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Abstract

The influence of managerial attitudes on corporate finance has become a topic of great interest. For example, Malmendier and Tate (2008) show that overconfident managers are more likely to conduct acquisitions. This research explores the impact of national business cultures on cross-border acquisitions. Business cultures can influence the ways managers cope with uncertainty and their subsequent business decisions, as was described in seminal research by Hofstede (1991). By their very nature, cross-border acquisitions require that managers deal with different cultures and higher levels of uncertainty. We seek to understand how business cultures affect value in cross-border acquisitions using data from the Asia-Pacific Rim region over the period 2000-2009. The countries in this region have large cultural differences, and the potential gains from acquisitions are very substantial, so these data are an excellent population for analysis. Our results show that different business cultures have an important influence on financial decisions by firms in ways that are consistent with classic research by Knight (2006), and also that different business cultures cope with uncertainty in different ways. We find that acquirers from countries with a high aversion to uncertainty conduct fewer cross-border acquisitions. Furthermore, these high uncertainty averse firms pay a higher price for control in cross-border deals.

Keywords: Cross-border M&A, East Asia, Culture, Law and finance, Behavioral finance

JEL Classification: G32, G34, R32

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1. Introduction

The influence of managerial attitudes on corporate finance has recently become a topic of great interest. For example, Malmendier and Tate (2008) show that overconfident managers are more likely to conduct acquisitions, in particular diversifying acquisitions, and that the market reacts negatively to these acquisitions. Instead of focusing on the individual attitudes of managers, this research explores the impact of national business culture on cross-border mergers and acquisitions. The cultures of company managers differ across countries. Culture can influence the ways managers cope with uncertainty, as was described in seminal research by Hofstede (1991). Culture can affect firm value through at least two channels. The first channel is indirect: culture in concert with history will influence corporate governance, especially through its impact on laws. A number of studies have examined the link between corporate governance and firm value (La Porta et al 2000, Gompers et al 2003, and Starks and Wei 2013).[1] In general, this research concludes that the quality of corporate governance does affect firm value. Culture's second channel arises from the way it influences management decisions. Our research is an exploration of this second channel through an examination of cross-border acquisitions while controlling for the influence of the first channel. By their very nature, cross-border deals require that managers contend with different cultures and higher levels of uncertainty. We seek to understand how culture affects value in cross-border deals through empirical analysis and through a supplemental survey of the attitudes of finance practitioners.

Acquiring another firm requires estimates of the target firm's value, both in the sense of its worth as a subsidiary and in terms of a price acceptable to target firm shareholders. Of course these values will be connected; target firm shareholders will want some (all) of the post-acquisition value. The key is the post-deal value; yet this value is uncertain. There is a

[1] These studies are part of a broader literature that links culture to economic outcomes. See Guiso et al (2006).

real risk that the post-acquisition value will be low. Value might be low because the deal itself is flawed due to lack of information about the target or just because of plain bad luck. Value could also be low because residual management and ownership elements extract rents inefficiently, or undermine the acquiring firm's management efforts. This research argues that culture, in particular the preference to avoid uncertainty, will influence the way the acquiring firm's management approaches these issues. Managers whose attitudes developed in a culture that seeks to avoid uncertainty will be more selective when acquiring targets that have greater uncertainty; when they do make acquisitions, they are likely to acquire a larger portion of the target's shares and pay a higher price for these targets. The higher price paid for a greater uncertainty target is not necessarily a result of overvaluation; it could result from the highly selective acquisition process that uncertainty-avoiding managers follow. The links between these acquisition issues and culture will be more apparent in cross-border acquisitions because the acquiring company has to deal with a target in a less familiar country.

To test the link between culture and firm value, we develop testable hypotheses that explain how aspects of culture change the premium and acquisition details of both domestic and cross-border acquisitions. These hypotheses are developed in the context of Hofstede et al (2010), who formulated indices of cultural tendencies for countries based on the dimensions of power distance, uncertainty avoidance, individualism and masculinity. Our main hypotheses relate to Hofstede's uncertainty avoidance index. We suspect that managers of companies operating in countries with a culture that seeks to avoid uncertainty will be less likely to make foreign acquisitions because these have greater uncertainty. If this is the case, these firms will conduct cross-border acquisitions only when the potential gain is judged to be large enough relative to their own decision-making standard. In addition, once they do decide to seek the deal, they will attempt to avoid the uncertainty of completing the deal by paying higher control premiums. We find that acquirers from countries with a high

uncertainty avoidance index value do pay a higher price for control, but this is primarily the case for cross-border acquisitions; they do not pay more for domestic deals. This is consistent with our prediction because domestic deals have less uncertainty. Furthermore, we show that this cultural influence is different from the link between the legal protection of minority shareholders and firm value that has been established in the literature. Thus, our primary contribution is to document how culture influences cross-border acquisitions.

We conduct our analysis using a large sample of cross-border acquisitions, but our main focus is on the Asia-Pacific Rim region. These data are an excellent sample to test our hypotheses; the countries of the Asia-Pac Rim have close economic relationships with each other, yet have large cultural differences and the potential gains from acquisitions are very substantial. To date, acquisitions in the Asia-Pac Rim has not been a major focus of scholarly inquiry. One of our contributions is to examine these deals in this region. In addition to the results from the legal and the cultural analyses, we report that after controlling for the origin of law and the propensity to avoid uncertainty, Asian acquirers pay an equivalent price, but Asian targets receive a lower price of control in cross-border acquisitions. This might be because the Asia-Pac Rim market for corporate control is relatively less developed; there are fewer multiple bidder acquisitions. The market for corporate control is quite limited in much of the Asia-Pac Rim.

Some specific examples illuminate the link between uncertainty and acquisition. In the high-technology area, Flextronics International Ltd of Singapore (which has the lowest uncertainty avoidance index for the 17 countries in our sample) conducted 14 cross-border acquisitions out of a total of 17 acquisitions in the analyzed period. The company acquired 100 percent of each target's shares in 15 out of these 17 acquisitions. Hewlett-Packard Company of the U.S. (whose uncertainty avoidance index is in the middle range) conducted 8 cross-border acquisitions out of 20 acquisitions in total. Hewlett-Packard acquired 100

percent of the shares of 19 targets. Hitachi Ltd. of Japan (whose uncertainty avoidance index is highest) conducted only 4 cross-border deals out of 20 acquisitions in the period. Hitachi acquired 100 percent of each target's shares in only 9 of these 16 domestic deals. Yet, Hitachi acquired 100 percent in all of its cross-border deals. These examples are consistent with our empirical finding that high uncertainty avoidance country managers conduct fewer cross-border acquisitions and are likely to acquire 100 percent of targets in cross-border deals, but not in domestic acquisitions. Our results show that different business cultures in different countries have important influences on financial decisions by firms; this is consistent with classic research by Frank H. Knight (2006), who made the distinction between risk and uncertainty. It also demonstrates that different business cultures cope with uncertainty in significantly different ways.

Our paper is structured as follows. The next section fleshes out the link between uncertainty avoidance behavior and acquisitions. In Section 3 we develop our hypotheses. In Section 4 we describe our data and methodologies, as well as report summary descriptive statistics. In Section 5 we present the main results of our analyses. Section 6 provides additional analysis of shareholder returns for acquiring firms to examine if high uncertainty avoidance firms irrationally overpay for acquisitions. Section 7 concludes the paper.

2. Uncertainty, Acquisitions and the Literature

Although our focus is business culture, it is natural to initially approach the determination of cross-border acquisition value from the perspective of corporate governance and investor protection. This is consistent with the established literature, and also provides a benchmark from which we can explore the marginal impact of culture on acquisition value. The broad goal is to understand how cross-border deals are different from domestic deals. Specifically, we attempt to understand if and why acquirers pay more for cross-border acquisitions. Cross-border deals potentially offer greater synergies because such targets are from a larger and

more diverse population than domestic targets. Cross-border deal values might also be affected by the quality of corporate governance. Rossi and Volpin (2004) and Moeller and Schlingemann (2005) are the seminal works in this area. Rossi and Volpin (2004) examined 45,686 global mergers and acquisitions in the 1990s, of which 11,638 were cross-border. They reported that the takeover premium of cross-border acquisitions was higher than domestic deals. Takeover premiums are important from the perspective of the targeted market, because, as was shown by Burkart et al (1998), they are linked to efficiency improvements. Higher premiums are associated with higher ownership concentration, which in turn is associated with lower extraction of private benefits—better governance. Bris et al (2008) found that targets in 100 percent acquisitions received a premium as measured by relative abnormal returns when the acquirer had higher governance standards.

The Asia-Pacific Rim is an ideal population to conduct our research. Its high level of economic growth and opportunities for synergistic business combinations provide a natural experiment that allows powerful tests of the links between business culture and acquisitions. Yet, because many countries in the region prohibit acquisition of majority stakes in local companies in a substantial number of industries, research on cross-border acquisitions that limits the sample to transactions that acquire more than 50 percent of the target company results in an undercounting of deals from the Asia-Pac Rim. Hence, to resolve this underrepresentation and address some of the nuances of our hypotheses about uncertainty avoidance behavior, we expand the sample to include transactions that result in deals of less than 50 percent (but more than 20 percent). The 20 percent threshold is not controversial; La Porta et al (1999) and Dyck and Zingales (2004) also used this threshold. Specifically, we analyze the characteristics and the takeover premium of domestic and cross-border acquisitions that involve the 12 major economies of the Asia-Pac Rim: China, Hong Kong, South Korea, Australia, New Zealand, India, Indonesia, Malaysia, Singapore, Taiwan,

Thailand and Japan. During the first decade of the 21st century, this region experienced enormous development in terms of the growth of its economy, intraregional trade, and investment activity. According to Thomson-Reuters (2014), the market share of the Asia-Pac Rim region (including Japan) in terms of the size of the global acquisitions market nearly doubled, from 13.3 percent in 2001 to 23.2 percent in 2010. The initiation of the Trans-Pacific Partnership suggests that this region is likely to grow at a much faster rate than the rest of the world and that cross-border investment within the region will be very active. At the same time, the countries in the region have vast differences in terms of law, corporate governance, financial regulation, foreign investment regulation,[2] and accounting standards. And most importantly, many of these countries have very different cultures. Table 1 shows the Hofstede Uncertainty Avoidance Index (UAI) and the origin of law for the countries in our sample. We break down the seventeen countries in our sample into three groups: Low UAI (five countries), Middle UAI (six countries), and High UAI (six countries). Japan has a very high UAI, while Singapore is very low.

