

# Institutional Distance and Brazilian Outward Foreign Direct Investment

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**Abstract.** Different studies have discussed the factors that influence outward foreign direct investment (OFDI) from developing countries. However, the choice of location and the role of institutional distance are still controversial. The aim of the present paper is to address the determinants of OFDI from Brazil from the perspective of the host countries. Using a panel data model, we have tested the impact of cultural and institutional distances on OFDI, and noted the moderating effects of the economic performance of the host country. The results show that institutional difference has a positive effect on OFDI; however, such effect is constrained by the size of the host country and the amount of its bilateral trade. We have found no statistically significant relationships between cultural distance and OFDI, but in our study geographical proximity had a positive effect on the strategy of Brazilian OFDI. The results pointed to two main implications. First, the positive effect of institutional distance on OFDI may be constrained by the bilateral trade flows between home and host countries. Second, multinational companies from Brazil are more likely to invest in a culturally distant country when it delivers better institutional performances, which suggests that there is a complementary relationship between cultural and institutional distance.

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The growing internationalization of multinational companies from emerging economies (EMNCs) can be described as a major trend in the current world economic scenario. In the last two decades, the foreign direct investment (FDI) outflows from such economies grew at a higher yearly average than those from developed economies. Over 58% of the FDI from emerging countries originates in Asia, especially from China and India. Latin America is the second largest source of FDI from emerging economies (UNCTAD, 2014).

Brazilian outward foreign direct investment (OFDI) was relatively insignificant throughout the 1990s. Following economic and institutional reforms in the latter half of the decade, Brazilian firms became increasingly internationalized, which stimulated the outward FDI as a strategy of entering and expanding business in foreign markets. Thus Brazil became, together with China and India, not only one of the main host countries of world FDI, but also one of the leading sources of outward FDI among developing countries. In 2013, FDI outflows from developing countries represented 21% of the world total outflows, and they registered around 21% of the total outward stock according to UNCTAD (2009; 2014).

Previous empirical studies on the determinants of FDI have emphasized the role of the economic environment and liberalization policies in the host country to attract foreign investment. However, very few attempts have been made to address the determinant factors of FDI from developing economies. Most of the studies focus on the case of Asian multinational companies (MNCs), particularly studies that investigate OFDI from China and India (Buckley et al.,

2007; Cheng & Ma, 2007; De Beule & Van Den Bulcke, 2012; Fung, Garcia-Herrera, & Siu, 2009; Kolstad & Wiig, 2012; Pradhan, 2011). Other studies are more focused on the effect of home country factors on OFDI and the performance of MNCs from emerging economies (Cuervo-Cazurra & Genc, 2011; He & Lin, 2012; Luo, Xue, & Han, 2009).

Egger and Winner (2005) and Cuervo-Cazurra (2006) have shown how well firms from developing countries can deal with imperfect institutions in the host countries. More recently, some studies have attempted to establish the connections between ID and natural resources in the case of FDI from emerging economies (Aleksynska & Havrylchyk, 2013), or the relationship between experience, location choice, and government support (Jinping, 2011; Lu, Liu, Wright, & Filatotchev, 2014). However, very few studies have addressed the question of how institutional distance (ID) affects outward FDI from developing countries.

Taking the eclectic paradigm, also called OLI Ownership, Localization and Internalization) paradigm as a general framework (Dunning, 1988), the present study aims to investigate the importance of the location of the host country on OFDI. According to the OLI paradigm, location cannot be restricted to a bundle of physical variables, but is instead represented by the institutions and good governance that contribute to economic efficiency and growth (Dunning & Lundan, 2008). On the other hand, considering that institutions are dynamic, changes over time in the qualitative content of location may significantly influence the strategies and performance of MNCs.

The results of the empirical studies have shown general trends in the behavior of MNCs regarding economic variables like growth and macroeconomic stability. However, the same studies have also shown more controversial and divergent results regarding the role of institutions and cultural distance (CD) between home and host countries.

Using Brazil as our case study, we intend to contribute to the debate about the determinants of FDI from developing countries by addressing the following questions: Do institutional and cultural distances affect OFDI from Brazil? To what extent are such effects moderated by economic factors in the host country?

The main assumption of the study is that MNCs from developing and advanced economies are different due to several factors. According to Narula (2012), the internationalization of firms follows a similar interaction between ownership assets and location assets regardless of their origin. However, the "O" assets may be constrained by the "L" assets of their home countries in different ways for developing and advanced economies respectively. We argue that OFDI from developing countries is constrained and shaped by the location-specific assets of their home countries (Narula, 2012). And since the initial conditions (L assets) vary considerably between countries, we expect significant differences in the early internationalization of MNCs from different countries, as suggested by Narula (2012). We also anticipate that such companies may display different behavior and may cope in different ways with ID. However, and in line with different contributions in the international business (IB) literature (Hennart, 2012; Narula, 2012; Rugman, Oh, & Lim, 2011), international performance requires knowledge assets, and depends on acquiring, maintaining, and developing firm-specific advantages (FSAs) or ownership-specific (O) assets (Narula, 2012). This means that firms from emerging countries with a high level of intangible assets are more likely to follow intensive strategies of involvement in foreign developed markets, with the aim to obtain and/or to enlarge their ownership-specific assets and compete globally (Hennart, 2012). The implications of such strategies are that firms from emerging economies are more likely to invest in and enlarge their foreign assets, no matter what the cultural and institutional distances might be. More specifically, distance does not necessarily have an adverse effect on firms' operations (Cuervo-Cazurra, 2012). Therefore, distance and foreignness cannot

be considered as pure liabilities anymore, but as new strategic opportunities which allow access to specific assets “for arbitrage, complementarity or creative diversity” (Zaheer, Schomaker, & Nachum, 2012, p. 26).

In this paper, we will not discuss the role of home country factors; instead, we will examine how the economic and non-economic factors in the host country influence the choice of location by MNCs. Brazil is an ideal country to illustrate and test some general assumptions about OFDI from emerging economies. First, it is among the most dynamic economies in an emerging country (the BRIC countries). Second, Brazil is the largest Latin American economy, the largest recipient of FDI in the region, and one of the leading host countries among the developing economies. Finally, yet significantly, although the country started to introduce important market reforms late in the 1990s, it has only been in the past ten years that the internationalization of Brazilian firms has really been felt. This internationalization continues to be an ongoing process, and this study will be a reflection of how Brazilian MNCs currently cope with different cultural and institutional distances in the host countries, as well as an assessment of the challenges of creating value-added activities cross-border.

The paper proceeds as follows. In the next section, we will discuss the growth and pattern of Brazilian OFDI. Then we will present a literature review and the theoretical framework of the study. In the subsequent section we will present the method and the estimate the results of our model. Finally, we will discuss our findings and their implications.

## **GROWTH OF OFDI FROM BRAZIL**

In the past, the economic and political environment in Brazil has offered little incentive for Brazilian companies to internationalize. Since the end of the 1990s the data shows a growing tendency towards more international involvement from Brazilian firms, not only in terms of import and export activities, but also in the acquisition of foreign companies and the building of new subsidiaries in different countries around the world.

