Cultural Distance and its Effect on Cross-Border Entry Mode: Latin American Evidence

Abstract

This paper studies if "cultural distance" between two firms determines the entry mode of a foreign organization. We study two different modes of entering a market: cooperative agreements and acquisitions. We analyze a database that gathers 1,292 cooperative ventures and acquisitions in ten Latin American countries from 1998 to 2004. Evidence is consistent with firms selecting cooperative agreements over acquisitions the larger the cultural distance, particularly when we proxy cultural distance in two dimensions: individualism-collectivism and masculinity-femininity. Results hold when we run a logistic regression controlling for other variables among them, the Heritage Foundation Indexes, and a same-language dummy.

JEL Classifications: G34, G38, G39
Key Words: Cultural Distance, Entry-Mode, Institutional Environment

Introduction:

Focusing the analysis on Latin America, this paper intends to empirically show if variables that proxy for "cultural distance" between two firms determine the entry mode of a foreign organization into a given country. We study two different modes of entering a market: cooperative agreements and M&As (mergers and acquisitions).

Several factors may affect the election between different ways to enter a market: (1) firm-specific factors (technological, commercial or financial capacities of the entry firm that can create a competitive advantage), and (2) country-specific factors (geographic distance, market size and expected growth, expected return, technological development, labor costs, cultural distance, country risk, country corporate governance, etc.). In the latter group we include cultural distance which may be an important determinant of the entry-mode in Latin America given that two culturally different organizations may have difficulties integrating resources, particularly human capital resources.

Most of the researchers recognize that two organizations based in countries with dissimilar cultures will face integration problems that can derail the successful entrance of one of the firms into the other firm's market (Brouthers and Brouthers, 2001; Hennart and Reddy, 1997; Kogut and Singh, 1988).

Cultural distance may be a useful proxy for the investment risk in a given country. However, how cultural distance determines the mode of entry is not clear in the literature. Kogut and Singh (1988) find that the larger the cultural distance, the more likely the selection of joint ventures (JVs) for entering a country as opposed to acquisitions. However using the same theoretical framework, Brouthers and Brouthers (2001) find just the opposite relationship. This contradictory evidence receives the name of Cultural Distance Paradox.

This working paper pretends to contribute to the literature through the empirical analysis of a unique database that gathers 1,292 joint ventures and acquisitions announcements in ten Latin American countries (Argentina, Brazil, Chile, Colombia, Ecuador, Mexico, Paraguay, Trinidad & Tobago, Uruguay, and Venezuela) from 1998 to 2004.

In most of the univariate analysis and logistic regressions we perform, the dependent variable is a dummy that takes the value of 1 if the entry firm chooses an acquisition and 0 if it chooses a cooperative agreement. We proxy for cultural distance using the Geert Hofstede variables associated to each of the countries involved in a particular entry-mode transaction. We also control for the corporate governance or institutional environment in the target country using the Heritage Foundation indexes that serves to control the freedom to do business, fiscal code, government intervention in the economy, property rights protection, among others.

Results strongly support the idea that cultural distance affects the mode of entry. Table 1 shows univariate analysis that compares the entry mode of a company between an acquisition and joint venture. Three out of five Hofstede variables are statistically significant in determining the organizational form. Specifically, results are significant for the individualism and masculinity proxy at a 10% and 1% level. Table 2 also shows statistical results when we calculate the absolute value of the cultural distance proxies of the firms involved and classify them between acquisitions and joint ventures. The evidence in Latin America is consistent with firms selecting cooperative agreements over acquisitions the larger the cultural distance, particularly when we proxy cultural distance in two dimensions: individualism-collectivism and masculinity-femininity. Finally, these statistical results hold when we run a logistic regression controlling for other variables, among them, the Heritage Foundation Indexes and a same-language dummy.

Theoretical Background:

Cultural Distance is a general term that describes the existence of potential differences in the way individuals in different countries behave. These differences in the conduct of people will affect the business relationships and the every-day management of multinational corporations or companies that decide to enter a new country. The cultural distance between two corporations will determine the easiness of transferring best practices and work methods from one country to another. Therefore, a company that intends to enter a new country should consider a series of relevant factors that include the social, legal, economic and political frameworks or environments in the targeted country.

