INSTITUTIONAL DISTANCE AND THE PERFORMANCE OF FOREIGN SUBSIDIARIES IN BRAZILIAN HOST MARKET: A *POSITIVE* RELATIONSHIP

Abstract

The objective of this article is to contribute to the ongoing and unresolved debate in the IB literature with respect to what drives or impedes MNC success in emerging markets, focusing specifically on the impact of institutional conditions on subsidiary performance. In the understanding that greater attention to different institutional settings and their diversity has much to offer theory-building in the international business area, this panel study examines the influence of institutional distance on the performance of 399 foreign subsidiaries from 2008-2011 in a previously understudied host market, that of Brazil. Regression analysis was carried out on panel data using weighted least squares as estimator. Similar to research conducted in other national contexts, results revealed significant correlation between institutional distance and firm performance. Unlike previous research, however, these correlations were positive: the greater the institutional distance, the better the performance. Both normative distance and regulatory distance positively influenced ROA, raising questions with regard to the concept of institutional distance, its operationalization and influence.

Keywords: Institutional Distance, Regulatory Distance, Normative Distance, Foreign-Owned Subsidiaries, Subsidiary Performance, Brazil.

Introduction

The big question in international business research, as argued eloquently by Peng (2004: 102) is "what determines the international success or failure of firms." The first and most direct aspect of this question has to do with what might be the determinants of performance in international business; and, as Peng (2004) points out, there is still no complete, definitive answer to this. To answer this question, he suggests, will require considerable theoretical and empirical work focusing, particularly, on emerging markets.

Following upon these observations of Peng (2004) and the article of Wright, Filatotchev, Hoskisson and Peng (2005) with respect to the fact that strategy research in emerging economies is "challenging the conventional wisdom," there has been an upsurge in research on firms operating in

these economies, with much of it focused on multinationals and their subsidiaries (Xu & Meyer, 2013).

With respect, specifically, to the determinants of international performance Peng, Wang and Jiang (2008) proposed a conceptual framework for studying the question called the "strategy tripod" that includes, in addition to the widely accepted industry-based and resource-based views, a third leg influenced by institutional theory, which they termed the "institution-based view". This three-legged approach, according to the authors, generates a more complete understanding of the success or failure of firms in emerging markets.

The premise of Peng, Wang and Jiang (2008) is that when the subsidiary of a multinational firm is installed in another country, it comes under the influence of the institutions of the host country. This influence can generate negative or positive outcomes for the firm's performance (Xu, Pan & Beamish, 2004).

As pointed out by Cantwell, Dunning and Lundan (2010), with increasing foreign direct investment in emerging economies, the question of institutional differences between home and host country has gained prominence.

In spite of the increased research interest in institutional conditions and in emerging markets, most of this interest has been focused upon specific markets or specific regions. With respect to institutional distance, a rapid survey we carried out with Google Scholar using the search words "institutional distance" in association with specific countries, the greatest number of hits by far appeared for the United States, followed by China and Japan. With respect to emerging markets, a survey of strategy research in emerging countries reported in Xu and Meyer (2013), only thirteen articles, or five percent of the total, looked at the Latin American region, although this represented a 450% increase in numbers over the previous five-year period. In contrast, 168 articles, or 68% of the total focused on Asian countries. These findings suggest that theory development in international business (IB) with respect to institutions and emerging markets has been molded by the experiences of relatively few countries.

Among emerging markets, although figuring as a member of the so-called BRIC - a quartet of the largest and supposedly most important of these markets - Brazil is conspicuous chiefly for the

paucity of research attention it receives in the international business and business strategy literatures (Li et al, 2012). Nonetheless, the Brazilian economy is the largest in Latin America and the seventh largest in the world (World Bank, 2014), close behind sixth-place UK; and in recent years Brazil has been one of the major recipients of FDI worldwide, ranking fourth in this regard in 2012 (UNCTAD, 2013) and fifth in 2013 (UNCTAD, 2014).

Furthermore, as an object of research, the Brazilian context may offer contributions to international business and strategy theories, given the significant institutional differences observed in that country by Estrin and Prevezer (2010), in their comparison of formal and informal institutional factors in BRIC countries (Brazil, Russia, India and China). As argued by Jackson and Deeg (2008), greater attention to different institutional settings and their diversity has much to offer theory-building in the international business area.

