

The Asymmetry of the Cultural Encounter: The Impact of National Culture Differences on Cross-Border Mergers & Acquisitions Performance

Abstract

Prior studies suggest that national “cultural distance” will adversely affect the return on the acquisition of foreign firms. However, they implicitly assume that this impact will be symmetric; in other words, that cultural differences will have the same impact regardless of who is the bidder and who is the target in a transaction. In this study, we test for and confirm asymmetry of impact. While we find an overall negative impact for cultural differences on the return to the shareholders of the target firms, we also find that foreign targets of US bidders are more adversely affected by differences in national culture than comparable US targets of foreign bidders. The findings also show that foreign targets of US bidders are more likely to suffer low returns when based in countries whose culture, unlike that of the US, is high on uncertainty avoidance and collectivism.

The Asymmetry of the Cultural Encounter: The Impact of National Culture Differences on Cross-Border Mergers & Acquisitions Performance

Cross border mergers and acquisitions (CB M&A) have become an integral part of the global business landscape. Between 1991 and 1998, the global volume of CB M&A increased more than six-fold, from \$85 billion to \$559 billion, exceeding the amount of greenfield foreign investment (OECD, 2000). In 1999, CB M&A amounted to \$720 billion distributed across 6000 transactions (UNCTAD, 2002). While only 7% of takeovers by US bidders between 1985 and 1989 involved foreign targets, this percentage had more than doubled to 15% in the 1990-1995 period (SDC, multiple years). In some countries, CB M&A activity now exceeds domestic volume. In Australia, for instance, CB M&A accounted for 54% of all M&A transactions in 2000. CB M&A deals in East Asia's crisis countries (Indonesia, Korea, Malaysia, and Thailand) rose from \$3 billion in 1996 to \$22 billion in 1999, before falling slightly to \$18 billion in 2000.

The growth in CB M&A transactions is driven by multiple factors (Seth, Song, and Pettit, 2000). CB M&A bring about international diversification benefits that are not available to investors (Hymer, 1976, Hisey and Caves, 1985, and Markides and Ittner, 1994) and create value by overcoming trade barriers, providing market access (Pringle, 1991), and generating synergies. An acquisition enables the acquirer to dispose of excess capacity in local and or global markets and represents a way to rapidly attain local knowledge, assets, and resources (Chang and Rosenzweig, 2001). Imperfections in product, factor, and capital markets give acquiring foreign firms a competitive advantage over local acquirers (Kindleberger, 1969, Caves, 1971, Hymer, 1976, and Froot and Stein, 1991). Growth in deals notwithstanding, the performance of CB M&A has been

relatively weak. Studies found negative stock price movement to the announcements of CB M&A deals (e.g., Datta and Puia, 1995), while others reported trivial reaction (e.g., Markides and Ittner, 1994). Moeller and Shlingemann (2004) found that US acquirers experienced significantly lower performance for CB versus domestic transactions. A few studies found however that CB M&A provided positive returns at least in some cases, though they studied return to bidders rather than targets (e.g., Markides and Ittner, 1994; Doukas and Travlos, 1988).

The generally low (or at least inconsistent) performance of M&A has often been attributed to cultural differences and their attendant diversity in managerial styles, incentive systems and decision-making procedures, a precursor of conflict among the merging firms (Buono, Bowditch, and Lewis, 1985; Cartwright and Cooper, 1993). This has been the case even for domestic mergers: A Conference Board (2001) study found that nearly 90 percent of surveyed executives agreed that cultural issues were at least as important as financial issues in M&A transactions; while Chatterjee, Lubatkin, Schweiger and Weber (1992) found cultural differences to be inversely related to shareholder gain in domestic M&A. Still, the problem has been more serious in CB M&A. For instance, Krug and Hegarty (1997) found turnover to be significantly higher following CB M&A compared to domestic deals. In a contrarian opinion, Morosini (1998, 1999) found that cultural diversity is a source of strength, a competitive advantage that can be leveraged by merging firms. What could explain the inconsistency? Crucially, prior studies did not consider, let alone test, the possibility that the impact of cultural differences on merger performance is asymmetric, that is, that the same “cultural distance” would produce a different impact based on who was the bidder and who was the target in a given merged

pair of companies (Shenkar, 2001). This is especially important because of the prevalence of two-way merger activity; for instance, Marr, Mota and Spivey (1993) find high level of foreign takeover activity in US industries that tend to engage in substantial foreign investment of their own.

In the present study, we begin by developing the case for the asymmetrical impact of cultural differences on CB M&A performance. To test the asymmetry hypothesis, we then examine returns to target shareholders in CB M&A transactions over the years 1990 to 2000 for a sample of 95 foreign targets and 126 US bidders. While most studies used return to bidder as the performance criterion, we use the return to target, arguably the better measure with which to assess the success of a CB M&A. Finance research (e.g. Jensen and Ruback, 1983; Andrade et al., 2001) documents that even though mergers and acquisitions, on average, increase the combined total value of bidders and target assets (typically, by about 4 percent), the total gains accrue almost exclusively to the targets, which gain typically between 25 and 30 percent. Acquirers, on the other hand, tend to bid away their value gain potential and, on average, generate abnormal returns insignificantly different from zero. Implications for theory, method and practice in the establishment and operation of CB M&A are drawn and future research paths are outlined.

HYPOTHESES

Merger and Acquisition Performance: The Culture Factor

Evidence is mixed on whether cross-border M&A create value for shareholders. Datta and Puia (1995), Danbolt (1995) and Fatemi and Furtado (1988) reported negative price reactions to the acquirer's stock following bid announcements, while Doukas and

Travlos (1988) and Conn and Connell (1990) found no significant stock price reaction. Marginally positive reaction was reported by Markides and Ittner (1994) and Eun, Kolodny, and Scheraga (1996). More recently, Moeller and Schlingemann (2004) have shown that US acquirers experience significantly lower short-term stock and accounting performance in cross-border M&A relatively to domestic deals. Similar findings have been reported by Chatterjee and Aw (2000) and Eckbo and Thorburn (2000) for U.S. bidders acquiring UK and Canadian targets, respectively. Further, Black et al. (2004) documented significantly negative abnormal return performance of -43% for US acquirers of foreign firms during the five years following the acquisition. A KPMG (1999) survey concluded that 83% of 700 cross-border M&A deals over the years 1996-1998 have failed to create shareholder value.