In this same context, the finance literature analyzes a single risk variable named country risk that encompasses the business-specific risks tied to the new venture. The country risk generally includes uncertainty related to the product/service demand, competition, cost structure and other market and institutional conditions associated to the business freedom, political, and rule of law.

The organizational economics literature argues that when a corporation faces a high level of country risk in the country where it plans to open operations, the firm should adopt a flexible organizational structure that allows the firm to modify its strategic decisions at a minimal cost in case of negative changes in the environment to avoid substantial losses. The corporation should adopt less rigid entry modes like joint ventures. The cooperative ventures give the entry corporation the flexibility of leaving the country if it is not capable of adapting to a new unfamiliar location (Kim and Hwang, 1992). Similarly, other authors have argued that corporations have higher integration costs the less familiar is the company with the targeted country culture. Therefore, the entry firm should prefer organizational forms that require less resource commitment (Randoy and Dibrell, 2002).

Also, a greater cultural distance could force the entry company to search for the help and advice of a local firm to facilitate adapting the product or service to the new country culture and environment, share risks, avoid cultural gaffes, and finally learn how to manage and delegate activities that are sensitive to differences in culture (Hennart and Larimo, 1998). According to Madhok (1997), to create a successful competitive advantage, the company needs to possess country- and culture-specific knowledge about the particular way of doing business in the target country. Differences in cultural distance makes difficult the application of work routines and therefore the company entering the country may prefer to enter in collaboration of a local firm that will know the culture and institutional environment.

A different line of reasoning poses that the organization may not count with the sufficient knowledge to enter a new market. This means that the corporation will not have the relevant market know-how, which could impede its success entering the country. The best way to enter in a market is to acquire a local company to rapidly obtain the necessary knowledge minimizing at the same time the risk exposure of the assets involved and therefore minimizing the overall risk of the venture (Brouthers, 2002). Additionally, Brouthers and Brouthers (2003) find that cooperative ventures are less frequently used as an entry-mode in high uncertainty environment given that adapting takes long time given the constant negotiation between the parties involved in the agreement. Also, the higher the uncertainty, the more the local partner can expropriate wealth from the foreign partner in a cooperative agreement given that it is easier to hide the bad behavior by one of the partners in the contract.

Given these conflicting arguments between rigid (acquisitions) versus flexible (cooperative ventures) entry organizational forms this paper intends to study a sample of firms beginning to do business in Latin America with through acquisitions or cooperative ventures. Latin America on average has a high degree of uncertainty related to institutional environment and is a region different culturally from a good portion of the firms that begin operating in the area. From Pablo (2009) we know that around 50 percent of all acquisitions in the region come from companies that based their operations in United States, Europe, and Asia. Controlling for the quality of the business environment and differences in the culture of the companies involved in acquisitions and cooperative ventures in the region, we intend to analyze if cultural distance and the institutional environment play a role in selecting ex-ante the optimal organizational form between acquisitions and cooperative agreements like joint ventures or strategic alliances.

Data and Methodology:

We collect a sample of companies that entered into cooperative agreements with or acquired Latin American companies from 1998 to 2004. Initially, we collect the events from newspaper announcement gathered from FACTIVA. In each announcement, we identify from FACTIVA, Economatica, Compustat, and other sources of information the name and country of bidder or foreign partner company, the name and country of the target or local partner, the announcement date, the ticker symbols of the companies involved if they are public corporations, their legal systems and language spoken. With this initial information and using mainly the country in which both companies reside, we proceed to collect and assign for each event proxy variables for cultural distance and institutional environment for the company involved.

The initial sample comprises 1,292 events of mergers and acquisitions (M&As) and/or cooperative ventures in Argentina, Brazil, Chile, Colombia, Ecuador, Peru, Paraguay, Uruguay, Mexico, Puerto Rico, Dominican Republic, Trinidad & Tobago, and Venezuela.