From both a practical and theoretical viewpoint, then, there are reasons to investigate the influence of institutional conditions and institutional distance on foreign subsidiary performance in the Brazilian host market, as we do here.

The rest of this paper is organized into four parts. Section 2 briefly discusses institutional distance and its relationship to performance and sets forth the hypotheses of the study. Section 3 discusses the operationalization of the study and the methods used. Results and discussion are presented in Section 4, while Section 5 provides conclusions.

Institutional Distance

The institution-based view in IB studies highlights the formal and informal structures that regulate international business development and that together with industry structure and firms' resources and capabilities shape industrial competition (Peng, Wang & Jiang, 2008; Peng & Pleggenkuhle-Miles, 2009). Table 1 presents the dimensions of institutions as seen by an economist (North, 1990) and a sociologist (Scott, 1995). These dimensions are operationalized, respectively, as rules, laws, and regulations (formal, regulatory/coercive), and group norms, cultural values and cognition (informal, normative and cognitive), influenced by ethnicity, religion and education.

Eden and Miller (2004) place the discussion of institutional distance in the context of a longstanding concern of the IB literature with what has been called the cost of doing business abroad (costs not encountered by host country firms but that MNCs must bear in foreign countries) and with what has come to be called the liability of foreignness. They state that the costs associated with the liability of foreignness are essentially social costs deriving from disadvantages such as unfamiliarity with the local context and how to operate within that context and argue that institutional distance is the driver of the liability of foreignness.

Formality (North, 1990)	Pillars (Scott, 1995)	Operationalization
Formal	Regulatory (coercive)	Rules Laws Regulations
Informal	Normative	Norms
	Cognitive	Ethnicity Religion Culture

Table 1: Dimensions of institutions. Source: Adapted from North (1990) and Scott (1995).

Kostova (1999) coined the term “institutional distance” to describe the degree of similarity or difference between the regulatory, normative and cognitive components of the institutional environment of a firm’s country of origin and those of the host country. The regulatory components are manifested in the laws, rules and regulations that establish order and stability in a society, encouraging certain behaviors and discouraging others. Normative components consist of the values and norms upheld by individuals in a given society; while the cognitive elements involve the mental programs used by individuals in observing and interpreting what is happening in the environment (Kostova, 1999; Kostova & Zaheer, 1999).

Studies of institutional distance in IB have looked at how it influences a wide variety of questions such as entry mode decisions (Chueke and Bonini, 2014; Schwens, Eike and Kabst, 2011), diversification decisions (Chao et al., 2012), ownership strategy (Eden and Miller, 2004; Xu, Pan and Beamish, 2004), knowledge transfer (Kostova, 1999), partner selection (Roy and Oliver, 2009), subsidiary survival (Dhanaraj and Beamish, 2009; Gaur and Lu, 2007), and subsidiary performance (Pattnaik and Choe, 2007; Chan, Isobe and Makino, 2008; Chao and Kumar, 2010; Chao et al., 2012).

Our study is intended to contribute to the growing literature on the relationship between institutional distance and subsidiary performance.

Kostova and Zaheer (1999) and Jackson and Deeg (2008) argue that the institutional distance between the country of origin of a multinational company (MNC) and the host country of a subsidiary exerts a negative impact on the MNC's efforts to establish and maintain legitimacy in the host country. According to the same authors, lack of familiarity with what is accepted as legitimate in the host country and market differences between the country of origin and the host country can increase the uncertainty and risk for the firm's performance in the host country.

Kostova and Zaheer (1999) theorized that regulatory, normative and cognitive distances are distinct constructs and potentially might have different effects on dependent variables of interest This distinctness was later tested empirically and shown to exist (Xu and Shenkar, 2002, Xu, Pan and Beamish, 2004).

Pointing to the inconsistent results obtained with respect to the effects of cultural distance, Xu, Pan and Beamish (2004) argued that the use of cultural differences to represent country differences has caused researchers to ignore the impact of other institutional dimensions. Following Xu and Shenkar (2002), they proposed focusing on the impact of regulatory and normative distances for explanations of MNC behavior and FDI strategy, developing and testing measures that can be used in this regard. They applied these measures to understanding MNC ownership and expatriate strategies and conclude that a practical implication of their findings is that "firms can now view regulative and normative distances as a source of competitive (dis)advantage" (Xu, Pan and Beamish, 2004: 298).

