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National culture differences and its impacts on cross-border M&A performance

Italy

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Final thesis to obtain the Master's diploma in Management Engineering at Politecnico di Torino

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Master's Degree in Management Engineering

Supervisor: Elisa Ughetto

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I dedicate this work to my family and friends that supported me through this journey.

Acknowledgements

Firstly, I would like to thank my parents, Melina and Marcelo, for all the support during my graduation and for always encouraging my career choices, giving me advice when I most needed. Also, for pushing me to try different paths and to constantly challenge myself.

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All the hard work was definitely worth it.

"Gradually, then suddenly." - Ernest Hemingway

Abstract

In the past decades, cross-border mergers and acquisitions have increased in popularity, with a significant push in number of transactions in the 1990s. Among other reasons, companies are looking for acquiring targets abroad to participate in fast-growing markets and geographies while increasing their in-house capabilities. The international nature of these transactions poses unique challenges related to the differences in national culture between the parties, which can be reflected in discrepant corporate and working cultures and might directly impact the performance of these deals. In that context, the measurement of national cultural differences is of large interest of cross-regional research and has been applied to study companies' and employees' profiles and behaviors. Authors suggest that the national environment (our country) exerts influence in individuals and decision makers, which influences management control systems, leadership attitudes, relationship between workers and strategic decisions of firms. The objective of this paper is, thus, to analyze what the existing literature states regarding the impacts of national culture on the performance of cross-border mergers and acquisitions. Does cultural distance really impacts performance of the acquirer and the target company? Or does it contribute positively to the long-term development of the combined organization?

Key-words: Cultural Differences, Mergers and Acquisitions, M&A, Cross-border, Performance.

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List of abbreviations and acronyms

M&A	Mergers and acquisitions
CBM&A	Cross-border mergers and acquisitions
CD	Cultural difference
HR	Human resources
MBO	Management by objectives To be completed
GLOBE	Global leadership and organizational behavior effectiveness
OLT	Organizational learning theory
RBV	Resource-based view

Contents

Part I - Introduction

1 Cross-border M&A Panorama: Evolution, Determinants and Motivations

The objective of this section is to describe the historical evolution of cross-border mergers and acquisitions, depict the factors that affect its development and understand the main motivations of acquirers according to the literature. Firstly, it is analyzed how this phenomenon has evolved in the past decades, the main differences between periods and existing tendencies. Then, it is considered what are the main determinants behind this type of transaction. Finally, in the third subsection, the main motivations behind cross-border M&A are listed.

1.1 Historical Evolution

Cross-border M&A (CBM&A) and domestic M&A reveal clear differences, with the former presenting unique characteristics and challenges, since it involves companies from countries with different regulations and cultural structures. One similar behavior, however, can be seen in both types of transactions. As reported by Xu (2017) the analysis of data from cross-border M&A activity from 1990 to 2010 reveals that this type of merger tends to cluster by time and industry, similarly to domestic M&As (MITCHELL; MULHERIN, 1996; XU, 2017). Nonetheless, discrepancies are quite noticeable between waves by cause of economical and industry-specific changes.

The 1990s showed a big popularization of CBM&A as a strategy for companies, corresponding to an increase of at least five times the number of transactions than the 1980s and a significant expansion in the number of countries involved. The wave that took place from 1987 to 1990, reached its peak at its last year. The next wave started as an increase in transaction activity in 1996, reaching a peak of $828 billion in the year 2000 (EVENETT, 2004). Several factors are responsible for this compelling advance, such as general industry consolidation, deregulation and globalization. Figure 1 shows this clear difference between these two periods.

According to data of the United Nations Conference on Trade and Development (UNCTAD), the economic recession that took place in the beginning of the 20th century directly impacted the number and value of cross-border M&A deals (TRADE; (UNCTAD), Accessed on: June 26th 2020). The next wave, then, starting in 2001, showed an increase in number of transactions starting in 2004 and reaching its historical peak in 2007, with

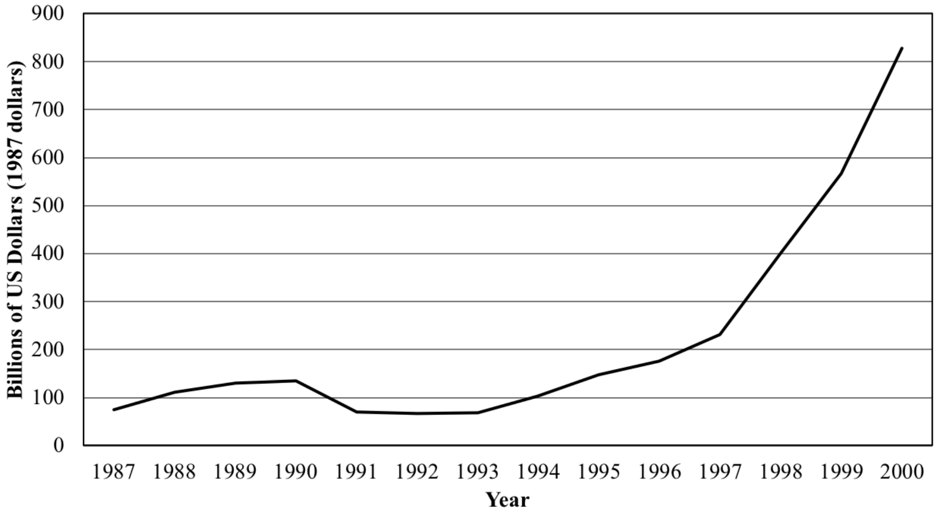

Figure 1 – The 1990s showed a big increase in the value of cross-border M&A
Source: UNCTAD (various years)

7.582 transactions registered. This wave was characterized by a dominant activity of the United States, representing 20.4% of the total acquirer value in 2005, followed by the United Kingdom with 12.2% (BRAKMAN; GARRETSEN; MARREWIJK, 2007).

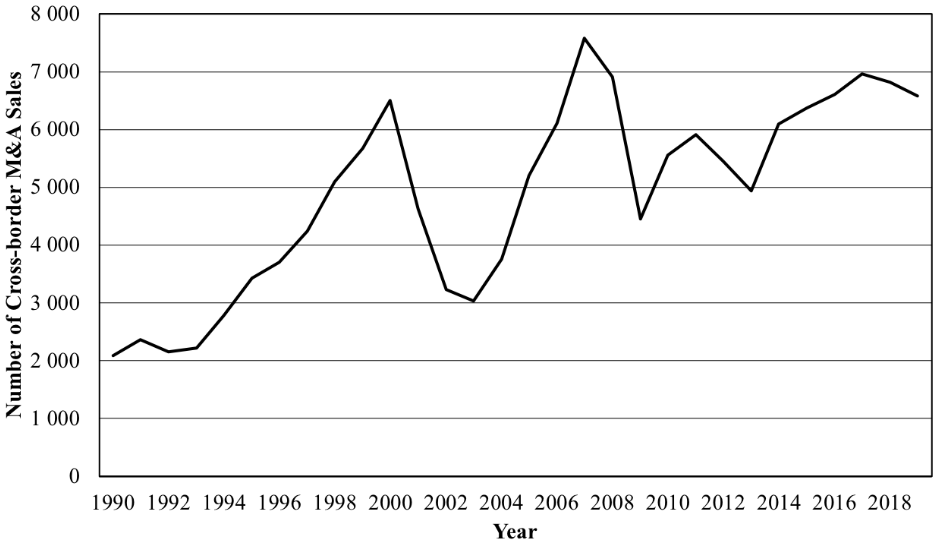

Figure 2 – Number of Cross-border M&A Sales
Source: UNCTAD cross-border M&A database (various years)

Furthermore, it can be concluded that the overseas M&A activity from 1985 and 2005 was represented by a significant dominance of developed countries, since, on average, 85% of acquiring nations were from the United States, Canada or Western Europe, including France, Germany and United Kingdom (BRAKMAN; GARRETSEN; MARREWIJK, 2007).

Despite the fact that the 2007-2008 economic crisis negatively impacted both the

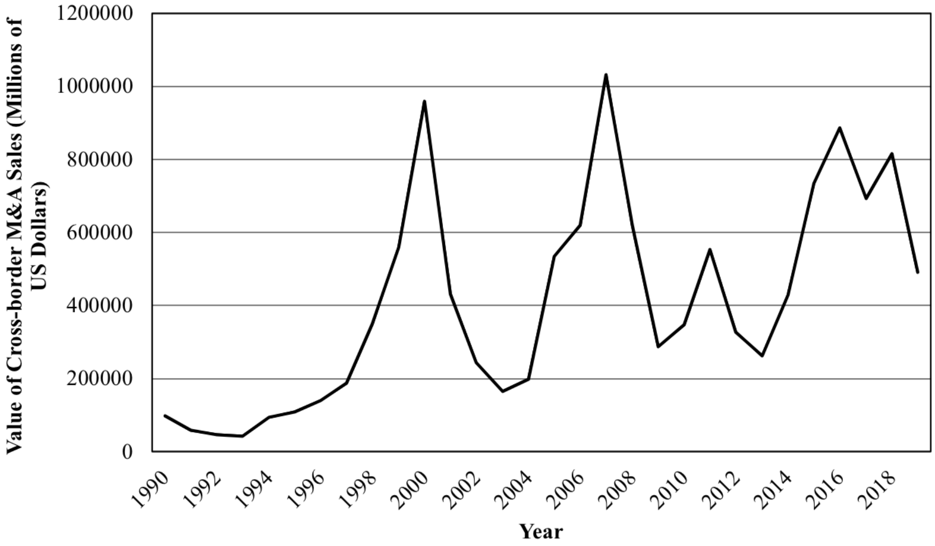

Figure 3 – Value of Cross-border M&A Sales
Source: UNCTAD cross-border M&A database (various years)

number and value of cross-border deals, the following years showed several gradual changes. After 2010, the higher presence of Asia-Pacific companies as acquirers, which was already a trend in the past decades, was intensified, showing the clear interest of these companies to enter the developed economies in Europe and the United States (KENGELBACK; ROOS, 2011). This becomes clear in the first quarter of 2016, when China was between the three biggest investors, together with the United States and Canada (DELOITTE, 2011).

