Firm ownership heterogeneity and strategic diversification via cross-border deals

Abstract

In this paper, we investigate the role of ownership heterogeneity of acquiring Brazilian multinational enterprises in determining industrial diversification strategies in cross-border mergers and acquisitions. Based on institutions-based theory and corporate governance arguments, we hypothesize that different ownership types such as government majority ownership and private business group affiliation can influence the diversification strategies when determining related or unrelated international acquisitions. We also argue that the industrial diversification strategies abroad will be moderated by cross-country institutional differences between the host country and Brazil.

Key words

Government ownership, business group, industrial diversification, cross-border mergers and acquisitions, industry relatedness, emerging market

INTRODUCTION

Mergers and Acquisitions (M&As) form one of the most important strategic decisions for a firm. Even though M&As entail high levels of risks and resource commitments (Reuer, Shenkar, & Ragozzino, 2004), evidence across the globe suggests that Cross-Border Mergers & Acquisitions (CB M&As) have become a primary mode of internationalization (UNCTAD, 2000). Particularly for Emerging Market Multinational Enterprises (EM MNEs), Outward Foreign Direct Investment (OFDI) has been dominated by CB M&As (Luo & Tung, 2007; UNCTAD, 2000). However, few studies have looked at the strategic decision of industrial diversification in an international context (Rao-Nicholson & Cai, 2020).

In this paper, we will examine the strategic decisions of MNEs on whether to diversify into unrelated deals or stay in the same industry in foreign markets. *Industrial diversification* implies that MNEs will acquire firms belonging to an industry different from their own, and in this paper, it means Brazilian MNEs are buying *unrelated* targets in a different industry to theirs in foreign markets (Rao-Nicholson & Cai, 2020).

As with other EM MNEs, since the beginning of the 21st century, many Brazilian MNEs have used M&As as a strategic tool and preferred mode to enter foreign markets (Cyrino & Barcellos, 2016). When going abroad, a number of companies have decided to use existing firm-specific advantages. The propensity of EM MNEs to engage in *related undiversified* acquisitions in the same industry reflects their pursuit of a more exploitative (incremental) than explorative (taking lager steps) foreign expansion (Rabbiosi, Elia, & Bertoni, 2012). For example, Degen (2012) documented in a single case study that Brazilian meat processing company JBS has reached an impressive position in the world market using its resource-based horizontal acquisition strategy.

On the other hand, perhaps more surprisingly, when going abroad, some Brazilian companies

have decided to *diversify* in the value chain. For example, in 2006 Companhia Vale do Rio Doce (CVRD) announced an all-cash unrelated deal to acquire Canadian nickel producer Inco Limited, and this is a case of industrial diversification in the foreign market. According to a press release "the combination of CVRD and Inco will create one of the three largest diversified mining companies in the world, with leading global market positions in iron ore, pellets, nickel, bauxite, alumina, manganese and ferroalloys, and an exciting world-class pipeline of projects, supported by a large-scale, long-life and low-cost asset portfolio"(vale.com, 8/11/2006).

Having investigated these two examples, we have to note that industry relatedness in deal characteristics is reflected in the transfer of key functional skills between businesses and the creation of synergy through economies of scale. This is linked to but different from the international diversification literature, which studies how firms diversify into foreign markets (Hitt, Tihanyi, Miller, & Connelly, 2006). The two streams of literature on international diversification and industry diversification are developed largely separately.

Motivation and Research Gap

Therefore, the **first aim** of the paper is to combine strategic diversification literature with CB M&As literature. CB M&As are long-term investments with diverse strategic implications, ranging from *exploitation* of host country advantages such as natural resources and market opportunities to *exploration* of advanced technology and other strategic assets (Makino, Lau, & Yeh, 2002). In both scenarios of exploration and exploitation, firms need to decide whether they stay in the same industry or diversify when going abroad.

Secondly, there is a gap in the literature regarding how firm **ownership characteristics** may

play a role here. Corporate ownership has been recognized as having a considerable impact on internationalization (Oesterle, Richta, & Fisch, 2013). Internationalization and diversification strategies are largely influenced by firm ownership characteristics that are rooted in the home institutional environment.

The **third aim** is to explore the role of **institutional distance**. The issue of ownership heterogeneity and its interaction of home-host country institutional difference assumes importance here since different acquiring firms may have different strategies to either diversify into other industries or stay in the same industry in CB M&As and this would have long-term effects on the development of the MNEs. Industrial diversification in a foreign country will require major commitments as it will require an overhaul of current corporate strategies to reap the potential benefits (Rao-Nicholson & Cai, 2020). Otherwise, potential synergy is limited at best due to the cross-country differences and costs of diversification (Tallman & Li, 1996). Entering an unrelated industry abroad is extremely risky when firms do not have enough experience to deal with the liability of foreignness in the host country and liability of newness in the new industry at the same time (Lu & Beamish, 2004).

We argue that most prior studies examining corporate diversification strategies do not consider the overall effect of home and host institutional environments and typology of the heterogeneity of different types of firms that are making these decisions. EMFs differ significantly with advanced countries MNEs in terms of initial conditions and their interaction with regards to home-host country institutional distances. In addition, there is significant heterogeneity in Brazilian MNEs in terms of ownership identities and governance structures, and strategic implications when going abroad. Few studies looked at the decision of industrial diversification in an international context for Brazilian MNEs. Therefore, we examine how ownership identities will influence industrial

diversification strategies when firms venturing abroad by M&As.

The **research questions** are as follows:

Does ownership heterogeneity of Brazilian acquirers affect their industrial diversification strategy in cross-border M&As? In particular, we focus on two different types of ownership identities of acquirers (1) Government majority ownership (2) Private business group affiliation. We also look into the effects of these two groups and their interactions with the level of cross-country differences between Brazil and the host country.

To study this topic, we will introduce the institutions-based view to the diversification literature and examine how ownership identities rooted in the home country will influence risk-averse and industry diversification decisions when internationalize. So it is very likely that institutions play a greater role for emerging market acquirers due to the heterogeneity of home country ownership identities (Brockman, Rui, & Zou, 2013; Dinc & Erel, 2013)

The role of corporate ownership identities is especially relevant in the context of an emerging market such as Brazil since the effects of institutions are stronger in emerging economies. Institutional voids in the home country would lead to the importance of owners at the firm-level. Thus, some ownership identities (e.g., private business group affiliations, state majority ownership) that are typical in an emerging market such as Brazil are not common in advanced countries. Here we will focus on whether two ownership identities (e.g., government ownership, private business group membership) will impact the industry diversification strategy of Brazilian companies in foreign market acquisitions.

The research questions are analyzed for a sample of CB M&As of Brazilian acquiring companies. By focusing on one home country (i.e. Brazil), the home-country institutional

environment is constant. We find that government majority ownership has a negative impact on a firm's tendency to diversify beyond its core industry abroad whereas firms that belong to private business groups are more likely to diversify. Finally, we find that the effects of acquirer's ownership identity on diversification choice are moderated by the institutional distance between the home country and host countries.

This paper makes several significant contributions to the theoretical and empirical literature. First of all, we examine the role of ownership heterogeneity on diversification strategies in the context of acquirers from an emerging market. This is one of a small number of papers that combine industrial diversification literature and international diversification literature. Different types of firms will tend to follow different strategic rationale and motivations and as a result, make disparate decisions regarding industrial diversification while entering foreign markets through acquisitions. The heterogeneity of ownership identities on strategic growth such as diversification is rarely studied in the context of an emerging market. Despite the vital role of ownership in firm strategies in emerging markets, prior studies typically consider each of these ownership types individually in their studies (Cui & Jiang, 2012; Liu & Scott-Kennel, 2011). This paper provides a more comprehensive view of two different types of ownership identities and Brazilian firms' diversification strategy.

Secondly, we contribute to the literature on cross-border industry diversification by introducing the international dimension. A foreign acquisition is often seen as a risky way to put a corporate strategy into action (Cartwright & Schoenberg, 2006). The implications of entering a foreign country while diversifying into a new industry at the same time will be difficult for most firms, and particularly for EM MNEs. By combining two different streams of literature (industry diversification and internationalization), our results add an international dimension to the industry

diversification literature (Hautz, Mayer, & Stadler, 2013).

Thirdly, we also explore moderating factors such as the institutional distance between Brazil and host countries. Our work provides evidence that the impacts of acquirer ownership identity on diversification are linked to institutional distances and country choices.

The remainder of this paper is organized as follows. The next section will provide a theoretical framework and presents our hypotheses. In the third section, we document the methodology and data collection process. The fourth section provides a summary of the results and findings. Finally, we conclude this paper with a discussion on contributions.

THEORETICAL FRAMEWORK

The Role of Ownership: An Institutions-based View

The institutions-based view addresses the context within which the firm's activities are embedded by focusing on the social and regulatory context. It provides a non-economic explanation of organizational behaviors and strategies (DiMaggio & Powell, 1991).

According to institutions-based theory, institutions are rules of game and consist of formal rules and informal norms (North, 1990). Firms are embedded in the external institutional environment. An organization has linkages with dominant formal and informal institutions in the environment, which confer resources and legitimacy (Uhlenbruck, Rodriguez, Doh, & Eden, 2006; Wright, Filatotchev, Hoskisson, & Peng, 2005). Firms need to accommodate strategic choices to handle country-level determinants such as institutional constraints (Uhlenbruck et al., 2006).