Since our focus is to determine the effect of differences in the culture and institutional environment uncertainty on the optimal entry-mode organizational form when entering Latin America, we perform univariate statistical analysis comparing mean and median sample differences and a logistic regression where the dependent variable is a dummy that takes the value of one if the organizational choice is an acquisition (M&A) and zero if a cooperative agreement is chosen.

Independent variables can be classified mainly into two types. One group of variables is related to the Hofstede indexes, research by Geert Hofstede on trans-cultural leadership in different industries and countries. Hofstede (1980) considers five dimensions to study the social and cultural context of an organization and the role of the leader. These aspects or dimensions are (1) uncertainty avoidance, (2) power or authority, (3) masculinity versus femininity, (4) short-term orientation, and (5) individualism versus collectivism.

The second group takes into account the sub-indexes of Economic Freedom published by the Heritage Foundation that proxy for the quality of the institutional environment that allows the entry firm to freely makes business in the targeted country. Specifically, the sub-indexes are business freedom, trade freedom, fiscal freedom, government size, monetary freedom, investment freedom, financial freedom, property rights, freedom from corruption, and labor freedom.

The idea of using both set of variables – Hofstede and Economic Freedom indexes – is to control for (1) the uncertainty in the country where the foreign company is entering and (2) the differences between the culture and institutional environment of the companies involved arguing that the company will choose the optimal entry-mode to minimize the risk and reduce the costs of operating in the Latin American company.

Results:

The first two columns of table 1 show the difference between companies that choose between being the bidder in an acquisition event or become a foreign partner in a cooperative agreement. The column titled t-statistics shows if the mean and median of the two samples of entry-modes are different from a statistical point of view.

[Insert Table # 1 here]

Out of five Hofstede indexes, we obtain statistically significant results for three of them. According to the individualism-collectivism index, companies that favor cooperative ventures instead of acquisitions have higher Individualism and masculinity indexes than those related to companies that decide for a more rigid structure. This result is statistically significant at a 10 percent level for the individualism index and 1 percent for the masculinity index. This preliminary result seems to contradict the intuition that companies involved in M&A agreements would prefer to impose their own conditions than collaborate in the decision process with another party. In another important result, acquiring companies have on average higher levels of long-term orientation than the companies that form cooperative ventures. This result is statistically significant at a 1 percent level Forming a rigid structure through an acquisition is consistent with a longer term commitment in the targeted country given the higher resource commitment by the acquiring company.

The remaining columns in table 1 compare selected variables between the companies being acquired (target) or the local partner in a cooperative venture. Most of the results are statistically significant. The firm adopting the cooperative structure has lower levels of the Power Distance Index and Long-Term Orientation Index. These results are consistent with the firm adopting flexible structures that requires coordination with the counterpart. However, similar to the previous result associated to the bidder/foreign partner, the local partner has higher levels of the masculinity and individualism indexes. These differences are statistically significant at a 1 percent level although only robust for the masculinity index.

Table 1 also analyzes differences in the institutional environment when comparing the companies involved. When using the Business Freedom Index which is an average of the other sub-indexes of Economic Freedom, mean and median differences when comparing acquiring companies versus foreign partner companies are not statistically significant. However, when comparing the selling company (target) versus the local partner mean and median values for the Business Freedom Index we obtain differences that are significant and robust at least at a 10 percent level. For most of the Heritage Foundation indexes, the samples are different and significant which corroborates the differences in the institutional environment in the countries involved in acquisitions and cooperative ventures. Stronger statistical results however are related to the sample of selling firms/local partners, showing that M&As are more tailored to lower institutional environment countries (lower indexes). This result is consistent with Brouthers and Brouthers (2003) about M&As being optimal in countries with high institutional environment uncertainty which makes difficult the coordination between the parties.