*** Table 1 about here ***

Concerning the acquisitions literature, Moeller and Schlingemann (2005) examined a sample of 4,430 U.S. acquirers between 1985 and 1995 and found that cross-border acquirers tended to experience a more negative stock price reaction around the announcement of these transactions, and also experienced worse post-transaction operating performance. Following their research, Francis et al (2008) presented contradictory results for U.S. cross-border acquisitions in the late 1990s and early 2000s. They showed cross-border deals resulted in positive abnormal returns around the announcement date and better post-transaction operating performance. Feito-Ruiz and Menéndez-Requejo (2011) examined 221 European cross-

[2] Although foreign ownership limitations have been substantially reduced in recent years as Asia-Pac Rim countries joined the WTO, foreign ownership is still restricted in many industries. See World Bank Group (2010).

border acquisitions over the period from 2002 to 2006 and found that acquiring firm shareholders valued cross-border acquisitions more than domestic deals. To date, cross-border research on areas other than the U.S. and Europe has been minimal. Hence, a major contribution of this research is to examine acquisitions in the highest growth region on the planet: the Asia-Pac Rim.

Regarding the legal aspects of cross-border acquisitions, we largely follow the approaches of Rossi and Volpin (2004) and Bris et al (2008). Their work draws much of its inspiration from classic research by La Porta et al (1998).[3] Legal origin, in particular, appears to explain these deals. These researchers considered two main legal systems, common law and civil law. Common law countries are thought to give greater protection to minority shareholders. And, indeed, our research shows that the premium is higher when the target is in a common law country. However, we also find that acquirers from common law countries do not pay a higher premium for control in cross-border acquisiions. This is inconsistent with the idea that firms from common law countries can transfer good governance to target firms to create greater value, as suggested by Rossi and Volpin (2004) and Erel et al (2011).

In a sense, our research is a complement to Dyck and Zingales (2004). They analyzed the size of the control premium with a sample of block transfers from 39 countries, and reported that the premium was significantly higher in Malaysia, but that there was no significant difference for other Asia-Pac Rim countries. However, their sample ended in 1999 and their sample size for the 12 Asia-Pac Rim countries was only 124 (one-third of which were Malaysian firms). Their sample did not include China and India, two of the biggest emerging markets in the region. Further, they did not distinguish between domestic

[3] Moskalev (2010) also examined the impact of restrictions that the target's country imposes on foreign investment.

and cross-border transactions. Our research contributes to the literature by examining a much larger sample over a more recent and relevant period.

In terms of existing research on the relationship between national culture and cross-border acquisitions, Steigner and Sutton (2011) examined the effect of cultural differences between bidder and target countries. Frijns et al (2013) analyzed the role of culture in corporate takeover decisions, and argued that managerial risk aversion, at the national level, is a cultural trait that affects the required net synergies. They found that executives of firms in countries with higher levels of risk aversion, as measured by Hofstede's uncertainty avoidance index, had less takeover activity, engaged in more diversifying takeovers, and required higher premiums on takeovers. Ahern et al (2013) examined how measures of trust, hierarchy and individualism affected the gains and volume of cross-border acquisitions over the period from 1985 to 2008. They found that there are fewer cross-border acquisitions when the differences in these culture measures are larger, and also that the value created diminished as these differences increased.[4]

3. Hypotheses

Cross-border acquisitions have significantly greater uncertainty for bidders. Acquiring firm managers must cope with the possibility that cross-border deals will have a low post-acquisition value. This lower value may arise from insufficient information about the target; cross-border target information will probably be less complete than domestic target information. The quality of cross-border target information may be lower; furthermore, analyzing cross-border target information may be difficult and/or costly. The motives and negotiation stances of target management and shareholders may significantly differ from those in the countries of the acquiring firm's management. These differences will be greater

[4] Ahern, Daminelli and Fracassi's culture measures are from the World Values Survey. Yet their results were essentially unchanged when they replicated their analysis with the corresponding Hofstede measures.

as the corporate cultural distance between target firms and acquirer firms increases, and even more so in the case of cross-border deals. As such, managers of firms domiciled in high UAI countries will be relatively reluctant to undertake high-risk cross-border deals. In analyzing the foreign bias in international allocation, Beugelsdijk and Frijns (2010) attribute the bias to uncertainty avoidance and cultural distance. This idea has been applied to the study of corporate takeovers. Research by Frijns et al (2013) argued that managerial risk aversion influences corporate takeover decisions; they found evidence that chief executives of firms in high-risk aversion countries engage in fewer takeovers. Similarly Ahern et al (2013) found that there were fewer cross-border acquisitions when the cultural distance between the target and the acquirer is greater. Hence, we arrive at the following:

> **Hypothesis 1: Firms located in countries with a relatively high Uncertainty Avoidance Index will undertake fewer cross-border acquisitions than firms located in relatively low Uncertainty Avoidance Index countries.**

To test this hypothesis, we analyze the relation between the Uncertainty Avoidance Index and the characteristics of acquisitions both as a whole and in cross-border situations.

Although managers in some countries may prefer to avoid uncertainty, it would be irrational for these managers to reject all cross-border deals. Cross-border acquisitions allow both the acquirer and the target to select better matches from a much broader population of firms. Even when high UAI firms conduct cross-border acquisitions, they approach these deals in ways to reduce uncertainty. We assert that a high UAI acquirer may face a tradeoff when dealing with two possibly conflicting uncertainties. On one hand, the acquirer may want to reduce the uncertainty associated with problems in the post-acquisition management of the target firm. They are more likely to conduct cross-border acquisitions with a structure that allows the acquirer to reduce the risk of losing value due to acquiring a poorly performing target firm or the failure to create value due to differences between the culture of the target and the acquirer. In this regard, the acquirer may typically acquire a lower

proportion of ownership in the target. Alternatively, the buyer may want to reduce uncertainty regarding post-transaction conflicts of interest between the acquirer and the remaining minority shareholders of the target. If the acquirer is concerned about possible disputes or lawsuits with the target's minority shareholders concerning the post-trasnaction operation of the target, high UAI firms will be more likely to acquire majority ownership, or greater ownership of targets to reduce the chance of minority owners interfering with the post-transaction operations of the target. While a smaller stake in the target reduces the former risk, it may increase the latter risk. These conflicting risks and costs are greater in the case of cross-border acquisitions. Knight (2006) describes the "two fundamental methods of dealing with uncertainty" as "consolidation (grouping)" and "specialization." [5] Lowering the investment portion and diversifying among investment targets corresponds to consolidation, and increasing the investment portion in a selected target to increase ability to control the future of the investment corresponds to specialization. Since there is a trade-off between the costs and benefits from higher proportions of ownership, whether high UAI firms acquire higher proportions of ownership is an empirical question.

Hypothesis 2-1:
High Uncertainty Avoidance Index firms are more likely to buy a smaller proportion of shares in cross-border acquisitions to reduce the risk of fully acquiring bad target firms.

Hypothesis 2-2:
High Uncertainty Avoidance Index firms are more likely to buy a greater proportion of shares in cross-border acquisitions to reduce the risks and costs from interference by remaining shareholders in the post-transaction operation of target firms.

To test these hypotheses, we examine the effects of the Uncertainty Avoidance Index on the proportion of shares acquired in cross-border and domestic deals while controlling for other potential factors that have been emphasized in the literature. If we find supporting evidence for Hypothesis 1, which suggests that acquirers carefully select value increasing transactions,

[5] We refer here to chapter 7 of Knight (2006), which was originally published in 1921.

we anticipate that the acquirers are likely to reduce their own risk by increasing their control over the target firms. This is the idea behind Hypothesis 2-2 and corresponds to Knight's concept of "specialization".

Similarly, higher UAI firms face two contradicting concerns in terms of how much control premium they pay to target shareholders. They might simply want to reduce the amount of the initial investment for an acquisition to reduce the risk of overpayment. In this case, high UAI firms will only conduct acquisitions when they can close the deal with a lower control premium.

On the other hand, cross-border target firms, which are very different from acquirers in terms of growth opportunities, market valuation and managerial resources, provide the opportunity for greater synergies. Managers in high uncertainty avoidance countries will have an inherent bias against foreign deals; they will conduct cross-border deals only when the potential value created is compelling. In this case, high UAI firms will pay a higher control premium to reduce the risk that they cannot reach an agreement with target management or target shareholders. Rossi and Volpin (2004) found evidence in support of this; they discovered that cross-border deals tended to have higher acquisition premiums.

Hypothesis 3-1:
When relatively high Uncertainty Avoidance Index firms conduct cross-border acquisitions, they will be likely to pay a lower premium on average to reduce overpayment risk, compared to low Uncertainty Avoidance Index firms.

Hypothesis 3-2:
When relatively high Uncertainty Avoidance Index firms conduct cross-border acquisitions, they will be likely to pay a higher premium on average to reduce the non-completion risk of acquisitions with high expected value, compared to low Uncertainty Avoidance Index firms.

To test these hypotheses, we examine the relation between the Uncertainty Avoidance Index and the premium paid in cross-border acquisitions while controlling for other factors highlighted by the literature.

Our hypotheses focus on four dimensions of acquisition behavior: uncertainty avoidance, difference of corporate culture, takeover characteristics and anticipated acquisition value created from acquisitions. We "observe" uncertainty avoidance as Hofstede's Uncertainty Avoidance Index. The difference in the corporate culture of an acquisition is whether the deal is cross-border or domestic.[6] Cross-border deals have greater cultural difference. We argue that large cultural difference/cross-border deals change the behavior of high uncertainty avoidance managers. We also explore a variety of other hypotheses inspired by the rich mergers and acquisitions literature. In addition, we include control variables to confirm that our results are not a consequence of other acquisition-related effects.

4. Data, Methodologies and Descriptive Statistics

This section describes our Asia-Pac Rim acquisition data. We use the Thomson-One Database to collect data on acquisition transactions for both acquirers and targets from 17 countries from 2000 to 2009. A total of 13,433 mergers and acquisitions were announced during this period. We limit our sample to transactions between companies in 17 countries. The 17 countries include the twelve major Asia-Pac Rim economies, namely Australia, China, Hong Kong, India, Indonesia, Japan, South Korea, Malaysia, New Zealand, Singapore, Taiwan, and Thailand, plus five developed Western countries: the U.S., the U.K., France, Germany, and Canada.[7]

Following previous research, we further restrict the sample to transactions where (1) the shares owned before the deal (toehold) amount to less than twenty percent; (2) the shares controlled after the deal are larger than twenty percent; (3) ten percent or more of shares are acquired in the deal; (4) the deal value is more than 10 million U.S. dollars; (5) the target is

[6] We also consider other ways of measuring cultural distance.
[7] We include these five economies in the light of their share in the global mergers market, and as a reference to compare the characteristics of acquisitions in the Asia-Pac Rim to those in North America and Europe.

not a joint venture; (6) the target is a public company whose share prices are available.[8] In addition, we exclude outliers which have acquisition premiums (defined below) exceeding 300 percent. These selection criteria result in a sample size of 4,796 acquisitions, which covers 36 percent of the original Thomson-One sample, with 1,009 (21%) being cross-border and 3,787 (79%) being domestic.