Subsequent to this, their measures have been used for investigating the impact of regulatory and normative institutions on such questions as the ownership strategies and survival of foreign subsidiaries (Gaur and Lu, 2007), the international diversity-performance relationship (Chao and Kumar, 2010), and the post-entry strategic positioning of foreign firms in a host market (Xie et al., 2011). In all of these studies, treating regulatory institutions and normative institutions as distinct constructs produced valuable new insights with respect to the research questions of interest.

In this study, then, with a view to testing whether regulatory and normative distance pose a competitive disadvantage to foreign subsidiaries operating in the Brazilian host market, it is hypothesized that:

Hypothesis 1: *The greater the normative distance between the foreign MNC's country of origin and the Brazilian host market, the lower the subsidiary's performance will be.*

Hypothesis 2: *The greater the regulatory distance between the foreign MNC's country of origin and the Brazilian host market the lower the subsidiary's performance will be.*

Methods

This study focused on subsidiaries of foreign firms that operate in the Brazilian host market, with respect to the institutional conditions affecting their performance. Panel data was assembled on all the foreign firms having sales of over US$470 million included in the *Revista Exame* database in the years 2008, 2009, 2010 and 2011. This database has been used previously in studies of foreign subsidiaries in the Brazilian host market by Wanke, Fleury and Hijjar (2007) and Ogasavara (2010).

Seven hundred and forty (740) foreign subsidiaries were initially identified for investigation. Of these, 320 presented missing values and were eliminated, reducing the sample to 420. An additional 21 were excluded, as outliers, based on Iglewicz and Hoaglin (1993), leaving 399, or 53.92% of the initial population.

The final sample included subsidiaries from 24[1] different countries of origin, acting in the following sectors: retail, wholesale, automotive, capital goods, consumer goods, electronics, information technology, telecommunications, energy, pharmaceuticals, construction, mining, pulp and paper, agriculture, chemical and petrochemical, services, steel and metallurgical, and transportation.

To identify the influence of institutional distance on foreign subsidiary performance in the Brazilian host market, a panel analysis was made (Gujarati, 1995; Green, 2008) with return on assets considered as the dependent variable. Multiple regression analysis was applied to the panel data, using

[1] South Africa, Germany, Argentina, Australia, Austria, Belgium, Canada, Chile, Colombia, South Korea, Spain, United States of America, Finland, Netherlands, India, England, Ireland, Israel, Italy, Japan, Mexico, Norway, Portugal, Sweden and Switzerland

weighted least squares as estimator. The Baltagi-Wu test for serial correlation in linear panel-data models (Baltagi-Wu, 1999), which provides an appropriate test for panel data (Baltagi, 2005). According to Wincent et al (2009), when the Baltagi-Wu test results in critical values of 2, or in the words of the same authors (2009, p. 612) "much smaller than 2", there is need to correct for serial autocorrelation. According to the test carried out no autocorrelation was apparent in the data. In addition, the condition index was calculated in order to check the potential for multicollinearity (Echambadi and Hess, 2007) and none was found. Based on the tests realized, the findings of the regressions were shown to be robust.

Dependent variable

Return on assets (ROA), a metric that represents the company's potential to generate profits and that is widely employed in the field of international business as a general performance measure (Chari & Davi, 2011; Li & Yue, 2008; Pattnaik & Choe, 2007), was used as proxy for the dependent variable, performance. The *Revista Exame* database was used to establish the ROA for each subsidiary.

Independent variables

As mentioned above, Xu, Pan and Beamish (2004), in a study that operationalized institutional distance, emphasized two dimensions of this: a) normative distance; and b) regulatory distance. Regulatory distance expresses the differences in rules and regulations between the subsidiary firm's country of origin and the host country, while normative distance reflects the differences in social norms (Xu, Pan & Beamish, 2004). Their operationalization of institutional distance has subsequently been used in several studies (Xie et al., 2011; Chao & Kumar, 2010; Gaur & Lu, 2007. In our study we also used calculated the normative distance and regulatory distance variables following the procedures of Xu, Pan and Beamish (2004). As they did, we use items from The Global Competitiveness Report that deal with institutional factors, specifically those corresponding to the attitudes, norms (normative

distance) and regulatory infrastructure (regulatory distance) reported for each country[2]. The editions of this Report used in our study were for 2008/2009, 2009/2010, 2010/2011 and 2011/2012.

