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# INVESTMENT BANK EXPERTISE IN CROSS-BORDER MERGERS AND ACQUISITIONS

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### Abstract

We study the influence of country expertise of investment banks in facilitating cross-border merger deals by analyzing a large international sample of merger and acquisition (M&A) deals. We provide evidence that the geographical proximity, cultural affinity, and local experience of investment banks advising bidding firms on cross-border M&A deals significantly increase the probability of completion of the deal, significantly decrease the time required to complete the deal, and significantly increase the operating performance of the acquiring firm after the deal. Our results are robust to firm, deal, country-specific factors, and endogeneity concerns.

### I. Introduction

The fast-evolving literature on mergers and acquisitions (M&As) has recently begun exploring the pivotal role of investment banks in facilitating M&A transactions. Although older studies, such as Servaes and Zenner (1996), do not find any significant effect of investment banks on the success of M&As, more recent studies present evidence that suggests that investment banks play an important part in M&A deals and contribute to their performance (e.g., Bao and Edmans 2011; Golubov, Petmezas, and Travlos 2012; Sibilkov and McConnell 2014).

However, despite the fact that almost half of M&As are cross-border deals (Erel, Liao, and Weisbach 2012), all the studies that examine the influence of investment banks on M&As focus on domestic acquisitions where the bidding firm and the acquisition target are headquartered in the same country. We examine a large international sample of cross-border mergers and show that the expertise of the acquirer-side investment bank in the country of the acquisition target has a significant effect on the outcome of the deal. Specifically, for the first time in the literature we investigate the effect of the advising bank's target country expertise on the probability of completing cross-border M&A deals, the time required to successfully complete a deal, the stock market reaction to the deal announcement, and the postmerger performance of the acquiring firm.

Cross-country M&As are particularly challenging because of the obstacles caused by the geographical distance and cultural differences between the countries of the two merging firms (Weber, Shenkar, and Raveh 1996; Ahern, Daminelli, and Fracassi 2015). Consequently, acquirer firms might strategically select their advisors to ensure a successful outcome for the deal. The prior literature on the role of investment banks in the market for corporate control limited its focus on domestic deals to ask whether larger or more reputable investment banks provide a superior intermediation experience in line with the higher fees they collect. However, at the international level the direct experience and knowledge about the target country by the hired investment bank is likely to be more valuable to the acquirer than is generic deal experience.

In this article, for the first time we move past this general domestic measure of bank prestige to investigate what specific bank expertise components are important in a more complex network of international crossborder deals where deal completion and success requires navigating long distances and diverse cultures. We also provide an important contribution to the fast-expanding literature of the importance of geography and cultural values in financial transactions. Although several studies examine the importance of geographical distances and cultural differences in loan contracting, financing costs, payout policy, and other financial policies and transactions (e.g., Giannetti and Yafeh 2012; Arena and Dewally 2012; John, Knyazeva, and Knyazeva 2011; Ahern, Daminelli, and Fracassi 2015), we are the first to show the importance of these dimensions in relation to the advising role of investment banks in M&A transactions.

Investment bank expertise in the country of the acquisition target of a cross-border merger is particularly important for two reasons. First, language and cultural differences increase the contracting costs of a cross-border merger (Ahern, Daminelli, and Fracassi 2015). These barriers during contractual negotiations can be partially overcome if the investment bank is headquartered in a country that is geographically or culturally close to the country of the acquisition target or if the bank has accumulated experience through past deals in the target country. To wit, in its 1999 "Unlocking Shareholder Value: The Keys to Success" report, KPMG finds that deals between U.S. and continental European firms are 11% less likely to be successful than deals between U.S. and U.K. firms despite extensive deal experience. The study cites greater cultural differences and challenges as responsible for the difference.

Second, cross-border mergers often take advantage of misvaluations due to temporary currency depreciations (Baker, Foley, and Wurgler 2009). These arbitrage opportunities might be better identified by an investment bank with expertise in that country rather than by the nonfinancial bidding firm or an investment bank with large global experience but no target country expertise.

The sample comprises all cross-border M&As initiated by publicly traded firms targeting publicly traded or private firms between 1994 and 2012 for which information about the bidder-advising investment bank is available. Our sample consists of 7,630 M&A deals for target firms headquartered in 127 countries from 4,072 unique acquiring firms headquartered in 70 countries advised by 1,093 unique investment banks headquartered in 53 countries. We conduct the multivariate analysis by estimating several fixed effect regressions with measures of the success of the deal as dependent variables. The main independent variables of the study are proxies for country expertise of the investment bank that advises the acquiring firm. The three proxies are (1)

the distance between the capital of the investment bank headquarters' country and the capital of the target headquarters' country (IB Geographical Distance), (2) the cultural distance between the investment bank and target countries (IB Cultural Distance), and (3) the previous experience accumulated by the investment bank in the target country measured as the number of deals completed by the investment bank in that country in the previous five years (IB Deal Experience).

Our results show that investment banks play an essential role in facilitating cross-border M&A deals. Investment banks that are geographically proximate and possess cultural expertise in the target firm's country can significantly reduce the obstacles to the success of a cross-border acquisition. Specifically, we find that investment banks headquartered in countries that are geographically closer and culturally more similar to the country where the target firm resides significantly increase the probability of completion of the merger while decreasing the time required to complete the deal. Expertise in the target country can also accumulate through experience. Indeed, we find that banks that have worked as advisors on a larger number of deals in a specific country are better equipped to enhance the probability of deal success for a new M&A in that country, independent from the characteristics of the acquiring and target firms and its global experience.<sup>1</sup>

In addition to facilitating the deal completion, the expertise in the target country allows investment banks to identify better targets with larger synergy. Firms that complete M&A deals facilitated by banks with significant expertise in the target country experience a significantly greater improvement in operating performance in the three years after the merger completion.

Our analysis of cumulative adjusted returns (CARs) at the time of the merger announcement show that the cultural affinity of the investment bank with the target country has a positive and significant effect on the stock market reaction to the announcement. We also find that the expertise of the acquiring firms in the target country has a significant effect on the market returns at announcement.

Our test of the relation between acquiring firms' characteristics and investment banks' country expertise show that the investment bank country expertise variables are related to some of the bidder characteristics that are also determinants of the outcome of the M&A deal. We control for possible endogenous matching between the acquiring firms and investment banks in two ways. First, we include in all our main multivariate regressions investment bank fixed effects. Investment bank fixed effects control for the possibility that banks might advise acquirers to target firms in countries in which the banks have expertise. Our results are robust to this inclusion. Second, we adopt a two-stage Heckman method similar to Golubov, Petmezas, and Travlos (2012), whereby in the first stage we control for the selection of the investment bank and in the second stage we include the inverse Mills ratio to control for selection bias. Our analyses show no evidence of such bias and the main results hold.

### II. Hypotheses Development

Investment banks play a crucial role in the selection of takeover targets that can provide the highest synergy and net present value for the acquiring firm. Even though earlier research failed to find a strong link between advisor's quality and M&A outcome (e.g., Bowers and Miller 1990; Michel, Shaked, and Lee 1991; Servaes and Zenner 1996), more recent studies show a positive and significant relation between the characteristics of the investment banks in their M&A advisory role and the outcome of a takeover (e.g., Kale, Kini, and Ryan 2003; Bao and Edmans 2012; Golubov, Petmezas, and Travlos 2012; Sibilkov and McConnell 2014; Chemmanur, Ertugrul, and Krishnan 2014).

Investment banks help in the pre- and postmerger periods. In its 1999 "Unlocking Shareholder Value: The Keys to Success" report, KPMG identifies six keys to M&A success. Three hard keys are synergy evaluation, integration project planning, and due diligence, and three soft keys are selecting the correct management team, resolving

cultural issues, and communications. These keys to success are as valid in the post-acquisition period as they are during the negotiations stage. Investment banks are an integral part of the process and can competently guide the bidder and help critically with due diligence, cultural issues, and communications, especially in a cross-border context. These aspects of the investment bankers' advisory role are at the core of our study.

Regardless of the inherent complexity of cross-border mergers, their potential risks and rewards are usually higher than for domestic M&As. Acquiring a target firm headquartered in a different country can allow access to new untapped lucrative markets but, at the same time, is characterized by higher risk because of a larger number of unknown factors. Ahern, Daminelli, and Fracassi (2015) find that companies that are more similar culturally are more likely to merge and to generate greater synergy. Although the cultural heterogeneity between the managers of the acquirer and target firms is important during the implementation of a crossborder merger, the expertise of the acquirer-side investment banks in the country of the target is likely to play a dominant role in the target selection stage and during the deal negotiation. Rau (2000) documents that top-tier investment banks are able to complete more tender offer deals. Similarly, Hunter and Jagtiani (2003) show that deals involving top-tier acquirer advisers are more likely to be completed and are completed faster than those involving lower quality acquirer advisers. Apollon (2014) indicates that higher quality advisers are better equipped to handle the multiple levels of influence on negotiators' behavior. National culture, corporate culture, and professional culture also have a great influence on a negotiator's behavior. Two cultures typically not only share similarities, but also many fundamental cross-cultural differences, and therefore, as Apollon states, even though negotiators should "weigh culture against other important factors, national culture always remains the first and single most influential factor on international business negotiations" (p. 259), and if ignored, cultural differences can become a source of conflict at the bargaining stage or later stages.

Because of the complexity associated with a cross-border acquisition, investment banks must play a crucial role in the preparation, evaluation, decision-making, and implementation stages of the merger process. Investment banks in particular provide significant help during the due diligence, evaluation, and strategic decision stage of the acquisition. As Kyvik (2013) points out, the acquirer must verify that the information acquired during the initiation of the negotiations provides valid information about the firm's added value by also evaluating items that are not part of the balance sheet, such as national, corporate, and professional cultural differences. As such, the investment bankers will bring about several competencies including language skills and knowledge of psychology and sensitivity for foreign cultures.<sup>2</sup>

In this context, we expect, controlling for the prestige and overall experience of the investment banks, that the expertise of the investment bank in the target's country allows it to better choose among suitable targets and to efficiently negotiate with the target firm's executives to increase the likelihood that the merger deal will be completed and will be completed more rapidly. We formulate our first and second hypotheses as follows:

*Hypothesis 1:* There is a significantly higher likelihood of a cross-border M&A deal being successfully completed when the investment bank that advises the bidding firm has more expertise in the country where the target firm is headquartered.

