A Work Project, presented as part of the requirements for the Award of a Master Degree in Management from the NOVA – School of Business and Economics.

# MEASURING THE IMPACT OF EXPERIENCE ON THE RELATION BETWEEN DISTANCE AND M&A PERFORMANCE

# ANA RAQUEL LINO RAMOS & 2544

# A Project carried out on the Master in Management Program, under the supervision of: Youtha Cuypers

JANUARY 6, 2017

ABSTRACT	3
INTRODUCTION	3
LITERATURE REVIEW	4
CROSS-BORDER MERGERS & ACQUISITIONS AND VALUE CREATION	4
THE EFFECTS OF LEARNING FROM EXPERIENCE IN MERGERS & ACQUISITIONS	5
THE CAGE DISTANCE FRAMEWORK	6
1. CULTURAL DISTANCE	7
2. Administrative Distance	7
3. GEOGRAPHIC DISTANCE	8
4. ECONOMIC DISTANCE	9
THE IMPACT OF MERGERS & ACQUISITIONS EXPERIENCE ON THE EFFECT OF DISTANCE	10
MODEL	11
METHODOLOGY	11
METHODOLOGI	
SAMPLE	11
Dependent Variable	12
M&A PERFORMANCE	12
Independent Variables	13
PREVIOUS M&A EXPERIENCE	13
CULTURAL DISTANCE	14
Administrative Distance	14
GEOGRAPHIC DISTANCE	15
ECONOMIC DISTANCE	15
CONTROL VARIABLES	16
MODEL TESTING SPECIFICATIONS	16
RESULTS	17
DISCUSSION	20
LIMITATIONS	21
CONCLUSION	22
REFERENCES	23

# Abstract

Taking the literature on the effects of experience on M&A performance, I draw a model with the intent of examining the impact of experience on the relation between distance and M&A performance outcome. In addition, I theorize that the negative effect of distance on acquisition performance is positively moderated by prior M&A experience. Using a sample of 156 M&As in a time period of 7 years, it was not possible to achieve significant results to demonstrate the theorized main hypotheses. Nonetheless, findings suggest that prior acquisition experience helps reduce the effect of cultural and economic distance on M&A performance.

Title: Measuring the impact of experience on the relation between distance and M&A performance. Key Words: M&A performance, CAGE distance framework, experience advantage.

# Introduction

Among the literature on mergers and acquisitions, there is evidence that prior experience and experiential learning contribute to improve M&A performance. Nonetheless, there are conflicting results on whether M&As create or destroy value and if there is indeed a relation between M&A performance and experience, reflecting the limited understanding of what indeed drives M&A transactions and its sources of gain (Seth et al., 2002). The lack of congruence in the results represent a gap in the M&A deals literature that needs to be addressed.

Therefore, I analyzed literature on cross-border M&A and learning from experience, with the purpose of examining the relations between performance and the influence of learning. With the CAGE distance framework in mind, plus the literature on learning from previous experience and how it influences the subsequent M&A performance, I developed my research question where the aim is to explore the impact of M&A experience on the relation between each type of distance and M&A performance. Specifically, the main argument is that previous M&A experience influences how a company overcomes the obstacles represented by the different types of distance through the appliance of previous learnings, therefore responding better to them, and thereby obtaining a higher M&A performance. This reflects a moderating effect of experience on the relationship between distance and M&A performance.

# **Literature Review**

#### **Cross-border Mergers & Acquisitions and Value Creation**

When firms choose to expand across national borders, they normally do it to get into different geographic locations, to access new markets (Hitt et al., 1998) or to grow and gain market power (Anand and Singh, 1997; Barton and Sherman, 1984).

Expanding through cross-border M&A allows access to foreign countries earlier than competitors and quickly build a strong presence outside national borders (King et al., 2004), thereby representing a possibility to exploit foreign market opportunities (Rugman, 1979).

Additionally, this mode of entering new markets can be seen as a way of utilizing the current capabilities that local firms already master (March, 1991) or acquiring assets, resources or technical knowledge (Ahuja and Katila, 2001; Capron, 1999). It also allows to create synergies, such as economies of scale and scope (Kobrin, 1991; Kogut, 1985).

Thus, it is typical to see M&A driven by a desire for growth, market power and synergies leading to a performance improvement (Rahman et al., 2016). Nonetheless, there are conflicting results on whether M&As create or destroy value. Consequently, there is limited understanding of the sources that indeed lead to value creation or destruction. Seth, Song and Pettit (2002) present asset sharing, reverse internalization of valuable intangible assets and financial diversification as sources of value creation, and managerialism as a reason for value destruction, which may explain the conflicting results across the literature by suggesting that both scenarios are plausible to occur.

#### The Effects of Learning from Experience in Mergers & Acquisitions

Also related to M&A performance improvement is past related experience. From the literature, acquisition experience – all the M&A deals that a firm incurred before the focal acquisition – appears as important, but may not be sufficient to improve M&A performance (Haleblian and Finkelstein, 1999).