Control variables

As control variables, components of the industry-based and firm-specific or resource-based views of the strategy tripod (Peng, Wang & Jiang, 2008) were used. To control for industry-related effects, the variables of market concentration and the sector's level of technological intensity were utilized. Market concentration has been considered an important aspect of market structure and one that can influence firm performance (Bresnahan, 1989; Prescott, Kohli, Venkatraman, 1986; Porter, 1980, 1979). A number of IB studies suggest that market concentration in the host country is a local market condition significantly linked to the performance of foreign subsidiaries (see, for example, Zhao, Zou, 2002; Li, 1995). Following Xie et al. (2011) and Wang et al (2012), the Hirschman-Herfindahl index (HHI) was used to measure market concentration. To calculate the HHI, the database of the Brazilian Ministry of Development, Industry and Foreign Trade (BRASIL, 2009; 2010; 2011; 2012) was used, specifically the item *sales per firm* for the period 2008-2011. This database is organized by specific sector[3] and does not distinguish the national origin of firms.

The level of technological intensity is also seen as an industry characteristic having the potential to affect firm performance. Kirner, Kinkel and Jaeger (2009) demonstrate in a study of German firms that the technological intensity of an industry influences the performance of firms acting in that industry. Similar findings are reported in studies in other national contexts (Rodriguez & Rodriguez, 2005; Munier, 2006; Wu, 2012). Our classification of the sectors' respective levels of technological intensity followed that of the Organization for Economic Co-operation and Development (OECD, 2005) and used an ordinal scale treated as an interval scale, as was done in the studies of Kearns and Ruane (2001), Görg and Strobl (2003), Godin (2004) and Falk (2007). Firms in

[2] Xu, Pan and Beamish (2004) consider as regulatory institutions: anti-trust laws, legal system, impartiality of arbitration, settlement of disputes, institutional stability, effectiveness of police force, and product liability; and as normative institutions: product design, customer orientation, staff training, willingness to delegate, performance-related pay, professional managers, and effectiveness of corporate boards.

[3] Retail, Wholesale, Automotive, Capital Goods, Consumer Goods, Electronics, Information Technology, Telecommunications, Energy, Pharmaceuticals, Construction, Mining, Pulp and Paper, Agriculture, Chemical and Petrochemical, Services, Steel and Metallurgical, and Transportation.

sectors categorized as low in technological intensity were assigned the number 1. Those in sectors classified as medium-low technological intensity were attributed the number 2, The number 3 was attributed to firms in sectors of medium-high technological intensity, and the number 4 to those in sectors of high technological intensity (Godin, 2004; Kearns & Ruane, 2001).

To represent firm resources and capabilities, the variables of size, international experience and local knowledge were used. These firm-specific variables are frequently used in IB studies. Size was expressed in terms of the number of employees (Delios & Beamish, 2001; Halkos & Tzeremes, 2007) in Brazil, using data from the *Revista Exame* database for the years 2008, 2009, 2010 and 2011. The MNC's international experience was calculated based on the number of its foreign subsidiaries (Li, 1994; Gaur & Lu, 2007). To obtain these figures, we analyzed performance reports for the years of interest made available by the head offices of the foreign subsidiaries hosted in the Brazilian market. The third firm-specific control variable, local knowledge, was expressed in years of operation in the host market (Makino & Delios, 1996; Xie et al., 2011). This data was acquired from information made available by the Brazilian subsidiaries themselves.

Correlation matrix

The correlation matrix, Table 2, does not show strong correlation among the variables. To investigate possible multicollinearity problems, variance inflation factors (VIFs) were calculated. According to Echambadi and Hess (2007: 443), "VIFs are currently the most commonly used tools to diagnose multicollinearity." Results revealed that all variance inflation factors were quite low, indicating no multicollinearity problems (Echambadi & Hess, 2007).

	ROA	Size	International Experience	Local knowledge	HHI	Level of Technological Intensity	Normative Distance	Regulatory Distance
ROA	1.0000	-0.1385	0.0385	0.0520	-0.0421	-0.0327	0.0288	-0.0097
Size		1.0000	0.0514	0.0516	-0.2154	-0.1564	0.0060	0.0643
International Experience			1.0000	0.2543	-0.0709	-0.0578	0.3086	0.2901
Local Knowledge				1.0000	-0.1836	-0.1820	0.4147	0.3224
HHI					1.0000	0.4180	-0.1310	-0.1477
Level of Technological Intensity						1.0000	-0.2109	-0.2360
Normative Distance							1.0000	0.8498
Regulatory Distance								1.0000

Table 2: Correlation matrix

Source: Research results

Results and discussion

The influence of institutional conditions on the performance of foreign subsidiaries in the Brazilian host market was tested, with ROA as the dependent variable and normative and regulative distance as independent variables. The analyses were carried out using separate models, following the same strategy used by Chao and Kumar (2010) and always including control values in the regression models. Table 3 summarizes the results in accordance with the three different models applied. As in Chao and Kumar (2010), the base model, Model 1, uses control variables only. Model 2 includes the normative distance and control variables, Model 3 the regulatory distance and control variables.