*Hypothesis 2:* Cross-border M&A deals are successfully completed in a significantly shorter length of time when the investment bank that advises the bidding firm has more expertise in the country where the target firm is headquartered.

Recent research in U.S. M&A deals has found a strong link between investment bank characteristics and the performance of mergers. Kale, Kini, and Ryan (2003) find that investment bank prestige has a positive and significant effect on the performance of acquisitions. Golubov, Petmezas, and Travlos (2012) show that top-tier investment banks significantly help improve the performance of public acquisitions. Bao and Edmans (2011) show that investment bank fixed effects are significantly related to the announcement returns of M&A deals.

Chemmanur, Ertugrul, and Krishnan (2014) focus on investment bankers and find that, even after controlling for investment banks' characteristics, investment banker fixed effects are significantly related to acquisition cumulative abnormal returns and postacquisition performance. Huang et al. (2014) find that board directors with investment banking experience positively affect the outcome of acquisitions. de Jong, Ongena, and van der Poel (2013) suggest that conflicts of interests might arise when the investment bank is geographically diverse and might not exert its best effort in a region that bears little weight in its advising portfolio. In contrast, as suggested by Sibilkov and McConnell's (2014) results, an investment bank has a higher incentive to do well in these instances as a successful deal will increase the firm's expertise and improve its chance of being selected for future deals in the target country. This is especially true for mid-market investment banks that might enter a new market based on the desire of a client and end up creating a new portfolio of clients for a country in which it had not completed prior deals. Investment banks can also help identify targets in segmented markets from which acquirers can extract positive cross-border effects (Francis, Iftekhar, and Sun 2008).

As a result, we conjecture that the specific expertise of banks in the country of the target firm has a positive and significant effect on announcement returns and postmerger performance, after controlling for other investment bank and deal characteristics. We state our third and fourth hypotheses as follows:

*Hypothesis 3:* The CARs of the bidding firm on the day of the M&A announcement and the day after are significantly higher when the investment bank that advises the bidding firm has more expertise in the country where the target firm is headquartered.

*Hypothesis 4:* The acquiring firm's long-term (three-year) operating performance following a successful M&A deal is significantly higher when the investment bank that advises the bidding firm has more expertise in the country where the target firm is headquartered.

#### III. Sample Formation and Variables

#### Sample Formation

We retrieve M&A information from the Thomson One Banker (SDC Global Issues) M&Adatabase for deals announced between 1994 and 2012 and completed by the end of 2012. We exclude leveraged buyouts, spinoffs, recapitalizations, self-tender offers, exchange offers, repurchases, partial equity stake purchases, acquisitions of remaining interest, and privatizations, as well as deals in which the target or the acquirer is a government agency or in the financial or utilities industry. From this initial sample, we select only cross-border deals for which information about the investment banks advising the acquiring firm is available. We also exclude deals with privately held acquiring firms. The final M&A sample comprises 7,630 observations.

We collect some data items from Thomson One Banker, including the announcement and completion dates, the target's and acquirer's names, public status, primary industry measured by the four-digit Standard Industrial Classification (SIC) code, country of domicile, as well as the acquirer's advisory firms' (investment banks') names, countries of domicile, and advisory roles. We collect the deal value in dollar terms when available, the fraction of the target firm owned by the acquirer after the acquisition, and other deal characteristics such as the method of payment made by the acquirer.

We obtain firm-level information about the acquiring firms from Worldscope. In particular, we collect information about firm size (book value of total assets), book leverage (long-term debt divided by total assets), and operating profits.

We obtain country-level data from a variety of sources. We obtain the latitude and longitude of capital cities of each country from mapsofworld.com and calculate the great circle distance between the capital cities of the two

countries in kilometers. Specifically, we calculate the distance between cities a and b as arc length as in Coval and Moskowitz (1999):

 $d_{ab}$  = ar cos(deg )  $\times$  2 $\pi$  = 360, (1)

 $cos(lat_a) * cos(lon_a) * cos(lot_b) * cos(lon_b) + cos(lat_a) * sin(lon_a) * cos(lat_b) * sin(lon_b) + sin(lat_a) * sin(lat_b), (2)$ 

where lat and lon are latitudes and longitudes, and r is the radius of the earth (6,378 kilometers).

As in Giannetti and Yafeh (2012) we measure cultural distance between any pair of countries as the Euclidean distance between the traditional versus secular/rational and the survival versus self-expression orientations as reported in the Inglehart and Welzel (2010) cultural map shown in Figure I. The graph is based on the 2005–2009 World Values Survey (http://www.worldvaluesurvey.org), which includes about 400,000 respondents from 100 countries.<sup>3,4</sup>

We obtain annual gross domestic product (GDP) in U.S. dollars normalized by population, the annual real growth rate of GDP, the real effective country exchange rate, the deposit interest rate, and the country aggregated market capitalization of listed companies from the World Development Indicators database (World DataBank). We retrieve information about the primary language and primary religion of each country from the CIA World Factbook database. We collect rule of law for the World Bank's Worldwide Governance Indicators and quality of corporate disclosure from the World Bank's Doing Business report.

#### Variables

All the dependent variables of this study are proxies for the success of theM&Adeal: (1) an indicator variable equal to 1 when the deal is successfully completed (Success), (2) completion time in days from the date of the announcement of the M&A attempt to the date on which the acquirer assumes full ownership of the target firm (Days to Completion), (3) CARs of the bidding firm around the M&A announcement (CAR), and (4) long-term performance postmerger measured as the difference between the industry-median adjusted return on assets (ROA) for the three years following the acquisition and the industry-median adjusted return on assets for the year before the acquisition (DROA).

The main independent variables of the study are proxies for the bidder-side investment bank expertise in the country where the target firm is headquartered. The three proxies are: (1) distance in kilometers between the capital of the investment bank headquarters' country and the capital of the target headquarters' country (IB Geographical Distance), (2) cultural distance between the investment bank headquarters' country and the target headquarters' country and the target headquarters' country based on the Inglehart and Welzel (2010) cultural map (IB Cultural Distance), and (3) previous experience accumulated by the investment bank in the target country measured as the number of deals completed by the investment bank in that country in the previous five years (IB Deal Experience). In the computation of IB Deal Experience we take into account the merger history of the investment banks. If bank A and bank B merge, we count as part of the experience the sum of deals performed in a country by both bank A and bank B over the previous five years.<sup>5</sup>

The three acquirer-side control variables directly related to our investment bank country expertise main variables are: (1) distance between the capital of the acquiring firm headquarters' country and the capital of the target headquarters' country (Acq. Geographical Distance), (2) cultural distance between the acquiring firm headquarters' country and the target headquarters' country (Acq. Cultural Distance), (3) previous experience accumulated by the acquiring firm in the target country measured as the number of deals completed by the acquiring firm in the previous five years (Acq. Deal Experience).

Other control variables include an indicator variable equal to 1 when the target is a privately held firm, acquiring firm size, deal value, percentage of cash offered in the deal, number of firms successfully acquired globally by the bidder over the previous five years, logarithm of the number of worldwide deals advised by the advisory investment banks in the previous five years, and size of the acquirer advisory investment bank syndicate. We recognize also the need to control for the different economic and legal environments in the targets' and acquirers' countries as these aspects play a significant role in increasing the complexity of cross-border deals (Moeller and Schlingemann 2005; Cao et al. 2015). To this end, we include in our analysis the difference between the bidder and target countries in rule of law, GDP growth, per capita GDP, and stock market capitalization. Details on the definitions of these variables can be found in the Appendix.

## IV. Descriptive Statistics and Univariate Analysis

In this section, we report univariate sample statistics related to M&A deals and investment banks' country expertise. First, we look at the time-series and geographical distribution of the deals in our sample and then turn to firm and deal characteristics.

Table 1 presents descriptive statistics of the mergers and acquisition deals in the sample. Panel A shows the distribution of the sample M&A deals by year. The first three sample years (1994–1996) have the lowest number of deals. The number of deals in 2009 is lower by more than 100 from previous and following years, evidencing a significant dip in the number of deals during the Great Recession. The percentage of deals that are successfully completed is slightly lower in the second half of our sample. Our multivariate analysis includes year fixed effects to control for these temporal variations.

Panels B and C of Table 1 show the sample's distribution across acquirer and target countries. The United States and the United Kingdom are the two countries most represented in our sample both as location of bidding firms (33%) and as location of target companies (39%). Not surprisingly, the most commonly paired countries involved in a cross-border merger are the United States and the United Kingdom for a total of 837 merger deals, of which 466 involve a U.K. firm attempting to acquire a U.S. firm and 371 involve a U.S. firm attempting to acquire a U.K. firm. The sample retains balance as we have 670 deals in the sample occurring between two countries, neither of which is in the top 12 countries by number of deals in the sample.

Although the ratio of acquiring to target firms by country centers around 1 (i.e., a U.S. firm is the bidder 1,665 times and the target 1,658 times, or a ratio of 1.00), some countries differ from the norm. For example, the country with the largest disparity is Japan: our sample includes 398 Japanese acquiring firms but only 65 Japanese target firms for a ratio of 6.11. The second largest such disparity is Hong Kong with a ratio of 2.29. China, Germany, and Austria are at the other end of the range (0.27, 0.59, and 0.62, respectively), showcasing that companies in those countries are more likely to be targets in our sample.