*** Table 2 about here ***

Table 2 shows the country of origin of acquirers and targets in our sample after all of the above described filters. The value in each cell shows the number of transactions. The number of domestic transactions in each country is shown on the diagonal axis of the matrix. The table shows that the proportion of cross-border acquirers and targets varies by country. Within the Asia-Pac Rim region, Australia (50) and Japan (50) are the most active cross-border acquirers, followed by China (41) and Hong Kong (39). In terms of cross-border targets, Australia (88), Japan (42), Singapore (41), and Hong Kong (38) are favorite destinations. Naturally these numbers are affected by how active the acquisition markets are in each country and these figures are far exceeded by the countries we show as comparisons, notably the U.S. and the U.K. If we look at the ratio of cross-border transactions, Singapore (56%), New Zealand (54%), and Indonesia (47%) are the most active cross-border markets, while Japan is most oriented toward domestic transactions. Japan's cross-border ratios of 8 percent for acquirers and about 7 percent for targets are notably lower than other Asia-Pac Rim countries, and also less than other developed countries. However, since many of the cross-border acquisitions are conducted between adjacent countries, the cross-border acquisitions analyzed in this paper are biased relative to non-Asia-Pac Rim countries. Roughly 40 percent of cross-border transactions targeting the U.K., Germany, and France are not included in the original sample. As for the other countries, at least 73 percent of the

[8] These filters result in a sample that is comparable to Rossi and Volpin (2004) and Dyck and Zingales (2004).

transactions are included in the original sample. Thus, we can obtain reasonably unbiased empirical results from this sample, at least for countries other than the U.S. and those in Europe. The Asia region excluding China and Japan represents a substantial portion (about 8%) of world acquisitions.

Table 3 shows details about acquisitions for the region and target countries, reporting whether a deal results in acquiring majority (above 50 percent) or minority (but above 20 percent) stakes. Majority acquisitions accounted for more than half (52%) of deals in Asia. Within the Asia-Pac Rim region, Australia (92%), New Zealand (85%), and Taiwan (81%) are countries where a high proportion of deals are to acquire majority stakes, while China (22%), India (37%), and Thailand (38%) have lower proportions of majority stakes. Interestingly, in countries where the proportion of majority acquisitions is low, cross-border deals tend to have a higher proportion of majority acquisitions than domestic deals, while the opposite is true for countries where the proportion of majority acquisitions is high.

Whether acquirers seek majority stakes or minority stakes is affected by many factors, including business judgment, the risks of sharing control, the extent of shareholder concentration and takeover regulations such as mandatory bid rules. However, and in particular in Asia, influences from restrictions on shareholding by foreign investors are expected to dominate. In most Asian countries other than Japan and Singapore, there are restrictions on foreign investors acquiring controlling stakes in certain industries. In China, foreign acquisitions of no less than 25 percent ownership are tightly regulated regardless of the industry.[9] Table 3 shows majority acquisitions (acquisitions that result in 50 percent or more ownership of target firms) account for less than half of cross-border target firms in China (38%), Thailand (43%), and India (48%). To consider these effects in our analysis, we separately test those factors that may play a role in the determination of the price of control in

[9] See Anderson, Mori & Tomotsune (2013, p.199).

majority acquisitions and minority acquisitions. For example, we consider whether the target's country is in Asia, and if it is in China. In addition, we consider whether the origin of law of a target's country is common law where shareholder protection is relatively strong.

Table 4 summarizes the level of the control premium in each target country. The control premium is defined as the acquisition price divided by the target share price four weeks before the deal announcement, minus one. In terms of the average premium, cross-border deals tend to be more generous except for Malaysia and Japan.

*** Tables 3 and 4 about here ***

In Table 5, we present descriptive statistics to compare the sample of cross-border and domestic acquisitions, as well as targets from Asia and from non-Asian countries. In fact, if we take an average of all deals, which includes the U.K. and the U.S. as target countries, there is not much difference between domestic and cross-border acquisitions in terms of toehold, percentage of shares to be acquired, and the percentage of majority acquisitions. In contrast, there are wide differences between Asia targets and non-Asia targets. The former tend to have a lower percentage acquired and ownership after the deal. We also note that, despite the global financial crisis, the acquisition market continued to be active in the Asia-Pac Rim.

*** Table 5 about here ***

Table 6 reports the average level of the control premium among different target country groups. The average control premium is much lower in Asia than in the U.K. and the U.S. Within Asia, China is particularly low in terms of the control premium (explained below) with 3.3 percent for cross-border acquisitions and −35.7 percent for domestic deals. Japan is also lower in terms of the control premium with around 12 percent for both domestic and cross-border acquisitions. Cross-border deals generally result in higher control premiums than domestic ones.

Although we recognize the potential value created and the corresponding implications for managers who pay premiums, there is a possibility that the private benefits of control also affect the level of the premium. Dyck and Zingales (2004) show the difference between the calculated premium and the share price returns represents the private benefits of block-shareholders. They assert that if the premium paid in a block share acquisition exceeds the stock price reaction to the announcement of the transaction, this difference reflects private benefits which are only accessible by the block shareholder. Therefore, in Table 6 we examine the difference between the calculated premium and the share price returns. The difference is small except for China, where the premium is negative (−18.6%) but share returns are positive. In China, block shares owned by the government and state-owned enterprises are often sold at a discount relative to market prices to provide benefits to acquirers of the block-shares. Thus, the difference represents an economic incentive for acquirers provided by the Chinese state rather than private benefits in the conventional sense of expropriation of wealth from minority shareholders by block shareholders. Other than China, we find that private benefits are not economically important in our sample and that the observed control premiums mainly represent positive wealth effects from control transfers, not private benefits resulting from the expropriation of minority shareholders. We re-examine this interpretation later by analyzing both the determinants of the premium and the stock price reaction (cumulative abnormal returns) of acquirers.

*** Table 6 about here ***

While we explore our takeover sample in the context of our hypotheses, we also control for other variables from the literature that may have an impact on acquisition activity. We consider: the relative strength of the target/acquirer currency; returns of the main stock markets of the target/acquirer countries; the origin of the target's legal system; the language of the country of the acquirer and the target; whether the takeover is diversifying or is in a

related industry; whether the acquirer has a toehold in the target before the takeover; and a variety of other variables that potentially influence takeovers.

Although we are mainly interested in the uncertainty avoidance behavior of acquirers, we also consider the influence of the origin of law, since protection of minority shareholders is particularly important in acquisitions. Hofstede et al (2010) asserted that countries with higher uncertainty avoidance indices are less likely to adopt common law. We confirm this to be true; the correlation between UAI and a dummy variable that takes the value one when the country has common law is −0.612 at the country level (N=17 countries). This value for the 17 countries in our sample is statistically significant at the one percent level of confidence. The high negative correlation between the common law dummy and Hofstede's uncertainty avoidance index is also consistent with Licht et al (2005). Licht et al argued that a national culture that promotes tolerance for uncertainty is consistent with using litigation to deal with economic conflicts (p. 232) and found a statistically significant negative correlation between Hofstede's uncertainty avoidance index and the anti-director index of LaPorta et al (1998). Due to this high absolute correlation, we do not estimate the Common Law variable and UAI together, but include them separately in the following regression analysis. In addition, we find that correlations between the Common Law dummy variable and other potentially important factors in cross-border transactions such as the International GAAP difference variable and the Law and Order Index are high in our sample.[10,11] Thus, we use the Common Law dummy as a proxy for the strength of minority shareholder protection in our empirical analyses.

[10] The International GAAP difference is an index of the difference in the GAAP of each country from the International Accounting Standards as presented by Bae et al (2008).

[11] The Law and Order Index values are obtained from the International Country Risk Guide prepared by The PRS Group, Inc. Law and Order are assessed separately, with each subcomponent comprising zero to three points. The Law subcomponent is an assessment of the strength and impartiality of the legal system, while the Order subcomponent is an assessment of popular observance of the law.

5. Empirical Analysis of the Hypotheses

5.1 Uncertainty Avoidance and the Execution of Cross-border Acquisitions

In this section we explore our hypotheses with univariate and multivariate approaches. To test Hypothesis 1, we analyze how uncertainty avoidance is related to acquisition activity. First, we look at the relation between UAI and the level of acquisition activity at the country level.

*** Table 7 about here ***

Table 7 shows the results of regression analysis at the country level to test if UAI and origin of law affect the level of acquisition activities (models 1 and 2) and cross-border acquisitions in particular (models 3 to 5). In a manner different from other analyses, acquisition volume and the cross-border ratios in the table are calculated not from acquisitions among the 17 nations analyzed in our research, but rather from all acquisitions conducted by firms in their respective nations. We measure the attitudes of acquirers to acquisition activities with the ratio of acquisition transaction volume to GDP from 2000 to 2009 in models 1 and 2. We measure the attitudes of acquirers to cross-border acquisitions with the ratio of the value of cross-border acquisitions to total acquisitions from 2000 to 2009 in models 3 to 5.[12] The results show that countries with higher UAI are associated with lower acquisition activities and fewer cross-border deals in particular. Although the origin of law is associated with higher acquisition activities, we do not find a significant relation between the origin of law and cross-border deals. These results indicate that firms in high UAI countries tend to conduct fewer cross-border acquisitions; this result is not explained by the influence of the origin of law. Thus, UAI is more strongly correlated with the cross-border acquisition ratio than with common law. These results support Hypothesis 1. Cross-border acquisitions by firms of nations with high UAI survive screening processes by managers and are more

[12] We obtained the gross domestic product information from the World Bank Database.

likely to create greater wealth on average compared to acquisitions conducted by firms from low UAI nations. Hence, we expect to observe higher premium payments in cross-border acquisitions by firms from higher UAI nations.