After a period of different crises that affected Latin America and Brazil in the 1980s, most of the emerging countries in the region implemented macroeconomic policies designed to stabilize their economies and to create better conditions for a climate of investment. The implemented changes aimed at liberalizing the economies, removing the barriers on inward FDI and cross-border acquisitions, and creating regulatory processes to remove or at least reduce trade barriers among South-South countries.

Brazilian OFDI was relatively insignificant throughout the 1990s. In the second half of the 1990s Brazilian firms became increasingly internationalized, and this change stimulated the outward FDI into foreign markets. In 2002, OFDI was estimated at US\$ 2.5 billion, and reached its height in 2006, at US\$ 28.2 billion (Unctad, 2014). The amount of OFDI increased particularly after 2002, when the Brazilian economy bounced back from the crisis of 2001, and was then driven by a relatively long cycle of economic growth in developed and developing countries.

The data of FDI show that the flows of Brazilian investments were relatively insignificant during the period between 1990 and 2001, pointing to a low degree of internationalization of Brazilian companies. On the other hand, the data shows a high degree of fluctuation in the investment flows, suggesting the high sensitivity of investments to external changes in the economy. The expansion of Brazilian investment flows correlates strongly with the cycles of inward direct investments in the country. The increase of FDI in Brazil has contributed to a learning process by Brazilian companies, stimulating and enhancing their

international expansion, and has suggested a tendency towards more engagement of Brazilian firms in the world economy.

**Box 1.** Brazilian Economic Reforms in the 1990s.

To understand the recent growth of Brazilian OFDI and its dynamic, it is necessary to go back to the beginning of the 1990s, when most of the economic reforms were implemented, and patterns of international competitiveness in the country were established. The reforms also created the conditions in the domestic market necessary for the internationalization of Brazilian firms. The general framework of the reforms was based on three fundamental tools: Plano Real, economic openness, and regional integration (Cristini & Amal, 2006). The first part of the program was the so-called “Plano Real”, which is now regarded as one of the most important and successful strategies in Brazilian history for controlling inflation, reducing the degree of external vulnerability, and creating the economic and political conditions needed for long-term stability. The resulting macroeconomic changes in the country have created the conditions for a positive investment climate and, therefore, for the increased competitiveness of the Brazilian economy.

The second part of the plan was a systematic program to facilitate the liberalization of foreign trade and external financial flows. These changes provided new opportunities for economic growth but they also exposed the country to strong competition and new challenges. The third part of the reform and stabilization plan was related to the regional economic integration. The creation of the MERCOSUR contributed significantly to the increase of trade among its members, and stimulated new investments from outside the regional bloc. During this period, Brazil went on to establish a basis for the expansion of business investment projects of MNCs. Moreover, MERCOSUR, which benefited companies through the elimination or reduction of tariff barriers, contributed to the international expansion of Brazilian companies. This international expansion was not limited to export increase, but also manifested itself in a very gradual path through the establishment of sales and production subsidiaries.

In terms of the geographic distribution of Brazilian OFDI, the data points out two key periods. The first period, which started at the beginning of the 1990s and lasted until 2004, showed that the largest recipients of Brazilian FDI were tax haven countries like the British Virgin Islands, the Cayman Islands, and the Bahamas, which enjoyed a share of over 70% of the total OFDI. The concentration of Brazilian OFDI in tax haven countries can be explained by several factors, such as their high levels of regulations and taxes. Thus, moving to tax havens used to be a normal outcome of operating in a country with high levels of government controls (Stal & Cuervo-Cazurra, 2011). The year 2005 registered a shift in the geographic distribution of Brazilian FDI abroad. The participation of the tax haven countries decreased throughout the second half of the 2000s, representing in 2010 only 40% of all the Brazilian FDI abroad. Meanwhile the second period began, the share of Europe increased to 42%, and it became the largest recipient of Brazilian FDI abroad. The United States also increased its participation from 3% in 2001 to 9% in 2012 (BCB, 2014a).

## THEORETICAL FRAMEWORK AND HYPOTHESES

In the literature on IB and management several models have been provided to explain path and internationalization strategies. Dunning (1988) combined different perspectives (Buckley & Casson, 1976; Hymer, 1960) from the IB theories into one single framework, which was denoted as the eclectic paradigm. The principal hypothesis on which the eclectic paradigm of international production is predicated is that the level and structure of a firm's foreign value-adding activities will depend on four conditions being satisfied. These are (Dunning & Lundan, 2008, pp. 99-100):

(1) The extent to which it possesses unique and sustainable ownership-specific (O) advantages vis-à-vis firms of other nationalities in the servicing of particular markets or groups of markets.

(2) Assuming that condition (1) is satisfied, the extent to which the enterprises perceive it to be in their interest to add to its O advantages rather than to sell them, or their right of use, to independent foreign firms. These advantages are called market internalization (I) advantages.

(3) Assuming that conditions (1) and (2) are satisfied, the extent to which the global interests of the enterprises are served by creating, accessing, or utilizing their O advantages in a foreign location.

(4) Given the configuration of the ownership, location, and internalization (OLI) advantages facing a particular firm, the extent to which a firm believes that foreign production is consistent with the long-term objectives of the stakeholders and institutions which underpin its managerial and organizational strategy.

It is important to mention that while the first, second, and fourth conditions are firm-specific determinants of FDI, the third is location-specific and has a crucial influence on a host country's inflows of FDI. In this article, we will limit our discussion to the issue of location, expressed in terms of the cultural and institutional distances between the home and host countries of FDI. Based on the different types of advantages, the conceptual framework allows the identification of four different types of FDI: resource-seeking, market-seeking, efficiency-seeking, and strategic-asset seeking (Rugman & Verbeke, 2002).

## EMNCs IN THE INTERNATIONAL BUSINESS LITERATURE

Due to the growing academic and economic importance of MNCs from developing countries, several authors have attempted to document the internationalization processes of such firms. Results from these studies reveal that incremental behavior is also a feature from the internationalization of emerging markets' MNCs (EMNCs), and the psychic distance also affects the market selection process, even though it does not determine alone, for example, the FDI destination (Li, 2003).

Regarding the extent to which a firm will depend on ownership, internalization, and location advantages to internationalize its activities, Li (2003) and Lee and Slater (2007) suggest an adaptation for the specific case of EMNCs. This can be explained by the fact that these firms often end up developing ownership advantages over foreign markets, mostly in developed countries, due to better access to technology and knowledge. Cuervo-Cazurra (2007) classified the MNCs from developing countries as those that seek to develop ownership advantages abroad and those that aim to explore abroad the advantages acquired in their domestic market. Those firms that wish to develop new capabilities abroad should choose to establish a foreign subsidiary; either in developed economies, if they seek access to higher technology; or in developing economies, if they aim to obtain access to a country's abundant resources.

The literature on IB shows that foreign firms face different barriers that exist because of different levels of geographic distance, and psychological, cultural, and institutional differences between the country of origin and host countries of their investments (Nachum, 2003; Zaheer, 1995). These barriers are often called liability of foreignness (LOF). To overcome the LOF, measured as the cost of doing business abroad (Zaheer, 1995) and their disadvantage as latecomers, some MNCs can act as a springboard to address firm-specific disadvantages via international acquisitions of new assets.