Besides that, 2015 shows an increase in both the number and value of deals as compared to 2010, which can be seen in Figures 2 and 3. However, from 2016 to 2018, companies started negotiating smaller deals, as total CBM&A value decreased from around U$887 billion in 2016 to approximately U$816 billion in 2018, while the number of deals increased by 3% in the same period (TRADE; (UNCTAD), Accessed on: June 26th 2020). Additionally, 2016 signaled a significant increase in Asian investors acquiring companies in Europe, up to 111% when measured by deal value, for deals over U$25 million (COMPANY, 2017).

Also, as stated by Mitchel and Mulherin, the analysis of transactions from 1982 to 1989 showed that M&As tend to cluster by industry (MITCHELL; MULHERIN, 1996). According to the authors, changes in an industry's structure factors, such as government policy, technology and demand and supply configurations directly influence merger activities. The hypothesis sustained and tested by the authors suggests that taking the takeover route is usually the least-cost method to react to these eventual industry shocks, rather than solving the problem internally. This clusterization by industry and the changes regarding this pattern across waves was further analyzed by Evenett, who determined the differences between the wave of 1987-1990 to the wave of 1997-2000 by sector (EVENETT, 2004).

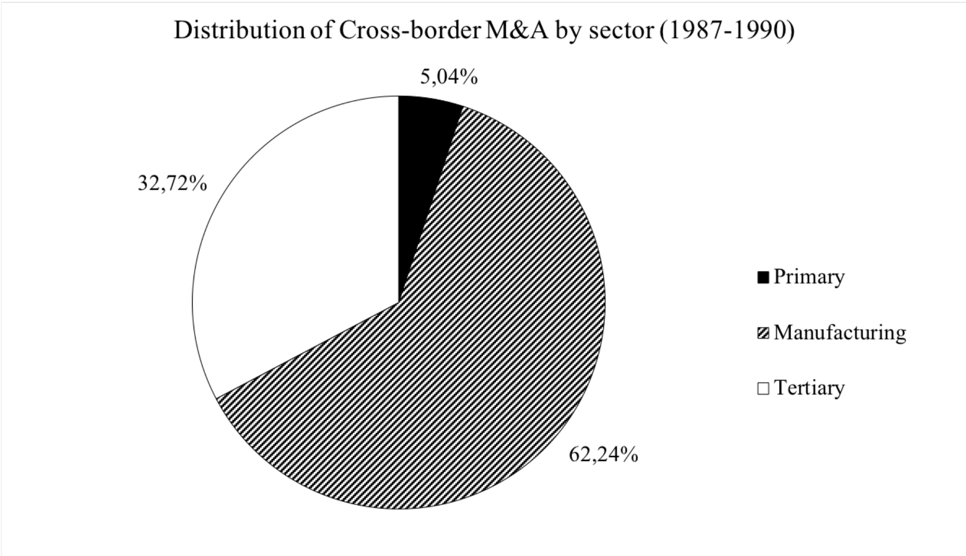

Figure 4 – Clusterization by Sector of Cross-border M&A (1987-1990)
Source: (EVENETT, 2004)

As seen in Figures 4 and 5, there were changes between these periods regarding the distribution within sectors. Firstly, the Manufacturing sector, representing the majority of all CBM&A value in 1987-1990 (62.24%), had a considerable decrease to 35.11%. Some examples of the main affected industries in this sector were "Food, Beverages and Tobacco", "Publishing, printing and reproduction of recorded media" and "Chemical and Chemical Products", according to the author.

Secondly, following to the data from Evenett (2004), it can be seen that the Primary sector, which represented 5.04% of the total, had a decrease to only 1.43%, mainly described by the contraction of transactions in "Mining, quarrying and petroleum", which went from 4.32% of the total value of deals to 1.04%. Finally, the period of 1997-2000 was greatly characterized by the predominance of CBM&A in the Tertiary sector, which can also be seen in Figures 4 and 5. The following are the industries that showed the greatest appreciation in their share of total investments when compared to 1987-1990: "Electric, gas and water" from 0.36% to 5.44%, "Transport, storage and communication" from 1.84% to 21.94% and "Business services" from 4.39% to 9.44% (EVENETT, 2004).

A similar sector and industry clusterization between periods can be done by inspecting data from UNCTAD cross-border M&A database. As indicated in Table 1, there are several changes and trends that can be observed. Despite the decrease in the total value of the Manufacturing sector from 1987-1990 to 1997-2000, as observed by Evenett (2004), in the next periods there was actually an increase in the share of this sector. Still in Manufacturing, it is relevant to highlight the increasing value of the "Food beverages and tobacco" industry. Similarly, this growing participation is also seen in the "Manufacture of pharmaceuticals, medical chemicals and botanical products industry".

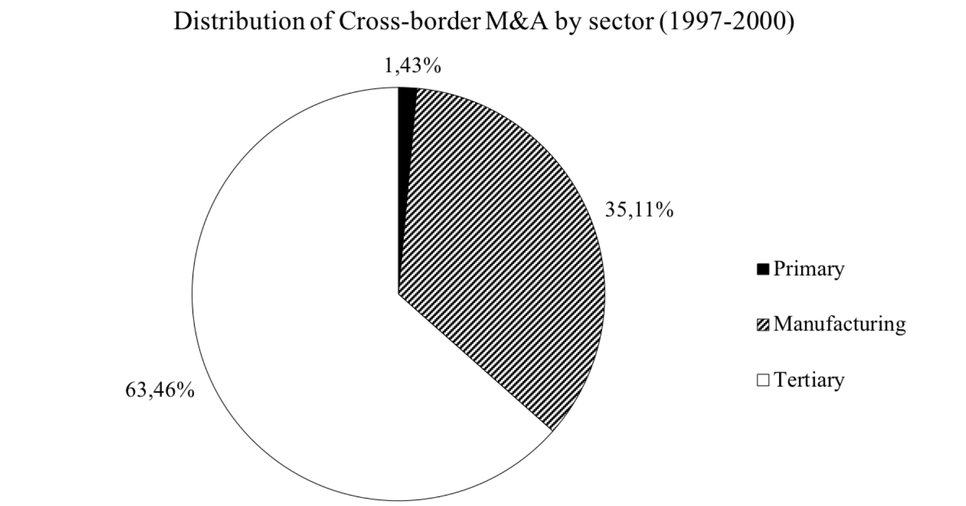

Figure 5 – Clusterization by Sector of Cross-border M&A (1997-2000)
Source: (EVENETT, 2004)

Another trend also observed in the data by UNCTAD is related to the Service or Tertiary sector. As pointed out before, the sector gained traction from 1997 to 2000, however, as shown in Table 1, there was a continuous decrease in the periods after that. An extra observable trend is seen in the “Information and communication" industry, which lost participation in the total value of transactions.

By looking at Table 1, it is also noticeable that there are some periods that show a peak in certain industries. This can be explained, in some level, by Mega Deals that took place at the time, which correspond to M&A deals that have more than U$500 million in value. According to data provided from the Institute of Mergers, Acquisitions and Alliances (IMAA), some examples of Mega Deals are the acquisitions of AirTouch Communications (US) and Mannesmann (Germany) by Vodafone (UK), in 1999, valued at $60.3 billion and $202.8 billion, respectively (MERGERS; (IMAA), Accessed on: July 3rd 2020). In addition, another example is the acquisition of the dutch ABN-AMRO Holding by RFS Holdings, in 2007, valued at $98.2 billion. To some degree, this is reflected in the peak seen in the 'Financial and insurance services' industry in the period 2001-2007. Other examples are the purchase of SABMiller by Anheuser-Busch Inbev in 2015 ($101.5 billion), in the beverages industry, and the acquisition of Monsanto by Bayer in 2016 ($56.6 billion), in the “Manufacture of pharmaceuticals, medical chemicals and botanical products industry",
as shown in Table 1.

After mapping the behavior of cross-regional M&A in the past years, it is also relevant to observe what are the main determinants for these deals across countries. This is done in the next section.

Sector/Industry	1997-2000	2001-2007	2008-2011	2012-2017
Primary	2,4%	7,4%	21,1%	6,4%
Agriculture, forestry and fishing	0,1%	0,1%	0,6%	0,6%
Mining, quarrying and petroleum	2,4%	7,3%	20,5%	5,7%
Manufacturing	29,6%	30,4%	33,6%	47,5%
Food, beverages and tobacco	3,4%	4,9%	5,9%	11,2%
Textiles, clothing and leather	0,5%	0,6%	0,4%	0,5%
Manufacture of wood and of products of wood and cork	0,2%	0,2%	0,1%	0,1%
Manufacture of paper and paper products	1,6%	0,4%	0,2%	0,4%
Printing and reproduction of recorded media	0,2%	0,2%	0,1%	0,0%
Manufacture of coke and refined petroleum products	2,3%	1,4%	0,1%	-0,2%
Manufacture of chemicals and chemical products	3,8%	3,2%	3,4%	4,5%
Manufacture of pharmaceuticals, medicinal chemicals and botanical products	1,9%	5,2%	8,8%	12,6%
Manufacture of rubber and plastics products	0,5%	0,5%	0,5%	0,6%
Manufacture of non-metallic mineral products	1,4%	2,2%	1,9%	1,8%
Manufacture of basic metal and metal products	1,9%	4,7%	1,3%	1,3%
Manufacture of computer, electronic, optical products and electrical equipmei	5,7%	4,0%	5,1%	5,7%
Manufacture of machinery and equipment	1,4%	1,4%	2,0%	4,4%
Motor vehicles and other transport equipment	4,2%	1,1%	1,9%	1,3%
Manufacture of furniture	0,1%	0,0%	0,0%	0,6%
Other manufacturing, n.e.c.	0,5%	0,3%	1,8%	2,8%
Services	68,0%	62,2%	45,2%	46,1%
Electricity, gas, water and waste management	5,7%	8,4%	7,4%	5,5%
Construction	0,4%	1,0%	1,2%	0,4%
Trade	3,6%	3,6%	3,9%	4,0%
Transportation and storage	2,0%	4,1%	3,2%	4,5%
Accommodation and food service activities	1,2%	1,1%	0,9%	1,9%
Information and communication	34,5%	15,2%	11,7%	6,2%
Financial and insurance activities	15,2%	19,1%	8,7%	11,2%
Real estate activities	1,1%	6,0%	2,9%	5,8%
Professional, scientific and technical activities	2,3%	1,0%	1,6%	2,0%
Administrative and support service activities	1,4%	1,4%	2,4%	1,7%
Public administration and defence; compulsory social security	0,1%	0,1%	0,1%	0,1%
Education	0,0%	0,1%	0,3%	0,1%
Human health and social work activities	0,0%	1,0%	0,8%	1,3%
Arts, entertainment and recreation	0,3%	0,2%	0,1%	1,0%
Other service activities	0,1%	0,0%	0,1%	0,2%
Total	100%	100%	100%	100%