5.2 Uncertainty Avoidance and Acquirer Behavior

Next, we analyze the relation between UAI and acquisition activity at the deal level. Table 8 explores the relation between the characteristics of acquisition behavior and different levels of UAI. The classification of High, Middle and Low UAI countries is based on the groupings shown in Table 1. Our research focus is how corporate culture affects acquisition behavior; the variables of interest are ownership proportion after the deal and the control premium acquirers pay in cross-border acquisitions. High UAI acquirers tend to secure a larger portion of ownership of cross-border targets than low UAI acquirers (Note the row labeled "% Owned after Transaction" in the right-hand, bottom portion of Table 8). The difference in the proportion of ownership between high UAI acquirers and low UAI acquirers is a significant 8.3 percent for cross-border deals. However, high UAI acquirers tend to own less of domestic targets. Similarly, high UAI acquirers are more likely to pay higher premiums for cross-border targets than low UAI acquirers, but this is not the case in domestic transactions. This result is consistent with research by Chakrabarti et al (2009), who argue that careful screening of cross-border deals results in higher-value deals and justifies a higher acquisition premium. The difference in the control premium between high UAI acquirers and low UAI acquirers is a significant 0.131 for cross-border deals.

*** Tables 8 and 9 about here ***

Our first hypothesis suggests that high UAI acquirers will undertake fewer cross-border deals. Table 9 explores this hypothesis at the deal level in a multivariate format. It reports results for LOGIT regressions where the dependent variable is one for cross-border deals, and zero for domestic deals. Since our sample is limited to acquisitions among the 17

nations, cross-border acquisitions of some nations are dropped systematically. We confirm that, in particular, the cross-border acquisition sample of EU countries (UK, France and Germany) is significantly downward biased due to the sample selection procedure.[13] Thus, we add an EU dummy variable to models 1 and 2, and we also show results of the LOGIT regressions for a sample that excludes these three EU nations in Model 3. In addition, we add a Hong Kong and Singapore acquirer dummy since these two city-states naturally have less alternatives when acquiring cross-border targets regardless of their corporate culture or origin of law. Models 1 and 3 show that high UAI acquirers are significantly less likely to undertake cross-border acquisitions. The UAI coefficient remains statistically significant when we exclude the EU acquirers in Model 3. Further, Model 2 also shows that acquirers from common law nations do not conduct more cross-border acquisitions at a statistically significant level. As such, UAI does a much better job of explaining cross-border acquisitions than origin of law. Thus, as in the results of analysis at the country level, higher UAI firms conduct fewer cross-border acquisitions and this tendency is not attributable to the influence of origin of law. These results strongly support Hypothesis 1 again. There are other interesting results revealed by the LOGIT regressions. Acquirers from countries that experienced higher stock returns are more likely to make cross-border acquisitions. Yet, currency appreciation in prior years does not have a significant effect on the probability of making cross-border deals.

*** Table 10 about here ***

5.3 Uncertainty Avoidance and Ownership Structure after Acquisitions

In this section, we analyze whether high UAI acquirers seek lower ownership proportions of targets to avoid uncertainty about the quality of the target or a higher ownership proportion to

[13] The cross-border acquisition ratios of the UK, France and Germany are reduced by 11%, 15%, and 13% respectively when we limit our sample to acquisitions between the 17 nations. The ratios of other nations are not systematically reduced.

reduce uncertainty caused by the remaining shareholders of the target. Table 10 reports regressions of the proportion of ownership secured after the takeover; in addition to UAI, we analyze if the origin of law of the home country of the acquirer and the target influence the proportion of ownership after the deal. It also includes several control variables, which might influence the proportion of ownership. We control for whether the acquirer is a public firm or a financial buyer. We also control for target size. We include a dummy variable if the target firm is from China, where strong restrictions on ownership remain, and from the U.K. and U.S., where the acquisitions markets are competitive. Consistent with Hypothesis 2-1, Model 1 of Table 10 reports a negative and significant coefficient on UAI for the whole sample. Thus, in general, firms in high UAI countries choose lower ownership proportions of targets. However, Model 2 reports a positive, significant coefficient on UAI in cross-border acquisitions. This supports Hypothesis 2-2. Model 4 provides support for Hypothesis 2-1 in that it suggests that high UAI firms purchase significantly lower ownership proportions of targets in domestic deals. High UAI firms really do behave differently when they make cross-border deals. We find strong evidence that high uncertainty avoidance firms conduct fewer cross-border deals, but once they do conduct cross-border deals, they acquire higher proportions of ownership. We interpret these opposing results to be a consequence of the selective behavior of acquirers from high UAI nations.

Model 3 shows that the Acquirer Common Law dummy variable is not statistically significant. Thus, the significant effect of the UAI of acquirers on the proportion of ownership after cross-border acquisitions is not due to origin of law. In all the models for both cross-border and domestic deals, the proportion of ownership becomes higher when target firms are in common law countries; this is consistent with the prediction that target shareholders are better protected in common law countries.

5.4 Additional Evidence from a Survey of Acquisition Practitioners

Our results indicate that acquirers from high UAI countries conduct fewer cross-border acquisitions, but once they make these deals, they secure greater ownership. To further confirm that our results are caused by the uncertainty avoidance culture of acquirers, we conducted a large-scale survey of individual views of acquisitions by CFOs and acquisition project leaders in Japan where the UAI score is the highest in our sample (as was shown in Table 1). We present a summary of this survey in Appendix 2. The results show that when CFOs and project leaders are more risk-averse, managers tend to feel that it is more difficult to create value in cross-border acquisitions. They prefer less than 100 percent ownership when there is a large cultural difference with the target firm. In fact, the firms of this group of more risk-averse managers conducted significantly fewer acquisitions in the five years before the survey. On the other hand, less risk-averse managers were more optimistic about the possibility of creating value in cross-border deals. These managers tended to prefer 100 percent ownership. Full ownership of the target potentially reduces post-transaction risk and also allows the acquirer to retain a larger proportion of the value created by the deal. The firms of these less risk-averse managers tended to make more acquisitions over the last five years. These results from the survey indicate that cross-border acquisitions by firms from high UAI nations are likely to be conducted by managers who are less risk-averse than their compatriots. When a cross-border deal has the potential to create value, they prefer to minimize risk by securing complete control. Thus, we find strong evidence in support of Hypothesis 2-2.

5.5 Uncertainty Avoidance and the Control Premium

Our third hypothesis concerns the relation between UAI and the size of the control premium. Table 11 reports regressions in which the dependent variable is the control premium. The independent variables are control variables and the acquirer's UAI. In addition to the control

variables that we employed in Table 10, we add a dummy variable to describe horizontal acquisitions, defined as being one when the first two digits of the SIC codes of the acquirer and the target are the same. This variable is related to the potential wealth created by the acquisition. We also add controls for prior stock market returns, appreciation of local currencies against the U.S. dollar for the acquirer's and the target's countries, cultural distance and language.[14] The results show that even in the presence of control variables that potentially influence the level of the control premium, including the proportion of shares acquired in the transaction, the coefficient on UAI is positive, significant.[15] These results do not change in an important sense even when we limit our sample to majority control acquisitions (not reported in the table). The coefficient on the common law acquirer dummy is not significant. In addition, we observe a positive relation between the UAI of the acquirer's nation and the control premium only for cross-border deals, not for domestic deals (not reported in the table). This is strong evidence supporting Hypothesis 3-2. Another interesting finding is that the coefficient on the common law target dummy is positive and significant which is consistent with stronger protection for minority shareholders' interests in common law nations.

*** Table 11 about here ***

6. The Shareholder Returns of Acquiring Firms

In the previous section, we show that higher UAI firms conduct fewer cross-border acquisitions, but when they do cross-border deals, they acquire higher proportions and pay higher control premiums. These results are consistent with the view that high UAI firms attempt to reduce the risk of losing value-enhancing deals and the risks and costs from interference from remaining shareholders in the post-transaction operations of the targets.

[14] Cultural distance is constructed from all four of the Hofstede dimensions. See Appendix A for a detailed description of these variables.

[15] We do not estimate models with both the common law of the acquirer and UAI because these variables have high collinearity.

One concern here is that high UAI acquirers simply overpay for their acquisitions. The cultural desire to avoid uncertainty might be irrational, and the acquirer's shareholders might pay the cost of irrational uncertainty avoidance. To examine if high UAI acquirers overpay for their acquisitions, we examine the stock market response of acquiring firms around the initial announcement date of the acquisitions.

*** Tables 12 and 13 (Panels A, B and C) about here ***

Table 12 shows cumulative abnormal returns (CARs) for the acquirers in our sample.[16] Cross-border acquirers experience average and median CARs of 1.84 percent and 0.28 percent, respectively, and only the median is statistically significant. Median CARs are significantly positive in Australia, Hong Kong and Japan, and only Malaysia's mean CAR is significantly negative (for a very small sample). The results suggest that there is little evidence that acquirers overpay in cross-border deals based on the reaction of the stock market. Indeed, cross-border acquisitions seem to be better accepted by stock markets than domestic deals, since an ANOVA equality test of the full sample shows that the mean CAR of cross-border deals is higher than that of domestic acquisitions. Panel A of Table 13 shows regressions with the CARs of all acquirers as the dependent variable and the control variables as independent variables. As noted above, the coefficient for the domestic deal dummy is significantly negative, suggesting that cross-border deals result in more positive acquirer CARs. Model 2, which includes the acquirer UAI variable, shows that its estimated coefficient is zero. There is no evidence that high UAI firms are penalized by their homelands' capital markets for overpaying for targets. Panel B of Table 13 reports the same CAR regressions for cross-border deals only. Again, there is no evidence that high UAI acquirers are regarded as too generous by their own stock markets. Hence, we have little

[16] Cumulative abnormal returns are based on abnormal returns calculated by the market-adjusted return method. This is each firm's return less the return on a market index. The market index used is the MSCI World Index.

evidence that the high takeover premium that a high UAI acquirer pays is *necessarily* an overpayment. The high takeover premium could be justified by the high synergy value created by the acquisition; they are paying more for better deals, and select only cross-border acquisitions with high potential gains to reduce uncertainty.

Note that our results are different from results associated with overconfident CEOs. Malmendier and Tate (2008) show that acquisitions initiated by overconfident managers are more likely to be assessed negatively by the stock market. Thus, overconfidence is costly. On the other hand, our results indicate that strong uncertainty avoidance culture is not costly for shareholders of acquiring firms.

We can still argue that the higher uncertainty avoidance behavior of acquiring firms has its costs. One related example is shown by Hirshleifer et al (2012), who found that overconfidence helps CEOs exploit innovative growth opportunities. Higher UAI firms might overlook opportunities for value-enhancing acquisitions due to their culture. Since we cannot directly observe such opportunity costs from the deal data, the examination of the potential costs of uncertainty avoidance needs to be explored further in future research.