Some researchers claim that experienced acquirers are more successful than companies without any acquisition experience, stating that similar acquisitions are positively related to acquisition performance (Fowler and Schmidt, 1989; Hitt et al., 1998). Others draw a different scenario, saying that acquisition experience may not always boost acquisition performance, questioning whether experience is beneficial or not, which means that they didn't find any significant relation between them (Haleblian and Finkelstein, 1999; Kusewitt, 1985; Lubatkin, 1983; Zollo and Singh, 2004). Hayward (2002) even argues that M&A performance is influenced by the similarity of past acquisitions, their performance and the period of time between the focal acquisition and the following ones.

Finkelstein and Haleblian (1999, 2002) argue that a prior event may influence the performance of a subsequent one in a positive or negative way, implying the transfer of learning from past experiences. A positive transfer effect facilitates the performance and a negative one inhibits it. They also argue that these transfers are affected by the similarity of events, as the higher the compatibility, the higher the probability of successful integration and, consequently, acquisition performance.

Therefore, a positive transfer may occur if the firm's acquisitions are similar to each other and if the previous acquisition experience can be generalized from one to another. When these two assumptions are met, performance should increase. Thus, in this scenario, there is a positive relation between previous M&A acquisition experience and M&A performance.

5

However, a negative transfer may arise if there is an inappropriate generalization between two situations that seem superficially similar, but present substantial underlying differences, leading to draw wrong inferences or to incorrectly apply knowledge from the past acquisitions, and resulting in a negative performance.

Companies may also attempt to apply old routines to new situations, ending up in unproductive and unsuccessful expansions for inappropriate generalization of knowledge. However, performance may increase over time as companies start reconsidering their routines. This also shows that knowledge is time and location specific and needs careful consideration to see if it fits in the current situation (Nadolska and Barkema, 2007).

Summing up, past experience gives the opportunity to learn from the prior successes and mistakes of the firm and to acquire specific know-how, therefore performing better. However, learnings may not always apply, requiring attention to the nature, performance and timing of the experience (Hayward, 2002; March, 1991; Penrose, 1959).

Thus, since there is no consensus on the relation between M&A performance and experience and which factors influence this link, I set two broad competing hypothesis.

Hypothesis 1a: There is a positive relationship between previous M&A experience and M&A performance.

Hypothesis 1b: There is a negative relationship between previous M&A experience and M&A performance.

#### The CAGE Distance Framework

In 2001, Pankaj Ghemawat approached a way of evaluating cross-border opportunities through the impact of distance attributes in international trade and how they affect the relative attraction of a foreign market. These attributes can be manifested through four dimensions: cultural, administrative, geographic and economic.

# 1. Cultural Distance

Cultural distance is determined by the country's cultural attributes, such as different languages, ethnicities, religions, social norms, routines and repertoires. These affect the firm's activities, such as the organizational design, new product development, and other aspects of management (Kogut and Singh, 1988). In sum, this set of routines and repertoires differentiates corporations, including the power and control structures (Brossard and Maurice, 1974), decisionmaking practices (Bourgoin, 1989; Kreacic and Marsh, 1986), degree of entrepreneurship (McGrath et al., 1992) and innovation effectiveness (Shane, 1993).

Likewise, cultural attributes influence how individuals interact between each other and with the organization, the choices that they make, as workers or as consumers, and that represent their preferences or trigger associations with a particular culture or a person's identity.

So, when a firm decides to engage in foreign M&A activity, it is confronted with unfamiliar preferences, languages, religions, values and business practices, which affect their willingness to exchange and may lead to problems of miscommunication, tension or even acquisition failure (Nadolska and Barkema, 2007). Therefore, it is necessary to accommodate both the target and aquirer's national and corporate cultures (Barkema et al., 1996). When there is a cultural proximity, it is easier to exchange knowledge, to combine capabilities, better integrate and communicate. *Hypothesis 2a: Cultural distance has a negative effect on M&A performance.* 

#### 2. Administrative Distance

According to Scott (1995), institutions are grounded in three main foundations: culturalcognitive, normative and regulative. Their function is to provide stability through rules, norms, principles and routines as guidelines for social behavior.

Administrative distance is determined by historical and political associations that are the reflection of these rules, norms and principles. The presence of political hostility or the absence of

colonial ties, shared monetary or political associations are inducers of a higher administrative distance. Also, government policies can act like a barrier to cross-border competition through unilateral measures, such as tariffs, trade quotas, restriction on foreign direct investment and favoritism in regulation and subsidies for domestic companies. An example of diminished administrative and political distance is the European Union.

Corruption or social conflicts are also known for creating a higher administrative distance for depressing trade and investment. Having a solid institutional infrastructure and a strong legal system is key to surpass this.

Developed countries are known for having advanced and established institutions with powerful market factors, few governmental interferences and efficient contract enforcement mechanisms. On the other hand, developing countries are more likely to have more simplistic institutions, thus higher risks and less support (Wu, 2014).

Furthermore, different levels of development reflect dissimilar levels of law enforcement that include labor laws and environmental measures. A permissive law allows to easily restructure the firm's processes and its workforce. A strict law will make those processes more difficult, for presenting higher restrictions, such as costs associated with laying off workers.

In sum, the laws in rule and the political situation of the country are important factors, especially in labor terms by representing the need to adapt workforce and processes.