Table 1 – Representation by value of Cross Border M&A

Source: UNCTAD Cross-border M&A database (various years)

1.2 Determinants

In conformity with the literature, several factors can be considered determinants for the occurrence of cross-border M&A. As stated by Rossi and Volpin (2003) and reaffirmed by Erel, Liao and Weisbach (2012), a better accounting quality and shareholder protection increases the probability of a country to be the acquirer rather than a target (VOLPIN; ROSSI, 2003; EREL; LIAO; WEISBACH, 2012). Additionally, geography has a statistically significant impact on overseas deals, since the odds of acquiring a company in a nearby country is higher than acquiring in a country far away (EREL; LIAO; WEISBACH, 2012).

Regarding the impact of financial development in CBM&A, literature suggests that an increase of the stock market to GDP ratio is associated with an increase in overseas M&A activity (GIOVANNI, 2005), which shows the positive effect of the high developed equity markets in cross-border investment flows. This is illustrated in the 1990s, when worldwide stock markets demonstrated an astonishing growth (see Figure 1 and Figure 6).

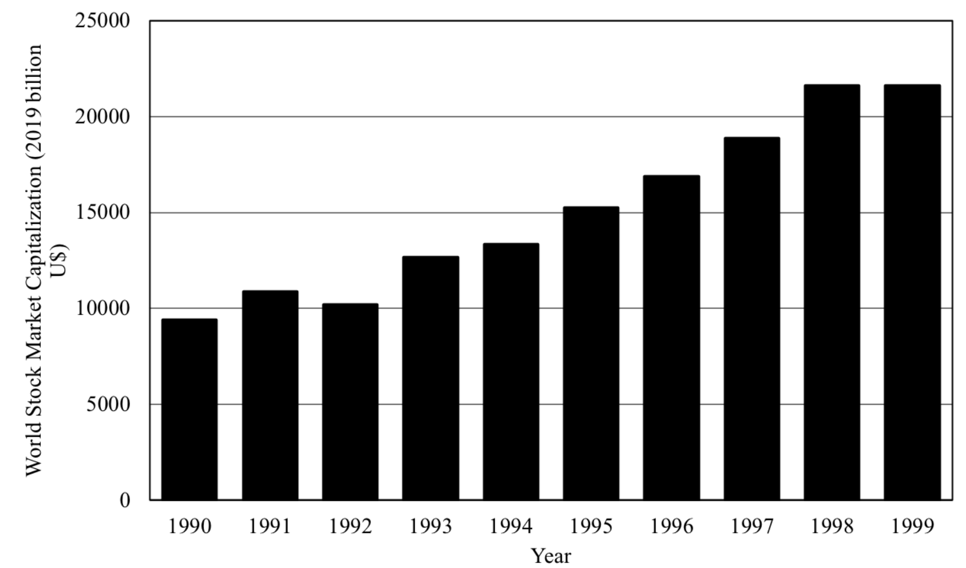

Figure 6 – World stock market shows great appreciation in the 1990s
Source: S&P's Emerging Market Factbook

Besides the influences of accounting standards, investors protection and the level of financial deepening of markets, there is also the impact that the quality of institutions have in M&A activity. As reported by Hyun, 'law and order', which represents the strength of the legal system and popular observance of the law in a certain country, do have a significant impact in CBM&A (HYUN; KIM, 2010). This suggests that hosts countries with solid institutions do attract more foreign M&A investments. This 'law and order' variable was utilized according to the definition of institutional quality by the International Country Risk Guide.

Also, Institutional Theory is largely applied to explain overseas mergers from emerging countries. A strong institutional framework ensures effective markets and promote voluntary exchange, which is not the case for countries with corrupt business practices (MEYER et al., 2009). Some elements of this institutional framework are law enforcement, regulatory regimes and information mechanisms. As attested by the literature, for firms with low international experience, government and institutional support might be fundamental to increase their capabilities to engage in foreign transactions (LUO; TUNG, 2007). Also, Du and Boateng complement this view with their analysis of Chinese firms, by stating that institutions are important sources of contribution for CBM&As in emerging economies, and that they can compensate the weaknesses of emerging firms arriving late in the international market (DU; BOATENG; NEWTON, 2016). Furthermore, a stronger institutional environment stimulates acquisitions rather than other investment choices, such as Joint Ventures (MEYER et al., 2009).

The literature on emerging countries is also complemented by Pablo (2009), who studies a dataset of 867 M&A transactions taking place in Latin America from 1998 to 2004. The author states that, alike developed countries, acquirers do come from countries with better economic environments (lower annual volatilities in GDP growth, inflation indexes, lending rates and currency depreciation) (PABLO, 2009). This is consistent with the studies of Rossi and Volpin mentioned before. Furthermore, the author states that factors such as shareholder protection and government intervention in business affairs determine who is the buyer and the seller in a CBM&A transaction.

In more recent years, government intervention and influence in cross-border deals is becoming even more evident in some developed countries, such us the US, UK and Germany. Governments show higher concerns regarding the expansion of some nations worldwide and their possible impacts in domestic economies, such as Chinese companies increasing their presence by engaging in M&A in Europe and North America. As reported by Bain & Company (2019), in 2018 the United States passed a law that extends the powers of the Committee on Foreign Investments in the US (CFIUS), which is responsible for vetting potential foreign investments that might pose a risk for national security (COMPANY, 2019). Similarly, Germany expanded its government influence to block a non-EU company from acquiring more than 25% of a domestic entity (COMPANY, 2019).

1.3 Motivations and Trends

As written in the past sections, CBM&A is influenced and determined by several factors, economical or not, which molds the evolution of this phenomenon over the decades. The different characteristics in overseas M&A across years is also illustrated by the changes in the strategic motivations behind the deals.

The monopoly theory was the first rationale used to illustrate the motivations that stimulated M&As. As depicted by Stigler and later by Scherer and Ross, companies take advantage of M&A activities to increase their market share and create entry barriers for other players in the industry (STIGLER, 1950; SCHERER; ROSS, 1990). Consequently, they can elevate their profits by setting prices independently. Nowadays, however, due to improved monopoly regulations, this theory is not as significant as it was in the past (WANG; MOINI, 2012).

The synergy theory was, then, used to try to explain this phenomenon. Several authors, such as Nielsen and Melicher (1973) and Berkovitch and Narayanan (1993), argued that companies engage in mergers to achieve improved efficiency and value creation due to synergy effects (NIELSEN; MELICHER, 1973; BERKOVITCH; NARAYANAN, 1993). Yet, since other studies question the beneficial post-merger returns (CAVES, 1989), this theory raised questions regarding other possible explanations for M&A motivations.

For those reasons, as stated by Wang and Moini, the Resource-Based View (RBV) is the most frequently used theory in recent literature to explain M&As (WANG; MOINI, 2012). The RBV links the ability of a firm to sustain competitive advantage with its resources and capabilities (BARNEY, 1991). Related to that, Madhok and Tallman wrote "…firms enter in collaborative relationships because they are expected to yield superior value relative to alternate organizational forms in certain situations, offering potentially synergistic combinations of resources and capabilities…" (MADHOK; TALLMAN, 1998). Thus, by acquiring international businesses, the acquiring company can obtain resources such as technology, know-how and other tangible or intangible assets that can contribute to its competitive advantage.

Some scholars also employ the Organizational Learning Theory (OLT) as a source of motivation for cross-border deals. Amburgey and Miner argue that mergers are also characterized by a firms strategy momentum, which corresponds to "...the tendency to maintain or expand the emphasis and direction of prior strategic actions in current strategic behavior" (AMBURGEY; MINER, 1992). That is, as companies engage in M&A activities, they learn and tend to have better capabilities to implement that strategy again. Moreover, Haleblian, Kim and Rajagopalan explored this relationship of learning and experience in M&As in the U.S commercial banking industry. The authors argue that both acquisition experience and performance positively influence the subsequent acquisition likelyhood

(HALEBLIAN; KIM; RAJAGOPALAN, 2006).

Another line of literature relates CBM&A with the objective of facilitating the entry into a foreign market, since it can provide instant access to suppliers, an existing customer base and solidified marketing channels. Datta and Puia argument that cross-border acquisitions have been related with helping companies explore international market opportunities more quickly than other types of direct investments (DATTA; PUIA, 1995).

Recent articles mapped the motivations of overseas M&A trough event-study methods, which showed that companies have multiple reasons to engage in a takeover abroad. By looking at 27 Chinese cross-border M&A deals that took place in 2000-2004, Boateng, Qian and Tianle determined that, for the data considered, most of the Chinese acquiring firms had more than one reason to engage in the acquisition (BOATENG; QIAN; TIANLE, 2008). The data regarding the different motivations can be seen in Figure 7. The figure shows that the main motive for Chinese firms to participate in these transactions was to facilitate international expansion/diversification, followed by increasing market share/power and acquiring strategic assets.