The literature on EM MNEs points to the importance of the home country institutional environment (Hoskisson, Wright, Filatotchev, & Peng, 2013). The link between Firm-Specific

Advantages (FSAs) and Country-specific Advantages (CSAs) is more relevant for BRIC countries (Brazil, Russia, India and China) considering the weakness of their home country environment in firms' internationalization trajectories.

Institutions not only affect structure and strategies at home but also determine the extent and strategic decision making (Peng, Wang, & Jiang, 2008). Peng et al. (2008) suggest that a fundamental issue in IB is how firm characteristics that are shaped by local institutions influence strategic decisions in an ever-changing business environment. The liberalization process in emerging countries has changed the business environment and endowments for firms rooted in the institutional contexts.

To mitigate the effects of institutional voids in emerging markets, the role of ownership structure and ownership identity play important functions in the decision such as whether to diversify. Ownership structure has been considered as a potential explanation for diversification (Hautz et al., 2013; Lane, Cannella, & Lubatkin, 1998). In addition, ownership identity (i.e., type of owner) is considered as an essential mechanism to influence firm strategies, such as the decision whether to diversify outside the core industry. According to the corporate governance literature, ownership identity plays a great role in the oversight and incentives management and influences corporate goals (Milhaupt & Zheng, 2014) and strategic choices (Ramaswamy, Li, & Veliyath, 2002). For example, Tihanyi, Johnson, Hoskisson, and Hitt (2003) examined the relationship between institutional ownership, the board of directors and industrial diversification of firms in foreign markets within an agency framework. They argued that in the case of US firms, different types of institutional owners have different stakes in firms' strategies, and contextual factors such as boards and technological opportunity accentuate these differences. Their results indicate that pension funds' long-term orientation facilitates internationalization in industries with high technological

opportunities. The role of ownership identities is even more prominent in the case of emerging market multinationals. Some owners in emerging markets are not common in advanced countries.

It is important to note here that ownership characteristics are influenced by the institutional environment of the home country (Khanna & Palepu, 2000). Due to the heterogeneity of the home country's institutional context, we focus on Brazil for the rest of the paper. We consider two types of ownership identities (1) acquirer state ownership and (2) acquirer private business group affiliation as mechanisms to fill in institutional voids at home such as weak legal structures.

Ownership Heterogeneity and Diversification in Brazil

Brazilian FDI has grown considerably since the beginning of the 21st century (Campanario, Stal, & Silva, 2011). Brazil is a suitable setting since it has a number of large multinational corporations, some of which have been ranked among the largest commercial aircraft, metal and mining companies in the world. At the same time, institutions in Latin America are not very stable and finance for long-term projects is insufficient (Cuervo-Cazurra, 2016).

In the Brazilian context, government ownership and business group affiliations share similarities and differences. State-owned enterprises (SOEs) are owned by the government and thus become part of the institutions. State ownership would influence the nature of relationships and decision-making processes within the companies as well as the quality (or lack of) monitoring(Li, Xia, & Lin, 2017; Trebat, 1983).

Similar to other emerging countries, business groups in Brazil owe much of their evolution in the national economy to government policies (Aldrighi & Postali, 2010). There are different types of business groups, some are controlled by the state, others are controlled by private entities. In

this section, we focus on private business groups, since the above-mentioned issues are not relevant for state-owned business groups. For example, financial constraints of the private sector are important for Brazilian companies whereas state-owned business groups have the backing of the government. In addition, access to capital is easy for SOEs while private companies need to mobilize internal resources to investments. The business group fills in institutional voids in the home country by forming economic groups with unrelated business portfolios to fill in the institutional gaps and cope with macroeconomic volatility(Carney, Gedajlovic, Heugens, Van Essen, & van Oosterhout, 2011).

Although both ownership identities identified here are responses to the home country institutional environment, they differ significantly. Whereas SOEs serve political goals, private business groups in Brazil usually belong to families and thus profit-seeking. However, few studies have systematically examined crucial different ownership types in Brazil. In the next section of hypothesis development, we will look at different types of ownership identities and explore their effects on diversification in the domestic and international markets., in the context of Brazilian MNEs.

HYPOTHESES DEVELOPMENT

Government Ownership

Governments have long been acknowledged as critical sources of dependency for firms (Lester, Hillman, Zardkoohi, & Cannella Jr, 2008). The government can influence firms in several ways, such as directly taking ownership in SOEs, providing subsidies directly, or using regulation and policies. Compared to other forms of influence, direct government ownership or state ownership allows extensive government control of operations.

Compared to developed economies, the government is an influential stakeholder in corporate governance decisions in the context of developing economies (Hoskisson, Eden, Lau, & Wright, 2000). Mergers are a type of business transaction where governments have both the opportunity and the motive to exert considerable influence.

Prior research has indicated that beyond the domestic context, government ownership might also explain the targets that Chinese companies pursue in their foreign acquisitions. State ownership might dictate the internationalization patterns and motives for cross-border acquisitions (Rui & Yip, 2008). The internationalization of SOEs has become an important phenomenon in international business (Cuervo-Cazurra, Inkpen, Musacchio, & Ramaswamy, 2014). Prior empirical researches support the argument: In the context of India, government agencies will not be related to diversification strategy (Ramaswamy et al., 2002). In a recent study, we document that Chinese SOEs are less likely to diversify in international acquisitions (Rao-Nicholson & Cai, 2020).

Similar to Chinese SOEs, there are several reasons why Brazilian SOEs are less likely to diversify in international markets. First of all, the motivations to internationalize are different. The corporate governance literature argues that SOEs are supposed to deviate from value maximization in the product market because, governments as firm owners may have different objectives than private agents (Musacchio & Lazzarini, 2014). For example, in the case of Brazilian construction companies, their presence in both national and international contexts could only be understood by examining the military government's policies for hiring contractor's services (Dalla Costa, Saes, & Gonçalves, 2018). Therefore, SOEs are less diversified in the domestic market and they tend to replicate this strategy when going abroad. By staying in the same industries, SOEs can serve their non-market strategies, so their international operations serve the same goals as their domestic

operations.

Secondly, the behavior of SOEs differs from private non-SOEs due to different performance measures. SOEs might have additional performance expectations like generating employment, providing public goods and national security. For all of these goals, stability is the key to the success, which will lead to a preference for less risk-taking behavior in international endeavors. For example, research has documented that Petrobras' internationalization through OFDI followed closely the three phases of Brazil's economic transition(Cahen, 2015)

Thirdly, the diversification discount hypothesis argues that some firms engage in M&As and unrelated deals due to agency costs. The self-interest of manages tends to drive them to pursue M&As to increase their compensation, enhance reputation or reduce employment risk. This is not the case for SOEs since managers of SOEs have different goals. In Brazil CEOs of state-owned companies have more constraints on managerial discretion than their counterparts in private companies(Musacchio, Lazzarini, & Bruschi, 2012).

In short, SOEs are less likely to diversify both domestically and internationally since the benefits of industrial diversification are observed to be less in the case of government ownership due to political costs of tunneling and expropriation (Faccio & Stolin, 2004). Recent studies also have found that diversified SOEs are valued less, thus, providing further evidence of the political cost hypothesis of diversification (Lin & Su, 2008). Therefore, we argue that SOEs differ from private firms since they follow non-market strategies and more risk-averse. Thus

Hypothesis 1*: Government ownership of Brazilian MNEs will decrease the likelihood of industrial diversification in cross-border acquisitions.*

Business Group Affiliation

A business group is a set of legally independent firms bound together by a constellation of formal and informal ties (Khanna & Rivkin, 2001; Khanna & Rivkin, 2006) and coordinated by a central or core entity (Leff, 1978). The importance of business groups and business group membership in emerging economies has been highlighted in various studies (Gaur, Kumar, & Singh, 2014; Khanna & Palepu, 2000; Khanna & Rivkin, 2001; Kim, Hoskisson, Tihanyi, & Hong, 2004; Lu & Yao, 2006).

Prior research in the Western context largely supports the notion that diversification across industries leads to a *conglomerate discount* in the domestic setting. However, the integration with the international scope of MNEs might present a different picture. In emerging markets, due to institutional voids, business groups emerge to create internal capital markets and mobilize resources (Khanna & Palepu, 2000). Large business groups tend to diversify in international deals to tap into upstream and downstream industries to consolidate market power to help with their position in the domestic market (Hoskisson, Johnson, Tihanyi, & White, 2005).

In the emerging market context, it has been observed that companies that are part of a business group are more likely to diversify across industries in their home country, which researchers have argued is due to their favorable position in the local political ecosystem (Khanna & Yafeh, 2007). Empirical studies tend to support the view that firms affiliated with business groups benefit from diversification in domestic markets. For example, Khanna & Palepu (2000) argued that in India, business groups create an internal market and affiliation of the most diversified business groups outperform unaffiliated firms. However, these observations have been made mostly for domestic acquisitions (Khanna & Palepu, 2000; Khanna & Rivkin, 2001; Lu & Yao, 2006), and have been linked to explanations like market imperfections, survivability prowess, weak contract

enforceability.