7. Conclusions

This paper has examined how the culture of acquiring firms changes the takeover behavior in cross-border acquisitions. We find that managers of firms domiciled in countries with a high uncertainty aversion tend to conduct fewer cross-border deals. They also tend to pay higher premiums and acquire larger ownership stakes. This behavior is strikingly different from their takeover behavior in their homelands. The implication seems to be that high uncertainty adverse managers shun foreign deals that promise lower, but still positive, value. They undertake only the highest-value foreign takeovers. Yet, they do not pay too much for these high-value foreign deals. We find strong evidence that culture, especially how managers feel about uncertainty, has a major impact on corporate acquisition behavior.

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Table 1 Hofstede Uncertainty Avoidance Index Values for Acquirer Countries

This table shows UAI (Uncertainty Avoidance Index values based on Hofstede et al 2010) and origin of law for the 17 nations used in this research. The three groups are categorized by ranked UAI values; the middle UAI group consists of nations that have a UAI value within the range of 40 to 60. Origin of law is based on La Porta et al (1998).

	UAI	UAI Group	Origin of Law
Singapore	8	LowUAI	Common
Hong Kong	29	LowUAI	Common
China	30	LowUAI	Communism
United Kingdom	35	LowUAI	Common
Malaysia	36	LowUAI	Common
India	40	MiddleUAI	Common
U.S.A	46	MiddleUAI	Common
Canada	48	MiddleUAI	Common
Indonesia	48	MiddleUAI	Civil / French
New Zealand	49	MiddleUAI	Common
Australia	51	MiddleUAI	Common
Thailand	64	HighUAI	Common
Germany	65	HighUAI	Civil / German
Taiwan	69	HighUAI	Civil / German
South Korea	85	HighUAI	Civil / German
France	86	HighUAI	Civil / French
Japan	92	HighUAI	Civil / German

Table 2 Number of Acquisition Deals by Acquirer and Target Country from 2000 to 2009

This table shows the number of acquisitions between the 17 nations included in this study paired by acquirer and target nations from 2000 to 2009. The nations of acquirers and targets are determined on the basis of the location of the firm's head office. The sample selection criteria are: (1) shares owned before the deal (toehold) was less than 20 percent; (2) shares controlled after the deal is larger than 20 percent; (3) 10 percent or more of the shares are acquired in the deal; (4) deal value is more than 10 million U.S. dollars; (5) the target is not a joint venture; (6) the target is a public company whose share prices are available.

		Target Nation																				
		Australia	Canada	China	France	Germany	Hong Kong	India	Indonesia	Japan	Malaysia	New Zealand	Singapore	South Korea	Taiwan	Thailand	UK	USA	*Asia*	Total	Cross-border	% Cross-border
Acquirer Nation	Australia	203	6	0	0	0	2	1	0	1	0	11	3	0	0	0	9	17	*7*	253	50	20%
	Canada	15	382	0	4	0	0	0	0	0	0	3	1	0	0	0	11	63	*1*	479	97	20%
	China	5	10	117	0	0	18	0	0	1	0	0	2	1	0	0	3	1	*139*	158	41	26%
	France	3	8	2	96	2	1	1	0	3	0	1	1	0	0	1	19	34	*9*	172	76	44%
	Germany	6	2	1	5	37	0	4	0	3	0	0	0	1	1	0	15	32	*10*	107	70	65%
	Hong Kong	6	6	4	1	0	88	0	1	2	2	0	10	1	0	1	2	3	*109*	127	39	31%
	India	1	3	0	0	1	0	39	0	0	0	0	0	0	0	0	4	7	*39*	55	16	29%
	Indonesia	2	0	1	0	0	0	0	10	0	0	0	2	0	0	0	0	0	*13*	15	5	33%
	Japan	1	4	2	1	5	3	2	0	571	1	0	4	1	0	1	8	17	*585*	621	50	8%
	Malaysia	0	0	0	0	0	1	0	1	0	40	0	5	0	0	1	0	0	*48*	48	8	17%
	New Zealand	2	1	0	0	0	0	0	0	0	0	18	0	0	0	0	0	1	*0*	22	4	18%
	Singapore	5	0	0	0	0	4	1	5	0	5	1	32	0	0	1	2	4	*48*	60	28	47%
	South Korea	0	3	1	0	0	1	0	0	1	0	0	0	19	0	0	0	2	*22*	27	8	30%
	Taiwan	0	0	0	0	0	1	1	0	1	0	0	0	0	20	0	0	1	*23*	24	4	17%
	Thailand	0	1	0	0	0	0	1	0	0	0	0	0	0	0	30	0	1	*31*	33	3	9%
	UK	12	19	0	10	13	1	3	1	5	2	2	5	0	0	0	324	81	*17*	478	154	32%
	USA	30	121	2	19	14	6	9	1	25	1	3	8	4	6	2	105	1,761	*64*	2,117	356	17%
	Asia	*20*	*27*	*125*	*2*	*6*	*116*	*44*	*17*	*576*	*48*	*1*	*55*	*22*	*20*	*34*	*19*	*36*	*1,057*	*1,168*	*202*	17%
Total		291	566	130	136	72	126	62	19	613	51	39	73	27	27	37	502	2,025	*1,165*	4,796	1,009	21%
Cross-border		88	184	13	40	35	38	23	9	42	11	21	41	8	7	7	178	264	199	1,009		
% Cross-border		30%	33%	10%	29%	49%	30%	37%	47%	7%	22%	54%	56%	30%	26%	19%	35%	13%	17%	21%		

Table 3 Minority versus Majority Acquisitions in Each Target Country

This table shows the composition of minority and majority acquisitions for each target country. Minority acquisitions are defined as transactions which result in the acquirer gaining less than 50 percent of the outstanding shares of the target after the completion of the deal. Majority acquisitions are all deals other than minority acquisitions.

	Target Nation																		
	Australia	Canada	China	France	Germany	Hong Kong	India	Indonesia	Japan	Malaysia	New Zealand	Singapore	South Korea	Taiwan	Thailand	UK	USA	*Asia*	Total
Entire Deals																			
Minority Acquisitions	24	44	101	35	16	39	39	11	277	26	6	27	13	5	23	27	96	*561*	809
Majority Acquisitions	267	522	29	101	56	87	23	8	336	25	33	46	14	22	14	475	1929	*604*	3987
Total	291	566	130	136	72	126	62	19	613	51	39	73	27	27	37	502	2025	*1165*	4796
% Majority Acquisitions	92%	92%	22%	74%	78%	69%	37%	42%	55%	49%	85%	63%	52%	81%	38%	95%	95%	*52%*	83%
Cross-border Deals																			
Minority Acquisitions	12	18	8	6	6	17	12	4	22	4	5	15	3	0	4	10	3	*89*	149
Majority Acquisitions	76	166	5	34	29	21	11	5	20	7	16	26	5	7	3	168	261	*110*	860
Total	88	184	13	40	35	38	23	9	42	11	21	41	8	7	7	178	264	*199*	1009
% Majority Acquisitions	86%	90%	38%	85%	83%	55%	48%	56%	48%	64%	76%	63%	63%	100%	43%	94%	99%	*55%*	85%
Domestic Deals																			
Minority Acquisitions	12	26	93	29	10	22	27	7	255	22	1	12	10	5	19	17	93	*472*	660
Majority Acquisitions	191	356	24	67	27	66	12	3	316	18	17	20	9	15	11	307	1668	*494*	3127
Total	203	382	117	96	37	88	39	10	571	40	18	32	19	20	30	324	1761	*966*	3787
% Majority Acquisitions	94%	93%	21%	70%	73%	75%	31%	30%	55%	45%	94%	63%	47%	75%	37%	95%	95%	*51%*	83%

Table 4 Control Premium by Target Country, Cross-Border versus Domestic

This table shows the mean value of the control premium paid in each country. The control premium is defined as the acquisition price divided by the target's share price four weeks before the deal announcement, less one.

		Target Nation																	Total
		Australia	Canada	China	France	Germany	Hong Kong	India	Indonesia	Japan	Malaysia	New Zealand	Singapore	South Korea	Taiwan	Thailand	UK	USA	*Asia*	
Cross-border Deals																			
	N	88	184	13	40	35	38	23	9	42	11	21	41	8	7	7	178	264	*199*	1,009
	Mean	41.1%	44.2%	3.3%	17.8%	30.8%	9.5%	27.0%	16.7%	11.6%	17.9%	31.0%	31.4%	18.3%	34.0%	54.2%	46.4%	46.5%	*19.6%*	38.3%
	Median	35.1%	34.1%	-4.9%	12.7%	26.3%	0.5%	23.3%	4.4%	4.2%	8.3%	14.8%	22.6%	15.8%	28.7%	5.6%	37.2%	37.9%	*17.0%*	31.6%
Domestic Deals																			
	N	203	382	117	96	37	88	39	10	571	40	18	32	19	20	30	324	1,761	*966*	3,787
	Mean	33.2%	34.0%	-35.7%	20.4%	18.9%	-5.1%	21.2%	l	11.9%	30.4%	24.4%	21.2%	12.9%	10.1%	25.0%	36.2%	40.1%	*6.3%*	29.4%
	Median	26.6%	24.9%	-42.4%	16.9%	17.7%	-9.4%	11.3%	-3.3%	5.5%	18.1%	21.4%	14.2%	9.1%	6.3%	16.8%	28.9%	31.5%	*3.8%*	23.9%

Table 5 Comparison of Cross-Border and Domestic Acquisitions and between Asia-Pac Rim Targets and Non-Asia-Pac Rim Targets

This table shows basic statistics for the acquisitions used in this research. Detailed definitions of the variables are shown in Appendix 1. We show statistics for the entire sample, a subsample of cross-border deals, a subsample of purely domestic acquisitions, a subsample of acquisitions that targeted Asian firms, and finally a subsample of non-Asia deals

	Entire Sample		Cross-border Acquisitions		Domestic Acquisitions		Asian Target		Non Asian Target	
N	4796		1009		3787		1165		3631	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median
Value of Transaction ($mil)	1,049	128	948	177	1,076	115	258	41	1,303	197
Toehold	1.0%	0.0%	0.1%	0.0%	1.0%	0.0%	1.9%	0.0%	0.8%	0.0%
% Share Acquired	83.5%	100.0%	84.4%	100.0%	83.3%	100.0%	55.3%	49.66%	92.6%	100.0%
% Owned After Transaction	84.6%	100.0%	85.5%	100.0%	84.3%	100.0%	57.2%	50.78%	93.3%	100.0%
Control Premium	31.3%	25.4%	38.3%	31.6%	29.4%	24%	8.6%	5.3%	38.5%	30.7%
Majority acquisitions	83.1%		85.2%		82.6%		51.8%		93.2%	
Horizontal Deals	43.2%		41.5%		43.6%		26.8%		48.2%	
Public Acquirer	66.9%		68.5%		66.5%		53.9%		71.1%	
Financial Acquirer	28.0%		27.9%		28.0%		41.1%		23.8%	

Table 6 Comparison of the Control Premium across Different Target Country Groups

This table shows the difference between the control premium and share price returns to examine the private benefits of block-shareholders associated with the acquisitions. The premium is defined as the acquisition price divided by the target share price four weeks before the deal announcement, less one. Δ Target Stock (−4W, 1D) is the difference from the target stock price four weeks before the announcement to one day after the announcement of the transaction. Δ Target Stock (−4W, 4W) is difference from the target stock price four weeks before the announcement to four weeks after the announcement of the transaction. Dyck and Zingales (2004) show the difference between the premium and the share price returns represents the private benefits of block-shareholders.