Hypothesis 2b: Administrative distance has a negative effect on M&A performance.

3. Geographic Distance

Broadly, the further a country is, the harder it is to conduct business with.

Geographic distance includes natural attributes, such as the physical size of the country, average distance to borders, access to water ways and oceans, topography, climate, and man-made features, as for example transportation and communication infrastructures. These infrastructures

allow the exchange of human, financial and physical resources, and to connect individuals to jobs, assets to manufacturing plants and products to markets.

Developed infrastructures help improve production and related service facilities, reduce transaction and exchange costs, offer employment opportunities, and therefore leading to an increase of efficacy and productivity. On the opposite scenario, an underdeveloped infrastructure creates the impossibility of achieving a sustainable development, inducing a decrease in the performance (Hasan et al., 2016).

Despite the importance of transportations and communication infrastructures for the understanding of geographic distance, Ragozzino and Reuer (2011) argue that in general a remote acquirer is more likely to face problematic situations than a nearby one. An acquirer that is close to its target is in a better position to evaluate and integrate a target's key resources, whereas an acquirer that is far away from its target is in a position where it is likely to lack key partnerships and suffer from information asymmetries.

# Hypothesis 2c: Geographic distance has a negative effect on M&A performance.

#### 4. Economic Distance

Economic distance is determined by differences in consumers' income, costs, quality of natural, financial and human resources, infrastructures, information and knowledge. The wealth is the most important indicator for this type of distance, having a positive impact on the engagement in cross-border economic activities.

When internationalizing to a country with a similar economic profile, it is easier for the firm to replicate the already existing business model and to directly apply its processes and knowledge. For this reason, companies that rely on expertise, economies of scale and standardization focus on these features in order to sustain its competitive advantage. If in contrast the country presents a dissimilar profile, the company must adapt its business model. Nonetheless,

in industries where labor costs are important, having different economic profiles is seen as an attractive feature (Wu, 2014).

Thus, the similarity of the economy is a factor for the development and the performance of the M&A, influencing the easiness of applying the business model, processes and products in the new market. The smaller the similarity between economic profiles, the higher the economic distance and the harder the adaptation, influencing negatively the M&A performance.

*Hypothesis 2d: Economical distance has a negative effect on M&A performance.* 

# The Impact of Mergers & Acquisitions Experience on the Effect of Distance

When firms choose to engage in cross-border M&A, they will face diverse obstacles, some represented by distance, and to which they have to adjust.

Previous M&A experience is a learning source to help perform the needed adjustment. This previous experience tells the firm what works and does not work for a specific set of factors in place and time, which means that it can be applied if the context in which the M&A happens is similar.

Moreover, higher experience, manifested through more previous M&As, gives the possibility to obtain more and specific knowledge about different markets and related factors. Consequently, it also allows to develop M&A capabilities, helping the creation of value (Barkema and Schijven, 2008) and that will be indeed useful to overcome the negative effects of the obstacles.

Therefore, regardless of the similarity between the focal deal and the past ones, experience should help attenuate the distance factor as it would be easier and more efficient to overcome problems and differences, reflecting a better M&A performance.

*Hypothesis 3a: M&A experience moderates positively the negative effect of cultural distance on the M&A performance.* 

*Hypothesis 3b: M&A experience moderates positively the negative effect of administrative distance on the M&A performance.* 

*Hypothesis 3c: M&A experience moderates positively the negative effect of geographic distance on the M&A performance.* 

*Hypothesis 3d: M&A experience moderates positively the negative effect of economic distance on the M&A performance.* 

# Model

From here on, the aim will be to explore if the previous M&A experience will be useful to overcome the negative effects of distance on M&A performance, as set in the research question. The following figure summarizes the hypotheses explained and established above.

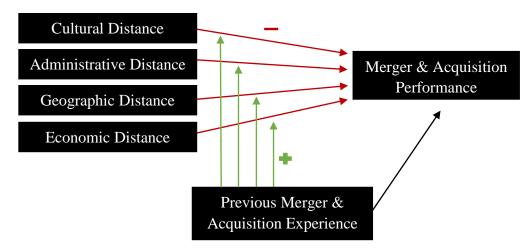


Figure 1: Relations between the variables and the moderator role of previous M&A experience

# Methodology

# Sample

For testing the hypotheses set above, I obtained a sample of complete M&A deals from Thompson Reuters Eikon database. This sample is composed of US based companies, publicly traded, that engaged in international M&A in Brazil, China or Germany during a 7-year time period, from 2008 to 2014. The target countries where chosen in order to include representatives of different continents that possess a high level of M&A activity and different levels of each of the 4 types of distance.

After, to compute the dependent variable, I obtained stock market data from Thompson Reuters Eikon database, including each firm's stock prices and from S&P500 as a proxy of the US market stock prices.

To calculate the independent variables, I used the Hofstede's official website to collect cultural data, the World Bank Open Data as a source for administrative and economic data, and GeoDataSource for the geographic data. The cultural data was not available for different years, so the same value was considered for all the time period.

Finally, Thompson Reuters Eikon database was also used to compile the control variables.