In the literature, the main differences in the internationalization patterns between developed and developing countries can be summarized as following: (i) EMNCs are based in countries with a low average income per capita and weak institutional infrastructure; (ii) EMNCs offer limited ownership advantages, such as technology, brand or other intangibles assets when developing international operations; (iii) They are latecomers (Ramamurti & Singh, 2009) and operate differently from MNCs in the countries in which their investments are based; and iv) They used to invest in other developing countries, but also in developed countries (Sirkin, Hemerling, & Bhattacharya, 2008), acquiring other companies as part of their internationalization strategy (Gubbi, Aulakh, Ray, Sarkar, & Chittoor, 2010; UNCTAD, 2006).

Due to the growing academic and economic importance of EMNCs, several authors have attempted to establish economic stability, institutional change, and culture as key factors that explain the FDI performance of EMNCs. In the present study, we build upon the existing literature by discussing the effects of institutional and cultural factors on the outward FDI from Brazil. We use the concept of CD (Kogut & Singh, 1988) and the six-dimension framework of governance developed by Kaufmann, Kraay, and Mastrazzi (2009) to test the effect of those factors and their interactions in the host countries on the OFDI from Brazil. We investigate the effects of cultural and institutional distance in a comprehensive analysis, arguing that OFDI can be constrained by the distance from the host countries. However, with the macroeconomic literature in mind, we also discuss to what extent such effects can be moderated by the economic performance of host countries.

## EFFECTS OF CULTURE

The uncertainty associated with conducting business across borders is largely represented by the cultural differences between diverse markets (Doole & Lowe, 2008). The psychic distance proposed by the Uppsala model is commonly referred to as a factor that constrains the internationalization of firms and makes them more likely to enter in to markets that are closer culturally to their home market environments. Authors have estimated the effects of culture on international businesses using different indicators. Most of them are related either to the CD based on the Hofstede dimensions (Kogut & Singh, 1988), or to geographical distance, which is a physical measure mostly used by economists to capture the determinants of foreign trade (Angué & Mayrhofer, 2010; Ghemawat, 2001).

Different studies have pointed to a positive correlation between CD and FDI, as already mentioned by Thomas and Grosse (2001), which means that the higher the CD between the home and host countries, the more likely it is that MNCs will enter into foreign markets through FDI. However, some other studies have questioned how relevant the influence of culture really is on FDI flows, owing to the fact that MNCs are usually experienced international firms focusing on other advantages besides cultural proximity (Andersson, 2004; Li, 2003; Pangarkar & Lim, 2003). Several empirical studies have found strong support for a negative correlation between outward FDI from EMNCs and the distance from the home market (Cheng & Ma, 2007; Fung et al., 2009), and that outward FDI is

positively correlated to cultural proximity between home and host country (like the Chinese case; Buckley et al., 2007). However, the relationship between FDI and CD is still controversial.

According to the aforementioned literature, it seems that the empirical studies are not conclusive about the effects of the CD on the OFDI, and even less so when regarding the case of emerging MNCs. In the case of emerging MNCs, owing to their more limited international experience and limited ownership advantages, we believe that the correlation between CD and FDI could be positive or negative. However, when one considers that distance may limit the competitiveness of firms, and that EMNCs are seeking to expand their value-added activities abroad to create and enlarge their ownership advantages, we expect to see a positive correlation between OFDI and CD. Therefore, we will test the following two sub-hypotheses:

*Hypothesis 1.1 (H.1.1): The higher the CD between Brazil and host country, the higher OFDI will be.*

Ghemawat (2001) suggests that distance between two countries can manifest itself along the cultural, administrative, economic, and geographic dimensions. The geographic distance refers to the physical distance existing between the countries or geographic spaces in which the partners are operating (Angué & Mayrhofer, 2010). However, geographic distance is not simply a measurement of the distance between two countries in terms of miles or kilometers, but includes other attributes like the physical size of the country, average within-country distances to borders, access to waterways and the ocean, and topography. The geographic distance affects the costs of transportation and communications, so it is of particular importance to companies that deal with heavy or bulky products, or whose operations require a high degree of coordination among highly dispersed people or activities (Ghemawat, 2001). Considering that geographic distance can represent specific barriers to export, companies may opt for FDI as an entry mode strategy in foreign countries. Therefore, we test the following sub-hypothesis:

*Hypothesis 1.2 (H.1.2): The greater the geographical distance between Brazil and host country, the higher OFDI will be.*

## INSTITUTIONAL DETERMINANTS

The institutional analysis has evolved significantly in the last two decades, particularly its applications in the IB field. Hotho and Pedersen (2012) have identified three dominant institutional approaches: New Institutional Economics, New Organizational Institutionalism, and Comparative Institutionalism. While Organizational Institutionalism mainly focuses on organizational forms and organizational practices (Powell & DiMaggio, 1991), New Institutional Economics (North, 1990) investigates the implications of the functioning or effectiveness of home and host country institutions, and Comparative Institutionalism highlights the implications of differences in the structure and organization of economies for multinational companies (Hotho & Pedersen, 2012, p. 237).

Since the main objective of the present study is to investigate the determinants of Brazilian OFDI and particularly the effect of ID, we limit our institutional analysis to a discussion of New Economic Institutionalism. This approach asserts that the nature of exchange processes and the resulting amount of friction are dependent on the institutional context in which they take place (Hotho & Pedersen, 2012, p. 240). This implies that the effectiveness or

quality of the institutional framework has a direct bearing on the performance of countries and organizations.

North (1990, p. 3) defines institutions as “the rules of the game in a society or, more formally, [are] the humanly devised constraints that shape human interaction”. The author distinguishes between formal institutions, such as rules that human beings devise, and informal constraints, such as conventions and codes of behavior.

Thus, institutional constraints represent the framework within which human interactions take place, and consist of formal written rules as well as unwritten codes of conduct that underlie and supplement formal rules (North, 1990, p. 4). Formal rules can complement and increase the effectiveness of informal constraints. They may lower information, monitoring, and enforcement costs, and hence make informal constraints possible solutions to more complex exchanges. Formal rules also may be enacted to modify, revise, or replace informal constraints.

For North (1990), the institutions exist to minimize the uncertainties present in human actions for those who are subject to them. It means that under conditions of information asymmetry and limited computational ability, constraints reduce the cost of human interaction as compared to a world of no institutions. Therefore, the ID measures the formal and informal institutional constraints that shape the decisions MNCs make in order to enter and create value in foreign markets.

The burgeoning of institutional perspective in the 1990s and 2000s has contributed to the understanding not only of the different strategies that firms adopt when they go global, but also to the different performances that they register in different contexts (Peng, Wang, & Jiang (2008). One of the most significant contributions in this field is the shift from focusing on cultural differences between countries to the broader concept of the ID between the home and host countries (Kostova, 1997; Kostova & Zaheer, 1999; Xu & Shenkar, 2002). According to Hotho and Pedersen (2012), the introduction of ID as a measure that captures comparative institutional differences offers considerable promise in terms of enriching our understanding of how institutions affect international business.