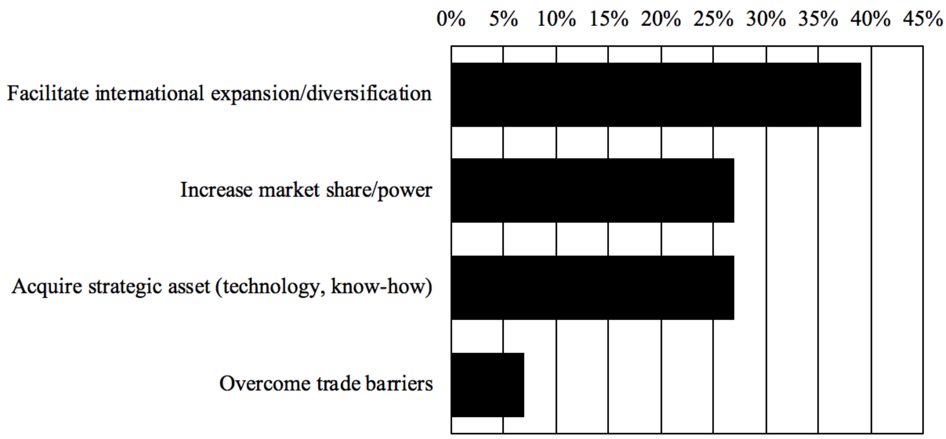

Figure 7 – M&A strategic motivations for Chinese firms
Source: (BOATENG; QIAN; TIANLE, 2008)

Correspondingly, another interesting study executed by Wang and Moini interviewed 29 executives from Danish firms that had been involved in CBM&A in 2001-2011. The authors show that respondents selected "geographical expansion" and "achieving more rapid growth" as their top motives to conduct these foreign transactions. However, other answers such as "the expansion or improvement of product-mix" and "gaining economies of scale" were also present (WANG; MOINI, 2012).

These two examples, from Chinese and Danish firms, offer the possibility that companies might have multiple reasons for participating in an international transaction and actually show different priorities for conducting them. As written by Wang and Moini, "It seems firms' heterogeneity and industrial characteristics determine their goals for engaging in M&As" (WANG; MOINI, 2012).

This is also supported by a study that analyzed overseas M&A in Indian companies from 2000 to 2003, done by Pradhan and Abraham (PRADHAN; ABRAHAM, 2005). The authors state that, according to their data, Indian firms have been motivated by a wide variety of reasons to engage in international acquisitions. Some of the main reasons of the transactions analyzed were having access to foreign market, to firm-specific intangibles, to benefit from operational synergies, to overcome limitations from domestic market growth and to survive a competitive business environment.

More recently, a few aspects are changing in M&A transactions worldwide. According to Bain & Company, there has been a significant increase in scope deals to acquire new capabilities, which outnumbered scale deals for the first time in 2018 (COMPANY, 2019). According to the company's paper, instead of pursuing deals to increase market share, firms are increasingly looking for scope deals to participate in fast-growing product segments or geographies.

Another interesting trend is related to the maturing of acquirers from developing countries, as they grow and learn from repeated deals. China represents this evolution well. In 2008, the majority of the country's outbound M&A deals were motivated by securing natural resources but in 2017 the bulk of that motivation was concentrated in capturing new technology and accessing global markets (COMPANY, 2019). This is also sustained by Mckinsey & Company, which states that, as emerging-market economies develop and mature, they execute more deals to enter new markets, which are often located in other developing countries (COMPANY, 2015).

Part II - Cultural Differences

2 How cultural aspects reflect in corporate and working culture

Now that we understood the rising importance of CBM&A in recent decades and its main motivations, it is relevant to dig in the impacts that cultural differences have in the performance of this type of foreign investment, which is one the main objective of this thesis. To achieve that, two steps are taken. Firstly, national culture and its reflections in the corporate environment are understood according to existing literature. This is done in this section. Secondly, the literature regarding the influence of cultural differences in M&A performance is studied, which is done in the next section of this paper.

2.1 National Culture

The measurement of national cultural differences is of large interest of cross-regional research and has been applied to study the behavior of corporate control mechanisms and managers' behaviors. The concept of national conditioning determines that our national environment (our country) exerts influence in individuals, creating a shared mental programming, called a country's culture (HOFSTEDE, 1980). This collective character is often reflected in a country's institutions, such as forms of government, law and family environment.

To try to map and determine how this national character is expressed, Hofstede defined four main dimension for national culture, which he called Power Distance, Uncertainty Avoidance, Individualism/Collectivism and Masculinity/Femininity (HOFSTEDE, 1980). Later on, in 1988, the author added a fifth dimension to the analysis, called Confucian Dynamism or Long-term Orientation (HOFSTEDE; BOND, 1988). These five criteria were elaborated based on an extensive statistical analysis, taking into account more than 116 thousand questionnaires from 72 different countries. His definitions of each dimension are indicated bellow.

Power Distance: This first dimension represents the level that a society accepts the fact that power is unevenly distributed in institutions and in the different members of the community. The culture of countries with small Power Distance is marked by a consciousness of equal rights, harmony between the powerful and the powerless, hierarchy as a reflection of inequality of roles and better relations between superiors and subordinates. On the other hand, countries with large Power Distance show concentration of privileges in the hands of power-holders, high levels of hierarchy and low accessibility of superiors by subordinates. This view, of course, represents the two extreme sides of both versions and a lot of countries might actually lie in between.

Uncertainty Avoidance: This criteria indicates the extent to which a society tries to dodge ambiguous and uncertain situations. That can be done by creating more formal rules, avoiding deviant ideas and behaviors and following paths of greater stability. Communities that show a weak level of this trait usually have less strict rules, more acceptance, less conflicts and competition, and a bigger willingness to take risk on a daily basis. Conversely, the presence of strong Uncertainty Avoidance is characterized by more aggressive behaviors, a working hard mentality, the necessity for written rules and formalities, and higher intolerance.

Individualism/Collectivism: The third dimension consists of the degree of tightness in the social framework and the level of integration between individuals. In a more individualistic configuration, people are expected to take care of themselves and to show initiative and leadership. Additionally, people are more independent from organizations and institutions. On the contrary, individuals in a more collectivist nation see themselves as a part of a group and have a stronger 'we' consciousness, show higher contributions to their organizational configurations and have a belief in group decisions.

Masculinity/Femininity: This forth criteria intends to measure the types of dominant values in the society, defining masculine values as assertiveness and the acquisition of money and things, for example, and feminine values as caring for others and valuing the quality of life. Other differences covered by this dimensions are gender equality, independence and sympathizing with the unfortunate.

Confucian Dynamism or Long-term Orientation: Finally, the fifth dimension, incorporated to the analysis in 1988 by Hofstede and Bond, measures the degree to which a society focus on the future. This is illustrated by future-oriented behaviors or a more static, tradition-oriented mentality. Higher levels of 'Confucian' values reflect perseverance, ordering relationships by status and thrift.

After identifying these dimensions, the authors were able to attribute index values for each of the countries present in the survey, according to the questionnaires from employees from different nations. The relationship between the first four dimensions are indicated, two by two, in Figures 9, 10 and 11. A selection of countries from the work of Hofstede and Bond (1988) are indicated, with its respective abbreviations shown in Figure 8.

Argentina	ARG	Greece	GRE		
Australia	AUS	Hong Kong	HOK	New Zeeland	NZL
Brazil	BRA	India	IND	Peru	PER
Canada	CAN	Italy	ITA	Philippines	PHL
Chile	CHL	Japan	JAP	Singapore	SGP
Colombia	COL	South Korea	KOR	Spain	SPA
Denmark	DEN	Malaysia	MYS	Sweden	SWE
France	FRA	Mexico	MEX	United States	USA
Germany	GER	Netherlands	NLD	Venezuela	VEN
Great Britain	GBR	Norway	NOR		

Figure 8 – Country Abbreviations used in Figures.

Initially, by looking at Figure 9 a few patterns can be identified. The top left quadrant is mostly filled with countries from Scandinavia (Norway, Denmark and Sweden), West Europe and North America (Canada and USA). According to the values attributed by the authors, these countries show small Power Distance and high levels of Individualism. Interestingly, France showed higher degrees of Power Distance when compare to other European nations. On the other hand, the bottom right quadrant, characterized by bigger Power Distance and more collectivism in societies, is mainly marked by Latin American countries, such as Brazil, Colombia, Chile and Venezuela, and Asian nations, including Singapore, Hong Kong, Philippines and Malaysia.