We argue that Brazilian acquiring firms affiliated with private business groups are more likely to diversify in international markets compared to those unaffiliated ones. To start with. In Brazil, high tariffs, underdeveloped capital markets, inadequate levels of research and development, turbulent political and economic climate have historically created market domination by family-owned conglomerates. These business group conglomerates preferred sector diversification in domestic markets (Casanova & Kassum, 2013). Some scholars have suggested that when the opportunities to diversify at home become restrictive, diversified business groups can be encouraged to internationalize (Borda-Reyes, 2012). Recent studies have documented a positive effect of participating in a conglomerate or other business group on the process of internationalization of Brazilian companies (Goncalves, Filho, Alberto Nascimento, Casanova, & do Valle Jardim, Paula Esteban, 2012). Therefore, their internationalization strategies are more of an escape from domestic markets in which they will replicate their strategies at home (Cuervo-Cazurra, 2016).

Secondly, acquirers associated with business groups tend to establish market power at home first before going abroad. Engaging in related deals will help them consolidate market power and have more synergy in integrating the acquirers and targets.

Thirdly, in conglomerate mergers, bidders built up diversified groups by adding capital and know-how to targets. Companies are more likely to mimic this behavior when abroad and engage in diversifying deals due to path dependency in internationalization.

Therefore, Hypothesis 2 posits that:

Hypothesis 2*: Private business group membership of Brazilian MNEs will increase the*

likelihood of industrial diversification in cross-border acquisitions.

Moderating Factor-Institutional Distance

Institutional distance

Besides ownership identity, the location choices of Brazilian MNEs when they acquire foreign companies also vary. The moderating factor of institutional distance might have an impact on the decisions to diversify across core industries.

An organization has linkages with dominant formal and informal institutions in the environment, which confer resources and legitimacy (Peng et al., 2008). These differences in institutions between home and host countries are often conceptualized as the institutional distance (Kostova, 1999; Xu & Shenkar, 2002). The term "institutional distance" designates a difference or similarity between home and host countries in terms of institutional environments (Kostova, 1999). Institutional barriers and liability of foreignness (e.g. laws, regulations and cultural differences) will increase tangible and intangible costs (Amal & Tomio, 2015; Wei & Wu, 2015) since institutional distance increases information asymmetry between partners. In international acquisitions, both acquirers and targets have to make sense of, manipulate, negotiate and partially construct their institutional environment (Kostova, Roth & Dacin, 2008). The acquirer has to deal with the liability of foreignness (Zaheer, 1995), e.g. in terms of regulatory structures, governmental agencies, laws courts, professions and also interest groups and public opinion in the host country. Most previous studies posit that a large institutional distance augments the likelihood of an M&A deal to fail and the time it takes to complete a deal (Reis, Ferreira, & Santos, 2013), thus increasing the risks for deals in international markets.

Reverse takeovers and the distance between EM acquirers and host countries

One important critique of distance is that it is symmetric (Shenkar, 2001). Let us consider two scenarios, first in the case of a US acquirer and a Brazilian target (The home country is developed and the host is underdeveloped) and then in the case of a Brazilian acquirer and a US target (The home country is underdeveloped and the host country is developed). In both cases, the institutional distance between the home and host is the same. However, we would expect the impact to be different on the likelihood to diversify.

Although EMs have undergone profound institutional transformations, their institutions remain distinct from those from developed markets (Wan, 2009; Peng et al., 2008). In countries with more developed institutions, the institutional environment promotes the development of the market economy and facilitates exchanges (Dikova et al., 2010). In cross-border deals, when host countries are characterized by more sophisticated institutional development and corporate governance systems, the level of information asymmetry is reduced, and less bureaucracy will be expected in the host. For an emerging market (such as Brazil), potential host countries with a large institutional distance are more often developed countries. Instead of increasing uncertainty with increasing distance, the institutional difference denotes the improvement in institutional quality compared to the home country. So host countries with large institutional distance have low levels of risk and uncertainty and thus more likely to diversify.

An increasing number of EM MNEs acquire targets in developed countries or sometimes referred to as *reverse takeovers* (Fleury & Fleury, 2014b). In advanced countries, related acquisitions are usually part of a consolidation of major industries, and part of responses to deregulation (Shleifer & Vishny, 2003). It is established in the EM MNEs literature that the internationalization of EM MNEs cannot be explained without paying attention to the previous

development of the domestic firms in their quest for generating ownership-based advantages that can be exploited abroad (Fleury & Fleury, 2014a). In Brazil during the early stages of development, the industrial policies stimulated local firms to focus on the large domestic market and pay little importance to the external market (Pinto, Ferreira, Falaster, Fleury, & Fleury, 2017). Fleury & Fleury (2014) argue that in many cases, the acquisitions by Brazilian multinational enterprises in North America mean the total or partial replacement of developed country firms in mature or sunset industries.

Some Brazilian firms enter neighboring Latin American countries with low *institutional distance* from Brazil while others venture into advanced countries with a large institutional distance. For Brazilian acquirers, Latin American host countries share a lot of similarities such as political system, pro-market reforms and reversals (Cuervo-Cazurra, 2016). Cuervo-Cazurra and Genc (2008) found that EM MNEs have developed non-market resources, capabilities and core competencies at home and know how to operate in difficult institutional environments. Therefore, these companies will have a competitive edge over developed country counterparts when entering less developed countries. Similarly, Brazilian companies will be very familiar with countries with a low institutional distance. Generally, EM MNEs are more diversified in the home country (Stoian & Mohr, 2016). Despite privatization, firms may develop their strategies abroad to mimic domestic behavior. In the case of Brazil, Brazilian MNEs delay internationalization to focus instead on the internal market (Goncalves et al., 2012).

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increasing uncertainty with increasing distance, the institutional difference denotes the improvement in institutional quality compared to the home country. So host countries with large institutional distance have low levels of risk and uncertainty.

SOE and the moderating role of institutional distance

EM MNEs' homegrown advantages can be characterized into two types: non-market advantages and market advantages (Cuervo-Cazurra, 2011)(Cuervo-Cazurra & Genc, 2011). Using this categorization, Kothari, Kotabe & Murphy (2013) argue that despite the absence of non-market advantages, EM MNEs can build up their capabilities to survive in weak home country institutions. These advantages can become advantages when EMFs entering other less developed countries. We argue that Brazilian state-owned acquiring firms with more experience in dealing with home country regulatory agencies and international experience might be better at closing deals in other relatively weak institutional environments and similar environments.

Latin American countries enjoy many similarities and common characteristics due to colonial roots and similar strategies for industrial development. The political economy of Latin American countries is also quite similar (Aguilera et al., 2017). Thus, we argue that Brazilian SOEs are more likely to explore assets and engage in related deals in countries with lower institutional distance (i.e. neighboring Latin American countries) but more likely to diversify when entering developed countries.

> ***Hypothesis 3****: The negative relationship between SOE and diversification is moderated by the institutional distance between Brazil and the host countries.*

Business group and the moderating role of institutional distance

Business groups are rooted within their institutional environment in their home countries, thus hindering their adaptation when they internationalize to countries with different institutional characteristics (Pedersen & Stucchi, 2014). Therefore, we argue that in order to reduce risks business groups are less likely to diversify in host countries with large institutional distance due to unfamiliarity with the environment.

On the other hand, compared to a business group affiliated firms, non-affiliated firms are more likely to suffer from agency costs and empire-building motives of managers, especially when acquiring targets in advanced countries. In the context of Brazil, private business groups are usually controlled by families, thus less likely to suffer from these principal-agent costs (Cuervo-Cazurra, 2006).

> ***Hypothesis 4****: The positive relationship between private business group affiliation and diversification is moderated by the institutional distance between Brazil and the host countries.*

To demonstrate the hypotheses, we will present the theoretical framework in Figure 1.

Insert Figure 1 About Here

METHODOLOGY

Data and Sampling

Our sample consists of 516 CBA deals by Brazilian acquirers between 2000 and 2014. The deal information is collected from Bureau van Dijk's Zephyr and Thomson SDC database. First, we select all host countries of Brazilian cross-border M&As as potential host countries. We exclude

tax haven countries since deals registered in these places are largely structured for tax avoidance reasons.

Company data is hand collected from Orbis, annual reports and other business sources. Some descriptive statistics of the sample are provided in Table 1. Of the sample of 516 CBA deals by Brazilian acquirers, 363 deals are classified as diversified (70.35%), whereas related undiversified deals only have 153 (29.65%). The percentage of diversified deals is similar to our recent study on whether Chinese acquirers (67% of diversified deals) would diversify in cross-border M&As (Rao-Nicholson & Cai, 2020).

Insert Table 1 about here

Variables

Dependent variable

The main dependent variable *Diversify* is a dummy that takes the value of one if the target does not belong to the same primary core industry as the acquirer and zero otherwise. A firm's core business is commonly defined as the business segment that generates the most significant revenue for the firm (Rumelt, 1974). Following existing literature, we define a firm's core business industry as the four-digit US Primary Standard Industry Classification (SIC) industry. Acquisitions are classified as diversified if the acquiring firm is not in the same business segment as the target identified by four-digit US SIC codes (Denis, Denis, & Yost, 2002; Moeller & Schlingemann, 2005; Shleifer & Vishny, 2003). By checking for the match of all four digits would imply testing for horizontal mergers between firms within the same primary economic activities (Barai & Mohanty, 2014) or whether the deals are diversified deals. Thus, deals that are not matched at the 4-digit level are

deemed as unrelated diversification.