In the specific case of our study, we use the world governance indicators of the World Bank (Kaufmann et al., 2009) to measure ID and to assess how much the difference between the quality of the institutional environment between the home and host countries affects OFDI from Brazil. Therefore, we conceptualize the institutions on a country-wide level, and we understand that institutions are constraints that may generate transaction costs and affect the internationalization of firms and organizations. In this case, we expect a negative effect to result from the institutional and cultural distances on the multinationality of firms. However, such a general prediction is constrained by the dimensions of the institutional environment in the home country. For firms from developing countries, distance may play a different role in their internationalization.

The relevance of institutions in the IB literature began to be noticed when the theorists perceived that economic conditions alone could not fully explain the competitiveness of a nation's industry (Amal, Raboch, & Tomio, 2009). Peng et al. (2008) consider the institutions as the third leg in the competitive tripod, in the way that a firm's level of competitiveness is not only a matter of resources possessed and industry-specific characteristics, but is also linked to the institutional scenario in its home market, which has an influence over local business practices. The institution's role is related to its ability to improve the markets' structure and efficiency by lessening transaction and information costs and uncertainty and instability levels (Mudambi & Navarra, 2002; North, 1990). Bevan, Estrin, and Meyer (2004) understand that both informal institutions and government arrangements should affect corporate strategies.

Nevertheless, it is important to underline that the role of institutions also has a counter position in the literature; authors like Witt and Lewin (2007) understand that poor institutions may drive local firms to international markets in order to overcome the limitations of their domestic barriers. Such behavior can be described as institutional escapism (Luo et al., 2009). The authors also accept that both approaches co-exist, and that their effects vary between firms and industries. While recent studies have indeed found some divergent results, the institutions mostly have a positive effect on the internationalization of firms from developed countries; but in the case of developing economies, studies have found correlations in the opposite direction (Buckley et al., 2007; Kolstad & Wiig, 2012).

In the context of our study, we argue that countries with a high and strong quality of governance may positively affect FDI flows, particularly those FDIs from countries with weak-institutional performance. According to Cuervo-Cazurra and Genc (2008), poor governance makes domestic markets inefficient for business activities, due to the instability of the institutional environment.

In the case of OFDI from Brazil, which is a country with relatively weak institutional performance, we expect to see a positive relationship between the governance quality of the host country and OFDI.

Based on the literature review above, we will test the second hypothesis that considers the effect of institutional quality and governance in the host country on the Brazilian OFDI:

*Hypothesis 2 (H.2): Strong institutional host country governance has a positive effect on OFDI from Brazil. Therefore, the higher the ID between Brazil and the host country, the higher OFDI is.*

To capture the interaction between institutions and CD, we will test to what extent there are complementary or substitutive relationships in terms of their effects on OFDI. A complementary effect means that a higher CD may have a positive effect on OFDI if ID is high. A substitutive effect will point to a diverse effect on a country's culture and institutions. Due to the limited expansion of OFDI from Brazil, we will consider that their relationship is more complementary than substitutive.

*Hypothesis 3 (H.3): The positive impact of CD on OFDI from Brazil is stronger when ID is high.*

## THE MODERATING EFFECT OF ECONOMIC PERFORMANCE

The effects of the economic performance of the host country have been significantly discussed in the literature of FDI determinants (Buckley, 2010; Voss, 2011). To report on these effects, authors have used different proxies and indicators. Most of the indicators are related to the size and growth of the economy (GDP and GDP per capita), the macroeconomic stability (inflation rate), and trade openness (trade flows between the home and host countries, and also the exchange rate). GDP is often cited as an indicator of the size and growth potential of a country. Several authors have found a significant positive impact of GDP over the outward FDI (Amal et al., 2009; Frenkel, Funke, & Stadtmann, 2004; Kyrkilis & Pantelidis, 2003, 2005).

Other authors have also tested the effect of a host country's GDP on OFDI from developing countries. Cheng and Ma (2007) pointed out the positive impact of the host country's GDP on the Chinese FDI. Subramanian, Sachdeva, and Morris (2010) studied FDI outflows from India. They found that acquisitions have been the predominant mode of entry for Indian firms investing abroad, and that seeking new markets has been the primary target of investors. Fung et al. (2009),

comparing the case of FDI from China to other Asian MNCs, show that the economic performance of the host country was statistically significant. Different empirical studies, using different econometric models, suggest a positive correlation between GDP and FDI, which suggests the predominance of the market-seeking strategy by MNCs from developing economies.

However, other empirical studies come to different conclusions, stating that the GDP's effects are either positive but not significant (Bae & Hwang, 1997; Faria & Mauro, 2009) or negative (Thomas & Grosse, 2001). According to Faria and Mauro (2009), the GDP per capita was more significant than the total GDP. Thus the authors regard the per capita income as a better proxy for a nation's aggregated ownership advantages level due to the reflex of demand structures of the market, since a higher personal income represents higher levels of demand from consumers, which lead firms to offer improved products and services.

Other macroeconomic variables, such as inflation and interest rates, are relevant indicators of the economic stability of countries. High levels for such indexes hinder the appeal of investing in a country (Thomas & Grosse, 2001), as higher interest rates can reflect a tendency towards higher inflation and, therefore, a higher climate of macroeconomic instability, which indicates a negative business climate.

The trade flows of a nation can be directly related to the local exchange rate as both of them have similar effects on the outward FDI. According to the Uppsala internationalization model (Johanson & Vahlne, 1977), the higher the trade flows between two countries, the more likely firms are, through a process of learning and knowledge accumulation, to increase their involvements through FDI. This implies a positive impact of the economic openness of a country over inward FDI. However, authors also suggest that in situations where trade and OFDI are negatively correlated, FDI is more likely to replace trade, pointing to substitutive relationships (Lim & Moon, 2001). In this article, we expect to see a positive correlation between trade and OFDI, pointing to a strategy of efficiency-seeking and resource-seeking FDI projects, in which FDI creates an intra-firm trade, mostly between raw materials, capital goods, and finished products manufactured under more competitive costs. However, a negative relationship between trade and FDI means that the MNC is more engaged in market-seeking projects, since the FDI replaces currently existing exports (Amal & Raboch, 2010; Seo & Suh, 2006; Swenson, 2004).

The impact of the exchange rates also presents a conflicting result in the literature regarding their effects on FDI. In this case, firms can be more or less likely to offer FDI depending on how the exchange rates affect their goals. Chen, Rau, and Lin (2006) argue that firms performing efficiency-seeking projects might wish to invest more abroad in the case of a valued domestic currency in order to reduce production costs. On the other hand, firms willing to conduct market-seeking projects may rather invest overseas when the domestic currency is unvalued, since foreign markets might offer higher profits. Thus, it is reasonable to accept that the relationship between outward FDI, economic openness and the exchange rate is dependent upon the FDI's nature.

Based on the literature cited above, we define the economic performance of a country as the performance of GDP, GDP per capita, trade openness, and real exchange rate variation. We therefore hypothesize:

*Hypothesis 4 (H.4): Brazilian OFDI is positively correlated to the economic performance of the host country, expressed in terms of GDP, GDP per capita, trade openness, and exchange rate variation. The higher the economic performance of the host country, the higher FDI flows to that country will be, suggesting that Brazilian MNCs show a market-seeking strategy.*

In the present article, we suppose that host country's economic performance exerts a moderating effect on OFDI. This implies that the effects of ID between the home and host countries are constrained by the size and income level of the host country, and also by the level of trade relationships between the home and host countries. On the other hand, a high CD will exert a negative effect on OFDI, no matter the size of the host country.