Cultural differences have been often blamed for low performance of M&A even in the case of domestic transactions. Sales and Mirvis (1984) found differences in corporate culture to be associated with greater polarization, negative assessment of counterparts, and top management team conflict (Weber and Schweiger, 1989). Chatterjee, Lubatkin, Schweiger, and Weber (1992) found shareholder gains to be negatively related to perceptions of corporate cultural differences. Cultural differences are even more important in CB M&A, since those entail both corporate and national cultural variations. National cultural distance may be the reason behind the negative wealth effect on the acquirer's shareholders (e.g., McBeath & Bacha, 2001) and explain why cross-border M&A under-perform domestic deals (Datta and Puia, 1995). In contrast, Morosini and his associates (Morosini, 1998; Morosini, Shane, and Singh, 1998) claim that diversity can be a source of value creation in CB M&A because it provides

access to a “diverse set of routines and repertoires that are embedded in the national culture”, which enhances the firm’s ability to innovate (Shane, 1993), undertake entrepreneurial activity (McGrath, MacMillan, Yang, and Tsai, 1992) and otherwise increase its skill set and oversight capabilities (Bourgoin, 1989; Brossard and Maurice, 1974; Madhok, 1997). Harris and Ravenscraft (1991), Kang (1993), Marr, Mohta, and Spivey (1993), and Swenson (1993) found that cross-border M&A created more value than domestic counterparts, with U.S. targets of foreign bidders experiencing larger share price increases at deal announcements than do U.S. targets of US bidders. Other studies (Dewenter, 1995) found that the abnormal returns to US targets of foreign and domestic bidders were not significantly different.

Despite the mix findings, we believe that cultural differences are likely to lower the return. National culture has a deeper reach than corporate culture, influencing crucial aspects such as strategy (Schneider and De Meyer, 1991), organization design (Hofstede, 2001), entry mode choice (Kogut and Singh, 1988), and business goals (Hofstede, Van Deusen, Mueller and Charles, 2002). Without a common frame of reference, differences in culture may reduce cooperation, cause miscommunication and conflicts (Olie, 1994), raising integration costs and jeopardizing the very purpose of the M&A. Consequently, we hypothesize:

Hypothesis 1: The greater the cultural differences, the lower the target returns in cross-border mergers and acquisitions.

The Asymmetric Impact of National Culture “Distance”

Shaked, Michel and McClain (1991) find that the shareholders of US targets obtain higher returns when acquired by foreign versus domestic buyers. They attribute

the gap to the attractiveness of the US market, the desire to obtain a US dollar cash flow, and uncertainty regarding the target's cash flow (the so called "winner's curse"), all leading the foreign acquirer to pay a higher premium. Another possibility however is that the gap is the result of weaker performance that is the result of cultural differences, and, as we argue in this study, that the return will vary in CB M&A based on the investment flow, that is, who is the acquirer and who is the target.

Virtually all studies examining the impact of cultural differences on CB M&A have utilized the Kogut and Singh (1988) index of "cultural distance." The index, based on the seminal work of Hofstede (1980), is an aggregate measure of the four original dimensions of culture in Hofstede's work, namely uncertainty avoidance, power distance, individualism vs. collectivism, and masculinity vs. femininity. As Shenkar (2001) notes however, the Kogut & Singh index is based on a number of assumptions which are lacking in both conceptual reasoning and empirical support. Chief among them is the "illusion of symmetry", the postulation that when moving from location A to location B one encounters the same problems as when moving from location B to location A.

The above assumes, in the present study, that a US firm contemplating an acquisition in France will face the same biases and information distortions a French firm will face when undertaking an acquisition in the United States, which neglects the fundamental difference in the role of home and host environments. Embedded in the home culture are various traits that will influence acquirer behavior regardless of target nationality. Culture determines the sources of information to which members selectively attend to, and the way in which this information is processed and used in the organizational context (Schneider, 1989). The target culture is assessed and interpreted

by an acquirer using home country lenses who needs to decide what adjustments should be made when operating in this environment. As a result, we expect returns to target shareholders to show asymmetry, in other words, to vary significantly based on the direction of the investment flow.

In projecting the direction of the expected asymmetry, we assume that the impact of cultural differences will be stronger for foreign targets of US firms than for US targets of foreign firms. This projection is based on the relatively ethnocentric nature of the United States, which has often been described as being monocultural and monolingual in contrast to, for instance, Europeans who are exposed to foreign cultures at an early stage and typically master multiple languages. The large size of the US domestic market establishes a relatively lesser need to expand into foreign markets at an early stage as a condition for growth, further dampening interest in understanding foreign markets. In contrast, foreign players are more likely to learn about the US culture and environment and are thus more prepared when entering the American market. In addition, the United States has one of the strongest legal systems protecting investors (shareholders and creditors), efficient regulation of capital markets, high transparency and stringent disclosure requirements (La Porta et al., 2000), supporting acquisition gains in this market. This may explain, for instance, why Kang (1993) finds significant wealth gains for Japanese M&A in the United States while Moeller and Schlingmann (2004) find that US acquirers experience significantly lower returns for foreign versus domestic acquisitions. Thus,

Hypothesis 2: For comparable targets, foreign targets of US firms have lower abnormal returns relative to US targets of foreign bidders.