To better study the relationship between the organizational form and the cultural distance, table 2 shows univariate analysis for the absolute difference between the Hofstede indexes of the companies involved in a M&A event (bidder and target) and the companies involved in a cooperative venture (foreign and local partner). Results support the idea that cooperative ventures are more likely when the cultural distance between the companies is larger than that between companies involved in M&As. For the masculinity, individualism, and uncertainty avoidance indexes, the average and median absolute difference between firms selecting cooperative ventures are larger than the absolute differences associated to the companies involved in M&As. Results are statistically significant at least at a 10 percent level. Also, firms involved in cooperative ventures reside in countries with a very different institutional environment when comparing to the difference in environment for the M&A sample and the partners share the same legal code. These two last results are statistically significant at a one percent level.

[Insert table #2 here]

Table 3 shows results for a logistic regression where the dependent variable is a dummy that takes the value on one if an M&A and zero if a cooperative venture. The table studies the effect of differences in language, legal system, cultural distance, and institutional environment over the likelihood of choosing acquisition over cooperative ventures. Four out of five Hofstede cultural indexes were relevant in determining the likelihood of acquisitions over cooperative ventures. According to the results, participating firms will choose an acquisition when their difference in power is larger and when their differences in individualism, masculinity, and uncertainty avoidance are smaller. These results are significant at a 1 percent, 1 percent, 5 percent, and 5 percent respectively. The overall result seems to support the idea that firms that decide to merge or adopt a rigid structure, with the exception of the power distance, seems to have less cultural distance than those companies that adopt more flexible structures common in cooperative ventures. This is consistent with the idea of choosing as an entry-mode the organizational form that will minimize the integration costs associated to a merger or acquisition.

[Insert table #3 here]

Finally, when a company is entering a country with a weak institutional environment, the entry firm is more likely to choose a cooperative venture given the high risk associated to a larger resource commitment typical of acquisition events. Also, when the firm enters a market where the language is different from the entry-firm's country language, the likelihood of entering with an acquisition is smaller. This is again consistent with the idea of selecting the organizational form that will minimize integration costs. These results are statistically significant at a 1 percent level.

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Table #1

Descriptive Statistics of M&A and Cooperative Agreements Selection by Companies in Latin America

Table #1 shows the mean and median of the Hofstede indexes and selected sub-indexes describing the institutional environment published by the Heritage Foundation. Column 1 shows the name of the variables under analysis. Columns 2 and 3 show the mean and median (in parenthesis) for the variables associated to the acquirers involved in an M&A event or the foreign partner in a cooperative agreement respectively. Columns 5 and 6 show the mean and median (in parenthesis) for the variables associated to the targets involved in an M&A event or the local partner in a cooperative agreement respectively. The classification criteria is based on placing the company sold or asset involved in an M&A or cooperative agreement in Latin America in columns 5 and 6 respectively. Columns 4 and 7 show t-statistics associated to the differences in means and the Wilcoxon non-parametric test. *, **, y *** show statistical significance at a 10%, 5% y 1% respectively.