Panel C of Table 1 presents similar information to our cross-country matrix but disaggregates the "Others" category. In addition, we provide information about investment bank headquarters' countries. Investment banks headquartered in the United States advise bidders for the largest number of sample deals (36.3%). On aggregate, investment banks headquartered in Europe advise a comparable number of deals.

Table 2 presents univariate statistics for the deal, target, bidder, and investment bank variables used in the analysis. The median deal size in our sample is \$116 million. Bidding firms are typically much larger than targets as bidding firms' total assets have a median 8.62 times those of the targets. Deals in our sample have an 89.5% chance of completion and the average (median) time to completion is about 3.6 (2.3) months.

When we split the sample between successful and unsuccessful deals, the results for our sample are consistent with previous studies on mergers and acquisitions (e.g., Betton, Eckbo, and Thorburn 2009).We find that smaller

deals that offer more cash as the method of payment are more likely to be completed. More profitable acquirers as measured by better operating performance (higher ROA) are more likely to successfully acquire their targets.

The first result in Panel B of Table 2 shows that bidders are more likely to successfully acquire target firms when their respective headquarters' countries are culturally closer. We also document the acquisition experience of the bidding firms in our sample. We use the full sample retrieved from the Thomson One Banker (SDC Global Issues) M&A database to develop acquirer merger experience. We create three variables that, respectively, capture the global, international, and in-country experience of the bidder. For example, assume Tyco International LTD was targeting an acquisition in the United States in 2009. We check Tyco's experience in the prior five years and find that Tyco ran 18 global (domestic and cross-border) deals between 2004 and 2008: 5 were domestic and 13 were cross-border, 6 of which were in the United States.

Panel B of Table 2 shows that the representative bidder firm in our sample on average completed 1.31 deals globally over the past five years (0.82 cross-border deal and 0.17 deal in the target country). In other words, the likelihood of bidders in our sample being active in an acquisition, either domestic or international, is 49.3%; in cross-border acquisitions is 36.7%; and in in-target-country acquisitions is 11.8%. Given the low incidence of cross-border activity for each firm, acquirer firms necessitate the help of investment banks that are repeat players in the market for corporate control.

Panel C of Table 2 presents univariate results directly related to the main focus of this study, the effect of the advisory investment bank expertise on the success of M&A deals. Comparisons between the geographical and cultural distances between the investment bank country and the target country, and those between the bidder and target countries, demonstrate that bidders are strategic in their investment bank selection. Indeed, whereas bidder–target geographical and cultural distances have a median of over 5,800 kilometers and 4.70, respectively, the distances between investment bank and target are only 3,626 kilometers and 3.40, implying that bidders aim to improve their chances of success through their investment bank choice. Although bidding firms have very little experience running acquisitions in the target country, they select investment banks that have on average (median) advised 16 (2) deals in the target country over the previous five years. This is particularly important as in-country experience is a strong predictor of success as seen in the tests of difference. The influence of investment banks is also felt across other dimensions: acquisitions are more likely to be successfully completed if the investment banks advising the bidding firms are geographically and culturally closer to the target firms.

In Table 3 we segment the observations into investment bank expertise quintiles based on the deal experience variable and perform a t-test of the difference of the means and a Wilcoxon–Mann–Whitney nonparametric test on deal characteristics and proxies for the success of the M&A deal between the top and bottom expertise quintiles.6 The table shows that investment banks with more in-country experience are more likely to advise the acquisition of a geographically distant target (5,841 kilometers vs. 4,586 kilometers for median acquirer\_target distance).7 More experienced investment banks are also likely to attract deals from larger bidders (\$16,607 million vs. \$7,535 million) targeting larger firms (\$1,990 million vs. \$930 million), resulting in larger deal valuation (\$1,487 million vs. \$281 million).

These univariate tests provide preliminary evidence about the effect of investment bank expertise in the target firm country on the success of the cross-border M&A deal. Overall, the results presented in the univariate tables are consistent with our hypotheses; however, the evidence is not conclusive because of the lack of controls in this setting.

# V. Do Acquirer Characteristics Affect the Selection of Investment Banks Based on Country Expertise?

Before analyzing the effect of the country expertise of banks on the outcome of M&A deals, we estimate a test aimed at understanding how bidders select advising banks based on their expertise in the target country. This test is based on the assumption that bidding firms in most cases hire bank advisors after having decided the location of the possible target but not the specific target itself.8 One of the advising roles of investment banks is to help in the selection of the best target and to design the financing of the deals after possibly involving other syndicate banks. For this reason, we exclude from these regressions variables that are affected by the investment banks such as the size of the deal, the percentage of cash used in the deal, and the size of the syndicate.

Table 4 presents the results of year fixed effects regressions with the banks' country expertise variables (i.e., IB Geographical Distance, IB Cultural Distance, and IB Deal Experience) as dependent variables. Across all three regressions, acquirer's size, the difference in disclosure quality between the acquirer's and the target's country, and the difference between per capita GDP between the acquirer's and the target's country are statistically significant. Larger acquirers that potential target larger targets are more likely to select banks that are geographically and culturally closer to the potential target and that have advised more M&A deals in that country in the past. When there is a large difference in disclosure and economic development (measured by the per capita GDP difference) between the acquirer's and the target's country, firms rely on banks that have greater expertise in the target country (less geographical and cultural distance, and greater deal experience).

In the first regression, Acq. Geographical Distance is positive and significant, which indicates that bidders that are geographically closer to the target country also select banks that are closer to the target. Similarly, the results pertaining to Acq. Cultural Distance in the second regression show that bidders that reside in a country that is culturally more similar to the target country select a bank that is more similar culturally. In the IB Deal Experience regression, the coefficient of Acq. Deal Experience is positive and significant, suggesting that bidders that previously completed more M&As in the target country select banks that also have advised more deals in the target country. This result might also underline a long-lasting relationship by pairs of bidders and banks that are likely to have collaborated in several previous deals.9 In the multivariate analysis presented in the following section, we include investment bank fixed effects to control for possible endogenous matching between bidders and investment banks. As an additional robustness check, we replicate our analysis with a Heckman two-stage model.10 Moreover, in our regressions that analyze the effect of the country expertise of investment banks on deal outcome, we control for the geographical and cultural distance between the acquirer's and the target's country, along with the number of deals previously completed by the acquiring firm in the target country.

# VI. Main Multivariate Analysis: Effect of Investment Banks' Country Expertise on Deal Outcomes

We conduct the multivariate analysis by estimating several regression specifications to examine the effect of investment bank expertise in the target firm's country on the probability of success of the deal, the length of time to successfully complete the deal, the CAR around the announcement day, and the long-term postmerger operating performance. All regressions specifications are fixed effects regressions:

$$y_{it} = \beta x_{it} + \delta Z_{jt} + \eta W_{kt} + \lambda U_{jkt} + \alpha_t + \varphi_i + \varepsilon_{it}$$
, (3)

where  $y_{it}$  is one of the proxies for the success of the M&A deal described above,  $x_{it}$  is one of the investment bank country expertise variables,  $Z_{jt}$  is a vector of bidding firm characteristics,  $W_{kt}$  is a vector of target and deal characteristics,  $U_{jkt}$  is a matrix of bidder and target paired characteristics (e.g., distance between bidder and target, difference in rule of law between bidder and target),  $a_t$  are year fixed effects,  $\varphi_i$  are investment bank fixed effects, and  $\varepsilon_{it}$  is the error term.

In the specifications in which we examine the effect of the geographical distance between the investment bank and the target firm on measures of deal success, we control for the geographical distance between bidder and target. Similarly, in the specifications in which we examine the effect of the cultural distance between the investment bank and the target firm, we control for the cultural distance between bidder and target. Finally, in the regressions in which we examine the effect of the experience accumulated in the past by investment banks in the target country, we control for the experience of the acquiring firm in the target country.

#### Effect of Bank Country Expertise on Deal Success

Table 5 presents the results of year and investment bank fixed effects conditional logit regressions that examine the effect of the investment banks' expertise in the country of the target firm on the probability of successful completion of the deal. For these regressions, the sample includes all tentative deals, both those successfully completed and those canceled before completion. The IB Geographical Distance and IB Cultural Distance variables in the first two specifications are negative and significant at the 10% level. This result shows that even after controlling for a wide range of deal, target, bidder, and country paired characteristics, the closer geographically or culturally the investment bank firm is to the target country, the higher is the likelihood for the deal to be successfully completed. The third specification shows that the experience the investment bank accumulated in the past five years through previous deals in the target country significant at the 1% level.

These results have also economic significance. If the IB Geographical Distance variable in the first specification goes from its 90th percentile of 10,771 kilometers to its 10th percentile of 0 kilometers while all other variables remain at the mean, the probability of the M&A deal to be completed successfully increases from 90.7% to 92.4%.11 Changes of IB Cultural Distance from its 90th to its 10th percentile and of IB Deal Experience from its 10th to its 90th percentile increase the probability of deal success from 90.8% to 92.8% and from 90.0% to 92.1%, respectively. Considering the high unconditional probability of M&A deal success, all three investment bank country experience variables have strong economic significance.<sup>12</sup>

The control variables that are consistently significant across all specifications are the privately held target indicator (Private), total value of the deal (Deal), percentage of cash versus stock used to acquire the target (%Cash), size of the investment bank syndicate advising the bidding firm (Syndicate Size), and difference between the per capita GDP of the countries of the acquirer and target (Per Capita GDP Distance). Consistent with previous studies (e.g., Betton, Eckbo, and Thorburn 2009), targeting privately held firms, smaller firms, and using a larger proportion of cash for the acquisition increase the probability of success of theM&Adeal. The number of advisory investment banks that are negatively related to the success of a deal might indicate that increasing the complexity of the negotiation team does not better resolve the complexity of the deal.