Independent variables

We created two mutually exclusive categories of ownership to avoid confounding our results between different kinds of ownership. We use a dummy variable *Acquirer SOE* to indicate whether the acquirer is a government-owned enterprise or the government is the majority stakeholder in this firm. We obtained this information from various sources like BvD's Orbis database, company websites, annual filings and newspaper articles. This variable takes value one if there is evidence of government ownership or zero in other cases. The dummy variable *Acquirer private BG* is used to indicate if the Brazilian acquiring company is part of a business group. This variable takes the value one if true, zero otherwise. We used firm-level information from the Orbis database and Aldrighi & Postali (2010) to classify our acquirers. This business group-affiliated firm can be either a government-owned business group or a private business group, to avoid duplication of cases, we have removed BGs that belong to SOEs. Aldrighi & Postali (2010) use consolidated BG data based on Valor Grandes Grupos magazine, published by Valor Económico Journal. This is widely used as the source of data for identifying business groups in Brazil. For example, Xavier et al. (2014) also used the Valor Económico as the source of identifying the biggest business groups in Brazil. This is widely used to identify BGs in Brazil. To avoid duplication of cases, we have removed business groups that belong to SOEs.

Moderator

Our moderating variable is the *Institutional distance* between Brazil and the host country. This

index measures the difference in formal governance quality based on World Governance Indicators (Kaufmann, Kraay, & Mastruzzi, 2009). The index consists of six dimensions (voice and accountability, political stability, government effectiveness, regulatory quality, rules of law and control of corruption) and the value of each dimension ranges between -2.5 and +2.5. We follow (Dikova, 2009) to calculate a composite in which a larger distance indicates a greater difference between the home and host. It is important to note that for Brazil as a country with relatively underdeveloped institutions, host countries with larger institutional distance are advanced countries such as the US.

Control variables

We also include various controls for variation in the data arising from numerous sources: the deal-level, firm-level, sector-level and country-level differences. We control deal characteristics such as acquired stake. *Acquired stake* is measured by the percentage of target acquired. It is expected that when acquirers diversify into unrelated industries, they might take a partial equity stake to reduce risks. We also control whether the acquirer and target are listed on the stock exchange (*Acquirer listed and Target listed*). Leading business groups in Brazil usually have their main firms listed on the stock exchange (typically Level 1 of BM&Bovespa). Having access to the capital markets might influence a firm's availability of financial resources (Rao-Nicholson & Cai, 2020). In addition, we control for other acquirer characteristics such as whether the acquirer belongs to the *high-tech industry*, *acquirer age* and *acquirer prior CB M&A experience*. Guillen & Garcia-Canas (2009) and Mathew (2006) argue that the motivation of emerging market acquirers is to upgrade their technological capabilities and global brand names. Strategic assets seeking (patents/trademark) is important for high-tech acquirers but not for all acquirers. Acquirer

experience of prior CB M&A deals will also influence the likelihood of diversification as experience in deals will diminish the risk to enter a new industry. We have also controlled for *acquirer ownership concentration.* Ownership concentration is a response to weak corporate governance institutions and thus will influence internationalization. We control for ownership concentration by including three dummy variables (Highly dispersed, moderate and Concentrated) (Bhaumik, Driffield, & Pal, 2010). We use the BvD Independence indicator from Orbis and Zephyr for the measurement of ownership concentration. This indicator refers to each company's degree of independence regarding its shareholders (BvD website). Where A indicates that there is no shareholder with shareholdings more than 25%, B indicates that there is no shareholder with shareholdings more than 50% and at least one with shareholdings more than 25%, and C and D indicate a company that has at least one shareholder with shareholdings more than 50%. We operationalize firm ownership concentration variable by converting the BvD independence indicator into an ordered variable taking the value of 3 for highly concentrated (Largest owner >50%, BvD "C" and "D"), 2 for moderately concentrated (Between 25% and 50%, BvD "B") and, 1 for dispersed (<25%, BvD "A"). Thus 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. This is in line with other studies such as Bhaumik & Selarka (2012) in measuring ownership concentration. They also use 25 and 50 percent separately as cut-offs in their studies to indicate that the owners may exert some effective control at this level of ownership. *Logdistance* is the logarithm of the geographical distance between Brazil and the host country. EM MNEs would invest primarily in countries that are culturally and geographically closer to the home country (Fleury & Fleury, 2014b). Although

the geographic scope of Brazilian MNEs has expanded significantly, a large number of their operations abroad are still concentrated in Latin America (FDC--CPII (Fundação Dom Cabral & Columbia University. Vale Columbia Center on Sustainable International Investment), 2007). In addition, to control for differences across acquiring firm sectors, we control for sector dummies and year dummies are included.

Model Specification

Similar to Rao-Nicholson & Cai (2020), since the dependent variable is a binomial variable (Diversification) we use Probit regression analysis to examine the relationships between the ownership identities and diversification. These regressions can be estimated by the maximum likelihood method. The model can be summarized as:

$$Y_n = b_0 + b_i X_i + b_j I_j + b_k C_k + e$$

where: Y_n is the dependent variable, X_i stands for independent variables, I_j are the moderating variables, and C_k denotes control variables. The coefficients in Probit models cannot be interpreted directly, so we will use marginal effects and plot the interaction terms.

Descriptive Statistics

Insert Table 2 and Table 3 about here

Table 2 and Table 3 present some descriptive statistics of the sample by looking at the distribution of the sample. Table 2 presents a picture of host countries. It is clear that the top host countries include both Latin American countries (such as Argentina and Uruguay) as well as advanced

countries. This is not surprising as these are the common host countries for OFDI from Brazil. Table 3 reveals a breakdown of sectors by acquiring Brazilian company. According to the table, almost half the deals belong to the manufacturing sector.

FINDINGS

Insert Table 4 and Table 5 about here

Table 4 and Table 5 presents pairwise correlation across all the variables. To analyze potential issues of multicollinearity, we also calculated variance inflation factors (VIF). The mean VIF is 1.6, far below the standard cut-off point of 10 for indicating the presence of multicollinearity. The highest VIF is 2.63 for acquirer ownership concentration. This may be due to the fact that SOEs are by definition concentrated.

Main Regression Results

Insert Table 6 about here

Table 6 reports the results of our probit estimations. The results indicate that the probability of unrelated diversifying deals.

Model 1 is the baseline model with only control variables. We started by testing the effects of all the control variables. For the control variables, most variables are not significant. We only find that acquirers who engage in diversification are more likely to have a concentrated owner and tend to make cash payments. This might due to the differences in decision-making for concentrated versus dispersed firms.

In Model 2 and Model 3 separately, we have included the direct effects of acquirer state ownership and private business group affiliation. We find that when the Brazilian acquirer is an SOE, it is less likely to diversify in CBAs (β=-0.490, p=0.1). The finding is consistent with Hypothesis 1 that SOEs may serve a political motive, more risk-averse and tend to stay in the same industry compared to other companies. Model 3 indicates that acquirers affiliated with private business groups tend to have more likelihood of diversification, but the results are not statistically significant (β=0.00769). Therefore, we can't support our Hypothesis 2 that Private business group affiliated firms are more likely to diversify.

To further explore, we included the moderating variable of institutional distance in Model 4 and Model 5 separately. In Model 4, we have included the interaction term between acquirer state ownership and institutional distance. The results suggest that institutional distance has a moderating effect on the role of state ownership and the likelihood of diversification. In Model 5, we look at the interaction term between BG affiliation and diversification. We find that again institutional distance has a moderating effect on this relationship. We will also include the margins plot to interpret the results of interaction terms. The results in Model 4 and Model 5 confirm our conjecture that institutional distance has a moderating effect on acquirer SOE and acquirer BG affiliation, supporting Hypothesis 3 and Hypothesis 4. Model 6 is the full model with all the independent variables and interaction terms. Compared to the baseline model, the predictive power of Model 6 is better. The results in Model 6 indicate that after including all interaction terms at the same time, the results still hold, thus again confirming the hypotheses above.

Interpretation of Results

Moderation terms of institutional distance

To interpret the interaction terms, we have created the margins plot using STATA. According to Figure 2 and Figure 3, the role of institutional distance has a moderating effect on both state ownership and private business group affiliation. In general, institutional distance has a positive effect on the likelihood of diversifying into unrelated deals. In other words, for Brazilian acquirers, when entering other Latin American countries with similar institutional distance, they tend to stay in the same industry. On the other hand, when they acquire targets in advanced countries with large institutional distance, they tend to diversify into the value chain.

Insert Figure 2 and Figure 3 about here

According to Figure 2, the likelihood to diversify in countries with large or small institutional distance differs significantly for SOEs and other firms. For both SOEs and non-SOEs, institutional distance has a positive effect on the likelihood of diversifying into unrelated deals (although the impact is different). However, for state-owned Brazilian acquirers, when entering other Latin American countries with a similar institutional environment (low institutional distance), they tend to stay in the same industry (i.e. less likely to diversify), probably to capture the market in neighboring countries. On the other hand, when they acquire targets in advanced countries with large institutional distance, they tend to diversify into the value chain. The effects are less prominent for non-state-owned firms. This finding is similar to anecdotal evidence that Brazilian companies may prefer to acquire in advanced countries as a strategic move (da Silva, da Rocha, & Carneiro, 2009).