The Variable Impact of Cultural Dimensions

While culture can be viewed as a whole, the cultural dimensions that underlie the “cultural distance’ index are distinct from each other (Shenkar, 2001) and therefore, as prior research confirmed (e.g., Shenkar and Zeira, 1992), should be expected to yield a different impact on CB M&A performance. Hofstede himself noted that Uncertainty Avoidance was the one dimension which should make more of a difference in terms of impact on foreign investment patterns, because of its connotations of risk-taking and uncertainty. Another dimension that can be expected to have a meaningful impact is individualism-collectivism, which has been found to predict entrepreneurial tendencies and business initiative. This leads to the following hypothesis:

Hypothesis 3: Foreign targets whose cultures differ from that of US bidders on uncertainty avoidance and individualism experience lower abnormal returns.

METHOD

Sample

We use *SDC Worldwide M&A* database to identify the sample of completed cross-border mergers that involve exchange-listed US firms. We consider M&A (a) of US bidders for non-US targets and (b) non-US bidders of foreign targets announced between 1990 and 2000. We match the two samples by industry (defined at the two-digit SIC level), timing (deals must have been announced within a year of each other (+ or -) and size (differences must have not exceeded 20%). Size of target and bidder has been shown in prior research to affect performance of M&A (e.g., Haleblan and Finkelstein, 1999; Fowler and Schmidt, 1989, Titman and Wessels, 1988, Billett and Ryngaert, 1997). As

Table 2 shows, foreign targets are slightly smaller and have smaller market/book ratios than domestic targets; Moeller and Schlingemann, 2004, find similar results). Ultimately, our sample yields 95 foreign targets of U.S. bidders and 126 U.S. targets of foreign bidders. In addition to the United States, sample firms hail from Australia, Austria, Belgium, Bermuda, Canada, China, Denmark, Finland, France, Germany, Hong-Kong, India, Italy, Japan, Mexico, Netherlands, Norway, Portugal, Singapore, South Korea, Spain, Sweden, Switzerland, Taiwan and the UK. Unlike Rossi and Volpin (2004), we document that stock as a means of payment is not used significantly more in case of U.S. acquirers (however, our results are also similar to Moeller and Schlingemann, 2004).

Variables and Measures

M&A Performance. While returns to acquiring shareholders are of interest, target's shareholder wealth gain may be a better way with which to capture the "marginal value added" in M&A (Dewenter, 1995, p. 422). This is because, relatively to the bidder, the target is more likely to be affected by the changes in ownership, governance and management that are associated with an M&A transaction. To formulate market-adjusted (abnormal) returns to target shareholders at announcements, we use stock price data; we use accounting data for a cross-sectional analysis of abnormal returns to target shareholders. Returns and accounting data for U.S. targets are taken from *CRSP/Compustat* database, while corresponding data for foreign firms are taken from *Datastream*. Announcement dates are taken from *SDC Worldwide M&A* database.

Cultural Differences. We follow Kogut and Singh (1988) to measure national cultural distance as an aggregated an index based on the four original dimensions of

culture in Hofstede, 1980). The index , I_{jt} , is the i th Hofstede score for the j th country. CD, National Cultural Distance between countries j and $k = \sqrt{\sum (I_{ij} - I_{ik})^2}$, where i is an Hofstede dimension ($i = 1, 2, 3, \text{ or } 4$), and the summation is across the four original Hofstede dimensions. We measure cultural distance as a continuous variables. In addition, we split the sample into high and low levels of cultural distance.

Although the aggregate measure of cultural distance has been criticized by Shenkar (2001), we use it for reasons of comparability, while also using the four cultural dimensions separately so as to overcome the equivalence problem, while also adding the dimension of Long Term Orientation (Confucian Dynamism) that has been identified later and not included in the original as well as subsequent usages of the Kogut and Singh index. In addition, given the criticism of Hofstede's dimensions and the recommendations of Shenkar (2001), we simultaenously employ the cultural dimensions of Schwartz (1994).

Control Variables

Cultural Difference*(0,1)Foreign Target Dummy Variable; Cultural Difference*(0,1) Domestic Target Dummy Variable. Consistent with our hypotheses, we expect Cultural Difference to negatively impact target abnormal gain, especially for foreign targets.

Gain in Governance. La Porta et al. argue that the gain in governance index should be positively related to total takeover returns, as well as to target gains.

Anti-takeover Provisions Used by Target (0,1) Dummy Variable. Anti-takeover provisions generally increase the bargaining power of targets (Comment and Schwert,

1995; Brickley et al.,1994). Accordingly, we expect a positive impact of this dummy variable on target gains.

Hostile takeover (0,1) Dummy Variable. This coefficient may be positive or negative. On the one hand, the ability to express resistance toward takeover is a sign of stronger target's bargaining power. On the other hand, hostile takeovers typically involve poorly-performing targets. The bidders can offer a lower premium, which still represents significant value improvement for the target.

Mergers with at Least 25% Bidder Foothold in Target (0,1) Dummy Variable. We expect a negative coefficient, since Stulz et al. (1990) document that bidders with prior stock ownership in targets have stronger negotiating power vis-à-vis targets.

Stocks Account for More than 50% of Total Takeover Payment Value (0,1) Dummy Variable. We expect a negative coefficient. Travlos (1987) argues that bidders using stocks to pay target shareholders are signaling that their shares are undervalued and they are unlikely to pursue value-enhancing acquisitions.

Multiple Bidder (0,1) Dummy Variable. We expect a positive coefficient, because Bradley, Desai, Kim (1988) show that the ultimate winner of multiple bidder auction tends to pay higher price for the target.

Target's Total Assets. Since target's gains are distributed over larger asset base (thus lowering the percentage returns) in case of bigger targets, we expect a negative coefficient (Houston and Ryngaert, 1994, Jarrell and Poulsen, 1989).

Bidder Total Assets. The impact of bidder size should be positive, as larger bidders have better expertise and opportunities to create synergies (Houston and Ryngaert, 1994, Jarrell and Poulsen, 1989).