#### Effect of Bank Country Expertise on Time to Deal Completion

Table 6 presents the results of year and investment bank fixed effects regressions with the days from the announcement date to the deal completion date as the dependent variable. We exclude deals for which the time between the reported announcement date and the completion of the deal is less than five days. The coefficients of all our country expertise variables in the three specifications are significant and have a sign consistent with our hypothesis. When the investment bank advising the bidding firm resides in a country geographically or culturally closer to the target firm country, the deal completes more rapidly. The experience accumulated by the investment bank from previous deals in the same country also shortens the amount of time required to complete the deal. These results are robust to the inclusion of our bidder-, target-, and country-specific variables.

All three investment bank country experience variables show strong economic significance. While maintaining all other variables at their mean value, if IB Geographical Distance or IB Cultural Distance decreases from its 90th to its 10<sup>th</sup> percentiles, days required to complete the deal decrease by 6.9 and 13.2 days, respectively. If IB Deal Experience increases from its 10th to its 90th percentile, days to completion decrease by 5.7 days.

The sign and significance of our control variables show that smaller deals paid mostly in cash, involving privately held targets and smaller bidding firms with more M&A experience complete in a shorter amount of time. The investment bank syndicate size variable is positive and significant in two of the three specifications. Similar to what Table 5 suggests, the higher complexity of certain deals that might prolong the negotiations preceding the completion of the takeover are likely to be only partially offset by a larger number of advising banks. Another possible explanation is that a multiplicity of investment banks with an advisory role might lengthen predeal discussions, delaying the completion of the acquisition. Among the country-level variables, the difference in disclosure and stock market development between the bidder and target headquarter countries is statistically significant in most specifications. The negative sign suggests that if the acquirer is headquartered in a country with a more developed stock market and with better disclosure standards than the country of the target, the deal completes more rapidly.

# Effect of Bank Country Expertise on the Stock Market Reaction at the Announcement of the Deal

Table 7 presents the results of investment bank and year fixed effects regressions in which the dependent variable is the CAR of the bidding firm from the day before to the day after the announcement.<sup>13</sup>

Of the three investment bank country expertise variables, cultural distance is statistically significant at the 1% level. The market reaction of merger deals for which the advisory investment bank has a cultural affinity to the target is significantly larger. This result is consistent with Hypothesis 3. The acquirer–target geographical and cultural distance coefficients are negative and significant at the 1% level, and the acquirer's experience in the target country is positive and significant at the 5% level. These results provide strong evidence that the country expertise of the acquiring firm in the target country has a positive and significant effect in the stock market valuation of the deal. The well-documented geographical investor bias (e.g., Huberman 2001; lvkovic and Weisbenner 2005) might also contribute to the significance of the acquirer geographical istance coefficient.

The size of the acquirer, the private versus public status of the acquirer, the value of the deal, the percentage of cash used to pay for the acquisition, the syndicate size, and the difference in disclosure quality, rule of law, and stock market size between the acquirer and target countries are statistically significant across all specifications. These results suggest that larger deals completed by smaller firms to acquire private targets with more cash are received more positively by investors. The coefficient of the stock market difference variable implies that the larger the difference between the stock market size of the acquirer and the target countries, the higher are the announcement CARs.<sup>14</sup>

# Effect of Bank Country Expertise on Long-Term Operating Performance Following the Acquisition

Table 8 presents the results of year and investment bank fixed effects regressions that examine the effect of bank country expertise on the change in performance of the acquiring firm following the acquisition. We measure the median ROA for firms in each two-digit SIC industry in each country and adjust the ROA of the acquiring firm by the median country-industry ROA for the same period to obtain the abnormal ROA. To obtain the change in abnormal ROA ( $\Delta$ ROA) used as the dependent variable, we first subtract from the firm's ROA the median ROA for firms in the same two-digit SIC industry and country of the acquirer to obtain the abnormal

ROA, and then we calculate the difference of the median abnormal ROA for the three years following the merger and the abnormal ROA for the year before the merger.

IB Geographical Distance, IB Cultural Distance, and IB Deal Experience are significant at the 5%, 10%, and 1% levels, respectively. Consistent with Hypothesis 4, these results show that merger deals facilitated by investment banks with more expertise in the country of the target are more successful after the deal implementation and contribute significantly to the operating performance of the acquiring firms. Investment banks with more country expertise, therefore, are not only able to facilitate the completion of the deal but are also able to help the acquiring firms find better targets.

All three investment bank country expertise variables show strong economic significance. While maintaining all other variables at their mean values, if IB Geographical Distance or IB Cultural Distance decreases from its 90th to its 10<sup>th</sup> percentile, ROA increases 30% and 16% more, respectively. If IB Deal Experience increases from its 10th to its 90th percentile, ROA increases 14% more.

The coefficients of the control variables show that acquiring firms are more likely to improve their operating performance when they are geographically or culturally closer to the target firm. Larger acquirers buying smaller publicly traded targets perform significantly better.

## VII. Additional Tests and Robustness Checks

As shown in Table 4, the investment bank country expertise variables are related to some of the bidder characteristics that are also determinants of the outcome of the M&A deal. The ability of a bidding firm to hire a more reputable investment bank might be associated with unobserved firm characteristics that might significantly affect the deal outcome independently of the influence of the investment bank and its expertise in the target country. We verify that our results are robust to this type of endogeneity concern (self-selection bias) by implementing a Heckman two-stage method similar to Golubov, Petmezas, and Travlos (2012). In the first step reported in Table 9, we estimate a probit regression in which the dependent variable is an indicator equal to 1 when the advising investment bank is top tier.15 Similar to Golubov, Petmezas, and Travlos, the first-stage regression includes a scope variable calculated as the number of times the acquirer employed a top-tier investment bank for a merger, domestic or cross-border, in the previous five years. In the second-stage equation the independent variable is one of our outcome variables (e.g., completion days, event stock market returns, or operating performance).

The inverse Mills ratio in the second stage is not significant, suggesting that the unobserved acquirer's characteristics that affect the choice of the investment bank do not significantly affect the success of the deal. The coefficients in the second-stage regression are analogous in sign and significance to those presented in the main multivariate analysis, confirming that our findings are robust to a possible self-selection bias. For illustration purposes, we report the results of the Heckman two-stage analysis for completion days and geographic distance in Table 9. The results are similar when using cultural distance or investment bank experience.

Financial markets in developing countries are characterized by higher opaqueness and information asymmetry than those in developed countries (Morris and Shin 2002; Lang, Lins, and Maffet 2012). The country expertise of investment banks might be more valuable when advising deals whose target firms reside in developing countries. To test this conjecture, in unreported tests we replicate our multivariate regressions by splitting the sample between deals with targets headquartered in developed countries and deals with targets headquartered in developed countries. The results do not indicate any noticeable difference.

Investment banks with greater expertise in the target firm's country might be better equipped to identify bargain deals and to allow the bidding firm to pay a lower premium, all else constant. In unreported regressions

we test this conjecture by analyzing the possible effect of investment bank country expertise on the acquisition premium and the CAR of the target firms at the announcement. We estimate these regressions on a subsample limited to publicly traded target firms. The coefficients of our country expertise variables are not statistically significant.<sup>16</sup>

To verify that our results are not driven by other country characteristic or industry effects, we replicate our multivariate analysis by first substituting the investment bank fixed effects with target country fixed effects and then with target firm industry fixed effects (based on two-digit SIC codes). The unreported results are consistent with those reported in the main tables. Our main variables maintain the same sign and significance. As shown in Table 1, about one-third of our sample consists of U.S. and U.K. firms. We test the robustness of our results to the exclusion of these observations by replicating our multivariate tests without M&As involving target firms headquartered in the United States and United Kingdom; our results maintain the same sign and significance.<sup>17</sup>

The shareholder protection guaranteed by the country of the target firms along with its economic development affect acquisition outcomes (Bris and Cabolis 2008; Chari, Ouimet, and Tesar 2010). The legal origin of target and acquiring firms' countries might also affect acquisitions. Although we control for rule of law, GDP, and stock market development of target and acquiring firm's countries in the multivariate regression, as an additional robustness check, we substitute those variables with the LLSV shareholder protection variable as in Bris and Cabolis (2008), a developed versus developing country indicator variable similar to Chari, Ouimet, and Tesar (2010), and a legal origin indicator variable that equals 1 when the country is a civil law country. All these country variables are calculated as the difference between the value for the target country and the value for the acquirer country. The results are robust to the inclusion of these variables.

### VIII. Conclusion

Despite cross-border mergers' ever-growing role in the current highly globalized corporate environment, there is surprisingly a scarcity of studies about these types of transactions. In this study we contribute to this important but underdeveloped field by focusing on the role of investment banks in cross-border acquisition deals. In particular, we do not focus on headline overall investment bank volume, but rather we focus on country-specific experience. Our study also adds to the emerging literature on the effect of geography and cultural differences on financial transactions.

We find that investment banks play an integral role in the development and final outcome of cross-border acquisition deals. A judicious choice of an investment bank by the bidding firm can significantly reduce the obstacles to the success of a cross-border acquisition because of geographical and cultural differences between the countries of the two merging firms. We find that investment banks headquartered in countries that are geographically closer and culturally more similar to the country where the target firm resides significantly increase the probability of success of the merger while also significantly decreasing the time required to complete the deal. Expertise in the target country can also accumulate through experience: we find that investment banks that have worked as advisors on a larger number of deals in a specific country increase the probability of deal success for a new acquisition in that country, independently from the characteristics of the acquiring and target firms and its own global experience.

Investment banks with more expertise in the target country also help their corporate clients identify the most suitable targets with greater synergy. The change in operating performance of the acquiring firm during the three years following the deal completion is significantly more positive when the deal is advised by an investment bank geographically or culturally closer to or with more past experience in the target country. Cultural affinity of the bank and bidder in-country experience also significantly contribute positively to the announcement market reaction for the acquiring firm.