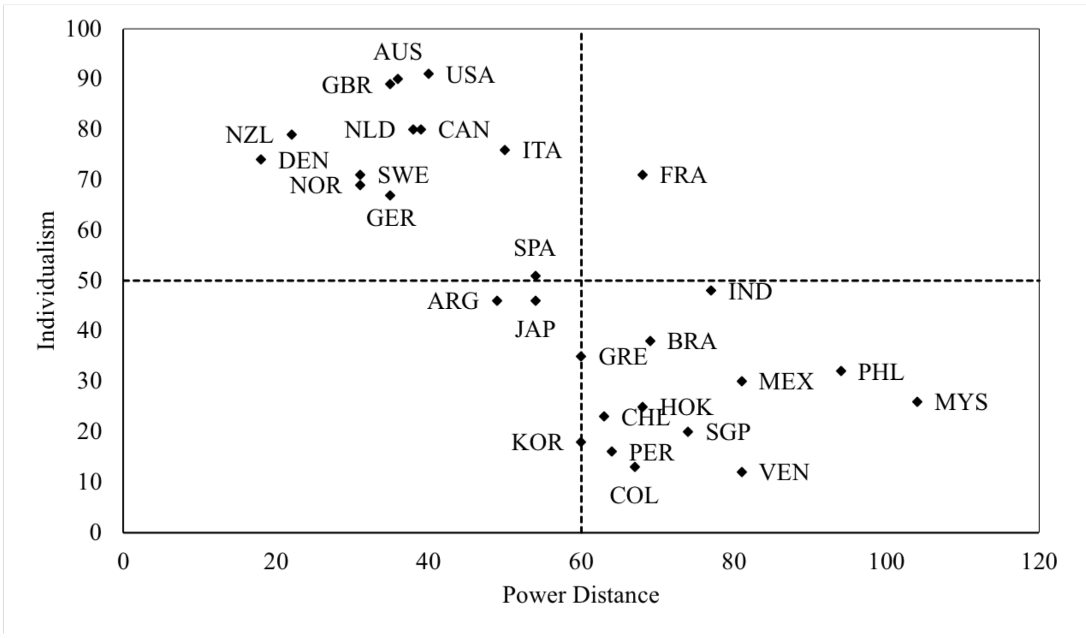

Figure 9 – Power Distance and Individuality relationship

Source: Adapted from Hofstede and Bond (1988)

Regarding the relationship between Power Distance and Uncertainty avoidance, showed in Figure 10, relevant aspects can also be interpreted. Highly developed nations, as Denmark, Sweden and Great Britain, present more propensity and flexibility towards uncertain situations and, as seen before, have smaller power differences. Latin American nations and some Asian countries (Japan and South Korea) indicate a higher necessity to control unexpected behaviors and situations while also having significantly stronger traits of Power Distance. Greece is the country with the highest punctuation on the Uncertainty Avoidance criteria. The data also shows that these dimensions are not necessarily region-specific, since there are other Asian nations that actually show low degrees of Uncertainty Avoidance (Hong Kong, Singapore, Philippines and Malaysia). In this case, there is a clearer difference between Northern European societies and Mediterranean nations (Spain, France and Italy), with the latter suggesting lower disposition towards risky situations.

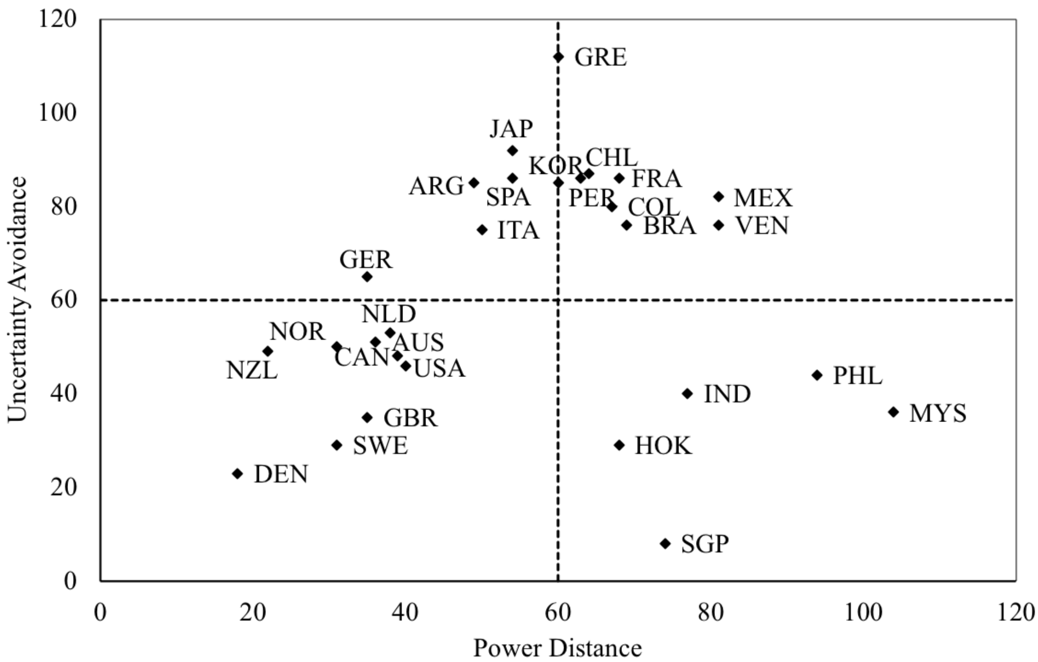

Figure 10 – Power Distance and Uncertainty Avoidance relationship
Source: Adapted from Hofstede and Bond (1988)

The third distribution illustrated in Figure 11 indicates a more evident discrepancy between countries. While there are European nations that show a low predominance of Masculinity, like the Netherlands and Sweden, there are also those that have a higher degree of this trait, such as Germany, Great Britain and Italy. Other developed countries that have a weaker Uncertainty Avoidance also show a higher predominance of Masculinity as dominant values of their society, for instance the United States, Canada and Australia, according to the data collected by the authors. Also, Japan is the country with the highest degree of Masculinity and, as seen in Figure 10, Singapore has the weakest Uncertainty Avoidance characteristic combined with a balanced distribution of masculine and feminine traits.

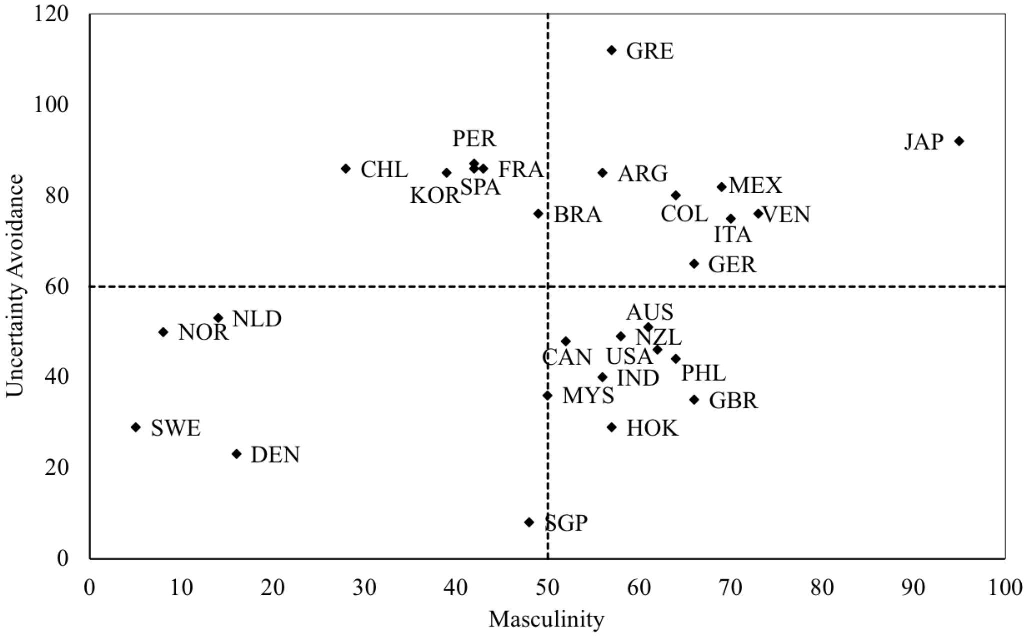

Figure 11 – Masculinity and Uncertainty Avoidance relationship
Source: Adapted from Hofstede and Bond (1988)

Finally, data related to the fifth dimension, Confucian Dynamism, was obtained only to certain countries and some results can be seen in Figure 12. It is noticeable that the top 3 positions are dominated by Asian nations, Hong Kong, Japan and South Korea, indicating that these countries have a more significant appraisal for thrift and perseverance, which are traits well know to be present in these societies. At the bottom part of the chart, English-speaking nations are seen, such as Australia, New Zealand, the United States, Great Britain and Canada.

Despite the significant and unquestionable contribution of Hofstede's studies for the understanding of national culture and its applications in a variety of cross-border topics, several authors question the replicability of his findings. For instance, Chew and Putti suggest the limitations of Hofstede's findings by applying his framework in the Singaporean society (CHEW; PUTTI, 1995). The authors argue that, since some of the five dimensions used by Hofstede were derived from factor analysis done in a few selected countries, there should be done a separate analysis focused in more countries to produce culture specific dimensions that would increase the overall findings of his work. Instead of executing the factor analysis only in three countries (France, Great Britain and Japan) and extrapolating the results, as the author did in his 1980 work, Hofstede should have done an individual factor analysis for each of the countries considered (CHEW; PUTTI, 1995). Similarly, Nasierowski and Mikuta argue the discrepancies between the results obtained by examining cultural dimensions in Poland with the results achieved by Hofstede (NASIEROWSKI; MIKULA, 1998).