# **Dependent Variable**

#### M&A Performance

M&A performance is the wealth created by the M&A activity, which can be measured through the resulting unexpected returns. The abnormal returns are computed as the difference between the actual stock market and the expected return that would be given by the performance of that market (Finkelstein and Haleblian, 2002; Haleblian and Finkelstein, 1999).

$$AR_{i,t} = R_{i,t} - (\alpha_i + \beta_i R_{m,t})$$

Where i: stock, t: day, Ri,t: Return on stock, Rm,t: Return on market portfolio, αi: Constant, βi:

# Beta of stock

#### Equation 1: Abnormal Returns

To perform this calculation, I used event study methodology, as the value implications of an M&A investment decision in the firm can be anticipated in a measurement window (Anand and Khanna, 2000; Kale et al., 2002; Park, 2004). To establish this measurement window, it was considered a trade-off between the implications of the length of the time interval. On one hand, a small time frame may not allow to capture early market reactions to the announcement or even information leakages before it. On the other hand, a large time frame may absorb information unrelated to the M&A in question, contaminating the results. With this in mind, I calculated the abnormal returns using the market model with an estimation window of 250 days and an event window of 21 days, centered on the event date (Cuypers et al., 2016).

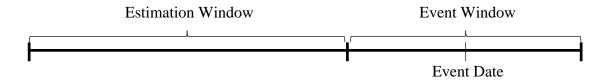


Figure 2: Event Study Window

$$CAR_t = \sum_{i=1}^n AR_{i,t}$$

Where t: day; i: stock, CARt: Cumulative Abnormal Return on stock, ARi,t: Abnormal Return on stock, n: number of stocks in the event window

Equation 2: Cumulative Abnormal Returns

#### **Independent Variables**

### Previous M&A Experience

Essentially, previous M&A experience is the sum of all M&As that the sample firms made during the 10-year time interval before the focal acquisition (Haleblian and Finkelstein, 1999). If during this time period the firm did not perform any M&A activity beyond the focal acquisition, I considered that this company does not possess any previous M&A experience, since the sum in this case is equal to zero.

# Cultural Distance

Cultural distance can be measured as the degree of difference between the cultural norms of the acquirer nation and of the target countries in question (Kogut and Singh, 1988). In this way, drawing on the formula that Kogut and Singh defined based on the Hofstede's national cultural scores, I used a composite index to estimate the deviation between the US and the target nations under analysis, Brazil, China and Germany (Morosini et al., 1998). All 6 cultural scales where taken into consideration: power distance, individualism, femininity/masculinity, uncertainty avoidance, long-term orientation, restraint/indulgence.

$$CD_{c} = \sqrt{\sum_{i=1}^{6} (S_{ic} - S_{iUS})^{2}}$$

Where c: country S: score of the Hofstede's  $i^{th}$  national cultural scale

# Equation 3: Cultural Distance

#### Administrative Distance

To calculate the administrative distance, I measured the political dissimilarity between the US and the target countries in a Euclidian distance, using the governance indicators set by the World Bank (Heuchemer et al., 2008).

$$AD_{c} = \sqrt{\sum_{i=1}^{6} (S_{ic} - S_{iUS})^{2}}$$

Where c: country S: score of the i<sup>th</sup> governance indicator

# Equation 4: Administrative Distance

These 6 indicators capture the impact of government policies and political factors. Voice and accountability captures citizens' political participation, and freedom of expression and association. Political stability and absence of violence measures the likelihood of political instability and violence motivated by politics. Government effectiveness captures the perception of the quality of public and civil services, the degree of pressure independence, the quality of policy formulation and implementation, and government's credibility. Regulatory quality captures the government's ability to formulate and implement policies and regulations. Rule of law captures agents' confidence in the rules of the society, in the quality of contract enforcement, in property rights, the police and the courts. It also measures the likelihood of crime and violence. At last, control and corruption captures perceptions on the exercise of public power to the detriment of private purposes.

#### Geographic Distance

The geographic distance between the acquirer and the target can be determined in a simplistic form by measuring the distance between the countries of origin and acquisition. This distance was scaled in kilometers and between the capital of the acquiring firm's country of origin and the capital of the acquired firm's country.

#### Economic Distance

The economic distance was measured through the difference between the acquiring firm's country gross domestic product per capita, based on purchasing power parity at current international dollars, and the acquired firm's respective one. The advantage is that GDP at PPP takes into account local prices and the inflation rate, which means that it considers different costs of living, allowing a fairer comparison between the countries.

 $ED_c = GDP_{US} - GDP_c$ 

Where c: country

Equation 5: Economic Distance

### **Control Variables**

In order to control for factors that may influence the value creation, I set control variables for factors at the acquirer and deal level.