We therefore suggest the following hypothesis:

*Hypothesis 5 (H.5): The positive impact of ID on OFDI from Brazil is stronger when the economic performance of the host country is high.*

## EMPIRICAL MODEL SPECIFICATION AND ESTIMATES

Based on the literature review above, the outward FDI from Brazil depends on the economic performance of the host country, the cultural and geographical distances between the home and host countries, and the institutional environment in the host country, according to equation 1:

$$\begin{aligned}
 DLOFDI_{it} = & c + \beta_1 LCD_{it} + \beta_2 LGD_{it} + \beta_3 LID_{it} + \beta_4 LGDP_{it} + \beta_5 LGDPPC_{it} \\
 & + \beta_6 LTRD_{it} + \beta_7 LRER_{it} + \beta_8 LID \times LCD_{it} + \beta_9 LID \times LGDP_{it} \\
 & + \beta_{10} LID \times LTRD_{it} + \varepsilon,
 \end{aligned} \tag{1}$$

Where "c" is the constant and "ε" is the residual error of the equation. The "D" in the dependent variable denotes that the variable is in first differences (see Table 4). To add non-linear characteristics on the estimations, every variable is in its logarithmic form (denoted by the letter "L"). All variables are represented by "i", the host country, and "t", the time (period). Table 1 presents the main variables, with the hypothetical signs and the sources of the collected data.

### VARIABLES

#### *Dependent Variable*

The dependent variable is expressed by the stock of outward FDI from Brazil to the host country (for more details on this, see BCB [2014a]). Data by the Central Bank of Brazil is only available as inward stocks data by host countries. We constructed our database using two sources. The first source is the record of OFDI in the period from 2001 to 2006 (BCB, 2014b), and the second source records the OFDI from 2007 to 2013 (BCB, 2014c).

The data is composed of Brazilian annual OFDI ranging from 2002 to 2012. Our sample is represented by 28 countries in a balanced panel. We excluded the tax haven countries, for which we expect that Brazilian MNCs are not generating value-added activities (Beugelsdijk, Hennart, Slangen, & Smeets, 2010). The 28 countries for which we could gather all the data needed to estimate the model are mainly located in Latin America, the European Union, North America, and China, representing 70% of the main destinations of Brazilian OFDI.

Several authors have used inward stocks of FDI to record value-adding activities of MNE affiliates in the host countries (Dunning & Lundan, 2008; Dunning, Fujita, & Yokova, 2007). However, according to Beugelsdijk et al. (2010), such measurements may bias the FDI stocks as a measure of total MNC affiliate activity for many reasons. First, since FDI stocks and flows only capture

the net financial capital flows (known as the Balance of Payment concept), they do not include all the funds that MNEs raise from host countries with large stock and bond markets. On the other hand, not all FDI stocks in the host countries are used to generate affiliate added value in those countries (such as the case of tax havens).

Despite the restrictions and relative limitations of the concept of FDI stock as a measure, it still captures the capital flows between the home and host countries. On the other hand, since our analysis is based on country-level data, the measurement will capture the relative level of involvement of MNEs in the host countries.

### *Independent Variables*

**Cultural distance.** The CD is measured by the index of Kogut and Singh (1988) based on differences in scores for each of the six Hofstede's (1980) cultural dimensions (Power Distance [PDI], Individualism versus Collectivism [IDV], Masculinity versus Femininity [MAS], Uncertainty Avoidance [UAI], Long-Term Orientation [LTO], Indulgence versus Restraint [IND]) between the country of origin of FDI and the host country of FDI, according to the following equation:

$$CD_j = \sum_{i=1}^6 \{(I_{ij} - I_{iu})^2 / V_i\} / 6 \quad (2)$$

Where I is the index for one of the six dimensions (i) for the host country (j) and (u) for the home country, which is Brazil in this case. The variable V stands for the variance of each dimension of the index. Thus, CD shows the cultural difference or distance between Brazil and the host country of Brazilian FDI. The higher the score is, the higher the cultural differences between the two countries.

This index is calculated by subtracting Brazil's scores in each of the six dimensions from the scores of the recipient country of FDI. The square of the resulting difference is then divided by the variance of the scores for each dimension. The resulting values of the differences for each dimension are added together and then divided by six. The scores were taken from Hofstede's website ([www.geert-hofstede.com](http://www.geert-hofstede.com)). However, the cultural effect can also be measured by the geographical distance, which is measured using the great circle distance between the capital of Brazil and the capitals of the host countries of Brazilian OFDI.

**Institutional distance.** The effect of the institutional framework was calculated using the governance indicators made available annually by the World Bank ([www.databank.worldbank.org](http://www.databank.worldbank.org)). The indicators are based on the research by Kaufmann et al. (2009), which covered 212 countries and territories and measured six dimensions of governance: Voice and Accountability (VA), Regulatory Quality (RG), Rule of Law (RL), Political Stability of Violence/Terrorism (OS), Government Effectiveness (GE), and Control of Corruption (CC). The authors attributed a score of between -2.5 and +2.5 to each dimension, with higher scores indicating higher levels of the quality of governance.

Similar to the formula proposed by Kogut and Singh (1988, p. 422), we hypothesize that the more institutionally distant the host country is from Brazil, the more likely it is that Brazilian MNCs will perform OFDI. Using Kaufmann et al.'s (2009) dimensions of governance, a composite index was formed according to the deviation of each of the six governance dimensions mentioned above of each host country from the governance dimensions of Brazil. The deviations were corrected for the differences in the variances of each dimension and then arithmetically averaged. Thus, in algebraic form, like Kogut and Singh (1988), we propose the following index to test the effect of ID on OFDI from Brazil:

$$ID_j = \sum_{i=1}^6 \left\{ \frac{(WGI_{i,j} - WGI_{iu})^2}{V_j} \right\} / 6 \tag{3}$$

Where  $WGI_{ij}$ , stands for the  $i$ th dimensions and  $j$ th country,  $V_i$  is the variance of the index of the  $i$ th dimensions,  $u$  indicates the home country of OFDI (Brazil), and  $ID_j$  is the measurement of ID of  $j$ th (host country) from Brazil.

**Moderating variables.**

\* GDP: Gross Domestic Product refers to the nominal GDP of the host country of Brazilian OFDI and expresses the market size of the host country.

\* GDPPC: GDP per capita refers to the GDP per capita in the host country of Brazilian OFDI and is used to assess productivity in the host country.

\* Trade flows express the bilateral trade between Brazil and the host country of Brazilian FDI.

\* Exchange rate refers to the real exchange rate variation between Brazilian currency and the US dollar. This variable was calculated using the Consumer Price Index (CPI $_j$ ) and the nominal exchange rate (NER $_j$ ) of the host country ( $j$ ), and the Consumer Price Index of the United States (CPIUS). The real exchange rate equation for the host country is  $RER_j = NER_j \times (CPIUS / CPI_j)$ ; data from the Brazilian Central Bank ([www.bcb.gov.br](http://www.bcb.gov.br)).

\* To assess the moderating effects of economic variables, we calculated ID with GDP and bilateral trade flows.