	Model 1	Model 2	Model 3
Control Variables			
Constant	6.94994	17.7383**	-1.34607
Size	2.60913***	2.89412***	0.88805
International Experience	-7.81286***	-16.0273***	-5.91295***
Local Knowledge	11.5828***	21.0342***	8.04058***
Level of Technological Intensity	-2.63766***	-4.87351***	0.0399588
HHI	-22.0322***	-44.5935***	0.225144
Institutional Conditions			
Normative Distance		8.27038***	
Regulatory Distance			7.20431***
N	399	399	399
F-value	57.73017***	493.8118***	24.48857***
R^2	0.427852	0.885002	0.276222
R^2 adjusted	0.420441	0.883209	0.264943

* p<0.1
** p<0.05
*** p<0.01

Table 3: Influence of institutional conditions on foreign subsidiary performance in the Brazilian host market.
Source: Research results.

In Model 1 (see Table 3), all the control variables were significant ($p<0.01$). All maintained this level of significance in Model 2, when the independent variable of normative distance was included.

In Model 2, the independent variable, normative distance, presented a 8.27038 coefficient significant at $p<0.01$, which refutes Hypothesis 1. In other words, normative distance is positively related to foreign subsidiary performance (ROA) in the Brazilian host market.

In Model 3, only the control variables International Experience (-5.91295) and Local Market Knowledge (8.04058) were significantly ($p<0.01$) related to performance. In this model, the independent variable, regulatory distance (7.20431) was significant ($p<0.01$), and thus Hypothesis 2 was also rejected. Like normative distance, regulatory distance is positively related to performance (ROA) of foreign subsidiaries in the Brazilian host market.

These results confirm the significance of institutional characteristics for performance in emerging markets, as argued by Peng, Wang and Jiang (2008). Moreover, our study reveals a level of significance ($p<0.01$) identical to that found by Xu, Pan and Beamish (2004) and Gaur and Lu (2007), albeit with a positive coefficient for the independent variables, normative distance and regulatory distance, in our study and a negative coefficient in those previous studies. Our study results also show greater statistical significance than those of the study by Xie, et al (2011) on foreign subsidiaries in the U.S. host market, in which significance of the independent variables (normative and regulatory distance) did not reach ($p>0.1$), and higher effect significance than the results found by Chao and Kumar (2010). In addition, the models present (R^2) higher than those in the similar studies of Chao and Kumar (2010).

However, unlike the results of previous studies, normative and regulatory distances were found to be *positively* related to foreign subsidiary performance in the Brazilian host market.

Interestingly, as in those previous studies finding negative relationships, possible explanations for the positive relationships between institutional distance variables and performance identified in Brazil may also be rooted in institutional characteristics. A careful reading of Baer and Kerstenetzky (1964), Lowinger (1974) and the more recent Baer (2008) and Ranincheski, Negri and Mueller (2011), suggests that the development of Brazilian institutions has a number of unique characteristics.

The possible uniqueness of Brazilian institutions is not only very much in line with the arguments pointing to the institutional diversity among the so-called emerging market economies presented by Jackson and Deeg (2008), but is consistent with results reported by Estrin and Prevezer (2010), in a study that looked specifically at Brazil, Russia, India and China. They found that in Russia informal institutions compete with and undermine the functioning of formal institutions. They further found that in China and India informal institutions appear to fill in the gaps left by formal institutions seen as ineffective or incomplete, while in Brazil informal institutions contribute to reconciliation of divergent objectives among actors in the formal and informal institutions. Estrin and Prevezer (2010) argue that the formal and informal institutions of a country interact and that the ways in which they interact can improve or undermine formal institutions. It is possible to infer from this that Brazilian informal (normative) institution actions and practices, even though distant from those of the home country, in interaction with formal (regulatory) institutional practices also distant from those of the home county may in some way contribute positively to performance.