First, to control for the acquirer firms' performance, I gathered net income data from the last twelve months prior to the focal acquisition. Second, to control for the absolute size of the acquirer, I used the *total assets* in thousands of US dollars in the year of the focal acquisition. Third, I controlled for the *relatedness* between the acquirer and the target, by creating a dummy variable based on 2-digit SIC codes. The dummy took the value 1 if both parties were active in the same 2-digit code and 0 otherwise. Forth, in order to apprehend any differences attributable to the stock exchange of the acquirers, I decided to use dummy variables coded 1 if the firm is listed on the NYSE and 0 if listed on NASDAQ. Fifth, to control for the *method of payment*, I use dummy variables coded 1 if a cash offer was used and 0 otherwise, and 1 if a stock offer was made and 0 otherwise. In the case of a hybrid payment composed by cash and stock, both dummies took the value 1 (Cuypers et al., 2016). Sixth, because friendly acquisitions facilitate integration and reduce information asymmetries (Reuer and Ragozzino, 2008), I created a control variable for deal attitude, with a dummy variable coded 1 if the attitude was friendly and 0 otherwise. Seventh and final, I controlled the *deal value*, using the total amount in millions of US dollars paid to the target by the acquirer, since research shows that the size of the acquisition influences the subsequent performance (Kitching, 1967; Kusewitt, 1985).

#### Model testing specifications

To test the hypotheses, I used a simple ordinary least squares regression analysis.

In the graph 1 (appendix 1) it is possible to observe that the variance of observations across the sample is not the same, reflecting the existence of heteroscedasticity. Thus, in order to avoid inefficiency of the independent variables, biased standard errors and consequently biased inferences, I used robust standard errors.

# Results

Table 1 (appendix 2) presents descriptive statistics – means and standard deviations – and correlations for the variables of the model. Table 2 below presents the results.

The mean of acquisition performance is approximately zero, explained by the small standard deviation and the fact that 50 percent of the deals resulted in positive acquisition performance (against 50% with negative acquisition performance). Furthermore, during the 10-year period prior to the focal acquisition, each sample firm performed an average of 11 M&As, representing around 1 M&A per year. However, the standard deviation is high, which suggests that this type of experience is more common to some companies than others.

The correlation between acquisition performance and acquisition experience is positive, which provides preliminary evidence to the support of hypothesis 1a. Moreover, the positive correlation between all types of distance and acquisition performance also suggest preliminary evidence that backs up hypotheses 2a, b, c and d.

The magnitude of the correlations between the independent variables is high, specifically between the distances, indicating the existence of multicollinearity that can lead to less reliable p-values.

In hypotheses 1a and 1b I argue that M&A performance depends on previous M&A experience, predicting a positive relation in 1a and a negative one in 1b. Results reported in Model 1, Table 2, show a small and positive coefficient for acquisition experience, although not significant. This result is consistent with other studies that did not find any significant relation between the two (Kusewitt, 1985; Lubatkin, 1983; Zollo and Singh, 2004). Thus, the results do not

provide support to any of these hypotheses. Model 2 illustrates a similar result. Models 3 to 6 show a negative coefficient, but all also non-significant.

Hypotheses 2a, 2b, 2c and 2d predict a negative impact of each type of distance on M&A performance. I tested these predictions in Model 2, Table 2, by adding the direct effect of cultural, administrative, geographic and economic distances on M&A performance. Models 3 to 6 also include these effects and show similar results to the ones in Model 2.

Cultural distance presents a positive coefficient of 0,035 that is not in line with the predictions and it is not statistically significant. Therefore, I cannot confirm hypothesis 2a.

Administrative distance presents a negative coefficient, in this case of -0,008, which is consistent with the hypothesis 2b, but does not present any statistic relevance.

Regarding geographic distance, it also presents a negative coefficient, although very small and non-significant to accept the hypothesis 2c.

Finally, economic distance shows a small and positive coefficient, close to zero, not statistically significant, which does not provide reasonable evidence to support the respective hypothesis, 2d.

The hypothesized moderating effects were tested in Models 3 to 6, one at a time. Model 3 verified this effect over cultural distance reported by hypothesis 3a, presenting a positive coefficient, even though small, with a p-value of 0,097. Hypothesis 3b was tested in Model 4, showing a positive effect consistent with the expectations, but with a p-value superior to 0,1. Model 5 confirmed hypothesis 3c by presenting a positive effect, despite very small, with a p-value of 0,095. Lastly, there was no statistical significance in Model 6 to prove hypothesis 3d.

It is also important to state that even though reported R-squares are relatively low, in other studies where abnormal returns are used as the dependent variable show equally low R-squares (Gomes-Mejia, 1992; Haleblian and Finkelstein, 1999; Lubatkin and Chatterjee, 1991; Travlos,