#### References

- Ahern, K. R., D. Daminelli, and C. Fracassi, 2015, Lost in translation? The effect of cultural values on mergers around the world, Journal of Financial Economics 117, 165–89.
- Apollon, G., 2014, Cross-cultural deal mediation as a new ADR method for international business transactions, Law and Business Review of the Americas 20, 255–302.
- Arena, M. P., and M. Dewally, 2012, Firm location and corporate debt, Journal of Banking&Finance 36, 1079– 92.
- Baker, M., C. F. Foley, and J. Wurgler, 2009, Multinationals as arbitrageurs: The effect of stock market valuations on foreign direct investment, Review of Financial Studies 22, 337–69.
- Bao, J., and A. Edmans, 2011, Do investment banks matter for M&A returns? Review of Financial Studies 24, 2286–2315.
- Betton, S., B. E. Eckbo, and K. S. Thorburn, 2009, Merger negotiations and the toehold puzzle, Journal of Financial Economics 91, 158–78.
- Bloom, N., R. Sadun, and J. Van Reenen, 2009, The organization of firms across countries, NBER Working Paper 15129.
- Bowers, H., and R. Miller, 1990, Choice of investment banker and shareholders' wealth of firms involved in acquisitions, Financial Management 19, 34–44.
- Brickley, J. A., J. S. Linck, and C. W. J. Smith, 2003, Boundaries of the firm: Evidence from the banking industry, Journal of Financial Economics 70, 351–83.
- Bris, A., and C. Cabolis, 2008, The value of investor protection: Firm evidence from cross-border mergers, Review of Financial Studies 21, 605–48.
- Cao, J. X., D. Cumming, M. Qian, and X. Wang, 2015, Cross-border LBOs, Journal of Banking & Finance 50, 69–80.
- Chari, A., P. Ouimet, and L. Tesar, 2010, The value of control in emerging markets, Review of Financial Studies 23, 1741–70.
- Chemmanur, T. J., M. Ertugrul, and K. Krishnan, 2014, Is it the investment bank or the investment banker? A study of the role of investment banker human capital in acquisitions, Working Paper, Boston College. Coval, J. D., and T. J. Moskowitz, 1999, Home bias at home: Local equity preference in domestic portfolios, Journal of Finance 54, 2045–73.
- Dass, N., and M. Massa, 2011, The impact of a strong bank-firm relationship on the borrowing firm, Review of Financial Studies 24, 1204–60.
- de Jong, A., S. Ongena, and M. van der Poel, 2013, The international diversification of banks and the value of their cross-border M&A advice, Working Paper, Erasmus University.
- Erel, I., R. C. Liao, and M. S. Weisbach, 2012, Determinants of cross-border mergers and acquisitions, Journal of Finance 67, 1045–82.
- Francis, B. B., H. Iftekhar, and X. Sun, 2008, Financial market integration and the value of global diversification: Evidence for US acquirers in cross-border mergers and acquisitions, Journal of Banking and Finance 32, 1522–40.
- Giannetti, M., and Y. Yafeh, 2012, Do cultural differences between contracting parties matter? Evidence from syndicated bank loans, Management Science 58, 365–83.
- Golubov, A., D. Petmezas, and N. G. Travlos, 2012, When it pays to pay your investment banker: New evidence on the role of financial advisors in M&As, Journal of Finance 67, 271–311.
- Huang, Q., F. Jiang, E. Lie, and K. Yang, 2014, The role of investment bank directors in M&A, Journal of Financial Economics 112, 269–86.
- Huberman, G., 2001, Familiarity breeds investment, Review of Financial Studies 14, 659–80.
- Hunter, W. C., and J. Jagtiani, 2003, An analysis of adviser choice, fees, and effort in mergers and acquisitions, Review of Financial Economics 12, 65–81.
- Inglehart, R., 1997. Modernization and Postmodernization: Cultural, Economic and Political Change in 43 Societies (Princeton University Press, Princeton, NJ).

- Inglehart, R., and W. E. Baker, 2000, Modernization, cultural change, and the persistence of traditional value, American Sociological Review 65, 19–51.
- Inglehart, R., and C. Welzel, 2010, Changing mass priorities: The link between modernization and democracy, Perspective on Politics 8, 551–67.
- Ivkovic, Z., and S. Weisbenner, 2005, Local does as local is: Information content of the geography of individual investors' common stock investments, Journal of Finance 60, 267–306.
- John, K., A. Knyazeva, and D. Knyazeva, 2011, Does geography matter? Firm location and corporate payout policy, Journal of Financial Economics 101, 533–51.
- Kale, J. R., O. Kini, and H. E. Ryan Jr., 2003, Financial advisors and shareholder wealth gains in corporate takeovers, Journal of Financial and Quantitative Analysis 38, 475–501.
- KPMG, 1999, Unlocking shareholder value: The keys to success, Mergers & Acquisitions, a Global Research Report.
- Kyvik, O., 2013, Cross-border M&A: Cultural complexities, Working Paper, ESCI-Universitat Pompeu Fabra.
- Lang, M., K. V. Lins, and M. Maffett, 2012, Transparency, liquidity, and valuation: International evidence on when transparency matters most, Journal of Accounting Research 50, 729–74.
- Loughran, T., and P. Schultz, 2005, Liquidity: Urban versus rural firms, Journal of Financial Economics 78, 341– 74.
- Michel, A., I. Shaked, and Y.-T. Lee, 1991, An evaluation of investment banker acquisition advice: The shareholders' perspective, Financial Management 20, 40–49.
- Moeller, S. B., and F. P. Schlingemann, 2005, Global diversification and bidder gains: A comparison between cross-border and domestic acquisitions, Journal of Banking & Finance 29, 533–564.
- Morris, S., and H. S. Shin, 2002, Social value of public information, American Economic Review 95, 1521–34.
- Rau, P. R., 2000, Investment bank market share, contingent fee payments, and the performance of acquiring firms, Journal of Financial Economics 56, 293–24.
- Servaes, H., and M. Zenner, 1996, The role of investment banks in acquisition, Review of Financial Studies 9, 787–815.
- Sibilkov, V., and J. J. McConnell, 2014, Investment bank advisors in corporate acquisitions, Review of Financial Studies 27, 2474–2503.
- Uysal, V. B., S. Kedia, and V. Panchapagesan, 2008, Geography and acquirer returns, Journal of Financial Intermediation 17, 256–75.
- Weber, Y., O. Shenkar, and A. Raveh, 1996, National and corporate cultural fit in merger/acquisitions: An exploratory study, Management Science 42, 1215–27.
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- <sup>1</sup> Geographical proximity might also provide investment banks with better and more efficient access to soft or tacit information. The influence of geography on financial transactions and economic decisions is well established in the literature (e.g., Brickley, Linck, and Smith 2003; Loughran and Schultz 2005; Uysal, Kedia, and Panchapagesan 2008; Dass and Massa 2011; Arena and Dewally 2012).
- <sup>2</sup>We note that Bloom, Sadun, and Van Reenen (2009) argue that corporate cultures are influenced by national culture, which is another reason we focus on differences in national culture as they speak to the traditional impediment researched in M&A research: differences in corporate culture. Giannetti and Yafeh (2012) use the contrast of individualistic and egalitarian cultures that select negotiators with decision power against hierarchical cultures that might select junior team members without decision power for the negotiations. <sup>3</sup>The survey data are based on the research on cultural distance presented in Inglehart (1997) and Inglehart and Baker (2000).

- <sup>4</sup>We considered other cultural distance metrics but preferred Inglehart and Welzel's (2010). For example, Hofstede's six cultural dimensions raises two issues. First, its measures are available for fewer countries and would have limited and concentrated our sample further. Second, it would have forced us to make an arbitrary choice as to which dimensions matter most for M&As.
- <sup>5</sup>Some of the largest investment banks have branches located in different continents and countries. While there are no data available about the specific branch that works on each deal, the calculation of the distance between the capitals of the headquarters, if anything, may bias our tests against finding evidence of the effect of the country expertise of banks on M&A deals.
- <sup>6</sup> In unreported tests available upon request, we perform analogous univariate tests with geographical distance and cultural distance instead of deal experience.
- <sup>7</sup> All our analyses are performed at the deal level so that in the case of an advisory syndicate with multiple investment banks, the experience variables are based on the cumulative experience of all syndicate members, and the geographical and cultural distances are based on the average measure for all syndicate members. To avoid complication in the exposition, we write our article as if all deals had only one advisor. In fact, in our sample, 82% of deals have a single advisor, 15% have dual advisors, and only 3% have more than two advisors.
- <sup>8</sup> In some instances, the investment bank identifies the deal and brings it to the acquirer.
- <sup>9</sup> In unreported analyses, we investigate how sticky the relationship between acquirers and investment bankers is when acquirers go cross-border. We find that, unlike our prior, it is common for cross-border acquirers to switch and hire an investment bank that they have not hired in the past five years to advise their cross-border deal. This happens 63% of the time, an indication of the opportunistic nature of the cross-border investment bank selection.
- <sup>10</sup>As shown in the robustness section, the results are consistent with those presented in the main multivariate analysis.
- <sup>11</sup> Note that if in our sample we have, for instance, a Swiss company that wants to acquire a U.S. company and hires a U.S. investment bank, then the IB Geographical Distance variable equals 0, reflecting a distance of 0 kilometers. This scenario is 17.65% of our sample. The closest investment bank country to target country measure is 63 miles from Slovakia to Austria, followed by Belgium to Netherlands at 193 miles, and Hungary to Austria at 231 miles.
- <sup>12</sup>We tried alternative measures of experience that were dollar based. Our count measure is best suited to test our hypothesis because our argument is more closely associated with the process of M&As. Dollar measures, though not reported, yield similar results with raw total deal dollar and percentage of total past five years' worth of M&Ain target country activity. de Jong, Ongena, and van der Poel (2013) find that international diversification has no effect on deal success rate but their measure is vastly different and measures the emphasis of a particular market for the investment bank rather than accumulated experience as ours does.
- <sup>13</sup>We obtain similar results when we estimate regressions with only the adjusted returns for the day of the announcement and the day following the announcement.
- <sup>14</sup>We also calculate residual CARs (CARRES) as in Bao and Edmans (2011). CARRES are the portion of cumulative adjusted returns for which the advisory investment bank is responsible. CARRES are calculated as the residuals of a regression with CAR as dependent variable and acquirer characteristics (i.e., leverage, operating performance market-to-book ratio, and measures of market competition) as independent variables. CARRES, therefore, exclude the portion of CAR attributable to the acquirer's quality or empire building, as they are outside a bank's control. Multivariate regressions with CARRES as the dependent variable generate results comparable to the CAR regressions results presented in Table 7.
- <sup>15</sup> Similar to Golubov, Petmezas, and Travlos (2012), we identify the top eight investment banks for value of deals advised during the prior five years as top tier.