	Acquirer or Foreign Partner			Target or Local Partner		
Variables	M&As	Cooperative Agreements	t-statistics	M&As	Cooperative Agreements	t-statistics
Power Distance Index	54.06 (50.00)	52.58 (40.00)	-1.368 -1.164	66.27 (69.00)	60.55 (63.00)	-6.296*** -5.482***
Individualism	60.71 (67.00)	63.79 (80.00)	1.838* -2.247**	40.68 (38.00)	49.18 (38.00)	6.388*** -.746
Masculinity	54.54 (56.00)	56.73 (62.00)	2.586*** -3.351***	54.02 (49.00)	57.75 (62.00)	5.159*** -7.221***
Uncertainty Avoidance Index	65.28 (76.00)	63.52 (49.50)	-1.43 -.514	76.45 (76.00)	70.65 (80.00)	-6.812*** -.637
Long Term Orientation	41.78 (29.00)	32.94 (29.00)	-5.952*** -4.957***	60.19 (65.00)	36.20 (29.00)	-17.047*** -14.415***
Business Freedom	76.00 (70.00)	76.18 (85.00)	0.27 -1.424	71.00 70.00	72.22 (70.00)	1.829* -2.359**
Trade Freedom	72.343 (77.80)	74.627 (78.20)	3.730*** -1.033	64.46 (59.00)	70.94 (74.10)	10.141*** -10.172***
Govt. size	61.21 (65.32)	63.537 (61.335)	1.683* -.662	77.13 (79.72)	72.785 (80.79)	-4.969*** -.830
Monetary Freedom	78.39 (83.61)	79.266 (84.317)	0.86 -.947	64.27 (77.145)	72.23 (80.085)	4.381*** -2.975***
Fiscal Freedom	67.095 (64.056)	64.259 (64.284)	-2.881*** -2.306**	79.323 (86.346)	70.992 (73.232)	-11.404*** -10.642***
Investment Freedom	61.77 (70.00)	66.59 (70.00)	7.291*** -7.545***	56.21 (50.00)	65.53 (70.00)	14.407*** -14.166***
Financial Freedom	64.31 (70.00)	63.09 (70.00)	-1.18 -.054	56.01 (50.00)	57.42 (70.00)	1.49 -2.504**
Property Rights	71.77 (70.00)	76.23 (90.00)	3.715*** -3.990***	56.11 (50.00)	66.86 (70.00)	10.158*** -9.179***
Freedom from Corruption	60.32 (68.00)	63.33 (75.00)	2.136** -1.496	40.26 (35.60)	51.19 (42.90)	9.588*** -4.169***

Table #2

Comparison between M&A and Cooperative Agreements Events

Table #2 shows the mean and median for the absolute value of differences between the Hofstede index and the institutional environment Heritage Foundation sub-indexes of the companies involved in M&A (acquirer and target) and cooperative agreements (local and foreign partner). Column 1 shows the name of the variables under analysis. Columns 2 and 3 show the mean and median (in parenthesis) for the variables associated to M&A and cooperative agreements respectively. Column 4 shows t-statistics associated to the differences in means and the Wilcoxon non-parametric test. *, **, y *** show statistical significance at a 10%, 5% y 1% respectively.

Variables	M&As	Cooperative Agreements	t-statistics
Absolute Value of the Difference in the Hofstede Power Distance Index	20.0201 (20.0000)	20.7820 (19.0000)	.684 -.617
Absolute Value of the Difference in the Hofstede Individualism Index	30.3683 (33.0000)	36.2664 (40.0000)	3.609*** -4.033***
Absolute Value of the Difference in the Hofstede Masculinity Index	10.7164 (7.0000)	12.0934 (7.0000)	1.886* -1.004***
Absolute Value of the Difference in the Hofstede Uncertainty Avoidance Index	19.7492 (25.0000)	21.8270 (29.0000)	1.843* -2.724***
Absolute Value of the Difference in Heritage Foundation Business Freedom Index	10.2630 (15.0000)	12.8296 (15.0000)	3.544*** -2.810***
Same-legal system dummy	.5370 (1.0000)	.9235 (1.0000)	29.252*** -26.170***

Table #3

Logistic Regression

Table #3 show results for a logistic regression where the dependent variable is a dummy that takes the value of 1 if the event is an M&A and zero if a cooperative agreement. The first column shows the name of the independent variables under analysis. Column 2 shows the value of the coefficients and the standard error in parenthesis. *, **, y *** show statistical significance at a 10%, 5% y 1% respectively.

Variables	
Constant	4.339*** (.719)
Different language Dummy	-1.024*** (.250)
Same-legal system Dummy	-.306 (.305)
Absolute Value of the Difference in the Hofstede Power Distance Index	.034*** (.009)
Absolute Value of the Difference in the Hofstede Individualism Index	-.038*** (.007)
Absolute Value of the Difference in the Hofstede Masculinity Index	-.016** (.007)
Absolute Value of the Difference in the Hofstede Uncertainty Avoidance Index	-.016** (.007)
Absolute Value of the Difference in Heritage Foundation Business Freedom Index	.002 (.009)
Heritage Foundation Business Freedom Index associated to the country where the target or local partner operates in Latin America	-.022*** (.007)