Target's Leverage. The impact can be positive, since more levered targets distribute target gains over smaller equity base, increasing target percentage gains (Billet and Ryngaert, 1997). However, since targets with higher leverage may be more prone to financial distress and bankruptcy, and thus have lower bargaining power, the coefficient for this variable can be negative.

Target's Market/Book Ratio. We expect negative coefficient. Higher M/B ratio may characterize better-performing target (thus offering lower possibility for extra value gain if acquired) and/or target with more intangibles, and thus more difficult to evaluate (Servaes, 1991).

Target's Growth Opportunities. We measure growth opportunities as: average industry M/B of equity, using the median M/B in the same 2-digit SIC industry. Targets with greater growth opportunities are more difficult to value and more risky to integrate. Consequently, bidders should be unwilling to pay significant premiums, and the coefficient may be negative. On the other hand, the coefficient could be positive - targets having greater growth opportunities may be more valuable for the bidders, since acquisition will allow such bidders to expand, achieve greater growth, etc. (Servaes, 1991).

FINDINGS

Table 1 presents the sample description and acquisition abnormal returns. We use abnormal returns to target shareholders so as not to attribute general market trends to target returns. To formulate abnormal returns, we use the market-adjusted methodology:

$$AR_i = R_i(-X,+X) - E[R_i(-X,+X)]$$

where $R_i(-X,+X)$ and $E[R_i(-X,+X)]$ denote actual and expected returns for firm i from X days before to X days after the merger announcement date. The expected return for firm i , $E[R_i(-X,+X)]$, is formed by using the local market index. For the United States we use the Standard and Poor 500, and the corresponding indexes for foreign markets are taken from *Datastream*.¹

[Table 1 about here]

The acquisition abnormal return for the target companies in our sample is 20.27% (mean) and 18.39% (median). This shows that targets of cross-border acquisition attempts benefit from being acquired. At the same time, the magnitude of the abnormal returns is smaller than that documented for US-based mergers throughout last several decades (Jensen and Ruback, 1983; Bradley et al., 1988, Andrade et al., 2001). This finding is consistent with the research suggesting that cross-border mergers in general (and those involving foreign-based targets in particular) are met with significant challenges and perform worse, on average, than deals involving just US participants (Rossi and Volpin, 2004; Moeller and Schlingemann, 2004, Eckbo and Thorburn, 2000).

Similarly to Rossi and Volpin (2004) who show that incidence of stock payments is significantly smaller in CB M&A, only 21.3% of our sample acquisitions involve stocks as the majority payment method. Since CB deals involve firms with typically different regulatory as well as investor protection laws, awarding target shareholders with

¹ A market model, $R_i(-X,+X) = \alpha_i + \beta_i * R_M$, where R_M denotes return on the local market portfolio from X days before to X days after the merger announcement date, could be alternatively applied. However, that would make greater data demands for past returns to estimate the alpha and beta values for each foreign firm. The market-adjusted model requires only the contemporaneous market returns.

stock of a company from a different country is likely a less preferred alternative than cash payments.

Table 2 presents the analysis of target abnormal returns as a function of the geographic identity of targets. As expected, our findings confirm that US targets of foreign bidders benefit significantly more from being acquired than the foreign targets of US bidders. Mean (median) target abnormal return is 24.31% (22.69%) for the former versus 14.91% (11.84%) for the latter, a statistically significant difference. These results are generally consistent with prior research showing low returns for CB M&A involving U.S. bidders (e.g. Moeller and Schlingemann, 2004; Black et al., 2004; Eckbo and Thorburn, 2000).

[Table 2 about here]

The findings in Table 2 show significant differences in gains reaped by US versus foreign acquisition targets. Table 3 presents the direct analysis of the impact of cultural differences on target gains. As predicted, high cultural difference between bidder and target countries adversely affects abnormal target returns. Abnormal returns for 170 targets with low cultural difference values are 20.74% (mean) and 19.80% (median), while they are only 18.72% (mean) and 13.16% (median) for the 51 targets with high cultural difference values. However, the differences are not statistically significant, suggesting the possibility of differential impact of cultural distance perceptions in case of U.S. and foreign bidders. Alternatively, other factors may influence the magnitudes of target gains and complicate binary comparisons. Thus, we performed multivariate regression analysis (see Table 5) to clarify the relation between cultural differences and target abnormal returns.

High market-to-book (M/B) ratios are typical of asset structures with high proportions of intangible assets, which are harder to value and manage for acquirers. Our findings show that targets from countries with high levels of cultural difference from the bidder's country have significantly lower market/book values, as expected. We also find that targets from countries with high cultural bidder-target differences have higher levels of bidder ex-ante stock holdings (albeit not at a statistically significant level) which can be viewed as a way to mitigate the impact of such differences.

[Tables 3-4 about here]

Next, we test Hypothesis 2, that cultural differences influence target returns for U.S. bidders to a greater extent than it influences target returns for foreign bidders. The results presented in Table 4 are consistent with this hypothesis. For foreign targets, high cultural difference leads to substantially smaller (mean of 7.72%, median of 3.57%) abnormal returns compared to targets with smaller cultural differences compared to the United States (mean of 17.48%, median of 16.07%). The findings suggest that the cultural differences encountered by US-based acquirers are associated with substantial costs which lower the total gains generated by the merger. In contrast, there are no statistically significant differences between the abnormal returns of targets with high versus low cultural differences in the sample of US targets, suggesting that foreign bidders do not suffer the same liabilities from cultural differences with respect to US targets.

The analysis in Tables 2-4 involved binary comparisons between two subsamples. However, the literature has identified many factors that influence the size of target acquisition abnormal returns. Consequently, Table 5 presents the results of the analysis of

target gains in a multivariate framework. We use linear regression model with target abnormal returns as the dependent variable and the control variables as independent explanatory variables.