	Entire Sample			Asian Target			China			Japan			US/UK		
	N	Mean	*t*-stat	N	Mean	*t*-stat	N	Mean	*t*-stat	N	Mean	*t*-stat	N	Mean	*t*-stat
Cross-border															
Premium	1,009	38.3%	26.308	144	23.5%	5.632	13	3.3%	0.213	42	11.6%	1.793	442	46.5%	23.161
Δ Target Stock (-4W, 1D)	843	31.3%	23.462	113	22.1%	8.092	12	22.6%	3.021	30	14.4%	2.485	375	37.2%	19.623
Δ Target Stock (-4W, 4W)	833	35.3%	20.548	109	27.1%	7.406	12	27.1%	2.301	29	25.9%	1.748	378	38.9%	19.105
Premium - ΔTarget Stock (-4W, 1D)	843	7.5%	6.521	113	2.2%	0.566	12	-18.6%	-1.057	30	-5.7%	-0.673	375	9.5%	8.096
Premium - ΔTarget Stock (-4W, 4W)	833	3.3%	2.192	109	-3.9%	-0.843	12	-23.1%	-1.151	29	-19.2%	-1.110	378	7.6%	6.642
Domestic															
Premium	3,787	29.4%	39.474	278	12.6%	3.935	117	-35.7%	-11.145	571	11.9%	7.621	2,085	39.5%	41.558
Δ Target Stock (-4W, 1D)	3,312	24.3%	38.143	211	14.1%	4.411	102	7.0%	3.029	462	11.3%	9.622	1,922	30.3%	35.364
Δ Target Stock (-4W, 4W)	3,291	28.5%	17.375	209	38.1%	1.669	95	6.2%	2.251	461	16.2%	9.374	1,916	32.7%	28.978
Premium - ΔTarget Stock (-4W, 1D)	3,312	5.6%	10.170	211	-5.1%	-1.380	102	-43.0%	-11.895	462	0.2%	0.111	1,922	9.0%	17.175
Premium - ΔTarget Stock (-4W, 4W)	3,291	1.2%	0.787	209	-30.7%	-1.361	95	-42.5%	-10.786	461	-4.8%	-3.115	1,916	6.5%	7.756

Table 7 Uncertainty Avoidance and the Selection of Acquisitions

This table shows regression (OLS) analysis of the level of acquisition activity at the country level for the 17 nations in our sample. Acquisition Volume to GDP is the average acquisition transaction volume divided by each country's gross domestic product over the period from 2000 to 2009. The cross-border ratio is the value of cross-border acquisitions divided by the value of all acquisitions from 2000 to 2009 for each country. The independent variables are described in Appendix 1. ***, ** and * indicate statistical significance at the 1, 5 and 10 percent levels.

Model	(1)		(2)		(3)		(4)		(5)	
Dependent Variable	Acquisition Volume to GDP		Acquisition Volume to GDP		Cross-border Ratio		Cross-border Ratio		Cross-border Ratio	
N	17		17		17		17		17	
Adjusted R^2	0.182		0.321		0.425		0.523		0.291	
	Coefficient	*t*-stat	Coefficient	*t*-stat	Coefficient	*t*-stat	Coefficient	*t*-stat	Coefficient	*t*-stat
Constant	0.056	1.754	-0.009	-0.272	0.452	6.314	0.678	5.125 ***	0.251	4.664 ***
UAI	-0.001	-2.344 **			-0.003	-2.290 **	-0.003	-2.133 *		
Common Law Dummy			0.040	3.078 ***					0.082	1.268
Ln(GDP)	0.004	0.839	0.004	1.017			-0.039	-1.964 *		
EU Dummy					0.251	3.355 ***	0.322	4.172 ***	0.240	2.866 **

Table 8 Acquisition Behavior and Uncertainty Avoidance

This table explores the relation between the various characteristics of acquisition behavior and different levels of uncertainty avoidance behavior (UAI). The classification of High, Middle and Low UAI countries is based on the groupings shown in Table 1. The characteristics are fully described in Appendix 1. ***, ** and * indicate statistical significance at the 1, 5 and 10 percent levels.

High UAI

	Cross-border		Domestic	
	N	Mean	N	Mean
Toehold	207	0.97	753	2.113
% Owned after Transaction	207	87.50	753	61.334
Control Premium	207	0.43	753	0.139
Asian Acquirers	207	0.29	753	0.823
Cultural Distance	207	13.92		
Same Main Language	207	0.00		

Middle UAI

	Cross-border		High UAI - Middle UAI			Domestic		High UAI - Middle UAI		
	N	Mean	Mean	*t*-statistics		N	Mean	Mean	*t*-statistics	
Toehold	532	0.91	0.057	0.207		2,433	0.725	1.387	7.311	***
% Owned after Transaction	532	87.90	-0.407	-0.210		2,433	93.788	-32.454	-28.080	***
Control Premium	532	0.40	0.032	0.885		2,433	0.377	-0.238	-14.895	***
Asian Acquirers	532	0.05	0.248	7.491	***	2,433	0.028	0.795	55.564	***
Cultural Distance	532	8.89	5.039	12.521	***					
Same Main Language	532	0.75	-0.750	-39.912	***					

Low UAI

	Cross-border		High UAI - Low UAI			Domestic		High UAI - Low UAI		
	N	Mean	Mean	*t*-statistics		N	Mean	Mean	*t*-statistics	
Toehold	270	1.48	-0.517	-1.514		601	0.943	1.170	5.097	***
% Owned after Transaction	270	79.22	8.283	3.489	***	601	74.775	-13.442	-7.964	***
Control Premium	270	0.30	0.131	3.217	***	601	0.150	-0.011	-0.436	
Asian Acquirers	270	0.43	-0.135	-3.080	***	601	0.461	0.362	14.706	***
Cultural Distance	270	12.78	1.142	2.918	***					
Same Main Language	270	0.56	-0.563	-18.615	***					

Table 9 Cross-Border Acquisition Behavior and Uncertainty Avoidance

This table shows results of logit regressions which analyze the determinants of cross-border acquisitions at the transaction level. The dependent variable is a Cross-border Deal Dummy that takes the value one when an acquisition is a cross-border transaction and zero otherwise. The full definitions of all the other variables are shown in Appendix 1. ***, ** and * indicate statistical significance at the 1, 5 and 10 percent levels.

	Model 1			Model 2			Model 3		
Sample	All			All			Excluding EU Countries		
N	4796			4796			4039		
Nagelkarke R^2	0.100			0.099			0.064		
	Coefficient	Wald		Coefficient	Wald		Coefficient	Wald	
(Constant)	-2.604	100.423	***	-2.990	177.029	***	-1.333	16.063	***
Acquirer UAI	-0.005	4.761	**				-0.022	37.726	***
Common Law Acquirer Dummy				0.091	0.719				
Public Acquirer FDummy	0.344	11.438	***	0.345	11.506	***	0.153	1.694	
Financial Acquirer Dummy	0.065	0.405		0.064	0.385		0.255	4.790	**
Acquirer Country Prior Return	0.644	26.056	***	0.636	25.493	***	0.310	5.095	**
Acquirer Currency Prior Appreciation	0.000	0.188		0.000	0.397		0.000	0.476	
China Acquirer Dummy	0.458	3.871	**	0.601	6.458	**	0.272	1.449	
EU Acquirer Dummy	1.432	160.111	***	1.502	190.776	***			
US Acquirer Dummy	0.222	4.420	**	0.283	7.320	***	-0.095	0.734	
Hong Kong and Singapore Acquirer Dummy	1.052	27.075	***	1.239	47.227	***	0.243	1.181	
Year Dummy	Yes			Yes			Yes		

Table 10 Proportion of Ownership after the Takeover and Uncertainty Avoidance

This table shows results of regression analysis (OLS) of the determinants of the proportion of ownership after acquisitions. The dependent variable is "% Share Owned after the Acquisition." The primary independent variable of interest is the uncertainty avoidance of acquirers (Acquirer UAI). Target China Dummy is a variation of the Target Asia Dummy that takes the value one if the target country is China and zero otherwise. See Appendix 1 for a full description of the other variables. ***, ** and * indicate statistical significance at the 1, 5 and 10 percent levels.