<sup>16</sup>The results of the robustness tests are available upon request.

<sup>17</sup>Our results persist also when U.S. and U.K. acquiring firms are excluded from the sample.

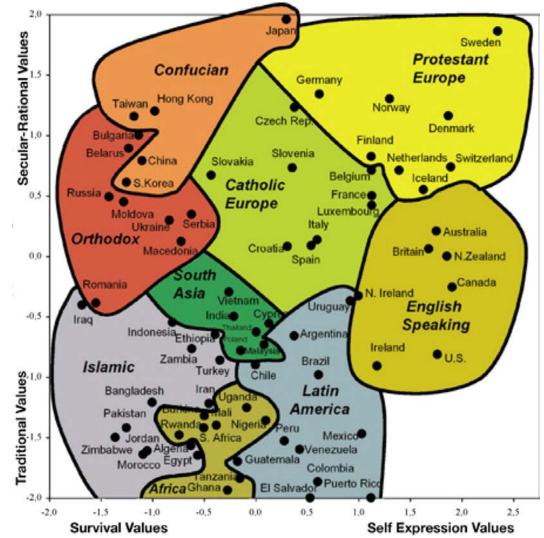


Figure I. Inglehart and Welzel's (2010) Cultural Map. This graph provides the locations of 53 societies on a global cultural map during 2005–2007. It represents how countries score across the "Traditional Values vs. Secular-Rational Values" dimension and the "Survival Values vs. Self-Expression Values" dimension. The oval at the lower right shows the mean size of the standard deviation on each of the two dimensions within the 53 societies (the shape is oval because the standard deviation on the horizontal axis is larger than on the vertical axis). The graph is based on the 2005\_2009 World Values Survey (WVS), which includes about 400,000 respondents from 100 countries, and was originally published as Figure 1 in Inglehart and Welzel (2010, p. 554).

Panel A. Number of Cross-Borders M&A	Pross-Bordens M&A Deals by Year			
Ycar	Number of Deals	Percentage of Sample	Successful Deals	Percentage Completed
1994	191	2.5%	170	%68
1995	233	3.1%	217	93%
19%	280	3.7%	268	8%
1997	368	4.8%	344	93%
1998	452	5.9%	422	93%
1999	522	6.8%	492	88
2000	676	8.9%	633	88
2001	423	5.5%	386	91%
2002	330	4.3%	288	87%
2003	291	3.8%	266	91%
2004	377	4.9%	339	%06
2005	447	5.9%	415	93%
2006	510	6.7%	424	83%
2007	582	7.6%	520	89%
2008	432	5.7%	353	82%
2009	290	3.8%	252	87%
2010	417	5.5%	346	83%
2011	423	5.5%	367	87%
2012	386	5.1%	329	85%
Total	7,630		6,831	%06

(Continued)

TABLE 1. Descriptive Statistics of the M&A Deak. Panel A. Number of Cross-Rorders M&A. Deats hy Ves.

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Acquirer	NSN	GBR	CAN	DEU	Nďľ	FRA	NLD	CHE	AUS	SWE	HKG	CHN	Others	Total	%
NSA	I	371	252	161	22	118	62	45	4	43	10	31	476	1,665	22%
GBR	466	I	46	\$	12	108	75	21	g	4	4	10	379	1,318	17%
CAN	244	32	I	2	0	<u>ت</u>	9	e	ঙ্গ	Ś	0	en	52	429	6%
DEU	95	37	-	I	64	57	1	20	e	4	-	64	103	324	4%
Ndf	125	36	4	1	I	18	15	13	5	9	6	19	126	398	5%
FRA	129	53	80	*	4	I	30	5	ŝ	6	61	4	173	472	6%
QIN	99	45	Ś	ล	0	57	I	6		<u>ព</u>	-	64	112	317	4%
CHE	64	22	13	4	en	<u>ت</u>	4	I	10	4	64	en	4	251	3%
AUS	56	27	15	4	0	4	en	e	I	-	64	en	6	210	3%6
SWE	50	28	Ś	8	0	5	12	5	9	I	0	4	140	293	4%
HKG	=	80	-	4	4	64	64	0	6	64	I	91	ผ	156	2%
CHN	6	64	en	ę	4	64	-	0	9	0	4	I	6	8	1%
Othens	343	160	37	112	4	8	59	26	107	5	ព	28	670	1,744	23%
Total	1,658	821	397	546	65	437	281	154	341	213	8	200	2,449	7,630	
%	22%	11%	<del>3</del> %	7%	1%	6%	4%	2%	4%	3%	1%	3%	32%		100%
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TABLE	Danel

	Target			Acquirer			Investment Bank	
Country	No.	%	Country	No.	%	Country	No.	%
USA	1,658	21.7%	USA	1,665	21.8%	USA	3,402	36.3%
GBR	821	10.8%	GBR	1,318	17.3%	GBR	1,057	11.3%
DBU	546	7.2%	FRA	472	6.2%	FRA	891	9.5%
FRA	437	5.7%	CAN	429	5.6%	CHE	608	8.6%
CAN	397	5.2%	Ndr	398	5.2%	DEU	630	6.7%
AUS	341	4.5%	DEU	324	4.2%	CAN	442	4.7%
OIN	281	3.7%	NLD	317	4.2%	NLD	419	4.5%
SWE	213	2.8%	SWE	293	3.8%	HKG	239	2.4%
CHN	200	2.6%	CHE	23	3.3%	SWE	239	2.4%
BRA	192	2.5%	AUS	210	2.8%	Ndr	238	2.4%
ESP	173	2.3%	HKG	156	2.0%	AUS	146	1.6%
CHE	2	2.0%	ITA	156	2.0%	BSP	118	1.3%
QNI	149	2.0%	FIN	150	2.0%	ZAF	73	0.8%
ITA	145	1.9%	2	142	1.9%	FIN	70	0.7%
NOR	107	1.4%	ESP	114	1.5%	Q	69	0.7%
BEL	102	1.3%	BEL	66	1.3%	MYS	69	0.7%
DNK	94	1.2%	IRL	93	1.2%	ITA	54	0.6%
ZAF	88	1.2%	DNK	92	1.2%	AUT	48	0.5%
POL	84	1.1%	ZAF	90	1.2%	BEL	46	0.5%
RUS	84	1.1%	NOR	88	1.2%	BRA	44	0.5%

TABLE 2. Summary Statistics.

		v	Whole Sample	0			Successful			Unsuccessful	μi.	Diff	Difference
	Mean	Med.	Std. Dev.	P25	P.75	Mean	Med.	Std. Dev.	Mean	Med	Std. Dev.	Atost	Z-score
Panel A. Deal Characteristics													
Deal Value	739.5	116.0	4,171	30.5	407.5	657.6	116.18	3,592	1.552	114.6	7,834	:	
% Cash	72.2%	100%	38.4	45.7%	100%	73.0%	100%	37.8	65.0%	100%	42.6	:	
Target Total Assets	1,343	185.4	4,911	55.5	803.2	1,079	172.2	3,871	3,024	321.7	8,898	:	:
Acq. Total Assets	12,094	1,600	86,410	303.7	7,103	11,247	1,569	61,220	19,246	1,851	197,115		
CAR(-1,1)	0.012	0.006	0.08	-0.021	0.034	0.012	0.006	0.08	0.011	0.005	60.0		
ROAM	7.26%	8.18%	11.6%	4.19%	12.6%	7.44%	8,30%	11.4%	5.64%	7.05%	13.6%	:	:
ROM	2.68%	6.68%	17.9%	2.46%	10.6%	2.85%	6.75%	17.6%	1.07%	6.03%	20.1%	•	•
Success	265-68	100%	30.6	100%	100%	I	I	I	I	I	I	I	I
Days to Completion <sup>a</sup>	I	I	I	I	I	106	70.0	140.73	I	I	I	I	I
Panel B. Target to Acquirer Country Characteristic	Jountry Cha	racteristics											
Geographical Distance	5,154	5,841	4,352	9.59.0	6,730	5,132	5,841	4,307	5,346	4,909	4,716		:
Cultural Distance	5.05	4.70	2.98	3.00	7.10	5.01	4.50	2.93	5.43	4.80	3.34	:	:
Acq. Global Experience	1.31	0.00	2.04	00.0	2.00	1.33	00.0	8	1.14	0.00	1.83	:	:
Acq. International	0.82	0.00	1.51	0.00	1.00	0.83	0.00	1.53	0.72	0.0	131	:	
Experience													
Acq. Deal Experience	0.17	0.00	0.52	0.00	0.00	0.17	0.00	0.53	0.14	0.00	0.44		
Panel C. Investment Bank Ch	Characteristics												
IB Geographical Distance	4,429	3,626	4,038	557	6,639	4,364	3,593	4,330	4,985	3,770	4,788	:	
IB Cularal Distance	4.04	3.40	3.19	1.50	8°3	4.00	3.35	3.15	4.50	4.03	3.57	:	:
Exp S - Total	25,722	201.18	88,027	00.0	5,631	26,489	213.20	90,284	19,167	101.68	65,315	:	:
Exp Deals - Total	16.16	2.00	37.97	00.00	11.00	16.68	2.00	38.87	11.71	2.00	28.96	:	•
More than the second seco	the set of the last state and set of the set	1 . C . M	and the local state of the second state of the		West and the second	W.	- 10 - 10	يعيدها المحالم المحالم المحالم محالا فم			and and have		ert derte for