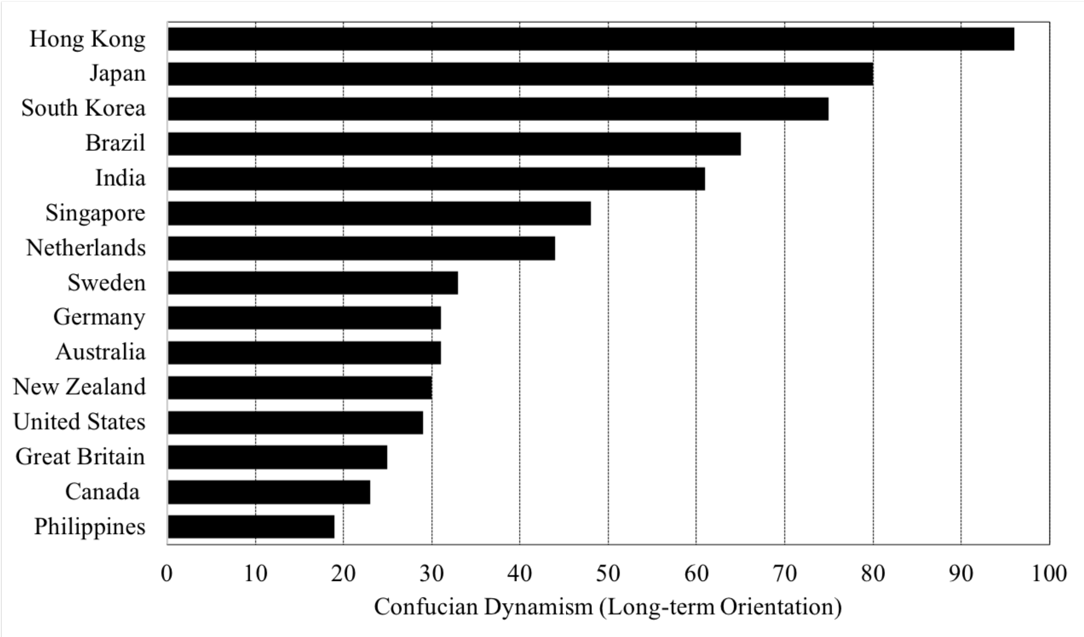

Figure 12 – Confucian Dynamism for selected countries
Source: Adapted from Hofstede and Bond (1988)

Therefore, the main argument used by researchers is that Hofstede's dimensions were designed to be implemented at a country-level perspective but are mistakenly applied to measure individual-level behaviors. In other words, the measurement of individual traits are actually more complicated and show multidimensional characteristics to be analyzed while Hofstede's criteria have a unidimensional aspect. This is stated by Gouveia, who show the necessity of a higher complexity and to have a better fit in explaining social behaviors in Spanish populations (GOUVEIA; CLEMENTE; ESPINOSA, 2003).

As stated by Bearden, the approaches to studying the cultural values at the individual level consider that a person's values are partially composed by a shared national culture and partially by their personal experiences (BEARDEN; MONEY; NEVINS, 2006). Furthermore, there are criticisms related to the unidimensionality used in Hofstede's work, since the author considers that a high level of Individualism in a country means a lower level of Collectivism, for example. However, as argued by Schwartz, this concept of dichotomy fails to contemplate values that serve simultaneously the individual and the collective (SCHWARTZ, 1990).

Moreover, as indicated in the study of Brazilian regions, even Hofstede himself shows that using local and regional variables instead of general national culture dimensions appeared to be more efficient in capturing all the nuances characterizing Brazil (HOFSTEDE et al., 2010). Conclusively, according to some authors, the usage of multidimensional criteria can be more appropriate when making analyzes at the individual and local level.

To cope with the validity of Hofstede's work, several authors proposed other methodologies to measure national culture, focusing in a complementary and alternative approach. For instance, the GLOBE (Global Leadership and Organizational Behavior Effectiveness) project, created by House, examines national culture in a multi-method approach, using nine different dimensions: performance orientation, future orientation, assertiveness, power distance, humane orientation, institutional collectivism, in-group collectivism, uncertainty avoidance, and gender egalitarianism (HOUSE et al., 2002). Furthermore, the study includes additional measures, namely the religions of each country, their political, social and economical environments, as well as other individual dimensions. This clearly adds more layers in the applications of Hofstede's work and deals with part of the most noticeable critics related to it, such as the unidimensional trait and the disregard of individual attributes.

Also, another very relevant contribution to cultural difference measurement and analysis on M&A transaction is done by Kogut and Singh (KOGUT; SINGH, 1988). Using Hofstede's dimensions, the authors created a algebraic index to mathematically compute the cultural difference between two nations. The index is presented on Equation 2, as shown in the study. Where $I_{i,j}$ represents the index for the i^{th} cultural dimension and j^{th} country, V_i is the variance of the index of the i^{th} dimension, u indicates the main Country of Comparison, and CD_j is cultural difference of the j^{th} country from the main Country of Comparison.

$$CD_j = \sum_{i=1}^{4} \frac{(I_{i,j} - I_{i,u})^2}{4 * V_i} \tag{1}$$

The number 4 included on Equation 2, both in the sum symbol and in the fraction's denominator refers to the four dimensions introduced by Hofstede (HOFSTEDE, 1980). However, a vast number of recent studies include the measurement complemented by the GLOBE project, which, as stated before, uses nine dimensions for cultural distance instead. Thus, a more general formulation of Kogut and Singh's expression is given in Equation **??**. Where N is the number of cultural dimensions used on the analysis.

$$CD_j = \sum_{i=1}^{N} \frac{(I_{i,j} - I_{i,u})^2}{N * V_i} \tag{2}$$

With a brief understanding of the concept of culture and how the national environment shapes different characteristics in societies, it is relevant to go deeper in the effects of these dimensions in companies and working groups.

2.2 Reflections of Culture on the Corporate Environment:

The understanding of the impacts of culture in the corporate environment is fundamental to grasp the developments of cross-border M&A, since it might directly impact the benefits of the combined firms. As presented by the literature, national cultures have influences in the behavior of employees and leaders and in the general company's structure, which can be seen in management control systems, leadership attitudes, relationship between workers and strategic decisions of firms.

One of the first descriptions of the impacts of cultural tendencies in companies was done by Crozier (CROZIER, 2009), who analyzed the influence of cultural traits of the French society on organizational forms, indicating that the bureaucratic patterns identified in institutions and in social systems was manifested in firms as well. Additionally, this 'culturalist' view was also led by Cole (COLE; COLE et al., 1979), who, by studying traditions and societal patterns in Japan, was able to contrast the job mobility of Japanese and American workers and relate that to cultural attributes Crozier, Michel. The common view shared by the authors is that people in different societies and with distinct cultural backgrounds have different expectations of how a corporation should be structured and how relationships between employees should look like.

In the succeeding years, this theory was extended and complemented by several authors. Following the dimensions of national culture stated in Section 2.1, Hofstede determines that different combinations of those characteristics lead to variate structures and functioning of organizations (HOFSTEDE, 1985). For instance, as stated by the author, larger levels of Power Distance combined with strong Uncertainty Avoidance contribute to people viewing an organizations as a 'pyramid of people', with clear hierarchy (common in France and Latin American nations). On the other hand, smaller Power Distance and weak Uncertainty Avoidance manifest more of a Adhocracy structure, showing lower bureaucracy and hierarchy. However, Hofstede argues that the implicit models of organizations do not depend exclusively on nationality, but instead is also influenced by the purpose of the organization and by the specific values shared by employees.

Similarly, referring to Hofstede's dimensions, Lebas (LEBAS; WEIGENSTEIN, 1986) discusses that in countries where power is distributed unequally and hierarchy is present, organizations manifest a vertical structure with minimal lateral relationships and dependence on chain of command. Furthermore, an appropriate control mechanism would be the creation of rules and procedures set by superiors (LEBAS; WEIGENSTEIN, 1986). The author also states that risk-averse societies, represented by stronger Uncertainty Avoidance, usually follow paths with greater career stability and more formal rules. Regarding Individualism and Collectivism, Hofstede argues that, when Collectivism is high, workers see themselves as part of a bigger thing, the 'we' prevails over the 'I', and employees strive for the group interest. By contrast, Lebas explains that for societies where individualism is valued, control mechanisms focusing on individual initiative and action are more effective (HOFSTEDE, 1985; LEBAS; WEIGENSTEIN, 1986).

Other authors also studied the peculiarities of cultures and its impacts on employees' expectations of the corporation. Lincoln, Hanada and Olson analyzed the differences between Japanese, Japanese-American and American workers regarding their behaviors and perceptions of the firm (LINCOLN; HANADA; OLSON, 1981). The authors concluded that, according to data analyzed, employees of Japanese origin showed a higher preference for organizational paternalism, which corresponds to the idea that the company should prioritize the welfare of its workers and get involved with their personal lives. Furthermore, the authors complete that a more significant level of vertical differentiation (vertical hierarchy) within the firm was associated with a higher degree of job satisfaction among Japanese workers, which did not happen for the American case.

Taking into consideration these differences between Japanese and American workers and thinking about the case of a Japanese company initiating their activities in the United States, the studies presented by the authors indicate how the choices of organizational structure might directly influence employees. In Japan, the company might originally use a hierarchical structure with significant vertical differentiation, since it increases satisfaction among personnel. However, following the authors' logic, applying this same structure to its American workers in the United States might not be the best choice.

Another interesting topic regards the potential collision of Human Resource (HR) practices across different cultures. Schneider (SCHNEIDER, 1988) argues that, since countries have different norms and values, some HR practices might not be accepted or might not achieve the desired results in certain environments. This is illustrated by Performance appraisal and Compensations systems. The author suggests that Japanese workers, for example, are more concerned with a person's integrity and morality rather than its working performance. Additionally, giving direct negative feedback to employees might be considered a very 'tactless' behavior in some Eastern societies. Related to Compensation , this cultural difference can be reflected in the effectiveness of Management By Objectives (MBO) strategies across countries. MBO determines that workers should be compensated and rewarded according to their performance and to their ability to achieve preestablished goals. Schneider states that MBO was favorably received in Germany, since it encompasses higher formalization of tasks and objectives, higher focus on individual accomplishments and less hierarchy, characteristics that were also described by Hofstede (HOFSTEDE, 1980). However, the same strategy was not as successful in France.

Other example of a HR practice that, according to Schneider (1988), might not be effective in some cultures is Socialization. In countries where Collectivism prevails, socializing activities and interaction events after work might be beneficial, creating a shared experience and spreading the corporate culture. However, in more individualistic nations, this same practice might not be well received, since employees might prefer deciding how to spend their own time. Pursuant to Schneider's logic, the implications of this divergent acceptance of HR practices are clear when looking at multinational companies and CBM&A transactions. Replicating the same system across nations might not be effective when dealing with the workforce and might actually result in negative consequences for the company. Therefore, it is important to have a clear understanding of the environment on which the corporation is inserted, grasping the values that govern it.