	Dependent Variable: M&A Performance						
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	
Constant	-0,109	-0,450	-0,401	-0,445	-0,406	-0,452	
	(0,068)	(0,781)	(0,778)	(0,772)	(0,777)	(0,774)	
Friendly Attitude	0,109	0,111•	0,097	0,098	0,097	0,100	
	(0,067)	(0,067)	(0,065)	(0,065)	(0,065)	(0,066)	
Cash Payment	-0,015	-0,015	-0,013	-0,012	-0,013	-0,012	
	(0,012)	(0,014)	(0,013)	(0,013)	(0,013)	(0,013)	
Stock Payment	0,053•	0,053•	0,057•	0,054•	0,057•	0,052•	
	(0,029)	(0,030)	(0,030)	(0,030)	(0,030)	(0,031)	
Acquirer NYSE Listed	0,016	0,015	0,016	0,016	0,016	0,016	
	(0,013)	(0,015)	(0,015)	(0,015)	(0,015)	(0,015)	
Relatedness	0,004	0,003	0,005	0,004	0,005	0,004	
	(0,013)	(0,013)	(0,013)	(0,013)	(0,013)	(0,013)	
Deal Value	-2,1E-05•	-2,0E-05	-2,1E-05	-2,2E-05•	-2,2E-05	-2,2E-05•	
	(1,3E-05)	(1,3E-05)	(1,3E-05)	(1,2E-05)	(1,3E-05)	(1,2E-05)	
Acquirer Profitability	-9,7E-07	-1,1E-06	-1,5E-06•	-1,3E-06•	-1,5E-06•	-1,2E-06	
	(7,3E-07)	(7,9E-07)	(7,8E-07)	(7,9E-07)	(7,8E-07)	(7,9E-07)	
Acquirer Size	3,4E-08•	3,7E-08	2,5E-08	2,5E-08	2,5E-08	2,7E-08	
	(2,0E-08)	(2,2E-08)	(2,2E-08)	(2,2E-08)	(2,2E-08)	(2,2E-08)	
H1 M&A Experience	<b>3,8E-05</b>	2,7E-05	-0,003	-6,8E-04	-0,002	-7,6E-04	
112 - Cultural Distance	(5,0E-04)	(5,0E-04)	(0,002)	(6,8E-04)	(0,001)	(7,0E-04)	
H2a Cultural Distance		0,035	0,035	0,037	0,036	0,038	
H2b Administrative		(0,084)	(0,084)	(0,083) <b>-0,013</b>	(0,084) <b>-0,005</b>	(0,084) <b>-0,007</b>	
		-0,008	-0,005	(0,039)	(0,038)	(0,038)	
Distance		(0,039)	(0,038)				
H2c Geographic		-3,0E-04	-3,1E-04	-3,2E-04	-3,2E-04	-3,3E-04	
Distance		(7,4E-04)	(7,3E-04)	(7,3E-04)	(7,3E-04)	(7,3E-04)	
H2d Economic		3,1E-06	2,9E-06	3,2E-06	2,9E-06	2,7E-06	
Distance		(5,5E-06)	(5,4E-06)	(5,4E-06)	(5,4E-06)	(5,4E-06)	
H3a M&A Experience			4,4E-05•				
x Cultural Distance			(2,6E-05)				
H3b M&A Experience				4,5E-04			
x Administrative				(2,7E-04)			
Distance							
H3c M&A Experience					3,7E-07•		
x Geographic Distance					(2,2E-07)		
H3d M&A Experience						4,9E-08	
x Economic Distance						(3,1E-08)	
n	156	156	156	156	156	156	
R-squared	0,160	0,163	0,173	0,172	0,173	0,172	
-	0,100	0,103	0,173	0,172	0,173	0,172	
p-value	0,001	0,013	0,014	0,014	0,014	0,013	

Estimated coefficients are in bold. Standard errors are in parentheses. • Indicates a p-value

bellow 0,1.

Table 2: Determinants of M&A Performance

1987). Therefore, the results appear to fall within similar types of studies. Nonetheless, the R-squares are still higher in comparison, probably a result from the multicollinearity between the independent variables already mentioned above.

# Discussion

By seeking to understand if previous M&A experience is useful to overcome some types of distance better than others, I examined the relations elaborated.

Despite not finding any linear relation between prior experience and M&A performance, this study contributes to the research on organizational learning by supporting the argument that experience does not lead necessarily to a strictly positive or negative acquisition outcome. Indeed, it is likely that the relation between experience and performance is more complex. Experience may be subjected to the existence of similarity or to an optimal level to be relevant.

Moreover, the contributions also extend to the indirect impact of experience on the acquisition performance, here through types of distance. The findings suggest that prior M&A experience may be useful to overcome the effects of cultural and economic distance. However, the direct effects of distances on M&A performance could not be proven and, therefore, the results do not support my main arguments.

These non-findings may have arisen from various reasons, some of which presented below.

First, there is a possibility that the effect of distance may be more complex than anticipated, for instance it can be non-linear or companies may possess an optimal level of distance that they can handle, which means that it would only be possible to observe a negative impact when firms deviate from that point.

Regarding cultural distance, Germany and Brazil look alike when looking at the numbers, but when separating the scores, it is possible to see that they are very different in terms of power to distance and long-term orientation. It is possible that some of the Hofstede's cultural scores represent higher obstacles to M&A performance than others, which by being treated identically leads to misleading results.

Administrative distance may have suffered from the same problem. China and Brazil look similarly distant to the acquirer nation, but when looking at the 6 indicators it is noticeable that they present opposite scenarios regarding voice and accountability, and regulatory quality.

Furthermore, China and Brazil also look economically similar in terms of GDP per capita PPP, but China has been presenting increasing GDPs and economic growth, indicating the rise of a possible economic power unequal to Brazil.

Hence, the false similarity resultant from the distance computations may be the reason behind the lack of results regarding the direct effects of distance.

#### Limitations

There are several limitations in this study that should be addressed and represent opportunities for future research.