Table 1 reports together the variables, hypotheses, expected signs for the coefficients, and respective source of the variables.

**Table 1.** Variables, hypothetical signs, and sources

Variables	Hypotheses	Hypothetical signs	Sources
Outward Flows of Foreign Direct Investment (OFDI)		Dependent variable	Brazilian Central Bank- BCB
Hypothesis H.1	Culture effects		
Cultural Distance (CD) <sup>1</sup>	H.1.1	+/-	Hofstede Website
Geographical Distance (GD) <sup>2</sup>	H.1.2	+/-	GlobeFeed
Hypothesis H.2	Institutional Effects		
Institutional Distance (ID)	H.2: ID effect	+	World Bank
Hypothesis H.4	Economic Performance Effects		
Nominal GDP (GDP)	H.4.1	+	World Bank
GDP per capita (GDPPC)	H.4.2	+	World Bank
Trade Flows (TRD)	H.4.3	+/-	World Bank
Real Exchange Rate (RER)	H.4.4	+/-	World Bank
Hypothesis H. 3	Interaction		
ID * CD	H.3 Complementary or substitutive effects	+/-	
Hypothesis H. 5	Interaction		
ID*GDP	H.5	+	
ID*TRD	H.5	+	

1. Data for cultural dimensions was obtained from [www.geert-hofstede.com/hofstede\\_dimensions.php](http://www.geert-hofstede.com/hofstede_dimensions.php)  
 2. Distance between Brazil (home country of FDI) and the main city (capital or capital's main airport) of the host countries (<http://distancecalculator.globefeed.com/>).

Based on country data, we estimated a panel model for Brazil. According to Raj and Baltagi (1992), the panel data technique is used when observations in cross sections and time series are taken into account simultaneously. The advantage of the method, according to Baltagi (1992), is that it allows a level of specification that helps to identify an economic model that may offer tighter control over individual heterogeneity. On the other hand, in reducing the effects of multicollinearity among the independent variables, the panel technique increases the efficacy of the estimations. Table 2 shows the correlation matrix for the dataset we used and the descriptive statistics.

**Table 2.** Correlation matrix and descriptive statistics

Variables	1	2	3	4	5	6	7	8	9	10
1. LCD	1									
2. LGD	0.68***	1								
3. LID	0.41***	0.49***	1							
4. LGDP	0.48***	0.74***	0.36***	1						
5. LGDPPC	0.40	0.64***	0.59***	0.65***	1					
6. LTRD	0.04	0.13**	-0.11**	0.64***	0.13**	1				
7. LRER	0.00***	0.00	-0.02	-0.19***	-0.21***	-0.34***	1			
8. LIDxLCD	0.20***	-0.34***	-0.22***	-0.20***	-0.20***	0.11*	-0.02	1		
9. LIDxLGDP	0.40***	0.48***	1.00***	0.35***	0.58***	-0.11*	-0.01	-0.20***	1	
10. LIDxLTRD	0.41***	0.49***	1.00***	0.36***	0.58***	-0.09	-0.02	-0.23***	1.00***	1
Mean	-0.13	8.69	0.04	26.32	9.59	21.84	4.59	0.28	1.66	0.75
Median	0.08	8.90	0.28	26.51	10.09	21.99	4.51	0.14	7.35	6.15
Std. Dev.	0.75	0.62	0.93	1.74	1.27	1.41	0.21	0.60	24.54	20.43
Observations	308	308	308	308	308	308	308	308	308	308

\* Significant at 10%. \*\* Significant at 5%. \*\*\* Significant at 1%.

The table of the correlation matrix shows a low level of correlation between the variables. Only the interaction variables present high correlations. In the estimated panel model, we isolated the variables in order to account for multicollinearity effects. It is worth noting, as pointed out by Hsiao (2003, p. 311), that one of the main benefits of panel data is that it attenuates the problem of multicollinearity by increasing the degrees of freedom, which is possible because the panel technique augments the dataset by combining several cross-section units and periods (time series). Moreover, the addition of a logarithm has also helped, because it seems that the strong interrelations of the variables were related to linear relations, which are eliminated by incorporating the nonlinear

operations. This means that better data and a bigger dataset is one of the ways of eliminating multicollinearity, as noted by Baltagi (2011, p. 76).

Before discussing the results of the model's estimation, some preliminary issues have to be addressed. First, panel unit root tests were computed to check whether the variables are stationary in level or not. The results of these tests are shown in Table 3.

**Table 3.** Panel unit root tests

Variables	Levin, Lin & Chu		Im, Pesaran and Shin		ADF - Fisher Chi-square		PP - Fisher Chi-square	
	Level	First diff.	Level	First diff.	Level	First diff.	Level	First diff.
LOFDI	0.89	-15.45***	3.50	-10.81***	31.55	212.00***	49.33	271.00***
LID	-6.27***	-11.90***	-2.50***	-6.04***	82.61***	137.28***	69.21***	142.82***
LGDP	-6.58***	-13.48***	-1.65**	-6.39***	80.51**	143.79***	215.72***	177.82***
LGPPC	-6.29***	-11.72***	-1.51*	-5.99***	88.20***	136.19***	217.33***	187.14***
LTRD	-3.71***	-14.56***	1.546	-8.71***	26.07	188.26***	26.84	259.97***
LRER	-5.54***	-2.99***	0.90	-2.76***	36.58	80.19**	73.15	69.34
LIDxLCD	-6.27***	-11.90***	-2.50***	-6.04***	82.61***	137.28***	69.21***	142.82***
LIDxLGDP	-6.59***	-11.85***	-2.92***	-5.98***	87.50***	136.35***	70.80*	141.68***
LIDxLTRD	-6.86***	-11.66***	-3.13***	-6.01***	90.92***	136.72***	72.39*	139.22***

\* Significant at 10%. \*\* Significant at 5%. \*\*\* Significant at 1%. For the variables LCD and LGD, it was not possible to calculate the panel unit root tests due to their time invariance characteristic.

Thus, only one variable is non-stationary in level, i.e. LOFDI. The panel was estimated through a two-way random-effects model based on the outcomes of the Hausman test (see Table 3). This indicates that the null hypothesis of consistent estimators for the random-effects model cannot be rejected. In addition, the estimation also opted for corrections regarding heteroskedasticity and autocorrelation using the White Period correction, which is used for datasets with a large number of cross-sections.

On the other hand, we adopted a step-wise technique to run five models to test the above-discussed hypotheses. The first model tests only the cultural and geographical variables. The second and third models will test, respectively, the effects of ID and its interaction with CD. The fourth and fifth models will test, respectively, the effects of the interactions, respectively between ID and GDP, and ID and trade. We will include the economic performance variables as moderators in all five models. Table 4 reports the model estimations.