In a later article, Schneider (SCHNEIDER, 1989) also studies the impacts of national culture on strategy formulation. Better saying, the author determines how can culture affect the manner in which companies respond to their environment, interpret information and prioritize actions to deal with emerging issues. Schneider states that there are five main strategic attributes that are influenced by country differences: scanning behavior, selection of information types and sources, interpretation, validation, and criteria for establishing priorities. For instance, the scanning behavior is influenced by the perception of environmental uncertainty and the level of risk control propensity. In cultures with a higher uncertainty avoidance trait, firms engage more in scanning their market during situations of ambiguity, trying to forecast the development of scenarios. Similarly, in these risk averse cultures, companies might opt for quantitative data from impersonal and objective sources, since they tend to be less ambiguous than qualitative data and personal sources (SCHNEIDER, 1989). Additionally, regarding the interpretation of this collected information, companies in certain nations might prefer to rely on analytical tools with more emphasis on hard facts, while others might rely on theoretical discussions, debates and intuitive thinking.

Regarding the type of validation used for the gathered information, Schneider suggests that its main determinant is the hierarchization of relationships in the corporate environment. In cultures and firms where power is not well distributed across different levels, the dependence on the boss's or the leader's decision to validate strategic moves is more significant. Finally, one of the main determinants of the prioritization of strategic decisions is the degree of social or task orientation of the culture in question. As clarified by the author, some countries, such as Sweden and England, have a higher concern for the work-life quality (e.g., employee welfare, health, safety) over productivity and efficiency issues (SCHNEIDER, 1989).

All these different rationale indicate that national culture impacts several aspects of the corporation, from the level of lateral relationships and the dependence on chain of command to the differences in Human Resource practices and strategy development. This 'culturalist' literature encourages, then, that the understanding of the corporation should also take into consideration its environment and its cultural configuration, including the set of attitudes and beliefs that characterizes workers and managers. As stated by Adler and Jelinek (ADLER; JELINEK, 1986), to better deal with cross-cultural frameworks it is fundamental to see corporations as a combination of managerial influence and national conditioning, and not as one or another. That is, "An expanded model of organization culture would include both free-will and determinism".

Following the line of thinking presented by the indicated literature, it is intuitive to depict the possible conflicts in cross-border transactions between firms with significant cultural discrepancies. However, the next step in this text is to determine if there is indeed a performance issue when two companies with distinct cultural backgrounds participate in M&A activity. Do cultural differences really impact the effectiveness and the achievement of expected synergies? When engaging in a transaction, should acquiring firms take into consideration the target's national configuration to make decisions? What evidences does the literature shows about the existing cultural conflicts that emerge in cross-border deals? These topics are analyzed in the following section.

Part III - Cultural differences and performance

3 The impacts of cultural differences on CBM&A performance

In Section 2, this paper analyzed the main cultural differences between countries and its manifestations in the corporate environment. This showed that several studies indicate the "culturalist" view of firms, which means that the national configuration has direct impacts in the routines, behaviors and decisions of firms and employees. Thus, the objective now is to understand what are the positive and negative influences that these cultural divergence between firms might have on M&A transactions.

However, despite the fact that several studies have tried to show the different variables that might affect mergers and acquisitions' performance, there has not been a clear distinction of the most relevant factors that indeed influence success or fail in M&A. As indicated by King, none of the most common analyzed variables, such as acquisition experience, method of payment, degree of diversification of the acquirer, were significant in determining performance in these type of transaction (KING et al., 2004). More specifically, the authors state that "despite decades of research what impacts the financial performance of firms engaging in M&A activity remains largely unexplained".

Thus, in order to have a better understanding of this topic, the approach taken in this paper is two fold. First, an overview of the key metrics and methodologies used to analyze M&A performance is done in order to comprehend what is this "success and failure" distinction. Then, a descriptive analysis of the literature covering the impacts of cultural differences on performance is elaborated, presenting the different existing results in research.

3.1 Performance Measurement

In the past decades, several authors have applied different approaches to determining M&A performance, from objective standards, such as financial and accounting numbers, to more subjective figures, like qualitative surveys on synergy realization. However, these diverse set of studies do not agree on the best way to measure mergers and acquisitions performance and this has been an issue facing researchers for years (DESS; JR, 1984; GLAISTER; BUCKLEY, 1998).

To try to cope with that problem and shed some lighting on this scope of measures, Zollo (ZOLLO; MEIER, 2008) analyzed 88 articles published on top management journals from 1970 to 2006 with respect to M&A research. The authors identified twelve quite different approaches to the task of measuring M&A performance, indicating that there isn't

	Time Horizon	
Level of Analysis	**Short-term**	**Long-term**
Task	- Integration process performance - Knowledge transfer - Systems conversion	- Customer retention - Employee retention
Acquisition	- Short-term financial performance (event study)	- Overall acquisition performance - Acquisition survival
Firm		- Accounting performance - Long-term financial performance - Innovation performance - Variation in market share

Table 2 – Classification of Measures of Merger Performance
Source: Adapted from (ZOLLO; MEIER, 2008)

a clear convergence of practices across studies. For instance, the largest group of studies (over 40% of the 88 articles) focused on using the short-term financial performance as method, focusing on the outcomes in the first year or so after the transaction. The second largest group of studies, with 25 articles (28%) concentrated on long-term accounting measures, corresponding to all the time frame relevant for the implementation of the business plan after the transaction took place (ZOLLO; MEIER, 2008). Furthermore, the analysis showed several other relevant metrics the were used, such as integration process performance, employee retention and innovation performance.

The view that the source of performance measure has been very variate in M&A research is also sustained by Schoenberg (SCHOENBERG, 2006), which states that several authors have relied objective metrics, like variations on stock prices and accounting data, to assess the outcomes of a transaction. Others, as stated by the author, have chosen more subjective performance indicators related to the studies of organizational and strategic management. By investigating four different acquisition performance indicators for 61 cross-border acquisitions from British companies, Schoenberg arrived in interesting considerations. The author states that the four performance indicators studied showed little to no comparability data between the metrics, showing that objective and subjective measures were not correlated. This clearly indicates that comparing studies that use distinct performance indicators on their analysis poses a threat for research and may help explaining the conflicting outcomes presented on this field. Finally, the author suggests that future works should employ various criteria in order to measure M&A performance (SCHOENBERG, 2006).

Similarly, Papadakis and Thanos (PAPADAKIS; THANOS, 2010) also investigate the comparability between the most widely used measures of acquisition performance:

Measure	Definition of failure and methodology, metrics
Accounting-based measures	Failure exists when the adjusted post-merger returns of the combined firm are lower than the average size and industry adjusted pre-bid returns of each of the merging firms. Common accounting metrics include: ROA, ROI, cash flows, etc.
Stock-market-based measures	Can be divded in short-term and long-term, with the analysis consisting of the returns to shareholders of the target and acquiring firm during different time frames.
Managers' subjective assessments	Consists of a more subejctive analysis where executives of the acquiring firm are asked to rate the extend to which the original goals set before the acquisition are effectively materialized or not. Can include both financial and non-financial factors.

Table 3 – Most commonly used metrics for M&A performance classification
Source: Adapted from (PAPADAKIS; THANOS, 2010)

accounting-based measures, cumulative abnormal returns and managers' subjective assessments (described on Table 3). After comparing Perason's correlations for the three criteria, the authors conclude that the measures are very low correlation, which also sustains the findings of Zollo and Meier's work (ZOLLO; MEIER, 2008). In the authors' words "the lack of comparability between the performance criteria reported in this study may provide a plausible explanation for the contradictory results often published in the M&A structure" (PAPADAKIS; THANOS, 2010).

Furthermore, Meglio and Risberg (MEGLIO; RISBERG, 2011) also aimed to provided a further comprehension of the variety of meanings attached to M&A performance and to show a different view to explain the inconsistency observed in the results of the field studying the success of mergers and acquisitions. The authors' main conclusion is that a significant portion of the M&A literature fails to consider the research settings on their analysis and are built in a cross-sectional approach. In other words, they argue that it is fundamental to take into consideration the industries involved in the transactions, the geographical regions, the merger waves on which they took place, etc. Also, due to the ambiguous composition of M&A performance, the authors state that "The ambiguity of the construct makes it essential that M&A scholars clearly define what it is that they label as M&A performance. This means clearly stating if M&A performance falls within the financial or the non-financial domain or both, over which dimension(s) the performance is measured, and through which indicator(s)."

Therefore, as supported by the literature cited in the past paragraphs, the interpretation of M&A performance as a universal assembly and its comparison across studies that use difference metrics to evaluate transactions' success can partly justify the overall conflicting results obtained in the past decade. Also, when analyzing and contrasting the results of published papers on cross-border mergers and acquisitions, it is fundamental to point what were the specific measurements and indicators used on each specific case, so that the discrimination is consistent and does not lead to misinterpretations. As best specified by Papadakis and Thanos, researchers should definitely proceed carefully when comparing studies using different measures (PAPADAKIS; THANOS, 2010). This will be taken into account in the following sections of analysis.

3.2 Do cultural differences really impact M&A performance?

Despite the fact that it is quite intuitive that significant national culture differences might result in higher costs, difficulties and risks for a certain international transaction, there are several studies that show the opposite, suggesting that cultural distance might actually have a positive impact in post-merger performance. Thus, in this section, a review of the most relevant articles on the topic is done in order to show the different results obtained and to demonstrate how the current literature is structured. Also, given the difficulties stated in Section 3.1 regarding the comparison of studies that use different performance metrics to evaluate cross-border M&A success, a distinction of the types of performance labels used on each article is done. Finally, as some papers reach conflicting conclusions, a contrast of the obtained outcomes is presented.

Several authors have made extensive literature reviews on the topic, showing the most relevant papers and its results (STAHL; VOIGT, 2004; SCHWEIGER; GOULET, 2000; SCHOENBERG, 2000). However, a collection of more recent research, also covering results from the year 2000's can still be complemented. Therefore, this section aims at doing so by developing a brief overview of the most interesting studies while distinguishing the performance metrics utilized, considering the division done by Papadakis and Thanos (PAPADAKIS; THANOS, 2010): Accounting-based measures, Stock-market-based measures and Managers' Subjective Assessments. The analysis considers a few papers from the end of the 90's and the majority from the year 2000's in order to contribute to other literature reviews done in the past.