First, I only used the United States, for its high levels of M&A activity, as the acquirer nation of the firms in the sample. Also, I only choose 3 representative countries for the target nations. By narrowing the countries in the study, the obtained results reflect only the adjacent realities and which may not necessarily represent an overall perspective. The use of a broader country mix would better reflect an international scenario to try to achieve results in the direction of better replicate the effects of distance on M&A performance. Therefore, it would be interesting to broaden the country set and see if different results are achieved.

Second, I only used M&A experience as a source of learning. Other studies examined other forms of learning (e.g. Martin and Salomon, 2003; Salomon and Martin, 2008) that would be interesting to approach and would allow a closer approximation to reality.

Third, the use of cumulative abnormal returns merely reflects market reactions and only represents a short-term impact, which does not necessarily characterize the overall M&A performance. Future research could gain by exploring long-term impact on performance.

Forth, as I used physical distance as a proxy for geographic distance, the values were taken as constant over time. Cultural distance had a similar treatment, for a lack of availability of values over time for the Hofstede's national cultural scores. The use of constant values represents a limitation for not necessarily reflecting the country's situation at the respective moment in time. In future research would be interesting to use different proxies and see if the results differ.

Fifth, the high correlation between the independent variables also represents a limitation, which was already discussed above. Furthermore, there may not be enough variance on distance, first because all deals from the same country present equal or almost equal levels of distance, and second because 2 out of the 3 target country have similar distances to the US – Brazil and Germany are similar culturally and geographically distant; China and Germany are similar administratively distant; China and Brazil are similar economically distant.

Lastly, I did not use any control variables for the target firms, which may be useful to achieve better and more realistic results.

### Conclusion

This study began with the idea that the impact of distance on M&A performance can be overcome through experience from prior M&A activity. Although many of the effects here are not significant, this study provides a base for future research with the possibility to address the attached limitations. Nonetheless, findings indicate that M&A experience helps surpass cultural and geographic distances, which suggest a better comprehension and performance under different cultural and natural attributes.

# References

Ahuja, Gautam, and Riitta Katila. 2001. "Technological acquisitions and the innovation performance of acquiring firms: a longitudinal study." *Strategic Management Journal*, 22(3): 197-220.

Anand, Bharat N., and Tarun Khanna. 2000. "Do firms learn to create value? The case of alliances." *Strategic Management Journal*, 21(3): 295-315.

Anand, Jaideep, and Harbir Singh. 1997. "Asset re-deployment, acquisitions and corporate strategies in declining industries." *Strategic Management Journal*, Summer Special Issue, 18: 99-118.

Barkema, Harry G., John H. Bell, and Johannes M. Pennings. 1996. "Foreign entry, cultural barriers, and learning." *Strategic Management Journal*, 17(2): 151-166.

**Barkema, Harry G., and Mario Schijven.** 2008. "How do firms learn to make acquisitions? A review of past research and an agenda for the future." *Journal of Management*, 34(3): 594-634.

**Barton, David. M., and Roger Sherman.** 1984. "The price and profit effects of horizontal merger: a case study." *Journal of Industrial Economics*, 33(2): 165-178.

Bourgoin, Henry. 1989. L'Afrique malade du management. Paris: Jean Picollec.

**Brossard, Michel, and Marc Maurice.** 1974. "Existe-t-il un modele universel des structures d'organisation?" *Sociologie du Travail*, 4: 402-426.

**Capron, Laurence.** 1999. "The long-term performance of horizontal acquisitions." *Strategic Management Journal*, 20(11): 987-1018.

**Cuypers, Ilya R.P., Youtha Cuypers, and Xavier Martin.** 2016. "When the target may know better: effects of experience and information asymmetries on value from mergers and acquisitions." Strategic Management Journal.

**Finkelstein, Sydney, and Jerayr Haleblian.** 2002. "Understanding acquisition performance: the role of transfer effects." *Organization Science*, 13(1): 36-47.

**Fowler, Karen L., and Dennis R. Schmidt.** 1989. "Determinants of tender offer post-acquisition financial performance." *Strategic Management Journal*, 10(4): 339-350.

**Ghemawat, Panjak.** 2001. "Distance still matters: the hard reality of global expansion." *Harvard Business Review*, 79(8): 137-147.

**Gomes-Mejia, Luis R.** 1992. "Structure of process diversification compensation strategy and firm performance." *Strategic Management Journal*, 13: 381-398.

**Haleblian, Jerayr, and Sydney Finkelstein.** 1999. "The influence of organizational experience on acquisition performance: a behavioral learning perspective." *Administrative Science Quarterly*, 44(1): 29-56.

Hassan, Md. Mahadi, Yusnidah Ibrahim, and Md. Mohan Uddin. 2016. "Institutional distance factors influencing firm performance: a hypothetical framework from cross-border mergers and acquisitions." *The Journal of Developing Areas*, 50(6): 377-386.

Hayward, Mathew L. A. 2002. "When do firms learn from their acquisition experience? Evidence from 1990-1995." *Strategic Management Journal*, 23(1): 21-39.

**Heuchemer, Sylvia, Stefanie Kleimeier, and Harald Sander.** 2008. "The geography of european cross-border banking: the impact of cultural and political factors." Maastricht research school of Economics of TEchnology and Organizations Working Paper 2008-04.