**Table 4.** Model estimations

Regression	Model I	Model II	Model III	Model IV	Model V
Constant	0.8673	0.2808	0.3473	0.2759	0.2777
LCD	0.0546				
LGD	-0.1519*				
LID		0.0557**	0.0591***		
LGDP	0.0911**	0.0397	0.0607**	0.0409*	0.0413*
LGDPPC	-0.0033	-0.0234	-0.0316	-0.0226	-0.0206
LTRD	-0.0885**	-0.0501*	-0.0714***	-0.0514*	-0.0529*
LRER	0.0621	0.0517	0.0292	0.0507	0.0512
Interactions					
LIDxLCD			0.1023**		
LIDxLGDP				0.0020**	
LIDxLTRD					0.0022**
R <sup>2</sup>	0.0122	0.0115	0.0138	0.0113	0.0109
DW	2.3901	2.3888	2.4040	2.3884	2.3877
Hausman Test (Cross-section and period random)	3.8242 (0.2811)	6.4341 (0.1690)	8.9117 (0.1126)	6.4105 (0.1705)	6.0938 (0.1922)

\* Significant at 10%. \*\* Significant at 5%. \*\*\* Significant at 1%. For the Hausman test, p-value is between brackets.

The overall results of the estimated models show the relatively stable behavior of the variables. Although the values of the coefficient of determination R<sup>2</sup> are relatively low (but closer in all model alternatives) it seems that Models III and IV that include ID, interaction between institutional and cultural distance, and the interaction of ID with the GDP have the best predictive power. This assessment is based on the analysis of the coefficient of determination R<sup>2</sup>, which registered a value of 0.0138 and 0.0113, with the values of the F-statistics indicating 8.9 and 6.41 respectively, the highest among all other alternatives of model regressions.

According to the results of Model I, it seems that Brazilian OFDI is positively correlated to the size of the host country as measured by the GDP, and is statistically significant at 5%. The higher the GDP of the host country is, the higher the flows of Brazilian FDI to that country are. Bilateral trade between Brazil and its host countries has been found to be negatively correlated and is statistically significant at 5%, pointing to a more substitutive relationship with FDI. The results suggest that the investments of Brazilian MNCs are more concentrated in larger economies, and that, due to the negative coefficient of bilateral trade, the results indicate a substitutive relationship between trade and OFDI. This suggests that in situations where there are some trade barriers, Brazilian firms will be quick to follow a strategy of FDI to enter into those markets. The results give some support for the market-seeking hypothesis, suggesting that the investments of Brazilian MNCs are probably intended to meet a growing demand in the host markets. Exchange rate and GDP per capita were not found to be statistically significant.

The model estimation has also shown that geographical distance was statistically significant at 1% and presented opposite patterns of correlation to the Brazilian OFDI. Thus, according to the results of Model I, it seems that Brazilian OFDI are more likely to perform well in geographically closer markets, which means that the closer the host country is geographically, the more likely Brazilian MNCs will be to enter into those markets through FDI. CD was not found to be statistically significant.

The results point to two possible implications. The first is that when the geographical distance is shorter, the more likely Brazilian MNCs will be to invest in sales and/or production subsidiaries. A shorter geographical distance suggests relatively closer cultural behavior, which will make it easier to overcome the liability of foreignness. In this case, we expect that Brazilian MNCs may have the knowledge and experience to assume more risks and to commit resources in order to develop a market-seeking strategy. The second implication is that when the distance between the home and host countries is shorter, the higher OFDI to that country will be. This result suggests a regional involvement of MNCs that can be influenced by the advantages related to geographic proximity.

Thus, the results confirm Hypothesis 1.2, suggesting that Brazilian OFDI is positively correlated to geographical proximity. However, we could find no evidence of the effect of cultural proximity (no support for Hypothesis 1.1). On the other hand, the size of the host economy has been found to be positively correlated with OFDI, pointing to a more market-seeking strategy of Brazilian MNCs, and that bilateral trade and OFDI are substitutive strategies.

Model II presents a positive correlation between OFDI and ID. This relationship was found to be statistically significant at 5%. This result suggests that the international involvement of Brazilian MNCs is more likely to occur in countries that show an improved institutional environment in terms of business climate, political stability, existing rules or laws, and government effectiveness. A socially and politically stable country which demonstrates transparency and clear rules will also reduce the risks related to cross-border added-value transactions, and will therefore reduce the impact of the LOF. It means that a positive institutional environment positively affects the investment strategies of MNCs from Brazil, since tighter regulation leads firms to reduce uncertainty and transaction costs, making them more competitive in foreign markets. The results of Model II support Hypothesis H.2.

In Model III we tested the effect of the interaction between CD and ID on OFDI. The model estimate has shown a positive correlation, and was statistically significant at 5%. The model also presents a positive correlation between ID and OFDI. These results point to an important implication. Brazilian OFDI is positively correlated to ID: the higher ID is, the higher OFDI will be. However, Brazilian firms are more likely to invest in culturally distant countries when the institutional environment in those countries offers a better level of performance than in the home country. Thus, we found positive support for Hypothesis 3 about the impact of interaction between ID and CD.

Model IV presents a positive and statistically significant (5%) correlation between OFDI and the interaction between the ID and GDP of the host country. Model V also shows a positive and statistically significant (5%) correlation between OFDI and the interaction between ID and bilateral trade. The results suggest that the positive effect of ID on OFDI is constrained by the economic size (GDP) of the host country, and by the importance of bilateral trade between the home and host countries. This result gives support for Hypothesis H.5, which considers the moderating effect of the economic performance of the host country on OFDI.

## DISCUSSION AND FINAL REMARKS

The internationalization of Brazilian MNCs is to a large extent related to the market and institutional reforms that have shaped the country since the beginning of the 1990s. Those reforms and institutional changes positively affected the investment climate in the country by attracting MNCs from the USA and Europe to take part in specific projects in the infrastructure and communications (privatization), and in developing new greenfield projects in order to meet the needs of a growing domestic market. The implication of these changes and the engagement of MNCs in Brazil during the 1990s have also stimulated the domestic firms to engage in the foreign markets. According to the Investment Development Path, the development level of a country encourages FDI inflows and stimulates specific ownership advantages for local firms over time. This mechanism can speed up the internationalization process while fostering the development of corporate skills and competencies for managing plants in a variety of markets.

The home market factors can be seen as key drivers of the international expansion, largely explaining the pattern of the internationalization of Brazilian firms. These home market factors have shaped the form and intensity of how EMNCs approach foreign markets, and their own performances in the host countries. Thus, studying the case of Brazilian OFDI represents an important step in understanding the development of MNCs from emerging countries, and the extent to which it may present differences to the mainstream theories of IB.

In this paper, we have attempted to address the determinants of Brazilian OFDI from the perspective of the host countries in order to assess their economic potential. However, we also wanted to establish the impact of cultural and institutional distances on OFDI. This represents an important contribution in understanding the dynamic of MNCs from emerging countries.

Our empirical analysis reveals that the economic performance of the host country is a significant factor to be considered in the internationalization strategy of EMNCs. The economic performance of the host country is connected not only to the size and growth of the economy, but more specifically to its trade openness, suggesting that MNCs are quicker to develop substitutive strategies of entering into foreign markets. On the other hand, the estimation of the model, different from previous empirical studies (Buckley et al., 2007; Cheng & Ma, 2007; Fung et al., 2009), has shown that cultural proximity does not affect the internationalization of Brazilian MNCs. But there is a negative correlation between geographical distance and OFDI, suggesting that Brazilian OFDI flows more easily between countries which are closer geographically, pointing to a more regionally oriented internationalization.