According to Figure 3, business group-affiliated and non-affiliated firms behave differently according to differences in the institutional environment. For private firms affiliated with business groups, acquiring Brazilian acquirers are more likely to diversify in countries with very low institutional distance. When they go to countries with median or large institutional distance (such

as advanced countries), they are less likely to diversify. This may be due to the fact that private groups are usually controlled by families using pyramidal structures and thus more risk-averse in face of large institutional distance. On the other hand, for private non-group-affiliated firms, acquirers tend to stay in the same industry to reduce risk in the advanced markets. Group affiliated acquirers are less likely to diversify in countries with low institutional distance. On the contrary, non-group firms are more likely to diversify in countries with large institutional distance. This could due to agency costs and empire-building motives of managers (Cuervo-Cazurra, 2006).

Robustness Checks

New dependent variable

To determine the level of relatedness or diversification, we rely on the standard industry classification system and the extent to which industries belong to the same broad industrial sectors. We follow similar studies such as Barai & Mohanty (2014) and Haleblian & Finkelstein (1999), we measure the level of diversification between the acquiring and target firms using US SIC match.

Insert Table 8 and Table 9 about here

Table 8 provides the details for generating the continuous variable for the level of diversification (Diversify4). We identify diversification at 1-digit, 2-digit, 3-digit and 4- 4-digit levels. Table 9 provides the results of robustness checks for which the new dependent variable (diversify4) is the level of diversification. According to Table 9, the results are in line with our main regression results. Hypothesis 2 is still not significant in Model 2, but all other signs hold in the Model 6 using this new diversification measure as a robustness check.

DISCUSSION AND CONCLUSION

In this paper, we examined the impacts of ownership heterogeneity and host country location as possible determinants of strategic industrial diversifications undertaken by Brazilian MNEs. The impacts of ownership heterogeneity among Brazilian firms are rarely captured in the literature. Therefore, this is one of the first studies to combine corporate governance literature with international business strategy literature to capture firms' strategic decisions to diversify or not in CBAs. The results of the paper suggest that Brazilian firms mirror their domestic strategies in foreign markets. To be more specific, government ownership will have a negative impact on the likelihood to diversify for Brazilian firms, whereas business group affiliation would increase the tendency to diversify into unrelated deals.

Theoretical and Empirical Contributions

To summarize, this paper makes several important contributions. To start with, this is among one of the first papers to combine industrial diversification and international diversification in the context of emerging market acquirers. The theoretical framework of the paper can be seen as an extension to Rao-Nicholson & Cai (2020). This paper delves deeper into the underlying mechanisms driving the differences between distinct types of ownership structures at home. These structures have deep roots in the home country and how they translate into organizational strategies abroad differ.

Secondly, we have built up a theoretical framework rooted in the institutions-based view on how ownership identities of firms might determine the choice of industry diversification abroad via CBAs. Specifically, we examine the impact of ownership identities on MNEs' industrial diversification in cross-border acquisitions.

Thirdly, the empirical context of the paper is Brazilian MNEs and their diversification strategies in international acquisitions. The findings of the paper demonstrate a systematic way of understanding industrial diversification strategy by Brazilian acquirers. We add to the empirical knowledge about MNEs from Brazil and other Latin American countries (Aguilera, Ciravegna, Cuervo-Cazurra, & Gonzalez-Perez, 2017; Cuervo-Cazurra, 2016).

Generalizability

The specific context of the paper is Brazil, where business group affiliations are common. The sample and results reported here are typical of Brazilian MNEs and to some extent may be generalized to other Latin American MNEs. Multilatinas (Multinational firms from Latin American countries) take a long time to become MNEs, reflecting the additional difficulties and need for sophisticated advantages for establishing FDI (Carneiro et al., 2015).

We need to note that there are significant differences between home countries in the BRIC and other emerging markets. For example, Brazilian EMNEs, which rely on resource-intensive home country advantages, undertake several vertical and horizontal investments in medium-tech industries, while Indian and Chinese EMNEs, whose home countries rely on skilled human capital and cost-saving advantages, undertake more horizontal investments in high-tech industries. Studies have argued that patents and trademarks do attract Chinese acquisitions, but only in high-tech manufacturing sectors. Indian firms are going out based on their existing ownership advantages and acquiring firms in developing countries, while Chinese firms target more technologically advanced country firms. The structure and strategy of Brazilian MNEs might differ from these companies. Therefore, we need to be cautious when generalizing the findings here to other emerging markets.

Limitations and Future Research

As with other studies, this paper is not without its limitations. First of all, to unpack ownership identities, we haven't studied a more complex combination of ownership characteristics such as minority government ownership in acquirers and state-owned business groups. For example, in a previous paper, we have studied the influence of leviathan as a minority shareholder through equity stakes such as the development bank and document that this might influence the likelihood of deal completion for Brazilian acquirers (Cai, van Veen, & Gubbi, 2014). A recent study also documents that in Brazil minority government ownership has a positive impact on firm's returns on assets and on the capital expenditures in investment opportunities (Inoue, Lazzarini, & Musacchio, 2013).

Secondly, we failed to support our Hypothesis 2 on the relationship between business group and strategic diversifications via CBAs. This might be due to the fact that business groups have many different types and they may have distinct motivations in foreign acquisitions. Future studies can explore this further to unpack different types of business groups.

Thirdly, we present limited information on the temporal differences that could emerge in the overseas acquisition strategy by Brazilian companies. We haven't studied how domestic experience influences cross-border decision-making. The current level of industry diversification in the domestic market may influence the likelihood of diversification in foreign markets. Future studies might look into this in more detail and study how domestic experience in M&As (both successful and failures) would influence cross-border deals when they internationalize (Muehlfeld, Rao Sahib, & Van Witteloostuijn, 2012). Therefore, future studies could look into the role of experiential learning that occurs over time and whether strategic diversifications change over time. For example, with more experience in the host countries, EM MNEs might move to more unrelated

deals.

Fourth, the macroeconomic environment in the Latin America region has one of the highest levels of volatility (Vassolo, Castro, & Gomez-Mejia, 2011). Some firms may have international diversification to diversify portfolio investment. Future studies could distinguish between strategic diversification in product markets and financial diversification.

Furthermore, methodologically, we used a dummy variable for diversification measures. In some cases, companies move up and down the value chain by engaging in forward and backward vertical integrations, possibly for the purpose of strategic assets seeking. Diversification is reserved for lateral movements across value chains either into related product markets or completely unrelated ones. Future studies can develop more fine-grained analysis into the global value chain and examine the extent of diversification by looking to product lines in domestic and foreign markets.

Lastly, we do not study the performance outcomes or these diversification deals. Another future research topic could investigate both short-term and long-term performance implications for CBAs in both developing and advanced countries.

REFERENCES

Aguilera, R. V., Ciravegna, L., Cuervo-Cazurra, A., & Gonzalez-Perez, M. A. (2017). Multilatinas and the internationalization of Latin American firms. *Journal of World Business*, 52(4), 447-460.

Aldrighi, D., & Postali, F. (2010). Business groups in brazil. In A. Colpan, T. Hikino & J. Lincoln (Eds.), *The Oxford Handbook of Business Groups* (pp. 353-386). Oxford: Oxford University Press.

Amal, M., & Tomio, B. T. (2015). Institutional distance and Brazilian outward foreign direct investment. M@n@gement, 18(1), 78-101.

Barai, P., & Mohanty, P. (2014). Role of industry relatedness in performance of Indian acquirers—Long and short run effects. *Asia Pacific Journal of Management*, 31(4), 1045-1073.

Bhaumik, S. K., Driffield, N., & Pal, S. (2010). Does ownership structure of emerging-market firms affect their outward FDI? the case of the Indian automotive and pharmaceutical sectors. *Journal of International Business Studies*, 41(3), 437-450.

Brockman, P., Rui, O. M., & Zou, H. (2013). Institutions and the performance of politically connected M&As. *Journal of International Business Studies*, 44(8), 833-852.

Cahen, F. R. (2015). Internationalization of state-owned enterprises through foreign direct investment. Revista De Administração De Empresas, 55(6), 645-659.

Cai, Y. (Catherine), van Veen, K., & Gubbi, S. R. (2014). Does government stake influence cross-border deal completion? evidence from brazil. *Academy of Management Proceedings*.

Campanario, M. A., Stal, E., & Silva, M. M. (2011, Outward FDI from brazil and its policy context, from inward and outward FDI country profiles. Vale Columbia Center on Sustainable International Investment.

Carneiro, J., Bandeira-de-Mello, R., Cuervo-Cazurra, A., Gonzalez-Perez, M. A., Olivas-Luján, M., Parente, R., & Xavier, W. (2015). Doing research and publishing on latin america. *International Business in Latin America: Innovation, Geography and Internationalization*,11.

Carney, M., Gedajlovic, E., Heugens, P. P. M. A. R., Van Essen, M., & van Oosterhout, H. (2011). Business group affiliation, performance, context, and strategy: A meta-analysis. Academy of Management Journal, 54(3), 437-460.

Cartwright, S., & Schoenberg, R. (2006). Thirty years of mergers and acquisitions research: Recent advances and future opportunities. British Journal of Management, 17(S1), S1-S5.

Casanova, L., & Kassum, J. (2013). Brazilian emerging multinationals: In search of a second wind.INSEAD–Faculty & Research Working Paper. Retrieved from http://www.insead. edu/facultyresearch/research/doc. cfm.