Note: This table provides univariate statistics for the major variables used in our analysis. We present the statistical significance between successful and unsuccessful deals for the *t*-test of the difference in the mean and the Wilcoxon test. Panel A provides summary statistics of the key variables. See the Appendix for detailed definitions of the variables. "We exclude Completion Time less than five days to avoid reporting on deals announced at time of completion. ...Significant at the 1% level. .\*Significant at the 1% level.

		perience ntile	Bottom Ex Quin		Diff	erence
	Mean	Med.	Mean	Med	<i>i</i> -test	Z-score
Deal Value	1,487	288	280.86	54.00		
% Shares Acquired	91.6%	100%	86.5%	100%	•••	•••
% Cash	76.7%	100%	66.8%	90.8%	•••	•••
Target Total Assets	1,990	371.0	930.0	103.9	•••	•••
Acq. Total Assets	16,607	3,125	7,534.6	805.1	•••	•••
CAR(-1,1)	0.014	0.005	0.015	0.006		
Success	91.3%	100%	88.1%	100%		
Day to Completion	95.8	70.0	105.7	65.0	••	•
T-Acq. Geographical Distance	5,859	5,841	4,992	4,586	•••	
T-Acq. Cultural Distance	4.65	3.70	5.57	5.30	•••	
Acq. Global Expereince	1.06	0.00	0.64	0.00	•••	•••
T-IB Geographical Distance	3,211	1,947	5,080	5,371	•••	•••
T-IB Cultural Distance	2.44	2.20	5.12	4.80	•••	•••
IB Exp \$ - Total	112,193	40,819	0.00	0.00	•••	
IB Exp Deals - Total	66.8	41.00	0.00	0.00	•••	
Global Exp \$ - Total	278,334	169,640	74,780	4,967	•••	
Global Exp Deals - Total	170.83	172.00	59.45	22.50	•••	

TABLE 3. M&A Characteristics by Investment Bank Experience.

Note: This table presents descriptive statistics of the merger and acquisition (M&A) deals in the sample. An M&A is defined as successful if there is a reported effective date in the database. The sample includes all cross-border M&As from 1994 to 2012. The top experience and bottom experience quintiles are determined by the extent of the investment experience in the target country. Top experience quintile investment banks will have advised several deals in the target country and bottom experience quintile investment banks will likely have previously advised none in the target country in the past five years.

\*\*\*Significant at the 1% level.

"Significant at the 5% level.

	(1)		(2)		(3)	
	IB Geographical Distance	p-value	IB Cultural Distance	<i>p</i> -value	IB Deal Experience	<i>p</i> -value
Acq. Geographical Distance	0.3235***	000		000		
Acq. Ummru Dutance Acq. Deal Experience			7600.0	0007	16.5525***	0007
Acq. Size	-0.1192***	000	-0.1026***	000	0.7091***	.005
Acq Global Experience	-0.0117	534	-0.0109	.487	-1.1180***	000
Disclosure Distance	-0.0355***	.002	-0.0836***	000	0.3735***	2007
Rule of Law Distance	-0.1013	.180	-0.7877***	000	-6.4236***	000
GDP Growth Distance	-0.0219	.122	-0.0226*	.075	0.8789***	000
Per Capita GDP Distance	-0.5240***	000	-0.5632***	000	11.2443***	000
Stock Market Distance	-0.0002	.891	0.0013	319	-0.0485***	600;
Constant	-1.0420	717.	-0.0183	994	-11.7541	730
Observations Adj R <sup>2</sup>	7,630 0.186		6,975 0.465	5 5	7,536	36

T ABLE 4. Acquirers' Characteristics and Investment Bank Target Country Expertise.

distance between investment bank country and target country, cultural distance between investment bank country and target country, and number of previous deals advised by the investment bank in the target country. The independent variables include: a continer geographical distance, acquirer cultural distance, acquirer size, and acquirer global experience. Disclosure, rule of law, GDP growth, per capita GDP, and stock market distances are included to control for the different economic and legal about the country of the possible merger and acquisition (M&A) target. The dependent variables are our three measures of investment bank country expertise: geographical Note: This table reports the results of year and investment bank fixed effects regressions examining the relation between acquirers and the expertise of the investment bank environments in the target's and acquirer's countries. The sample covers 1994-2012.

Significant at the 1% level.
Significant at the 10% level.

	(1)		(2)		(3)	
	Success	p-value	Success	p-value	Success	p-value
IB Geographical Distance	-0.0275*	.090				
Acq. Geographical Distance	-0.0120	.950				
IB Cultural Distance			-0.0320*	.061		
Acq. Cultural Distance			-0.0010	.955		
IB Deal Experience					0.0045***	.002
Acq. Deal Experience					-0.0604	.518
Private	0.5422***	.000	0.4990***	.000	0.5338***	.000
Acq. Size	0.0199	.470	0.0128	.660	0.0229	.404
Deal Value	-0.0373*	.096	-0.0500*	.092	-0.0470**	.069
% Cash	0.0041**	.012	0.0042**	.016	0.0040**	.014
IB Global Experience	-0.0360	.707	-0.0598	.560	-0.0696	.472
Acq Global Experience	0.0799	.409	0.0701	.492	0.0955	.346
Syndicate Size	-0.0643	.333	-0.1067	.099	-0.0985	.136
Disclosure Distance	-0.0132	.363	-0.0171	.267	-0.0130	.365
Rule of Law Distance	0.0227	.798	-0.0362	.706	0.0428	.629
GDP Growth Distance	-0.0197	.251	-0.0117	.543	-0.0221	.199
Per Capita GDP Distance	0.0537	.436	0.0688	.359	0.0277	.691
Stock Market Distance	-0.0028	.151	-0.0023	.258	-0.0026	.182
Observations	7,5	36	6,3	92	7,5	36
Pseudo R <sup>2</sup>	0.0	93	0.1	21	0.1	88

TABLE 5. Effect of Investment Bank Expertise on Deal Success.

Note: This table reports the results of year and investment bank fixed effects conditional logistic regressions examining the relation between investment bank distance and experience and deal success. The dependent variable is a dummy variable equal to 1 if the announced deal completed successfully. The independent variables include: *IB Geographical Distance* and *Acq. Geographical Distance*, defined as the geographical distance between the investment bank and acquirer to the target; *IB Cultural Distance* and *Acq. Cultural Distance*, defined as the cultural distance based on Inglehart and Welzel's (2010) dimensions; and *IB Deal Experience* and *Acq. Deal Experience*, measured as the number of deals the investment banks assisted and the acquirer completed in the target's country over the most recent five years. We also include a private dummy, the acquirer size, the value of the deal, the percentage of cash offered, the global experience of the investment bank and the acquirer, and the syndicate size. Disclosure, rule of law, GDP growth, per capita GDP, and stock market distances are included to control for the different economic and legal environment in the target and acquirer's countries. We also include but do not report dummy variables for missing deal value, total assets, and percentage cash as well as year and investment bank fixed effects. The sample covers 1994–2012. The *p*-values are reported in the table.

\*\*\*Significant at the 1% level.

\*\*Significant at the 5% level.

	(1)		(2)		(3)	
	Days to Completion	<i>p</i> -value	Days to Completion	p-value	Days to Completion	p-value
IB Geographical Distance	1.3052**	.025				
Acq. Geographical Distance	-1.3094	<b>3</b> 80				
IB Cultural Distance			3.3571***	000		
Acq. Cultural Distance			-0.0524	937		
IB Deal Experience					-0.1590***	000
Acq. Deal Experience					-3.0081	.351
Private	-25.9491***	000	-26.0022***	000	-25.4914***	000
Acq. Size	5.0303***	000.	4.7400***	000	4.8802***	000
Deal Value	3.3880***	900.	3.9960***	.002	3.7620***	.003
% Cash	0.3903	000.	-0.4211***	000	0.3900	000
IB Global Experience	-0.7783	.828	-0.7994	.818	0.6372	.859
Acq Global Experience	-10.2974***	.005	-9.7832***	900	-9.1941***	.015
Syndicate Size	6.3300**	.021	4.8213*	.067	8.2421***	.002
Disclosure Distance	-1.2501**	.026	-0.4012	.470	-1.2264**	.029
Rule of Law Distance	-2.2944	.519	2.9621	.403	-4.1493	.248
GDP Growth Distance	0.3954	.565	0.3394	.635	0.5324	.439
Per Capita GDP Distance	-3.3554	.224	-1.3913	.620	-1.3413	.634
Stock Market Distance	-0.1622**	.037	-0.1773**	.020	-0.1731**	.025
Intercept	99.3143	.200	87.8710	223	89.4262	.242
Observations	7,536		6,392		7,536	
Adj. R <sup>2</sup>	0.179		0.235		0.311	

TABLE 6. Effect of Investment Bank Expertise on Days to Completion.

Note: This table reports the results of year and investment bank fixed effocts regressions examining the relation between investment bank distance and experience and a deal's time to completion. The dependent variable represents the number of days e lapsed from the amouncement to the completion of a successful deal. We exclude deals for which the number of days between the reported amouncement and the form the independent variables include: *IB Geographical Distance and Acq. Geographical Distance*, of days between the reported amouncement and the completion is less than five. The independent variables include: *IB Geographical Distance and Acq. Geographical Distance*, of days between the reported amouncement and the completion is less than five. The independent variables include: *IB Geographical Distance* and *Acq. Geographical Distance*, or the completion of a successful data is the completion of the completion of the completion of a successful data is the completion of the co defined as the geographical distance between the investment bank and acquirer to the target; IB Cultural Distance and Acy. Cultural Distance defined as the cultural distance based on Inglehart and Welzel's (2010) dimensions; and IB Deal Experience and Acq. Deal Experience, measured as the number of deals the investment banks assisted and the acquirer completed in the target's country over the most recent five years. We also include a private dummy, the acquirer size, the value of the deal, the percentage of cash offered, the global for the different economic and logal environment in the target and a countries. We also include but do not report dummy variables for missing deal value, total assets, and percentage cash as well as year and investment tank fixed effects. The sample covers 1994-2012. The *p*-values are reported in the table. experience of the investment hank and the acquirer, and the syndicate size. Disclosure, rule of law, GDP growth, per capita GDP, and stock market distances are included to control

\*\*\*Significant at the 1% level.