[Table 5 about here]

Table 5 shows that cultural distance has indeed significant explanatory power in regressions with target's abnormal return as the dependent variable. Unlike our bivariate analysis, the multivariate regression suggests that the cultural difference between bidder's and target's country has a significantly negative impact on target abnormal gains (Model 2). One standard deviation increase in cultural differences (1.06, see Table 1) reduces foreign target abnormal returns by as much as $6.41\% * 1.06 = 6.80\%$ (see Table 5, model 5). There is no statistically significant decrease in case of US targets.

The negative effect of cultural distance remains significant when we control for reform in the legal and regulatory environment measured by "improvement in governance" index in Model 3. Models 4 and 5 show, however, that the negative impact of cultural differences on target gains is solely attributable to foreign targets acquired by US bidders. This finding is consistent with our hypothesis predicting that cultural differences will have an asymmetric effect on target gains, because firms from foreign countries do not perceive significant cultural differences with respect to the United States. Takeovers of US-based targets are likely associated with significantly smaller costs necessary to incur to overcome cultural differences. Consequently, target companies can reap significantly greater benefits that raise their percentage gains from acquisitions.

Other control variables' coefficients generally have the expected signs, though only multiple bidder dummy, bidder assets, target's M/B ratio and target's growth

opportunities are consistently statistically different from zero. The only variable that has unexpected significant coefficient is multiple bidder dummy, where results show a negative impact on targets. However, only seventeen of the sample mergers involve multiple bidder auctions.

We further explore the impact of cultural differences on target takeover gains in Table 6, where we focus on individual dimensions of cultural differences identified by Hofstede and Schwartz. The table displays the results of multiple regressions (modeled after model 3 in Table 5), but only the coefficients for the relevant (i.e. cultural) variables are reported. For each of the 12 cultural dimensions (five based on Hofstede, seven based on Schwartz), we ran 6 different regressions: target's values, bidder's values and difference between bidder and target values were studied when entered on its own and when interacted with domestic and foreign merger dummies.

[Table 6 about here]

Results show that overall, targets with high level of differences from bidders on Uncertainty Avoidance (UA), Power Distance (PD) and high Long-Term Orientation (LTO) offer lesser returns to target shareholders. These results hold for the foreign targets of US bidders. Differences on IDV have however the opposite effect, *increasing* return to shareholders of targets in both the US and foreign countries. A decrease of one standard deviation in difference between bidder-target cultures is associated with the -7.3% in target abnormal returns in the case of PD change, -7.8% in case of UA change, -7.9% in case of LTO change, and +9.6% in case of IDV change. Using Schwartz' dimensions, differences on harmony lower returns for all targets, while individual autonomy reduces return for the overall samples and affective autonomy increases returns for targets in both

the US and foreign countries. Some explanations for these results are offered in the Discussion section.

DISCUSSION

While the present research supports earlier studies showing an impact of cultural differences on CB M&A performance, its main contribution is in supporting the general proposition that the impact of national cultural distance is asymmetric, with cultural distance significantly lowering the return to the foreign target shareholders of US bidders but not to the US targets of foreign bidders. In other words, the difficulties associated with cultural unfamiliarity during and after a merger with a foreign entity are direction-specific, depending on which environment the target and bidder are embedded in.

The results obtained with the different cultural dimensions are also interesting. We find that differences on PD, UA and LTO predict lower returns while MAS does not; further, differences on IDV are associated with higher returns to target shareholders for both US bidders for foreign firms and foreign bidders for US firms. The findings for UA are consistent with the prediction of Hofstede and partially consistent with the findings of Shenkar and Zeira (1992), while the findings for PD are consistent with the general argument and findings of Siegel, Licht and Schwartz (2005), though Schwartz' own dimension of egalitarianism is significant for the bidder alone (see Table 6). Differences on PD LTO can be viewed as detrimental for foreign targets that might resist pressures from a US top management accustomed to centralized decision-making and driven by short-term profitability. The results for IDV are more puzzling and could be associated with the very high level of individualism in the United States, which is the base or target

for all of the deals included in the present sample. Interestingly, using the Schwartz dimensions, differences on individual autonomy is associated with lower returns, but only for the sample as a whole. Differences on harmony, however, show the expected negative sign with target return, suggesting a predictable impact which is probably channeled via different approaches on conflict resolution.

The above findings are of substantial importance to international business and management. First, the findings confirm that the impact of cultural differences is asymmetric, a finding which likely applies to other cross-border interactions such as negotiations, expatriate deployment, entry mode choice and performance, and strategic alliances (Shenkar, 2001). Second, this finding suggests that the cost and barrier of “liability of foreignness”, of which cultural differences are a major part, depends on the direction of investment. Third, the finding suggests the possibility that at least some of the inconsistencies reported in the literature can be attributed to the “averaging out” of cultural impact by neglecting to include the direction of investment in measuring the impact of ‘cultural distance’ on a variety of international business phenomena. Fourth, the finding implies that executives should not draw conclusions from prior deals made by their firm as well as by others involving the same nationality pairs but in a different host environment. They should also pay attention to specific dimensions on which the two national cultures differ as well as on their interaction with corporate cultural differences which were not measured in this study.

The present findings can also be viewed within the broader question of information asymmetry, which affects premiums, performance and exchange modes in M&A (e.g., Hansen, 1987; Eckbo, Giammarino and Heinkel, 1990). By putting barriers

to obtaining and deciphering information on a company finances, management and prospects, culture adds to the uncertainty resulting from information asymmetry. In the same way that acquirers, for instance, have difficulty valuing and assessing targets in knowledge intensive industries (Coff, 1999), cultural differences makes it difficult for companies to figure the true state of a target company. Yet, the difficulties created by culture go beyond those associated with other triggers of information asymmetry in that they color and amplify other obstacles. For example, assessment of knowledge assets will be even more difficult under high cultural differences because such assets are embedded in the culture and institutions of the target environment.