Cuervo-Cazurra, A. (2006). Business groups and their types. *Asia Pacific Journal of Management*, 23(4), 419-437.

Cuervo-Cazurra, A. (2011). Global strategy and global business environment: The direct and

indirect influences of the home country on a firm's global strategy. *Global Strategy Journal*, 1(3-4), 382-386.

Cuervo-Cazurra, A. (2016). Multilatinas as sources of new research insights: The learning and escape drivers of international expansion. *Journal of Business Research*, 69(6), 1963-1972.

Cui, L., & Jiang, F. (2012). State ownership effect on firms' FDI ownership decisions under institutional pressure: A study of Chinese outward-investing firms. *Journal of International Business Studies*, 43, 264-284.

Cyrino, Á B., & Barcellos, E. P. (2016). Cross-border M&A and competitive advantage of Brazilian EMNEs. In P. J. Williamson, R. Ramamurti, A. Fleury & M. T. L. Fleury (Eds.), *The Competitive Advantage of Emerging Market Multinationals* (pp. 191-219). Cambridge: Cambridge University Press.

da Silva, J. F., da Rocha, A., & Carneiro, J. (2009). The international expansion of firms from emerging markets: Toward a typology of Brazilian MNEs. *Latin American Business Review*, 10(2-3), 95-115.

Dalla Costa, A. J., Saes, A. M., & Gonçalves, C. (2018). Expansion and internationalization of business companies in brazil: Theoretical/methodological contributions. *Journal of Evolutionary Studies in Business*, 3(2), 1-22.

Denis, D. J., Denis, D. K., & Yost, K. (2002). Global diversification, industrial diversification, and firm value. *The Journal of Finance*, 57(5), 1951-1979.

Dikova, D. (2009). Performance of foreign subsidiaries: Does psychic distance matter? *International Business Review*, 18(1), 38-49.

DiMaggio, P. J., & Powell, W. W. (1991). Introduction. the new institutionalism in organizational analysis. In *The New Institutionalism in Organizational Analysis*, University of Chicago Press, Chicago, IL, , 1-38.

Dinc, S. I., & Erel, I. (2013). Economic nationalism in mergers and acquisitions. *The Journal of Finance*, 68(6), 2471-2514.

Faccio, M., & Stolin, D. (2004). Expropriation vs. proportional sharing in corporate acquisitions. *Proportional Sharing in Corporate Acquisitions*.

FDC-¬CPII (Fundação Dom Cabral, & Columbia University. Vale Columbia Center on Sustainable International Investment). (2007). Brazil's multinationals take off: Release of the FDC-CPII 2007 ranking of the Brazilian multinational enterprises.

Fleury, A., & Fleury, M. T. L. (2014a). Chapter 12: Country of origin effects on internationalization: Insights from brazil. In A. Cuervo-Cazurra, & R. Ramamurti (Eds.), *Understanding Multinationals from Emerging Markets* (pp. 242-267). Cambridge, U.K.: Cambridge University Press.

Fleury, A., & Fleury, M. T. L. (2014b). Local enablers of business models: The experience of

Brazilian multinationals acquiring in north America. *Journal of Business Research*, 67(4), 516-526.

Gaur, A. S., Kumar, V., & Singh, D. (2014). Institutions, resources, and internationalization of emerging economy firms. *Journal of World Business*, 49(1), 12-20.

Goncalves, M. X., Filho, C., Alberto Nascimento, L., Casanova, L., & do Valle Jardim, Paula Esteban. (2012). Institutional theory, membership in business groups and the internationalization of Brazilian multinationals.

Haleblian, J., & Finkelstein, S. (1999). The influence of organizational acquisition experience on acquisition performance: A behavioral learning perspective. *Administrative Science Quarterly*, 44(1), 29-56.

Hautz, J., Mayer, M. C., & Stadler, C. (2013). Ownership identity and concentration: A study of their joint impact on corporate diversification. *British Journal of Management*, 24(1), 102-126.

Hitt, M. A., Tihanyi, L., Miller, T., & Connelly, B. L. (2006). International diversification: Antecedents, outcomes, and moderators. *Journal of Management*, 32(6), 831-867.

Hoskisson, R. E., Eden, L., Lau, C., & Wright, M. (2000). Strategy in emerging economies. *Academy of Management Journal*, 43(3), 249-267.

Hoskisson, R. E., Johnson, R. A., Tihanyi, L., & White, R. E. (2005). Diversified business groups and corporate refocusing in emerging economies. *Journal of Management*, 31(6), 941-965.

Hoskisson, R. E., Wright, M., Filatotchev, I., & Peng, M. W. (2013). Emerging multinationals from mid-range economies: The influence of institutions and factor markets. *Journal of Management Studies*, 50(7), 1295-1321.

Inoue, C., Lazzarini, S., & Musacchio, A. (2013). Leviathan as a minority shareholder: Firm-level implications of equity purchases by the state. *Academy of Management Journal*, 56(6), 1775-1801.

Kaufmann, D., Kraay, A., & Mastruzzi, M. (2009). Governance matters VIII: Aggregate and individual governance indicators 1996-2008 The World Bank.

Khanna, T., & Palepu, K. (2000). Is group affiliation profitable in emerging markets? an analysis of diversified Indian business groups. The Journal of Finance, 55(2), 867-891. doi:10.1111/0022-1082.00229

Khanna, T., & Rivkin, J. W. (2001). Estimating the performance effects of business groups in emerging markets. *Strategic Management Journal*, 22(1), 45-74.

Khanna, T., & Rivkin, J. W. (2006). Interorganizational ties and business group boundaries: Evidence from an emerging economy. *Organization Science*, 17(3), 333-352.

Khanna, T., & Yafeh, Y. (2007). Business groups in emerging markets: Paragons or parasites? *Journal of Economic Literature*, 45(2), 331-372.

Kim, H., Hoskisson, R. E., Tihanyi, L., & Hong, J. (2004). The evolution and restructuring of diversified business groups in emerging markets: The lessons from chaebols in Korea. *Asia Pacific*

Journal of Management, 21(1-2), 25-48.

Kostova, T. (1999). Transnational transfer of strategic organizational practices: A contextual perspective. *Academy of Management Review*, 24(2), 308-324.

Leff, N. H. (1978). Industrial organization and entrepreneurship in the developing countries: The economic groups. *Economic Development and Cultural Change*, 661-675.

Lester, R. H., Hillman, A., Zardkoohi, A., & Cannella Jr, A. A. (2008). Former government officials as outside directors: The role of human and social capital. *Academy of Management Journal*, 51(5), 999-1013.

Li, J., Xia, J., & Lin, Z. (2017). Cross - border acquisitions by state - owned firms: How do legitimacy concerns affect the completion and duration of their acquisitions? *Strategic Management Journal*, 38(9), 1915-1934.

Lin, C., & Su, D. (2008). Industrial diversification, partial privatization and firm valuation: Evidence from publicly listed firms in china. *Journal of Corporate Finance*, 14(4), 405-417.

Liu, J. J., & Scott-Kennel, J. (2011). Asset-seeking investment by Chinese multinationals: Firm ownership, location, and entry mode. *Asia Pacific and Globalization Review*, 1(1), 16-36.

Lu, Y., & Yao, J. (2006). Impact of state ownership and control mechanisms on the performance of group affiliated companies in china. *Asia Pacific Journal of Management*, 23(4), 485-503.

Luo, Y., & Tung, R. L. (2007). International expansion of emerging market enterprises: A springboard perspective. *Journal of International Business Studies*, 38(4, International Expansion of Emerging Market Businesses), 481-498.

Makino, S., Lau, C., & Yeh, R. (2002). Asset-exploitation versus asset-seeking: Implications for location choice of foreign direct investment from newly industrialized economies. *Journal of International Business Studies*, 33(3), 403-421.

Moeller, S. B., & Schlingemann, F. P. (2005). Global diversification and bidder gains: A comparison between cross-border and domestic acquisitions. *Journal of Banking & Finance*, 29(3), 533-564.

Muehlfeld, K., Rao Sahib, P., & Van Witteloostuijn, A. (2012). A contextual theory of organizational learning from failures and successes: A study of acquisition completion in the global newspaper industry, 1981-2008. *Strategic Management Journal*, 33(8), 938-964.

Musacchio, A., & Lazzarini, S. (2014). *Reinvesting State Capitalism: Leviathan in Business, Brazil and Beyond* (1st ed.). Cambridge, Massachusetts, U.S.A.: Harvard University Press.

Musacchio, A., Lazzarini, S. & Bruschi, C. (2012). Do CEOs of state-owned enterprises matter? evidence from brazil, 1973-1993. Retrieved from http://ssrn.com/abstract=2096210.

North, D. C. (1990). *Institutions, Institutional Change and Economic Performance.* Cambridge: Cambridge University Press.

Oesterle, M., Richta, H. N., & Fisch, J. H. (2013). The influence of ownership structure on internationalization. *International Business Review*, 22(1), 187-201.

Pedersen, T., & Stucchi, T. (2014). Business groups, institutional transition, and the internationalization of firms from emerging economies. *Understanding Multinationals from Emerging Markets*, 224.