The possible singularity of Brazilian social institutions has long been an object of investigation in Brazilian sociology, with emphasis, among other things, on the propensity to dialogue and to the absorption or accommodation of other people and other ideas rather than confrontation or rejection. (See, for example, DaMatta, 1991; Holanda, 1995; Freyre, 2001.)

The form taken by economic institutions in Brazil has been attributed to various factors such as: the colonization experience (Ranincheski, Negri & Mueller, 2011); economic development policies emphasizing import substitution with the intent, initially, in the years following World War II, of encouraging industrialization (Baer & Kerstenetzky, 1964); later economic development policies that created protection mechanisms for the nascent industry, culminating in leveraging exports (Lowinger, 1974) that were strictly linked to the multinational subsidiaries installed in Brazil (Baer, 2008), given the fact that local industry was incipient (Ranincheski, Negri & Mueller, 2011). In other words, multinational subsidiaries established in Brazil enjoyed the same protections as local industry, and the same incentives to export.

The control variables of the study also present some points of interest in terms of how they converge and contrast with previous studies. Both industry effects and firm effects were found to have

significant impact on performance. In the case of industry effects, both the market concentration and the level of technological intensity of the sector were found to have a significantly ($p<0.01$) negative impact on performance in Model 1 (all control variables) and Model 2 (control variables and normative institutional variables), but not significant in Model 3 (control variable and regulatory institutional variables), where their impact was positive but not significant.

While the negative impact of market concentration on performance was expected, based on the literature, the negative impact of technological intensity was not. In addition, the differences found with respect to the effects of normative and regulatory distance respectively are intriguing. The findings suggest that: (i) the greater the normative distance, the less the impact of the level of technological intensity and of market concentration on ROA, and (ii) conversely, the less the normative distance, the greater the impact of both market concentration and level of technological distance on ROA, but (iii) these effects are reversed when regulatory distance is the independent variable under consideration. While not the object of this study, these results merit further investigation in future studies.

Of potential importance in understanding the results of this study are the values for the control variables Local Knowledge and International Experience. As mentioned above, International Experience had a strong negative correlation with performance in the Brazilian market. In other words, familiarity with other host markets appears to be a disadvantage in Brazil, given the fact that the greater the level of international experience, the poorer the performance in the Brazilian market. This finding is congruent with that of Perkins (2014) with respect to the Brazilian host market. Using an experiential learning framework and looking specifically at MNCs operating in the Brazilian telecommunications industry, Perkins (2014: 168) found that "firms experience learning penalties when the breadth of experience is not relevant to Brazil.".

Contrasting with this, we found a strong positive correlation between local knowledge and performance. These findings with respect to local knowledge are consistent with previous studies in other contexts. As pointed out by Li (1994) and Makino e Delios (1996), various attributes of local knowledge cannot be treated as public goods easily accessible by and transferable within the MNC. Local knowledge in a specific host country may be more tacit in some countries than others, making it

more difficult to capture (Sasaki & Yoshikawa, 2014). Whether for this reason or not, certainly subsidiaries having longer experience in the Brazilian host market present significantly superior performance.

Contrary to the possibility of transfer or reallocation of capabilities from one foreign subsidiary to another by the MNC posited by Rugman and Verbeke (2001) and Chandra, Styles and Wilkinson (2009), in the Brazilian host market prior experience non-relevant to the Brazilian institutional context appears to be a liability. The difficulty of promoting effective flows of knowledge and capabilities from one subsidiary to another (Tippmann, Scotto & Mangematin, 2014) appears to be particularly acute in the case of Brazilian host market.

We have suggested that one possible explanation for the results of this study is the nature of Brazilian institutions. As pointed out by Estrin and Prevezer (2010) and Thome, Vieira and Santos (2012), in Brazil informal institutions serve to promote accommodation rather conflict between normative and regulatory demands. Greater local knowledge can contribute to understanding how this works and how to make the distance that exists between home and host country institutions work to the advantage of the subsidiary.

The results of this study also suggest the importance of the three legs of the strategy tripod for understanding the performance of foreign subsidiaries. They suggest that while industry and/or institutional conditions may appear to be unfavorable, it is possible with time to acquire the knowledge (firm or resource-based conditions) to work successfully with them.