3.2.1 Accounting-based measures

The use of accounting-based measures to determine the success of cross-border M&A includes metrics such as growth in sales, net profit and EBITDA (Earnings before interest, taxes, depreciation and amortization). As stated before, studies reveal different results and take into account different time horizons in the analysis.

For instance, Morosini et al. (MOROSINI; SHANE; SINGH, 1998) examine a sample of 52 cross-border acquisitions taking place from 1987 to 1992. As a dependent variable to evaluate the transactions' success, the authors used the percent growth in sales in the two year period after the transaction. Regarding the measurement of cultural distance, the study was based on the four scores given by Hofstede (HOFSTEDE, 1980) and the algebraic expression proposed by Kogut and Singh (KOGUT; SINGH, 1988), given in Equation 2. Since multiple variables can also influence the overall performance of a transaction, the authors proceeded with the analysis while controlling for year, industry, size, post-acquisition strategy for integration, relatedness and uncertainty avoidance of the acquirer. As a result, the authors concluded that national cultural distance had a positive effect on sales over the time frame considered, indicating that the greater the cultural distance, the greater the sales growth rate (MOROSINI; SHANE; SINGH, 1998).

Another later study elaborated by Bertrand and Zitouna (BERTRAND; ZITOUNA, 2008) also used an accounting-based measures to evaluated the post-acquisition performance. More specifically, the authors used EBITDA as the main metric for the study in question, taking into account 169 cross-border operations by French firms in the period of 1993 to 2000. Similarly to what was done by Morisini et al. (MOROSINI; SHANE; SINGH, 1998), the authors proceeded with the analysis controlling for the influence of company's size, industry concentration and market-share. The authors concluded that M&A activity does not significantly increase the profits of French firms, both in the short run and long run.

On the other hand, Bertrand and Zitouna also evaluated the impact of CBM&A on productivity, using the multilateral TFP index developed by Caves et al. (CAVES; CHRISTENSEN; DIEWERT, 1982), which takes into account the change on return to scale and technology effects. Bertrand and Zitouna concluded that, different from profits, cross-border transactions had a positive impact on productivity for target firms, suggesting that "firms probably redistribute efficiency gains at the upstream and/or downstream production stage".

Additionally, Steiger et al. (STEIGNER; SUTTON, 2011) focus on a different accounting based measure to assess the benefits of transactions between bidder and targets. More specifically, the authors used cash flows divided by sales to assess operational performance for each of the analyzed transactions. As a conclusion, the study shows that higher degrees of cultural distance (CD) positively contribute to the long-term performance of companies with high levels of intangible assets. The argument is mainly sustained by the internalization theory, which states that the possession of intangibles contributes to value creation in a foreign investment. Another relevant aspect of this research is that in order to avoid relying only on Hofstede's work for defining CD, Steiger et al. also apply the measurement defined on the GLOBE project, reaching similar results.

Another study realized by Rozen-Bakher (ROZEN-BAKHER, 2018) investigates the impact of Hofstede's main four dimensions of CD on post-transaction performance in both the target and the acquirer. As a variable of performance, the author chose variation in revenues before and after the event. The uniqueness of this work is that the author shows that each of the dimensions considered have a different impact on M&A success, which highlights the importance and the advantage of using the dimensions separately instead of using a compounded index. One of the main findings of the work states the higher levels of Power Distance can facilitate synergy realization because top management can make decisions faster without consulting the lower levels of the team.

3.2.2 Stock price-based measures

Another set of metrics that is used when evaluating the performance of transactions are derived from stock prices of the companies involved in the transactions. The most common variable in that case is called Cumulative Abnormal Returns (or Cumulative Excess Returns), which calculates the variation in the price of a stock due to the occurrence of an external event involving the firm. Firstly the daily abnormal return is calculated. Then, the cumulative abnormal return is computed using a time window that can be adjusted for the desired period.

The literature usually applies a time window indicated as $(-1, 0)$, in which -1 represents the one day before the transaction is announced on the new and 0 represents the day of this announcement. This two-day period is used to capture the immediate market reaction to the acquisition announcement. However, time windows can vary and are denoted as (-25,25), for example, which relates to the period of 25 days before and 25 days after the transaction's announcement. To have a more precise overview of the event, studies usually consider more than one time frame into the analysis.

In a study considering U.S. acquiring firms engaging in cross-border transactions, Datta et al. (DATTA; PUIA, 1995) reach the conclusion that CBM&A, on average, destroy shareholder value. The authors considered different time windows in the analysis and hypothesize that one the reasons for this negative impact is that acquiring firms usually have difficulties in pricing firms in foreign configurations, which end leads them to overbid and overpay for their targets. Moreover, the study suggests that managers tend to undermine the consequences of cultural differences on the outcomes of the deal.

A contrasting results is achieved by Chakrabarti et al. (CHAKRABARTI; GUPTA-MUKHERJEE; JAYARAMAN, 2009), who analyzed 800 cross-border acquisitions from 1991 to 2004. Using Hofstede's cultural dimensions, the authors decided to focus their analysis on a 36 month period after the transaction happened in order to better picture the long-term effects off the event. The performance metric used is the BHAR, which "indicates the excess return over the market that an investor buying the shares of the acquiring company will be enjoying if he or she made the purchase". The authors argue that benefits derived from cultural differences do not show up in a short window if time right after the announcement of the transaction. Instead, it is necessary to consider long-term horizons to notice the positive impact of Cultural Distance.

Another study elaborated by Aybar and Ficici (AYBAR; FICICI, 2009) focused on emerging-market multinationals (EMM), indicating that the announcement of CBM&A by these companies does not create value and, instead, leads to the destruction of value for the majority of cases comprised in the paper. As a performance metric, the authors use Cumulative Excess Returns and the time window used is (-10, 10), comprising the 10 days before and after the transaction's announcement. It is worth mentioning that, differently from the work of Chakrabarti et al. cited before, Aybar and Ficici focus on a short-term period for the analysis, which is suitable to comparison with similar studies.

3.2.3 Qualitative assessments

Another performance metric commonly used in the evaluation of mergers and acquisitions is composed by qualitative assessments. These assessments are usually composed by a a set of questions to be filled by managers and workers from the involved companies. Questions can be correlated to the firms' profits, market share, sales volumes, productivity, etc. For each question, a numbered scale ranging from 1 to 5 is applied and a compounded average of the total punctuation is reached using the formula below. S represents the question of reference, n is the total number of questions in the survey, P is the answer and W is the applied weight.

$$Performance = \sum_{S=1}^{n} P_s W_s \tag{3}$$

The work of Vaara et al. (VAARA et al., 2012) evaluated the impact of national culture differences on the generation of in-company social conflicts. Through a survey covering several dimensions of organizational conflicts, the authors pointed to positive aspects emerging from cross-border deals. Surprisingly, the work showed that national cultural differences were negatively associated with conflict and contributed positively in terms of knowledge transfer. Also, the authors hypothesize that the root causes of social conflict might be generated by organizational culture disparity instead of national culture.

Another study elaborated by Reus and Lamond (REUS; LAMONT, 2009) tries to illustrate the double edged effect of cultural differences on CBM&A. On one side, the existing literature shows, cultural distance acts as an impediment for the success of integration between parties, since the foreign acquirer usually lacks knowledge about the local business practices and is unaware of the social context surrounding the organization. On the other hand, cultural distance can enable the combining firms to achieve unique capabilities. To validate those points, Reus and Lamond apply a survey to over 100 high-level executives that were involved in 118 acquisitions in total. The theoretical framework created by the authors demonstrates that there is no straightforward effect of cultural distance on acquisition performance.

Part IV - Conclusions

The phenomenon of cross-border mergers and acquisitions is influenced by a variety of factors, such as macroeconomic environment, nature of the companies involved, type of transaction, etc. With that in mind, this work had the objective to focus on national culture distance as one of the determinants to be taken into consideration when analyzing this type of transaction. More specifically, the past sections presented the conflicting results regarding the impacts of national culture on M&A, emphasizing that it should not always be linked to poor performance, with several studies showing opposite results. Part of these mixed results can be somehow related to the different approaches taken in research to evaluate this type of transaction.

The first point worth mentioning is the Cultural Distance (CD) measurement, which is most commonly divided between Hofstede's dimensions (HOFSTEDE, 1980) and the GLOBE project dimensions (HOUSE et al., 2002), as described before. This impacts the considered characteristics to compute a CD index and, thus, affects comparison across studies. Secondly, the performance metric used in the analysis is another factor that might lead to confusion when comparing different works. It is important to have a clear vision of the performance indicator utilized to evaluate the overall outcomes of a transaction in order to make a proper conclusion. A suitable division can be done in three main categories to avoid any misconception: accounting-based measures, stock-price-based measures and qualitative assessments. Thirdly, it is noticeable that studies show clear differences on the time window considered when evaluating performance of CBM&A. Usually, works considering the short-term impact are highly influenced by the announcement effect while others focusing on longer time frames are more affected by integration outcomes, indicating that is crucial to distinguish the two methodologies.

Additionally, another important breakdown that can give a more granular understanding of the influence of national culture is the separate study of each of the cultural dimensions. The majority of works takes into consideration the combined effect of all dimensions, using a Cultural Distance index. However, as showed by Rozen-Baker (ROZEN-BAKHER, 2018), the dimensions presented different impacts on the transaction's outcome, indicating that this approach should be also implemented by upcoming works.

Finally, it is clear that the impacts of national culture on cross-border M&A still needs to be further explored and, as research suggests, the relationship between cultural differences and the final outcomes of a transaction are highly complex. In order to have a better comprehension of this area of study it is critical to identify the nuances related to the cultural dimensions, performance metrics and time window considered.

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