Peng, M. W., Wang, D. Y. L., & Jiang, Y. (2008). An institution-based view of international business strategy: A focus on emerging economies. *Journal of International Business Studies*, 39(5), 920-936.

Rabbiosi, L., Elia, S., & Bertoni, F. (2012). Acquisitions by EMNCs in developed markets: An organisational learning perspective. *Management International Review*, 52(2), 193-212.

Ramaswamy, K., Li, M., & Veliyath, R. (2002). Variations in ownership behavior and propensity to diversify: A study of the Indian corporate context. *Strategic Management Journal*, 23(4), 345-358.

Rao-Nicholson, R., & Cai, C. (2020). The effects of ownership identity on corporate diversification strategy of Chinese companies in foreign markets. Asia Pacific Journal of Management, 37(1), 91-126.

Reis, N. R., Ferreira, M. P., & Santos, J. C. (2013). Institutional distance and cross-border mergers and acquisitions completion: A conceptual framework.

Reuer, J. J., Shenkar, O., & Ragozzino, R. (2004). Mitigating risk in international mergers and acquisitions: The role of contingent payouts. *Journal of International Business Studies*, 35(1), 19-32.

Rumelt, R. P. (1974). *Strategy, Structure, and Economic Performance*. Cambridge: Harvard University Press.

Shenkar, O. (2001). Cultural distance revisited: Towards a more rigorous conceptualization and measurement of cultural differences. *Journal of International Business Studies*, 32(3), 519-535.

Shleifer, A., & Vishny, R. W. (2003). Stock market driven acquisitions. Journal of Financial Economics, 70(3), 295-311.

Stoian, C., & Mohr, A. (2016). Outward foreign direct investment from emerging economies: Escaping home country regulative voids. *International Business Review*, 25(5), 1124-1135.

Tallman, S. B., & Li, J. (1996). Effects of international diversity and product diversity on the performance of multinational firms. *Academy of Management Journal*, 39(1), 179-196.

Trebat, T. J. (1983). *Brazil's state-owned enterprises: A case study of the state as entrepreneur Cambridge* University Press.

Uhlenbruck, K., Rodriguez, P., Doh, J. P., & Eden, L. (2006). The impact of corruption on entry strategy: Evidence from telecommunication projects in emerging economies. *Organization Science*, 17(3), 402-414.

UNCTAD. (2000). *World investment report 2000: Cross-border mergers and acquisitions and development*. Geneva: UNCTAD.

vale.com. (8/11/2006). CVRD announces proposed all-cash offer to acquire Inco. Retrieved from http://www.vale.com/en/investors/information-market/press-releases/pages/cvrd-anuncia-proposta-para-aquisicao-da-inco.aspx

Vassolo, R. S., Castro, J. O. D., & Gomez-Mejia, L. R. (2011). Managing in Latin America: Common issues and a research agenda. *Academy of Management Perspectives*, 25(4), 22-36.

Wei, Y., & Wu, Y. (2015). Chapter 5. how institutional distance matters to cross-border mergers and acquisitions by multinational enterprises from emerging economies in OECD countries. *Handbook of Emerging Market Multinational Corporations*, 111-136.

Wright, M., Filatotchev, I., Hoskisson, R. E., & Peng, M. W. (2005). Strategy research in emerging economies: Challenging the conventional wisdom. *Journal of Management Studies*, 42(1), 1-33.

APPENDICES

List of Figures

Figure 1 Hypotheses development

Figure 1a Theoretical framework for domestic and international markets

Ownership identity	**Home market**		**International markets**
SOEs	Less likely to diversify in domestic markets	→	Less likely to diversify in international markets
Private BGs	More likely to diversify in domestic markets		More likely to diversify in international markets

Figure 2b Theoretical framework for hypotheses development

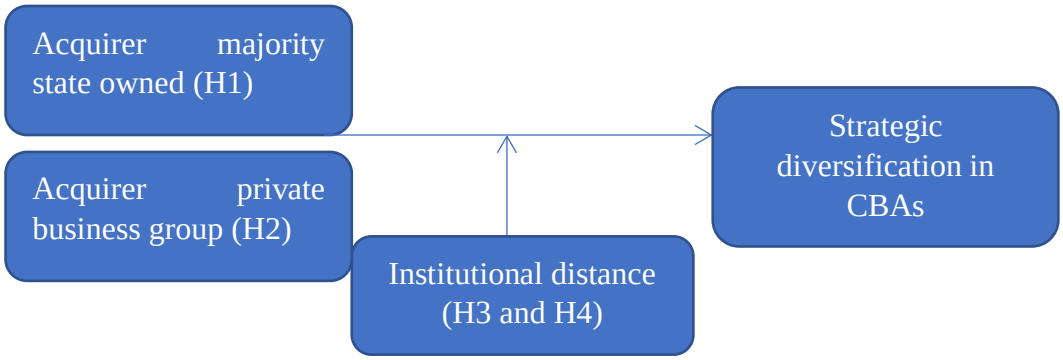
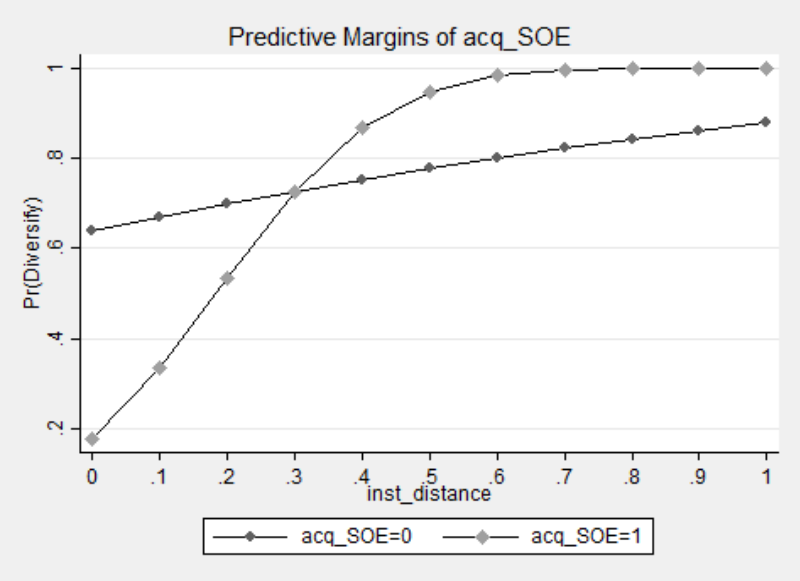
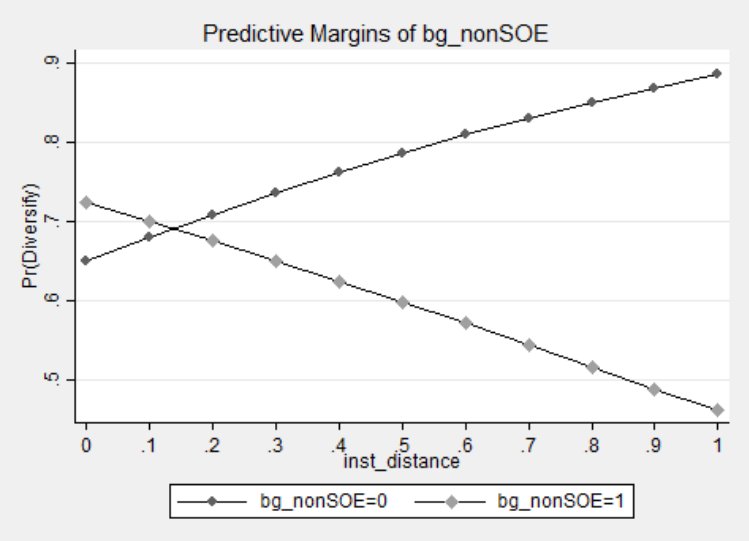


Figure 3 Interaction plot for acquirer SOE, institutional distance and likelihood to diversity



Note: Acq_SOE stands for acquirer SOE; The dependent variable is Diversify

Figure 4 Interaction plot for business groups ,institutional distance and the likelihood to diversity



Note: bg_nonSOE stands for acquirer private business group; The dependent variable is Diversify.