Suggestions for Further Research

Past research shows the value of a cognitive approach which measures actual risk perceptions, something that was not done in the present study. For instance, Weber and Hsee (1998) studied respondents' buying prices for risky financial options and found that risk preferences were associated with cultural differences in the perception of the risk rather than with the cultural differences regarding the attitudes towards perceived risk. Thus, it is worthwhile to examine whether differences in perceptions of the risk involved in CB M&A would impact the return to shareholders. A cognitive perspective will also be useful in incorporating variables such as mechanisms closing cultural distance (Shenkar, 2001) as well as in understanding the cultural "sense-making" process (Vaara, 2000) and in identifying the impact of "cultural attraction" (Very, Lubatking and Calori, 1996) on M&A performance.

Future studies should also investigate whether other, non-culture differences across environmental systems, are also asymmetric, which would be consistent with our general

argument. For instance, differences on transparency and disclosure likely make a difference when a company from a transparent business environment makes an investment in a less transparent environment than the other way around. The same should hold true for other measures of environment and governance, such as corruption, legal compliance and, in particular, risk related variables such as country and political risk. In addition, it is important to include variables such as use of international accounting standards and international auditing, as those affect information asymmetry across merging firms (Ashbaugh and Davis-Friday, 2002). More broadly, it is necessary to distinguish between cultural and institutional factors, which, although intertwined and correlated for M&A (Calori, Lubatkin and Very, 1994; Olie, 1994), represent distinct phenomena. Hence, measures of institutional distance should also be incorporated in future research on CB M&A.

Future studies should also study the potentially asymmetric impact of differences in corporate culture on M&A performance. Although asymmetry seems more important at the national level, corporate culture asymmetry is likely to exist, first because corporate and national culture are intertwined in CB M&A (see Weber, Shenkar and Raveh, 1996), and because even domestic mergers often end up with the acquired company moving to the acquirer's base.

While the present study examined CB M&A, it is worthwhile to examine the asymmetric impact of culture for such cross-border transactions as joint ventures and other forms of strategic alliances. Cultural distance has very often been employed to predict alliance performance, and the inconclusive results may be at least partially attributed to the asymmetry in impact. The same is true for the entry mode decision,

where firms choose among non-, partial or full ownership also on the basis of perceived cultural differences (see Shenkar, 2001, for a summary).

Finally, while most of the literature on CB M&A examined the impact of cultural differences on post-acquisition performance (e.g., Villinger, 1996, Very et al., 1997), a few studies examine the impact of such differences on other facets of M&A, such as the probability of such deals (e.g., Rossi and Volpin, 2003), acquisition price premium and bidders' shareholder returns. Danbolt finds that foreign acquirers pay higher premiums than domestic acquirers of US firms, though this is partially explained by the higher proportion of full cash offers among the cross-border deals. Dewenter (1995) finds that buyer nationality moderates the effect of transaction-related variables on the target premia. Gorga (2003) argues that Brazilian culture does not distinguish between corporate and personal assets; this would make it difficult for a foreign acquirer to assess the true value of a Brazilian take-over target. Future research should examine the asymmetry hypothesis at the premium as well as post acquisition phases so as to distinguish between two cultural effects: The first, price distortion, stems from the inability of culturally distant bidders to assess the true value of a target, leading to overpayment; the second, integration cost, stems from the difficulty faced by a foreign acquirer in trying to integrate the operations of culturally distinct entities. Research should also examine whether the high correlation between bidder's and target's returns found for foreign M&A in the US (Seth, Song and Pettit, 2000) will occur for US deals abroad.

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Table 1
Sample Description

	obs	mean	median	std	min	25 prctile	75 prctile	max
number of deals					221			
- with at least 25% foothold	221	9.95%	0.00%	30.01%	0.00%	0.00%	0.00%	100.00%
- with with at least 50% stock payment	221	21.27%	0.00%	41.01%	0.00%	0.00%	0.00%	100.00%
targets								
- with anti takeover defense	221	9.95%	0.00%	30.01%	0.00%	0.00%	0.00%	100.00%
- with hostile takeover protection	220	6.82%	0.00%	25.26%	0.00%	0.00%	0.00%	100.00%
abnormal return	221	20.27%	18.39%	23.44%	44.64%	3.22%	34.24%	113.22%
log equity market value	221	12.33	12.34	1.76	7.56	10.90	13.45	17.54
log book asset value	221	12.63	12.61	1.93	8.06	11.41	13.69	17.92
market to book value	221	3.74	2.00	6.68	0.09	1.28	3.71	70.03
leverage	220	0.35	0.32	0.26	0.00	0.14	0.54	0.95
growth opportunity	221	1.18	0.86	1.58	0.02	0.39	1.37	17.59
free cashflow to asset value	104	0.07	0.08	0.19	-0.47	0.04	0.13	1.45

Table 2
Direction of Acquisition

	Full sample		Direction of Acquisition					
			Foreign target		Domestic target		p-value	
	mean	median	mean	median	mean	median	mean	median
number of deals		221		95		126		
- with at least 25% foothold	9.95%	0.00%	15.79%	0.00%	5.56%	0.00%	0.02	0.01
- with at least 50% stock payment	21.27%	0.00%	18.95%	0.00%	23.02%	0.00%	0.46	0.47
targets								
- with anti takeover defense	9.95%	0.00%	2.11%	0.00%	15.87%	0.00%	0.00	0.00
- with hostile takeover protection	6.82%	0.00%	11.58%	0.00%	3.20%	0.00%	0.02	0.01
abnormal return	20.27%	18.39%	14.91%	11.84%	24.31%	22.69%	0.00	0.01
log equity market value	12.33	12.34	12.00	12.17	12.58	12.65	0.01	0.01
log book asset value	12.63	12.61	12.42	12.37	12.80	12.70	0.13	0.15
market to book value	3.739	2.003	2.471	1.645	4.694	2.338	0.01	0.00
leverage	0.350	0.320	0.330	0.326	0.366	0.308	0.30	0.62
growth opportunity	1.185	0.855	1.007	0.854	1.319	0.865	0.11	0.40
free cashflow to asset value	0.072	0.083	0.086	0.100	0.063	0.073	0.48	0.07