Nevertheless, while one possible explanation for the results of this study is the nature of Brazilian institutions, other explanations are also conceivable. One is the fact that unlike many other studies looking at institutional distance, this one is not focused on entry problems and entry strategies. With more study of how different institutional settings affect performance over the long term, the finding that the longer the experience in the host market, the better the performance to the extent of eliminating or reversing the effects of institutional differences may prove less surprising.

Another possible explanation may be related to the size of the subsidiaries studied. All of the firms included in the study can be characterized as large on the basis of their volume of sales. Although the study was carried out with large firms only, the results, with the exception of Model 3,

reveal a very high level of significance for the size of the Brazilian subsidiary. In short, in a sample made up of large subsidiaries, the largest of these performed better, as was found by Halkos and Tzeremes (2007) with respect to firms operating in Greece. Nonetheless, it is possible that a database including small and medium-sized firms might present different results. In this regard, it is relevant to note the difficulties of data availability in emerging markets, in general, and Brazil is no exception. This must be considered a limitation to the present study.

In this study, ROA was used as the proxy for performance. Other performance measures are possible (for example subsidiary survival rates or patents). Using a different measure or multiple measures for success might produce different results. Also, while the control variable for local knowledge takes into consideration how long a specific subsidiary has belonged to a given MNC, we did not control for whether this subsidiary had been acquired from a local firm or from another MNC from the same or a different country. These, too, must be considered limitations to the present study.

Finally, there is the possibility that problems exist with the construct of institutional distance and/or the constructs of normative and regulatory distance employed.

Zaheer, Schomaker and Nachum (2012) suggest that the criticisms of Shenkar (2001) to the cultural distance construct may be applicable to other distance constructs, as well. They argue:

> ...where we as strategy and international management scholars have perhaps failed most egregiously is by treating distance superficially, as one more variable in a regression. We have to conceptualize why we think distance matters, how we think its effects play out and exactly what mechanisms are at work in the process. Getting this kind of conceptual clarity will immediately lead us toward greater precision in theorizing about and measuring distance. This is perhaps the area where distance research needs the most direction." (Zaheer, Schomaker and Nachum, 2012: 24)

The results of our study support this call for a better conceptualization of institutional distance and why it matters, showing that there is, indeed, a need to better understand what mechanisms are at work in the relationship between regulatory distance and normative distance and how they relate to MNC performance. The assumption in the literature has been that lesser distance means greater

similarity and greater similarity contributes to fewer difficulties in interaction and mutual understanding (Zaheer, Schomaker & Nachum, 2012; Chao & Kumar, 2010; Estrin & Prevezer, 2010; Jackson & Deeg, 2008). Our findings suggest that this is not always the case. What they do not show is why or under what circumstances this is not the case. Obviously there is much we still need to know about institutional distance and how it works.

Managerial implications

The evidence of the study is clear that regulatory and normative distances are by no means a liability in Brazil. They are, rather, an advantage that increases with time as the MNC learns more about how to exploit the relevant differences. However, the findings of this study, while suggesting that there are rewards for staying the course, also provide empirical support for the Brazilian adage that "Brazil is not for beginners". The importance of local knowledge to performance suggests that for "beginners" in this host market, there will be benefits to partnering with those having local knowledge. Having prior foreign experience acquired in other host markets is of no advantage in Brazil. On the contrary, it is a liability. The experience that counts is experience in the Brazilian host market. This does not necessarily mean partnering with or acquiring a Brazilian firm. MNCs having longstanding experience in the country also can have the local knowledge necessary for survival and success in the Brazilian market.

Conclusions

Our paper identifying the influence of regulatory and normative distance on foreign subsidiary performance in the Brazilian host market contributes to the growing literature on institutional distance. Findings did not support the pre-established hypotheses that greater regulatory and normative distance between home and host country would be associated with lesser performance. The rejection of these hypotheses contradicts the results found in previous studies with respect to the impact of normative and regulatory distances carried out in other institutional contexts, such as those by Xu, Pan and Beamish (2004), Gaur and Lu (2007), Chao and Kumar (2010)

Possible explanations suggested for these contrary findings include the possible singularity of Brazilian institutions (DaMatta, 1991; Holanda, 1995; Freyre, 2001; Baer, 2008; Estrin and Prevezer, 2010; Ranincheski, Negri & Mueller, 2011), the composition of the database, the metric used to measure performance, or problems with the concept of institutional distance, its operationalization and influence.

What appears certain is that institutions and institutional distance do matter to MNC performance and that we still have a lot to learn about how and why they matter.

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