	Model 1			**Model 2**			**Model 3**		
	All Acquisitions			**Cross-border Acqusitions**			**Cross-border Acqusitions**		
	Model	Adj-R^2	*F*-stat	Model	Adj-R^2	*F*-stat	Model	Adj-R^2	*F*-stat
	4,709	0.377	159.516	985	0.386	32.896	985	0.367	32.666
	Coefficient	*t*-statistics		Coefficient	*t*-statistics		Coefficient	*t*-statistics	
Constant	95.562	50.073	***	79.728	17.823	***	83.319	21.449	***
Cross-border Dummy	-0.885	-1.158							
Toehold	-0.291	-3.420	***	-0.926	-5.315	***	-0.937	-5.374	***
Acquirer UAI	-0.043	-2.115	**	0.067	1.646	*			
Acquirer Common Law Dummy							0.695	0.373	
Target Common Law Dummy				11.839	5.959	***	11.638	5.857	***
Acquirer Public Dummy	3.539	4.250	***	3.882	2.513	**	4.214	2.749	***
Financial Acquirer Dummy	-4.266	-4.919	***	-4.683	-2.837	***	-4.842	-2.908	***
Target Size	-0.661	-3.684	***	-0.429	-1.165		-0.391	-1.058	
Asia Target Dummy	-28.305	-30.112	***	-26.763	-14.910	***	-27.095	-15.175	***
China Target Dummy	-20.948	-10.004	***	-12.057	-1.808	*	-11.920	-1.785	*
UK-US Acquirer Dummy	4.305	5.328	***	3.841	2.623	***	2.508	1.560	
Year Dummy	Yes			Yes			Yes		

	Model 4			**Model 5**		
	Domestic Acquisitions			**Domestic Acquisitions**		
	Model	Adj-R^2	*F*-stat	Model	Adj-R^2	*F*-stat
	3,723	0.393	142.559	3,723	0.396	144.622
	Coefficient	*t*-statistics		Coefficient	*t*-statistics	
Constant	95.830	43.858	***	83.916	38.445	***
Toehold	-0.080	-0.832		-0.090	-0.939	
Acquirer UAI	-0.099	-4.043	***			
Target Common Law Dummy				7.920	6.136	***
Acquirer Public Dummy	3.681	3.721	***	3.465	3.517	***
Financial Acquirer Dummy	-3.794	-3.714	***	-3.879	-3.809	***
Target Size	-0.744	-3.630	***	-0.667	-3.257	***
Asia Target Dummy	-25.023	-20.700	***	-22.792	-17.560	***
China Target Dummy	-22.804	-10.084	***	-18.179	-8.258	***
UK-US Acquirer Dummy	6.329	6.361	***	5.785	5.831	***
Year Dummy	Yes			Yes		

Table 11 Takeover Premium Regressions

This table shows results from regression analysis of the determinants of the control premium in cross-border acquisitions. The dependent variable is the control premium, which is defined as the acquisition price divided by the target share price four weeks before the deal announcement, less one. The primary independent variable of interest is the uncertainty avoidance of acquirers (Acquirer UAI). See Appendix 1 for a full description of the other variables. ***, ** and * indicate statistical significance at the 1, 5 and 10 percent levels.

	Model (1)		Model (2)		Model (3)		Model (4)	
N	958		958		958		958	
Adjusted R^2	0.133		0.112		0.127		0.128	
F-statistic	6.442		5.666		6.147		6.226	
	Coefficient	*t*-stat	Coefficient	*t*-stat	Coefficient	*t*-stat	Coefficient	*t*-stat
(Constant)	-0.199	-1.487	0.029	0.227	-0.070	-0.551	-0.016	-0.123
Acquirer UAI	0.002	2.625 ***	0.003	2.700 ***				
Common Law Acquirer Dummy							-0.064	-1.398
Cultural Distance	0.004	1.094	0.004	1.205	0.007	1.942 *	0.005	1.434
Same Language Dummy					0.019	0.375		
Common Law Target Dummy	0.130	2.747 ***	0.172	3.682 ***	0.127	2.454 **	0.133	2.810 ***
Horizontal Dummy	0.026	0.853	0.025	0.801	0.023	0.736	0.026	0.843
Toehold	0.006	1.541	0.000	0.043	0.006	1.488	0.006	1.487
% Share Acquired	0.004	4.806 ***			0.004	4.847 ***	0.004	4.880 ***
Ln(Deal Value)	-0.025	-2.902 ***	-0.017	-1.975 **	-0.025	-2.863 ***	-0.026	-2.985 ***
Acquirer Country Prior Return	0.070	1.344	0.067	1.272	0.065	1.233	0.064	1.219
Target Country Prior Return	0.074	1.463	0.076	1.490	0.074	1.463	0.068	1.355
Acquirer Currency Prior Appreciation	0.000	-0.520	0.000	-0.809	0.000	-0.458	0.000	-0.661
Public Acquirer Firm Dummy	0.022	0.619	0.020	0.544	0.028	0.785	0.027	0.752
Financial Acquirer Dummy	-0.087	-2.286 **	-0.112	-2.955 ***	-0.093	-2.461 **	-0.087	-2.268 **
China Acquirer Dummy	-0.339	-2.651 ***	-0.360	-2.785 ***	-0.372	-2.885 ***	-0.398	-3.066 ***
Asia (non-China) Acquirer Dummy	0.049	0.971	0.042	0.822	0.013	0.268	0.028	0.551
UK-US Acquirer Dummy	0.099	2.348 **	0.111	2.603 ***	0.035	0.817	0.078	1.763 *
China Target Dummy	-0.107	-0.827	-0.199	-1.533	-0.106	-0.804	-0.103	-0.788
Asia (non-China) Target Dummy	-0.059	-1.167	-0.133	-2.751 ***	-0.083	-1.681 *	-0.072	-1.444
UK-US Target Dummy	0.020	0.508	0.040	1.014	0.002	0.039	0.012	0.304
Year Dummy	Yes		Yes		Yes		Yes	

Table 12 Cumulative Abnormal Returns for Acquirers

This table shows cumulative abnormal returns (CAR) in a three-day window from one day before to one day after the announcement date of the deal for acquiring firms. *t*-statistics are shown in parenthesis below the CAR. Results are ordered by the size of each country's uncertainty avoidance (UAI). Singapore has the lowest UAI, while Japan has the highest UAI. ***, ** and * indicate statistical significance at the 1, 5 and 10 percent level.

	Cross-Border Acquirers' CAR			Domestic Acquirers' CAR			
	N	Mean CAR [-1~+1]	Median CAR [-1~+1]	*N*	Mean CAR [-1~+1]	Median CAR [-1~+1]	Mean Equality *ANOVA F-test*
Singapore	9	0.51%	0.45%	7	-1.13%	-1.54%	0.13
		(0.16)	(0.00)		(-0.38)	(0.42)	
Hong Kong	9	4.51%	1.63%	13	5.00%	-0.21%	0.00
		(2.14)*	(2.02)**		(1.18)	(0.49)	
China	10	1.93%	0.73%	12	-0.13%	-0.64%	0.95
		(1.86)*	(1.43)		(-0.07)	(0.67)	
UK	58	0.77%	-0.33%	87	-2.86%	-0.74%	3.11*
		(0.64)	(0.29)		(-2.06)**	(2.54)**	
Malaysia	2	-9.88%	-9.88%	8	-1.48%	-1.17%	26.93***
		(-19.89)**	(0.89)		(-1.92)*	(1.61)	
India	3	1.53%	-0.02%	8	-1.19%	-0.94%	0.96
		(0.51)	(-0.27)		(-0.90)	(0.77)	
US	144	-0.27%	0.22%	1,167	-1.26%	-0.69%	1.17
		(-0.39)	(0.64)		(-4.09)***	(6.23)***	
Canada	48	-0.23%	-0.04%	271	-1.69%	-1.50%	0.62
		(-0.08)	(0.47)		(-2.79)***	(4.67)***	
Indonesia	2	0.82%	0.82%	5	-4.03%	-6.14%	2.03
		(0.38)	(0.00)		(-2.24)	(1.65)*	
New Zealand	1	2.45%	2.45%	6	0.89%	1.15%	0.18
		(n/a)	(n/a)		(0.64)	(1.05)	
Australia	17	3.48%	1.25%	124	-0.86%	-0.14%	3.33*
		(2.10)*	(2.84)***		(-1.02)	(0.53)	
Thailand	1	-0.05%	-0.05%	10	1.98%	0.19%	0.12
		(n/a)	(n/a)		(1.13)	(0.61)	
Germany	22	-0.39%	-0.31%	10	-0.54%	-0.15%	0.00
		(-0.38)	(0.42)		(-0.52)	(0.10)	
Taiwan	2	7.12%	7.12%	10	-0.38%	-0.41%	1.96
		(0.51)	(0.00)		(-0.38)	(0.92)	
South Korea	3	-0.16%	0.61%	13	1.06%	-0.11%	0.11
		(-0.07)	(-0.27)		(0.64)	(0.21)	
France	21	1.94%	-0.26%	24	-3.16%	-0.29%	2.60
		(1.53)	(0.76)		(-1.10)	(0.53)	
Japan	22	3.79%	1.97%	308	2.79%	0.95%	0.02
		(1.60)*	(2.21)**		(3.18)***	(4.85)***	
Asia exc. China & Japan	31	0.15%	0.45%	74	0.61%	-0.42%	0.25
		(1.00)	(0.75)		(0.66)	(0.83)	
Total	356	1.84%	0.28%	2,083	-0.70%	-0.51%	9.82***
		(1.40)	(1.99)**		(-2.80)***	(5.67)***	

Table 13 Cumulative Abnormal Returns Regressions
Panel A All Acquisitions

This table shows results of regression analysis of the determinants of cumulative abnormal returns in a three-day window from one day before to one day after the announcement date of all deals for acquiring firms. The primary independent variable of interest is the uncertainty avoidance of acquirers (Acquirer UAI). See Appendix 1 for a full description of the variables. ***, ** and * indicate statistical significance at the 1, 5 and 10 percent level.

	(1)		(2)	
N	2,432		2,432	
Adjusted R^2	0.015		0.016	
F-statistic	2.435	***	2.398	***
	Coefficient	*t*-statistics	Coefficient	*t*-statistics
(Constant)	0.011	0.317	-0.045	-0.701
Acquirer UAI	0.000	0.925	0.000	0.535
Target UAI	0.000	-0.212	0.000	0.919
Common Law Acquirer Dummy			-0.006	-0.177
Cultural Distance			-0.002	-1.498
Common Law Target Dummy			0.052	1.459
Domestic Dummy	-0.024	-2.777 ***	-0.046	-2.865 ***
Horizontal Dummy	0.008	1.284	0.007	1.176
Majority Acquisition Dummy	-0.026	-2.589 **	-0.026	-2.590 **
Toehold	-0.001	-0.572	-0.001	-0.625
Ln(Target Size)	0.000	-1.921 *	0.000	-1.877 *
Financial Acquirer Dummy	0.010	0.664	0.010	0.697
Acquirer China Dummy	0.052	0.809	0.045	0.648
Acquirer Asia (non-China) Dummy	0.030	1.269	0.027	1.091
Acquirer UK/US Dummy	0.026	1.935 *	0.026	1.870 *
Target China Dummy	-0.046	-0.736	0.009	0.136
Target Asia (non-China) Dummy	-0.011	-0.455	0.009	0.353
Target UK/US Dummy	-0.021	-1.623	-0.018	-1.373
Year dummy	Yes		Yes	

Table 13 Cumulative Abnormal Returns Regressions
Panel B Cross-Border Acquisitions

This table shows results of regression analysis of the determinants of cumulative abnormal returns in a three-day window from one day before to one day after the announcement date of all cross-border deals for acquiring firms. The primary independent variable of interest is the uncertainty avoidance of acquirers (Acquirer UAI). See Appendix 1 for a full description of the variables. ***, ** and * indicate statistical significance at the 1, 5 and 10 percent level.