**Hitt, Michael, Jeffrey Harrison, R. Duane Ireland, and Aleta Best.** 1998. "Attributes of successful and unsuccessful acquisitions of US firms." *British Journal of Management*, 9(2): 91-114.

**Hofstede, Geert.** 1980. *Culture's consequences: international differences in work-related values.* Beverly Hills: Sage Publications.

Kale, Prashant, Jeffrey H. Dyer, and Harbir Singh. 2002. "Alliance capability, stock market response, and long-term alliance success: the role of the alliance function." *Strategic Management Journal*, 23(8): 747-767.

King, Major David R., Dan R. Dalton, Catherine M. Daily, and Jeffrey G. Covin. 2004. "Metaanalyses of post-acquisition performance: indicators of unidentified moderators." *Strategic Management Journal*, 25(2): 187-200.

Kitching, John. 1967. "Why do mergers miscarry?" Harvard Business Review, 45(6): 84-101.

Kobrin, Stephen J. 1991. "An empirical analysis of the determinants of global integration." *Strategic Management Journal*, 12: 17-31.

Kogut, Bruce. 1985. "Designing global strategies: comparative and competitive value-added chains (part 1)." *Sloan Management Review*, 27: 15-28.

**Kogut, Bruce, and Harbir Singh.** 1988. "The effect of national culture on the choice of entry mode." *Journal of International Business Studies*, 19(3): 411-432.

**Kreacic, Vladimir, and Philip March.** 1986. "Organisation development and national culture in four countries." *Public Enterprise*, 6: 121-134.

Kusewitt, John R. 1985. "An exploratory study of strategic acquisition factors relating to performance." *Strategic Management Journal*, 6: 151-169.

Lubatkin, Michael. 1983. "Mergers and the performance of the acquiring firm." Academy of Management Review, 8(2): 218-225.

**Lubatkin, Michael, and Sayan Chatterjee.** 1991. "The strategy-shareholder value relationship: Testing temporal stability across market cycles." *Strategic Management Journal*, 12: 251-271.

March, James G. 1991. "Exploration and exploitation in organizational learning." *Organization Science*, 2: 71-87.

**Martin, Xavier, and Robert Salomon.** 2003. "Tacitness, learning and international expansion: a study of foreign direct investment in a knowledge-intensive industry." *Organization Science*, 14(3): 297-311.

McGrath, Rita, Ian MacMillan, Elena Ai-Yuan Yang, and William Tsai. 1992. "Does culture endure or is it malleable? Issues for entrepreneurial economic development." *Journal of Business Venturing*, 7: 441-58.

Morosini, Piero, Scott Shane, and Harbir Singh. 1998. "National cultural distance and crossborder acquisition performance." *Journal of International Business Studies*, 29(1): 137-158.

Nadolska, Anna, and Harry G. Barkema. 2007. "Learning to internationalize: the pace and success of foreign acquisitions." *Journal of International Business Studies*, 38(7): 1170-1186.

Park, Namgyoo K. 2004. "A guide to using event study methods in multi-country settings." *Strategic Management Journal*, 25: 655-668.

Penrose, Edith. T. 1959. The theory of the growth of the firm. Oxford: Blackwell.

**Rahman, Mahabubur, Mary Lambkinb, and Dildar Hussain.** 2016. "Value creation and appropriation following M&A: a data envelopment analysis." *Journal of Business Research*, 69(12): 5628-5635.

**Ragozzino, Roberto, and Jeffrey J. Reuer.** 2011. "Geographic distance and corporate acquisitions: signals from IPO firms." *Strategic Management Journal*, 32(8): 876-894.

**Reuer, Jeffrey J., and Roberto Ragozzino.** 2008. "Adverse selection and M&A design: the roles of alliances and IPOs." *Journal of Economic Behavior & Organization*, 66(2): 195-212.

**Rugman, Alan M.** 1979. *International diversification and the multinational enterprise*. Lexington: Heath.

**Salomon, Robert, and Xavier Martin.** 2008. "Learning, knowledge transfer, and technology implementation performance: a study of time-to-build in the global semiconductor industry." *Management Science* 54(7): 1266-1280.

Scott, W. Richard. 1995. Institutions and Organizations. Thousand Oaks: Sage Publications.

Seth, Anju, Kean P. Song, and R. Richardson Pettit. 2002. "Value creation and destruction in cross-border acquisitions: an empirical analysis of foreign acquisitions of U.S. firms." *Strategic Management Journal*, 23(10): 921-940.

Shane, Scott. 1992. "Why do some societies invent more than others?" Journal of Business Venturing, 7: 29-46.

**Travlos, Nickolaos.** 1987. "Corporate takeover bids, methods of payment, and biding firms' stock returns." *Journal of Finance*, 42: 943-962.

**Wu, Yaoan.** 2014. *How do institutions matter to cross-border mergers and acquisitions by emerging economy multinationals in developed countries.* University of York.

**Zollo, Maurizio, and Harbir Singh.** 2004. "Deliberate learning in corporate acquisitions: post-acquisition strategies and integration capability in US bank mergers." *Strategic Management Journal*, 25(13): 1233-256.