Table 3
Cultural Difference

	Full sample			Cultural Difference			p-value		
	mean	median	221	Low		High		mean	median
				mean	median	mean	median		
number of deals				170	51				
- with at least 25% foothold	9.95%	0.00%		9.41%	0.00%	11.76%	0.00%	0.64	0.63
- with at least 50% stock payment	21.27%	0.00%		24.12%	0.00%	11.76%	0.00%	0.03	0.06
targets									
- with anti takeover defense	9.95%	0.00%		10.59%	0.00%	7.84%	0.00%	0.54	0.57
- with hostile takeover protection	6.82%	0.00%		7.10%	0.00%	5.88%	0.00%	0.75	0.76
abnormal return	20.27%	18.39%		20.74%	19.80%	18.72%	13.16%	0.63	0.28
log equity market value	12.33	12.34		12.33	12.34	12.35	12.35	0.93	0.93
log book asset value	12.63	12.61		12.56	12.53	12.88	12.69	0.26	0.36
market to book value	3.74	2.00		4.07	2.19	2.62	1.69	0.06	0.02
leverage	0.35	0.32		0.35	0.30	0.36	0.38	0.80	0.68
growth opportunity	1.18	0.86		1.17	0.94	1.24	0.62	0.84	0.06
free cash flow to asset value	0.07	0.08		0.08	0.09	0.03	0.07	0.20	0.15

Table 4
Direction of Acquisition and Cultural Difference

	Cultural Difference				p-value	
	Low		High		mean	median
	mean	median	mean	median		
number of deals	100		26			
- with at least 25% foothold	15.71%	0.00%	16.00%	0.00%	0.97	0.98
- with at least 50% stock payment	20.00%	0.00%	16.00%	0.00%	0.66	0.67
targets						
- with anti takeover defense	2.86%	0.00%	0.00%	0.00%	0.16	0.41
- with hostile takeover protection	14.29%	0.00%	4.00%	0.00%	0.08	0.17
abnormal return	17.48%	16.07%	7.72%	3.57%	0.03	0.02
log equity market value	12.04	12.19	11.90	11.90	0.68	0.72
log book asset value	12.33	12.34	12.66	12.61	0.34	0.34
market to book value	2.799	1.810	1.554	1.572	0.00	0.03
Leverage	0.311	0.294	0.382	0.457	0.18	0.09
growth opportunity	1.083	0.928	0.795	0.541	0.13	0.10
free cashflow to asset value	0.094	0.107	0.041	0.076	0.49	0.22
	Foreign target					
number of deals	100		25			
- with at least 25% foothold	5.00%	0.00%	7.69%	0.00%	0.64	0.60
- with at least 50% stock payment	27.00%	0.00%	7.69%	0.00%	0.01	0.04
targets						
- with anti takeover defense	16.00%	0.00%	15.38%	0.00%	0.94	0.94
- with hostile takeover protection	2.02%	0.00%	7.69%	0.00%	0.31	0.15
abnormal return	23.02%	22.49%	29.29%	24.00%	0.34	0.43

Table 4 (continued)

log equity market value		12.53	12.63	12.78	12.89	0.48	0.53
log book asset value		12.72	12.71	13.09	12.70	0.41	0.51
market to book value		4.966	2.380	3.650	2.007	0.32	0.31
Leverage		0.374	0.308	0.335	0.288	0.53	0.57
growth opportunity		1.227	0.944	1.674	0.796	0.53	0.38
free cashflow to asset value		0.074	0.075	0.018	0.070	0.34	0.45
number of deals							
- with at least 25% foothold		3.10%	1.91%	37.08%	37.10%		
- with at least 50% stock payment		28.79%	29.61%	37.08%	37.10%		
targets							
- with anti takeover defense	<u>va</u>	0.21%	0.63%	4.30%	4.52%		
- with hostile takeover protection	<u>u</u>	0.71%	0.23%	58.22%	59.50%		
abnormal return	<u>_____</u>	9.42%	19.15%	0.37%	0.46%		
log equity market value		0.08	0.08	0.03	0.03		
log book asset value		0.19	0.19	0.37	0.58		
market to book value		0.03	0.03	0.03	0.03		
Leverage		0.11	0.33	0.50	0.40		
growth opportunity		0.40	0.70	0.22	0.34		
free cashflow to asset value		0.60	0.09	0.79	0.69		

Table 5
Regression Results

Table 5 reports regression results abnormal return on explanatory variables and the cultural difference between bidder's and target's country (CD). 'gain in governance' is the difference in the LLSV governance index, Heteroskedasticity-adjusted T-test values are in parentheses.

	(1)	(2)	(3)	(4)	(5)
Intercept	0.0290 (0.24)	0.0531 (0.45)	0.0606 (0.71)	0.0708 (0.61)	0.0892 (0.75)
CD		-0.0347 (-2.28)**	-0.0326 (-1.89)*		
CD*Foreign target dummy				-0.0603 (-4.84)***	-0.0641 (-3.89)***
CD*Domestic target dummy				0.0169 (0.69)	0.0153 (0.62)
gain in governance			-0.0001 (-0.02)		0.0072 (0.75)
Antitakeover provision dummy	0.0930 (1.65)*	0.0865 (1.43)	0.0873 (1.37)	0.0651 (1.14)	0.0625 (1.04)
Hostile takeover	0.0436 (0.95)	0.0266 (0.47)	0.0279 (0.48)	0.0204 (0.40)	0.0222 (0.44)
Bidder foothold>25% dummy	-0.0002 (-0.02)	0.0120 (0.22)	0.0070 (0.14)	0.0007 (0.02)	0.0029 (0.05)
Stock payment>50% dummy	0.0155 (0.33)	0.0001 (0.01)	-0.0060 (-0.10)	0.0132 (0.28)	0.0078 (0.14)
Multiple bidder dummy	-0.0850 (-2.02)**	-0.0963 (-2.29)**	-0.1137 (-2.62)***	-0.0919 (-2.15)**	-0.1084 (-2.41)**
Target's total assets	-0.0196 (-1.48)	-0.0168 (-1.29)	-0.0232 (-1.54)	-0.0178 (-1.37)	-0.0250 (-1.66)*
Bidder's total assets	0.0245 (2.10)**	0.0228 (2.00)**	0.0279 (2.22)**	0.0216 (1.90)*	0.0267 (2.12)**
Target's leverage	0.0940 (1.08)	0.0903 (1.02)	0.1041 (1.10)	0.1092 (1.28)	0.1189 (1.30)
Target's M/B ratio	-0.0042 (-1.94)*	-0.0046 (-2.13)**	-0.0045 (-2.07)**	-0.0054 (-2.26)**	-0.0051 (-2.20)**
Target's growth opportunities	0.0365 (1.85)**	0.0374 (1.86)*	0.0351 (1.68)*	0.0342 (1.64)*	0.0310 (1.43)
Adj R-squared	0.05	0.07	0.06	0.11	0.10
N	187	187	174	187	174