However, unlike previous studies (Buckley et al., 2007; Kolstad & Wiig, 2012), we found a positive correlation between the institutional environment in the host countries and Brazilian OFDI. This suggests a different pattern of investment by Brazilian MNCs compared to Asian MNCs, since it has been established that Chinese OFDI are more attracted to countries with poor institutions, and that the limitations of these institutions is moderated by the endowment of natural resources in the host country (Aleksynska & Havrylchyk, 2013), or by the support of the government in selecting the location (Lu et al., 2014).

According to the assumption of Hymer (1960), firms will invest abroad because of their ability to compete in other markets, due to the fact that they have specific ownership advantages (Dunning, 1988) which allow them to enter into new markets through FDI instead of developing their value-added activities through export transactions. In Zaheer's (1995) approach, firms will be able to overcome the transaction costs related to foreign market entry and therefore they

will overcome the LOF because of the specific assets they have developed to sustain their global competitiveness. This is a fundamental assumption of MNC theory in the IB literature. It seems, according to the results of our panel model, that Brazilian OFDI is also positively correlated to the CD, but it was not found to be statistically significant. The higher the CD between Brazil and the host country, the higher OFDI is to that country. In this way, MNCs from Brazil follow the same behavior as MNCs from developed countries. It means, however, that Brazilian MNCs hold specific ownership advantages to overcome the LOF, even though the restrictions and limitations of competitiveness are related to the home market's constraints. This is an important finding that may suggest that despite the differences in the level of development in the countries from which the OFDI originates, firms in these different countries are all quick to show the same inclination towards international involvement.

In our model, we also tested the effect of ID on OFDI. In the IB literature, a weak institutional environment represents a high level of market imperfection, macroeconomic and political instabilities, and therefore, a high risk for investment, and for FDI in particular. Since the end of the 1980s, most countries from Eastern Europe as well as other developing countries have set up important economic and political reforms, and have adopted specific measures that create an open climate for foreign firms. The economic reforms and political stability in the developing countries stimulated significant FDI inflows, and could contribute to the economic growth and development in those countries. In the FDI literature, several authors have pointed to a positive correlation between market reforms, improved institutional environments, and inward FDI (Mudambi & Navarra, 2002). However, the relationship between institutions and FDI is still controversial. Authors have suggested assessing this relationship using ID indicators (Kostova, 1997). The idea to focus on the distance has contributed to shifting the discussion from macro-level analysis to firm-level analysis. It means that authors have focused much more on how MNCs cope with the ID, and less on their effects on FDI projects.

The growing flows of FDI from developing countries have been an important milestone in the world FDI patterns in the 2000s. Several studies (Cuervo-Cazurra, 2007; Ramamurti & Singh, 2009) have pointed out the differences between MNCs from developed and developing countries due to the differences in the home countries' conditions of competitiveness (Cuervo-Cazurra, 2012; Hennart, 2012; Narula, 2012). The results of the studies have suggested that the effects of institutional environment in the host country are controversial, and that there are differences among developing countries as well as in developed ones. Chinese OFDI (Amal & Raboch, 2010; Kolstad & Wiig, 2012) has shown a negative correlation with its institutional environment. The weaker the institutional environment in the host country, the higher OFDI is, suggesting that MNCs from developing countries are able to cope with unstable institutions due to the knowledge they have accumulated in their home countries about how to deal with factors such as corruption, political instability and accountability.

Moreover, the model points to a positive correlation between OFDI and ID (we used a composite index to record the relationship). It means that the higher the ID between Brazil and the host country, the higher OFDI is to that country. Considering that Brazil has a low institutional performance, according to the governance indicators of the World Bank, a higher ID means that the host country performs better in terms of governance indicators, and therefore, that the investment climate is more favorable than in the home country. The empirical finding shows that MNCs from Brazil are quicker to invest in countries that offer better institutional environments. However, it seems that such relations between ID and OFDI are restrained by the economic performance of the host country and by the importance of bilateral trade. This may suggest three important conclusions.

First, that the FDI strategy of Brazilian MNCs is a more market-seeking strategy. Second, that OFDI in an institutionally distant country may be constrained by the flows of trade between the two countries, pointing to a relatively gradual process of commitment of Brazilian MNCs as a way to cope with ID. Finally, in the IB literature, very few attempts have been made to assess the interaction between cultural and institutional distances. Some authors (Xu & Shenkar, 2002) consider that ID is a much broader concept, and is therefore much more efficient at reflecting the differences among countries than the concept of CD. Scott (2001) considers CD as one of the three pillars of institutions (cognitive-cultural pillar). In our panel model, we create a variable (CDxID) to assess the interaction between them. The model estimation has pointed to a positive correlation between OFDI and CDxID. This finding suggests that MNCs from Brazil are quicker to invest in culturally distant countries that present better institutional performances than Brazil, which suggests that there is a complementary relationship between the two variables (culture and institutions).

#### Managerial Implications

What are the main lessons that we draw from the case of Brazil in terms of understanding the internationalization patterns of emerging MNCs? The estimation of the models has shown that OFDI is highly correlated to the economic performance of the host countries, suggesting a more market-seeking strategy, unlike the results of some empirical studies about Asian MNCs, which have pointed to more efficiency and resource-seeking strategies. In this case, we suggest that the FDI strategy of Brazilian MNCs is less oriented to create capabilities and ownership advantages in the host markets and is more focused on opportunities of growth. The other characteristic of the Brazilian MNCs suggested by the results of the panel model is that institutions do matter. This finding suggests that Brazilian MNCs, due to their limited global experiences and knowledge about foreign markets, prefer to invest in distant countries with a positive institutional environment. This feature of Brazilian MNCs is not in line with the findings relating to Asian MNCs.

Such results point to some differences in the international involvement behavior of Brazilian MNCs. First, like MNCs from developed countries, they do enter into foreign markets through FDI in culturally distant countries. This pattern of international commitment suggests that they also hold specific ownership advantages that enable them to overcome the LOF. However, our results suggest that such behavior is more likely to occur when culturally distant host countries present a better institutional environment than the home country. In other cases, distance does matter, and Brazilian MNCs will be more ready to invest in geographically closer countries (like Latin American countries). This finding is in line with the general assumption that location constrains the ownership assets of MNCs from developing countries, and therefore limits the international competitiveness and expansion of Brazilian firms. On the other hand, Brazilian MNCs are quick to invest in distant countries when the institutional environment in the host countries is better than in Brazil. A better institutional environment will reduce the cost of transactions, and therefore will create better conditions for firms from developing countries to learn about the foreign markets, and to develop or enlarge their ownership advantages through different entry modes.

The results of the estimation model present some positive and some negative implications. Firstly, the existing theories of IB can explain many of the differences in the patterns of emerging MNCs. More specifically, the eclectic paradigm and institutional theories have been shown to be relevant in terms of explaining the role of the potential host market, and how institutions affect internationalization strategies. On the other hand, due to the very short time series of Brazilian OFDI, the results of the estimation models are more suggestive, and point more to tendencies and trends, and not to differences among firms, which is an important limitation of this study. In terms of

investigating this issue further, we would suggest conducting a more empirical analysis based on firm data, as well as developing comparative studies among MNCs from different emerging economies.

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