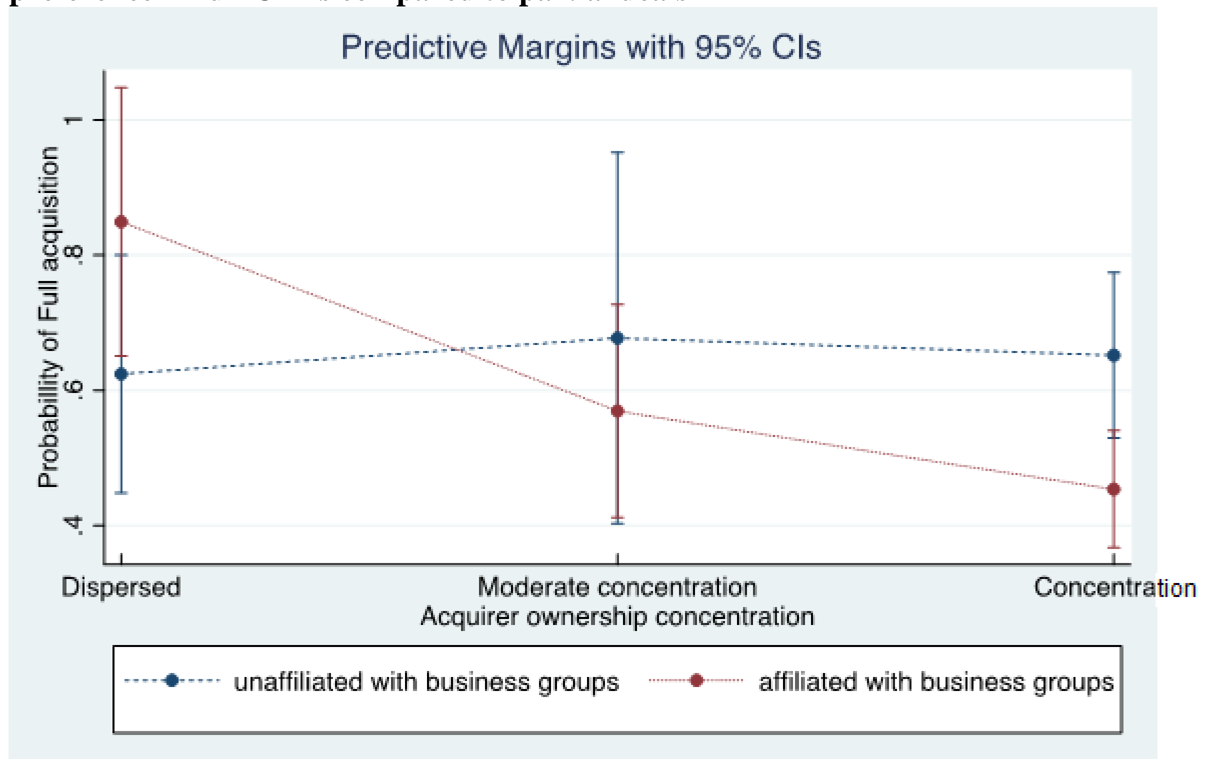
Note: All correlations>0.16 are significant at 0.01

Table 3
Regression results

	Binomial Logit					**Tobit**
Dependent variable:	Full acquisition					Acquired stake
	(1)	(2)H1	(3)H1	(4)H2	(5)H3	(6)
Firm ownership concentration		-0.392*			-0.563*	-17.62**
		(0.222)			(0.290)	(7.514)
Extent of single largest holding			-0.011*			
			(0.0057)			
Business group affiliation				-0.701**	-0.709*	-24.64**
				(0.348)	(0.402)	(11.28)
Ownership concentration ×business group affiliation					-0.912**	-31.81**
					(0.434)	(12.89)
Controls						
Firm size	-0.127*	-0.107*	-0.182***	-0.070	-0.055	0.554
	(0.068)	(0.065)	(0.068)	(0.073)	(0.069)	(2.395)
Firm age	-0.005	-0.003	-0.002	-0.004	-0.001	0.011
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.133)
Public listed	0.412	0.205	0.051	0.483*	0.430	7.507
	(0.292)	(0.313)	(0.396)	(0.294)	(0.315)	(10.17)
Firm prior performance	-0.033**	-0.027*	-0.033**	-0.033**	-0.024	-0.744*
	(0.015)	(0.015)	(0.016)	(0.015)	(0.015)	(0.430)
Firm industry R&D intensity	0.714**	0.702**	0.832***	0.657**	0.694**	18.48*
	(0.311)	(0.319)	(0.311)	(0.326)	(0.345)	(10.12)
Method of payment (Cash payment)	-0.600	-0.633	-0.559	-0.602	-0.649	-23.41**
	(0.410)	(0.429)	(0.445)	(0.415)	(0.452)	(9.671)
Industry relatedness	-0.083	-0.092*	-0.119**	-0.098*	-0.106*	-2.610
	(0.052)	(0.053)	(0.0544)	(0.053)	(0.055)	(1.649)
Institutional distance between Brazil and host countries	2.576***	2.645***	3.090***	2.555***	2.646***	75.75***
	(0.793)	(0.791)	(0.886)	(0.791)	(0.801)	(24.46)
Constant	1.261	2.186**	2.651***	1.063	2.240*	157.7***
	(0.905)	(1.083)	(0.987)	(0.902)	(1.238)	(32.20)
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes
Observations	317	317	298	317	317	295
R Square	0.146	0.155	0.185	0.156	0.171	0.045

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1
Significance is based on two-tailed test

Figure 1
Joint effects of acquirer business group affiliation and ownership concentration on preference in full CBAs compared to partial deals



[i] Following Brouthers & Hennart (2007), we refer to entry mode choice as the choice between full and partial equity ownership in foreign subsidiaries.
[ii] Prior literature identifies 95 percent equity as the cut-off point at which target is deemed to be wholly-owned (Chen & Hennart, 2004)
[iii] *BM&FBOVESPA* was created by a merger between the São Paulo Stock Exchange (Bovespa) and the Brazilian Mercantile and Futures Exchange (BM&F). It is based in São Paulo, Brazil.
[iv] The list of SIC codes considered high-tech industry is sourced from http://www.selfcraft.net/atself/htsics.htm
[v] The World Governance Indicators project by World Bank, available at http://info.worldbank.org/governance/wgi/index.asp