List of Tables

Table 1 Deal distribution

Diversify	**Frequency**	**Percent**
0	153	29.65%
1	363	70.35%

Total:516

Table 2 Deal distribution by host countries

Country	Freq.	Percent
United States	80	15.50
Argentina	79	15.31
Portugal	33	6.40
Uruguay	29	5.62
Chile	27	5.23
Colombia	24	4.65
Peru	22	4.26
Mexico	20	3.88
Spain	18	3.49
Canada	15	2.91
United Kingdom	13	2.52
Australia	12	2.33
France	12	2.33
Italy	10	1.94

Table 3 Sector distribution

Sector	Undiversified	Diversified	Total
Agriculture	0	24	24
Construction	1	9	10
Finance	24	46	70
Manufacturing	89	167	256
Mining	16	52	68
Retail	3	1	4
Services	9	28	37
Transportation	10	25	35
Wholesale	1	11	12
Total	153	363	516

Table 4 Correlation table

	Variable	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13	
1	diversify	0.7	0.46	1													
2	Acquirer SOE	0.09	0.28	-0.03	1												
3	Private BG	0.42	0.49	0.04	-0.26***	1											
4	Acquirer age	41.91	37.09	0.04	0.20***	0.23***	1										
5	Acquirer experience	5.82	9.94	0.04	0.49***	0.20***	0.33***	1									
6	Acquirer hightech	0.26	0.44	-0.05	-0.18***	-0.28***	-0.07	-0.18***	1								
7	Acquirer list	0.65	0.48	-0.03	0.19***	0.25***	0.32***	0.37***	-0.11**	1							
8	Target list	0.22	0.42	0.01	-0.01	0.24***	0.17***	0.05	-0.07	0.09**	1						
9	Concentrate	0.79	0.41	0.12***	0.16***	0.15***	0.17***	0.18***	-0.12***	-0.20***	0.06	1					
10	Moderate	0.13	0.34	-0.11**	-0.12***	0.01	-0.14***	-0.10**	0.05	0.24***	-0.00	-0.76***	1				
11	Acquired stake	70.99	34.64	-0.00	-0.06	-0.18***	-0.14***	-0.10**	0.07	-0.05	-0.42***	-0.05	-0.01	1			
12	Deal cash	0.23	0.42	0.09*	-0.05	0.21***	0.12***	0.045	-0.08*	0.10**	0.24***	0.06	-0.04	-0.13***	1		
13	instdistance	0.23	0.19	0.09*	-0.06	0.10**	-0.04	-0.010	-0.13***	0.00	0.04	0.08*	-0.08*	0.14***	0.01**	1	
14	logdistance	8.60	0.73	0.05	-0.10**	0.05	-0.01	-0.04	0.01	0.010	0.10**	0.06	-0.04	0.04	0.07*	0.41***	1

Table 5 VIF

Variable	VIF	1/VIF
concentrated	2.63	0.380156
moderate	2.48	0.402937
Acquirer SOE	1.84	0.542988
Private BG	1.75	0.572814
Acquirer experience	1.71	0.585835
Acquirer list	1.48	0.677463
Target list	1.34	0.747168
Acquirer age	1.3	0.769105
Acquired stake	1.29	0.774689
Institutional distance	1.28	0.782422
logdistance	1.23	0.811523
Acquirer high-tech	1.2	0.834642
Deal cash	1.1	0.906198
Mean	VIF	1.59

Table 6 Main regression results

VARIABLES	(1) diversify	(2) diversify	(3) diversify	(4) diversify	(5) diversify	(6) diversify
Acquirer SOE		-0.490*		-1.442***		-1.447***
		(0.288)		(0.356)		(0.421)
Acquirer private BG			0.00769		0.429*	0.362
			(0.200)		(0.252)	(0.278)
Acquirer SOE× institutional distance				5.484***		5.071***
				(1.145)		(1.316)
Acquirer private BG × institutional distance					-1.996**	-1.666**
					(0.789)	(0.760)
Controls						
Institutional distance				0.219	1.330**	0.903*
				(0.411)	(0.586)	(0.535)
Acquirer age	0.00176	0.00226	0.00175	0.00253	0.00198	0.00204
	(0.00225)	(0.00218)	(0.00231)	(0.00220)	(0.00234)	(0.00237)
Acquirer experience	-0.00128	0.00189	-0.00136	-0.00102	-0.00249	-0.00529
	(0.00797)	(0.00756)	(0.00820)	(0.00753)	(0.00864)	(0.00804)
Acquirer hightech	0.0423	0.0318	0.0443	0.0485	0.0634	0.00547
	(0.227)	(0.228)	(0.224)	(0.228)	(0.225)	(0.225)
Acquired stake	0.000578	0.000515	0.000585	0.000147	0.000370	4.79e-05
	(0.00236)	(0.00242)	(0.00236)	(0.00252)	(0.00241)	(0.00250)
logdistance	0.0916	0.0750	0.0916	0.0299	0.0537	0.0752
	(0.0925)	(0.0912)	(0.0925)	(0.107)	(0.108)	(0.114)
Acquirer list	-0.0350	-0.0285	-0.0356	-0.00266	-0.0256	0.102
	(0.192)	(0.192)	(0.189)	(0.192)	(0.190)	(0.199)
Target list	-0.134	-0.155	-0.136	-0.165	-0.123	-0.186
	(0.207)	(0.218)	(0.208)	(0.222)	(0.208)	(0.225)
Deal cash	0.251	0.217	0.250	0.232	0.247	0.241
	(0.156)	(0.153)	(0.161)	(0.159)	(0.165)	(0.164)
Acquirer concentrated	0.418*	0.433*	0.416*	0.441*	0.417	0.528**
	(0.242)	(0.242)	(0.250)	(0.245)	(0.261)	(0.259)
Acquirer moderate	0.150	0.159	0.149	0.158	0.152	0.0849
	(0.366)	(0.368)	(0.357)	(0.372)	(0.365)	(0.368)
Sector dummies	Yes	Yes	Yes	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes
Constant	4.002***	4.341***	4.000***	4.682***	4.150***	4.130***
	(0.659)	(0.643)	(0.661)	(0.736)	(0.708)	(0.795)
Observations	516	516	516	516	516	516
loglikelihood	-285.9	-284.6	-285.9	-280.3	-281.4	-282.8
r2_p	0.0884	0.0926	0.0884	0.106	0.103	0.0984
chi2	550.6	784.4	547.0	1311	616.7	826.6
p	0	0	0	0	0	0

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 7 Interpretation of results

	Expected sign	Results
H1 SOE less likely to diversify in CBAs	-	Significant
H2 Private BGs more likely to diversify in CBAs	+	Expected sign but insignificant
H3 The relationship between SOE and diversification is moderated by institutional distance that SOEs are more likely to diversify in countries with large institutional distance.	the interaction term	Significant
H4 The relationship between BG and diversification is moderated by institutional distance that BG affiliated firms are more likely to diversify in countries with small institutional distance.	the interaction term	Significant

Table 8 Generating indicator for robustness checks

Level of diversification	Description
Diversification = 0	All 4 digits of primary SIC codes match
Diversification = 1	First 3 digits of primary SIC codes match
Diversification = 2	First 2 digits of primary SIC codes match
Diversification = 3	First 1 digit of primary SIC codes match
Diversification = 4	No primary SIC codes match

Table 9 Robustness checks: Level of diversification

VARIABLES	(1) diversify4	(2) diversify4	(3) diversify4	(4) diversify4	(5) diversify4	(6) diversify4
Acquirer SOE		-0.168		-0.783***		-0.713***
		(0.157)		(0.228)		(0.267)
Acquirer private BG			0.0416		0.246*	0.163
			(0.0946)		(0.138)	(0.155)
Acquirer SOE× institutional distance				2.870***		2.550***
				(0.605)		(0.638)
Acquirer private BG × institutional distance					-0.837**	-0.660**
					(0.335)	(0.335)
Controls						
Institutional distance	0.411*	0.391*	0.404*	0.300	0.772***	0.603**
	(0.215)	(0.217)	(0.214)	(0.206)	(0.293)	(0.290)
Acquired stake	-0.00159	-0.00162	-0.00155	-0.00159	-0.00136	-0.00143
	(0.00119)	(0.00120)	(0.00120)	(0.00116)	(0.00119)	(0.00117)
Acquirer age	0.00149	0.00164	0.00146	0.00162	0.00144	0.00161
	(0.00136)	(0.00128)	(0.00136)	(0.00129)	(0.00137)	(0.00134)
Acquirer experience	0.000364	0.00176	6.91e-05	0.000445	-0.000524	6.00e-05
	(0.00442)	(0.00440)	(0.00417)	(0.00475)	(0.00436)	(0.00485)
Acquirer hightech	-0.0580	-0.0599	-0.0469	-0.0654	-0.0449	-0.0615
	(0.130)	(0.130)	(0.131)	(0.130)	(0.127)	(0.128)
Acquirer listed	-0.0738	-0.0710	-0.0809	-0.0602	-0.0740	-0.0563
	(0.107)	(0.107)	(0.106)	(0.106)	(0.105)	(0.103)
Target listed	-0.263**	-0.273**	-0.271**	-0.258**	-0.250**	-0.243**
	(0.115)	(0.117)	(0.115)	(0.112)	(0.109)	(0.108)
logdistance	-0.00508	-0.00831	-0.00543	-0.0168	-0.00462	-0.0154
	(0.0591)	(0.0583)	(0.0597)	(0.0574)	(0.0613)	(0.0586)
Deal cash	0.0906	0.0782	0.0855	0.0838	0.0797	0.0785
	(0.0784)	(0.0794)	(0.0807)	(0.0802)	(0.0793)	(0.0805)
Acquirer concentrated	0.159	0.162	0.145	0.169	0.135	0.159
	(0.140)	(0.139)	(0.144)	(0.138)	(0.146)	(0.145)
Acquirer moderate concentration	0.0189	0.0205	0.00724	0.0189	-0.00104	0.0123
	(0.235)	(0.236)	(0.228)	(0.236)	(0.225)	(0.227)
Constant	1.001*	1.032*	0.988*	1.132**	0.938	1.081**
	(0.558)	(0.550)	(0.560)	(0.534)	(0.578)	(0.548)
Observations	516	516	516	516	516	516
loglikelihood	-980.0	-979.3	-979.9	-974.0	-976.7	-972.2
r2_p	0.0500	0.0507	0.0501	0.0558	0.0532	0.0576
chi2	197.1	240.5	220.5	285.7	195.8	261.1
p	0	0	0	0	0	0

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1