Coefficients for CD*Foreign Target Dummy and CD*Domestic Target Dummy are significantly different on 1% level of significance.

***, **, * denotes statistical significant difference from zero on 1%, 5%, and 10% levels, respectively

Table 6
Cultural Difference Dimensions

Table 6 contains the values of coefficients measuring the impact of Hofstede and Schwartz cultural difference dimension values on target abnormal acquisition returns. The regressions contained other control variables identified in Table 5, model 3. The coefficients of control variables are omitted in this table. "Target" refers to the impact of target's cultural dimension value when entered as single cultural explanatory variable. "Bidder" refers to the impact of bidder's cultural dimension value when entered as single cultural explanatory variable. "Bid-Tgt" refers to the impact of bidder minus target difference in cultural dimension values when entered as single cultural explanatory variable. Each of the cultural dimension variable's impact was studied both as a single value and interacted with two (0,1) dummies for domestic ("dom") and foreign ("for") acquisitions. T-statistics (heteroskedasticity-adjusted) are in parentheses.

	Hofstede				Schwartz							
	PD	UA	IDV	MAS	LTO	HARM	EMBED	HIER	MAST	AFAUT	INAUT	EGAL
Target	-0.0048 (-2.68)***	-0.00369 (-3.81)***	0.00375 (4.53)***	0.00123 (0.94)	-0.00486 (-5.60)***	-0.16991 (-3.55)***	0.11616 (1.31)	0.08715 (0.99)	0.23738 (1.22)	0.04613 (0.62)	-0.12554 (-2.26)**	-0.07166 (-0.58)
Target*for	-0.00395 (-2.82)***	-0.00334 (-3.47)***	0.00412 (3.68)***	0.00045 (0.36)	-0.00434 (-4.16)***	-0.18811 (-2.73)***	0.0116 (0.10)	0.07921 (0.99)	0.07635 (0.37)	0.12433 (1.70)*	-0.07723 (-1.14)	0.07011 (0.59)
Target*dom	-0.00241 (-1.29)	-0.002 (-1.40)	0.00389 (4.45)***	0.00165 (1.28)	-0.00322 (-1.53)	-0.19242 (-2.43)**	0.02956 (0.30)	0.10929 (1.37)	0.0921 (0.46)	0.1509 (1.95)*	-0.06669 (-0.89)	0.08703 (0.71)
Bidder	0.00134 (0.71)	-0.00001 (-0.01)	-0.00035 (-0.24)	-0.00094 (-0.88)	0.00138 (0.65)	0.04102 (0.89)	-0.09886 (-1.26)	-0.02086 (-0.28)	-0.09448 (-0.60)	0.04398 (0.66)	0.05896 (1.21)	0.20579 (1.79)*
Bidder*for	-0.00117 (-0.54)	-0.00235 (-1.48)	0.00054 (0.32)	-0.00155 (-1.44)	-0.00221 (-0.75)	-0.11695 (-1.34)	0.01139 (0.10)	-0.01072 (-0.14)	0.02248 (0.14)	-0.06189 (-0.80)	-0.036 (-0.47)	0.03648 (0.20)
Bidder*dom	0.00069 (0.37)	-0.00056 (-0.47)	0.0017 (0.84)	-0.00036 (0.32)	0.00038 (0.17)	-0.08059 (-1.08)	0.03831 (0.33)	0.02963 (0.35)	0.04541 (0.26)	-0.03388 (-0.47)	-0.01344 (-0.20)	0.0523 (0.30)
(Bid-Tgt)	0.0033 (2.29)**	0.00146 (1.79)*	-0.00196 (-2.96)***	-0.00099 (-1.24)	0.00336 (3.58)***	0.06077 (2.18)**	-0.08005 (-1.53)	-0.03748 (-0.66)	-0.12348 (-1.06)	0.00696 (0.14)	0.05962 (1.82)*	0.11013 (1.63)
(Bid-Tgt)*for	0.00526 (2.81)***	0.00369 (3.80)***	-0.00392 (-4.44)***	-0.00116 (-0.88)	0.00482 (5.52)***	0.20722 (3.62)***	-0.12399 (-1.30)	-0.08694 (-0.98)	-0.25383 (-1.29)	-0.02711 (-0.36)	0.13095 (2.18)**	0.02636 (0.20)
(Bid-Tgt)*dom	0.0021 (1.12)	0.00004 (0.01)	0.00087 (0.56)	-0.0009 (-0.84)	0.00112 (0.54)	-0.04577 (-0.84)	-0.05167 (-0.59)	-0.00854 (-0.10)	-0.05432 (-0.35)	0.02749 (0.40)	0.02016 (0.37)	0.17876 (1.40)

***, **, * denotes statistically significant difference from zero on 1%, 5%, and 10% significance levels, respectively