	(1)		(2)	
N	364		364	
Adjusted R^2	-0.036		-0.043	
F-statistic	0.489		0.471	
	Coefficient	*t*-statistics	Coefficient	*t*-statistics
(Constant)	0.015	0.122	-0.134	-0.510
Acquirer UAI	0.001	0.7054	0.001	0.522
Target UAI	0.000	0.001888	0.001	0.655
Common Law Acquirer Dummy			-0.005	-0.060
Cultural Distance			-0.002	-0.527
Common Law Target Dummy			0.064	0.684
Horizontal Dummy	0.044	1.502	0.041	1.359
Majority Acquisition Dummy	-0.036	-0.657	-0.036	-0.652
Toehold	-0.001	-0.230	-0.001	-0.203
Ln(Target Size)	0.000	-0.791	0.000	-0.740
Financial Acquirer Dummy	0.034	0.421	0.027	0.334
Acquirer China Dummy	0.018	0.114	0.024	0.137
Acquirer Asia (non-China) Dummy	0.015	0.271	0.029	0.474
Acquirer UK/US Dummy	0.017	0.412	0.029	0.607
Target China Dummy	-0.088	-0.608	-0.026	-0.153
Target Asia (non-China) Dummy	-0.010	-0.200	0.027	0.420
Target UK/US Dummy	-0.024	-0.652	-0.008	-0.194
Year dummy	Yes		Yes	

Table 13 Cumulative Abnormal Returns Regressions
Panel C Domestic Acquisitions

This table shows results of regression analysis of the determinants of cumulative abnormal returns in a three-day window from one day before to one day after the announcement date of purely domestic deals for acquiring firms. The primary independent variable of interest is the uncertainty avoidance of acquirers (Acquirer UAI). See Appendix 1 for a full description of the variables. ***, ** and * indicate statistical significance at the 1, 5 and 10 percent level.

	(1)		(2)	
N	2,023		2,023	
Adjusted R^2	0.021		0.020	
F-statistic	3.071	*	2.993	*
	Coefficient	*t*-statistics	Coefficient	*t*-statistics
(Constant)	-0.022	-1.096	0.005	0.200
UAI			0.000	-0.349
Common Law Dummy	0.023	1.391		
Horizontal Dummy	0.001	0.211	0.001	0.260
Majority Acquisition Dummy	-0.028	-3.249 ***	-0.027	-3.162 ***
Premium	-0.001	-0.121	-0.001	-0.082
Toehold	0.000	-0.612	0.000	-0.582
Ln(Target Size)	0.000	-2.012 **	0.000	-2.060 **
Target ROA	0.000	-0.273	0.000	-0.278
Acquirer Financial Institution Dummy	0.008	0.624	0.007	0.561
China Dummy	0.039	0.791	0.018	0.390
Japan Dummy	0.052	2.871 ***	0.038	1.968 **
Asia (non Japan/China) Dummy	0.018	1.129	0.012	0.756
UK/US Dummy	0.003	0.370	0.004	0.493
Year Dummy	Yes		Yes	

Appendix 1 Explanation of Variables

Explanation of variables	
Acquirer UAI	Uncertainty Avoidance Index as defined by Hofstede (1991) of the acquirer's country
Target UAI	Uncertainty Avoidance Index as defined by Hofstede (1991) of the target's country
Common Law Acquirer Dummy	Dummy variable which takes the value one if the acquirer is from an English Common Law country as classified by LLSV and takes the value zero otherwise.
Common Law Target Dummy	Dummy variable which takes the value one if the target firm is from an English Common Law country as classified by LLSV and takes the value zero otherwise.
Cultural Distance	Cultural Distance between the acquirer country and the target country is the square root of the sum of squared distances of the four Hofstede cultural dimensions, divided by four as employed by Chakrabarti et al (2009).
Same Language Dummy	Dummy variable which takes the value one if the major language of the acquirer and the target are the same and takes the value zero otherwise.
Horizontal Dummy	Dummy variable which takes the value one if the first two digits of the primary SIC code of the acquirer and the target are the same and takes the value zero otherwise.
Ln (Deal Value)	Log of the total dollar value paid by the acquirer in the acquisition.
Target Size	Log of the dollar value of the total assets of the target firm in the fiscal year prior to the deal announcement.
Target ROA	Return on assets of the target firm in the fiscal year prior to the deal announcement.
Toehold	Ratio of the target's shares to total shares which was held by the acquirer prior to the deal.
% Share Acquired	Ratio of the target's shares to total shares which was acquired in the deal.
Public Acquirer Dummy	Dummy variable which takes the value one if the acquirer is a public firm and takes the value zero otherwise.
Financial Acquirer Dummy	Dummy variable which takes the value one if the acquirer is a financial entity and takes the value zero otherwise.
Asian Acquirer Dummy	Dummy variable which takes the value one if the acquirer or its ultimate parent firm is from Asia (excluding China and Japan) and takes the value zero otherwise.
China Acquirer Dummy	Dummy variable which takes the value one if the acquirer or its ultimate parent firm is from China and takes the value zero otherwise.
Hong Kong and Singapore Acquirer Dummy	Dummy variable which takes the value one if the acquirer or its ultimate parent firm is from Hong Kong or Singapore and takes the value zero otherwise.
EU Acquirer Dummy	Dummy variable which takes the value one if the acquirer or its ultimate parent firm is from the U.K., Germany or France and takes the value zero otherwise.
UK-US Acquirer Dummy	Dummy variable which takes the value one if the acquirer or its ultimate parent firm is from the U.K. or the U.S. and takes the value zero otherwise.
Asian Target Dummy	Dummy variable which takes the value one if the target firm is from Asia (excluding China and Japan) and takes the value zero otherwise.
China Target Dummy	Dummy variable which takes the value one if the target firm is from China and takes the value zero otherwise.
Japanese Target Dummy	Dummy variable which takes the value one if the target firm is from Japan and takes the value zero otherwise.
UK-US Target Dummy	Dummy variable which takes the value one if the target firm is from the U.K. or the U.S. and takes the value zero otherwise.
Acquirer Country Prior Return	3-year return of an index of the major stock market of the acquirer's country prior to the deal announcement.
Target Country Prior Return	3-year return of an index of the major stock market of the target's country prior to the deal announcement.
Acquirer Currency Prior Appreciation	3-year appreciation of the currency of the acquirer's country relative to the U.S. dollar prior to the deal announcement.

Appendix 2 Results of a Survey of Finance Leaders' Attitudes to M&A

To test if uncertainty avoidance has a genuine influence on acquisition behavior, we included several related questions on selection of ownership structure in M&A in a large-scale survey of the attitudes of finance practitioners in M&A activities in Japan. This sample is especially interesting because Japan has the highest uncertainty avoidance measure of the countries in this study. We sent the survey to M&A project leaders including CEOs, CFOs, or managers of the business development divisions of listed firms on the Tokyo Stock Exchange, Section One. The survey was sent by mail in August 2014 to 1,860 firms. We received 202 responses (for a response rate of 10.8%). The survey was conducted through collaboration between Kotaro Inoue, one of the authors of this study, and KPMG FAS Japan.[17]

We asked questions on a broad range of topics to M&A leaders that related to their experiences and their assessment of their own M&A behavior. In addition, we asked various questions relating to their personal attitudes toward life and risky projects. Among these, we included questions relating to ownership proportions sought in acquisitions. An example follows:

> "In general, it is often said that the difference of corporate culture between acquirer and target firm becomes a potential barrier to value creation in M&A. Now, which answer is the closest to your own attitude towards an acquisition facing a large cultural difference with the target firm?"

① When there is a large difference of corporate culture, we should not conduct M&A even when there is value creation potential.
② When there is a large difference of corporate culture, we should reduce risks by acquiring only a portion of target ownership.
③ When there is a large difference of corporate culture, we should reduce post-acquisition risks by acquiring 100% ownership of target.
④ Since the difference of culture can be overcome eventually, it does not affect my decision relating to acquisitions behavior.
⑤ Others

We categorized the responses to the above question into two groups. Group One is "managers who avoid 100% acquisitions (respondents of ① and ②)", and Group Two is "managers who acquire 100% (respondents of ③ and ④)". 83 respondents were categorized as Group One (①=46, ②=37) and 81 respondents were categorized as Group Two (③=42, ④=39). We then analyzed the correlation between the above groups and their responses to other questions, such as the number of acquisitions that the firm conducted in the last five years, managers' experience in cross-border deals, assessment of managers regarding the degree of difficulty to create value from cross-border (domestic) acquisitions, and the

[17] We refer to the results of this survey by permission of KPMG FAS Co. in Japan. The authors did not receive financial support from this firm.

respondents' degree of risk aversion. The degree of risk aversion is calculated on the basis of their response to the following question:

> "This is a question to assess your basic attitude towards M&A. Please note that there is no correct answer to this question. Now, let's assume two different M&A opportunities.
>
> Project A: An M&A project that will certainly create a value of 20 billion JPY.
>
> Project B: An M&A project that will create a value of 30 billion JPY with [ ]% probability and will create 10 billion JPY value with (100 – [ ])% probability.
>
> Question: Please fill in the [ ] below.
>
> I will choose Project B if the project creates 30 billion JPY with more than [ ]% probability."

This question does not assess the degree of uncertainty avoidance, but rather the degree of risk aversion as defined by Knight (2006). If the two personal attitudes correlate with each other, which we regard to be highly likely, we can use the degree of risk aversion of the respondents as a proxy for the degree of uncertainty avoidance of the respondents.[18]

We find that Group One managers, who want to avoid 100 percent acquisitions, have a significant positive correlation (23.4%) with the degree of risk aversion toward risky investment projects. They also have a significant negative correlation (−20.1%) with the number of acquisitions that the firm conducted over the last five years, and the assessment of managers regarding the degree of difficulty they would have to create value from cross-border acquisitions (−17.2%). There is not a significant correlation with the assessment of managers regarding degree of difficulty to create value from domestic acquisitions. These results indicate that M&A project leaders who prefer partial acquisitions rather than 100 percent acquisitions when there is a cultural difference have greater risk aversion. These results are consistent with our empirical results that acquirers from high UAI countries conduct fewer cross-border acquisitions, but acquirers who do conduct cross-border acquisitions prefer to seek 100 percent ownership to avoid post-acquisition uncertainty by enhancing their control over the target firms. In high UAI countries, acquirers in domestic and cross-border deals have very different attitudes to ownership and control in acquisitions.

[18] In Chapter 7, Knight (2006) describes the distinction between cases for which the distribution of potential outcomes is known and cases of uncertainty where the distribution is not known.