"Significant at the 5% level.

TABLE 7.	Effect of	Investment	Bank Ex	pertise on	Market	Reaction.
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	(1)		(2)		(3)		
	CAR(-1,1)	p-value	CAR(-1,1)	p-value	CAR(-1,1)	p-value	
IB Geographical Distance	-0.0212	.433					
Acq. Geographical Distance	-1.1205***	.000					
IB Cultural Distance			-1.8145***	.002			
Acq. Cultural Distance			-2.3321***	.000			
IB Deal Experience					-0.0066	.303	
Acq. Deal Experience					1.6007**	.038	
Private	3.6743***	.000	2.5779***	.000	2.7643***	.000	
Acq. Size	-1.0216***	.000	-1.0295***	.000	-1.0953***	.000	
Deal Value	0.3708*	.058	0.3668*	.042	0.1587*	.081	
% Cash	0.0657***	.000	0.3562**	.070	0.3670**	.049	
IB Global Experience	0.9339	.415	-0.5542	.358	-0.7289	.200	
Acq Global Experience	-1.0525	.950	-0.0724	.923	-0.3904	.477	
Syndicate Size	0.8208***	.006	0.9637***	.002	1.1195***	.000	
Disclosure Distance	0.2881***	.002	0.2489***	.004	0.2761***	.001	
Rule of Law Distance	-2.9940***	.001	-2.9978***	.000	-3.5467***	.000	
GDP Growth Distance	-0.3352	.812	-0.0180	.877	0.0175	.885	
Per Capita GDP Distance	-0.2445	.740	0.7091	.126	0.7033	.137	
Stock Market Distance	0.0833***	.000	0.0811***	.000	0.0738**	.002	
Constant	6.6775***	.000	9.9755"	.097	8.9254	.216	
Observations		4,343		3,894		4,343	
Adj. R <sup>2</sup>	0.162		0.242		0.151		

Note: This table reports the results of regressions examining the relation between investment bank distance and experience and the market reaction to the deal's announcement. The dependent variable represents the market reaction surrounding the merger amouncement. *CAR*(-1, 1) is the three-day market-adjusted return to the acquirer. It is expressed as a percentage so 0.10 is 10% in our data. The independent variables include: *IB Geographical Distance*, defined as the geographical distance between the investment bank and acquirer to the target; *IB Cultural Distance* and *Acq. Cultural Distance*, defined as the geographical distance between the investment bank and acquirer to the target; *IB Cultural Distance* and *Acq. Cultural Distance*, defined as the cultural distance based on Inglehart and Welzel's (2010) dimensions; and *IB Deal Experience* and *Acq. Deal Experience*, measured as the number of deals the investment banks assisted and the acquirer completed in the target's country over the most recent five years. We also include a private dummy, the acquirer size, the value of the deal, the percentage of cash offered, the global experience of the investment bank and the acquirer size, the value of the deal, the percentage of cash offered, the global experience of De investment bank and the acquirer size, the value of the deal, the percentage of cash offered, the global experience of De, and stock market distances are included to control for the different economic and legal environment in the target and acquirer's countries. We also include but do not report dummy variables for missing deal value, total assets, and percentage cash as well as year and investment bank fixed effects. The sample covers 1994–2012. The *p*-values are reported in the table.

\*\*\*Significant at the 1% level.

"Significant at the 5% level.

	(1)		(2)		(3)		
	ΔROA	p-value	$\Delta ROA$	p-value	ΔROA	p-value	
IB Geographical Distance	-1.1043**	.0130					
Acq. Geographical Distance	$-0.0072^{*}$	.0600					
IB Cultural Distance			$-0.0043^{\circ}$	.075			
Acq. Cultural Distance			-0.0437***	.000			
IB Deal Experience					0.0005***	.002	
Acq. Deal Experience					0.0145*	.099	
Private	-0.0303***	.000	-0.0279***	.000	-0.0283***	.000	
Acq. Size	0.0053***	.009	0.0055***	.007	0.0059***	.003	
Deal Value	-0.0130***	.000	-0.0133***	.000	-0.0118***	.000	
% Cash	0.0003***	.004	0.0003***	.008	0.0003***	.009	
IB Global Experience	-0.0035	.737	-0.0098	.146	-0.0108	.109	
Acq Global Experience	-0.0194***	.008	-0.0193***	.008	-0.0252***	.001	
Syndicate Size	-0.0039	.410	-0.0048	.306	-0.0017	.724	
Disclosure Distance	-0.0039***	.001	-0.0030***	.008	-0.0038***	.001	
Rule of Law Distance	-0.0065	.398	-0.0026	.733	-0.0169**	.030	
GDP Growth Distance	-0.0081***	.000	-0.0072***	.000	-0.0070***	.000	
Per Capita GDP Distance	-0.0119**	.039	-0.0107	.057	0.0031	.601	
Stock Market Distance	0.0003***	.103	0.0003	.143	0.0200	.522	
Observations	4,1	4,180		3,401		3,627	
Adj. R <sup>2</sup>	0.2	0.254		0.263		0.278	

Note: This table reports the results of fixed effects regressions examining the relation between investment bank distance and experience and the change in firm performance surrounding the acquisition. The dependent variable is the change in abnormal return on assets (ROA) calculated first by subtracting from the firm's ROA the median ROA for firms in the same two-digit Standard Industrial Classification industry and country of the acquirer and then by calculating the difference of the median abnormal ROA for the three years following the merger and the abnormal ROA for the year before the merger. The independent variables include: IB Geographical Distance and Acq. Geographical Distance, defined as the geographical distance between the investment bank and acquirer to the target; IB Cultural Distance and Aca. Cultural Distance, defined as the cultural distance based on Inglehart and Welzel's (2010) dimensions; and IB Deal Experience and Acq. Deal Experience, measured as the number of deals the investment banks assisted and the acquirer completed in the target's country over the most recent five years. We also include a private dummy, the acquirer size, the value of the deal, the percentage of cash offered, the global experience of the investment bank and the acquirer, and the syndicate size. Disclosure, rule of law, GDP growth, per capita GDP, and stock market distances are included to control for the different economic and legal environment in the target and acquirer's countries. We also include but do not report dummy variables for missing deal value, total assets, and percentage cash as well as year and investment bank fixed effects. The sample covers 1994-2012. The p-values are reported in the table.

\*\*\*Significant at the 1% level.

\*\*Significant at the 5% level.

TABLE 9.	Heckman	Two-Stage	Days	to Completio	n.
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	1st Step			2nd Step		
	Top Tier	p-value	Days	to Completion	p-value	
Scope	0.1362***	.000				
IB Geographical Distance				1.0098**	.042	
Acq. Geographical Distance	0.0343**	.030	-	-2.4472	.285	
Private	-0.0782*	.080	-2	21.5780***	.001	
Acq. Size	0.0479***	.000		6.7300***	.001	
Deal Value	0.1558***	.000	-	0.9713	.732	
% Cash	-0.0006	.369	-	0.4456***	.000	
IB Global Experience			-	4.1235*	.062	
Acq Global Experience	-0.1504***	.000	-1	11.0541**	.048	
Syndicate Size				6.4510*	.068	
Disclosure Distance	0.0122**	.047	-	2.0342**	.016	
Rule of Law Distance	0.0140	.720	-	3.6718	.471	
GDP Growth Distance	-0.0062	.406		0.2583	.802	
Per Capita GDP Distance	-0.0146	.626	-	3.0665	.466	
Stock Market Distance	-0.0003	.690	-	0.3087***	.007	
Intercept	-1.4776***	.000	13	0.2476***	.008	
Inverse Mills ratio			-2	23.2584	.320	
N			4,938			
Censored N			2,781			
Uncensored N			2,157			
Pseudo R <sup>2</sup> (Adj. R <sup>2</sup> )	0.2	57	-	(0.292)		

Note: This table reports the results of a Heckman two-stage procedure of year and investment bank fixed effects regressions examining the relation between investment bank distance and experience and a deal's time to completion. We exclude deals for which the number of days between the reported announcement and the completion is less than five. The dependent variable of the first stage is an indicator equal to 1 when the advising investment bank is top tier. The dependent variable of the second stage represents the number of days elapsed from the announcement to the completion of a successful deal. The first-stage regression includes a scope variable calculated from the number of times the acquirer employed a top-tier investment bank at least once in the previous five years. The independent variables include: IB Geographical Distance and Acq. Geographical Distance, defined as the geographical distance between the investment bank and acquirer to the target; IB Cultural Distance and Acq. Cultural Distance, defined as the cultural distance based on Inglehart and Welzel's (2010) dimensions; and IB Deal Experience and Acq. Deal Experience, measured as the number of deals the investment banks assisted and the acquirer completed in the target's country over the most recent five years. We also include a private dummy, the acquirer size, the value of the deal, the percentage of cash offered, the global experience of the investment bank and the acquirer, and the syndicate size. Disclosure, rule of law, GDP growth, per capita GDP, and stock market distances are included to control for the different economic and legal environment in the target and acquirer's countries. We also include but do not report dummy variables for missing deal value, total assets, and percentage cash as well as year and investment bank fixed effects. The sample covers 1994-2012. The p-values are reported in the table.

\*\*\*Significant at the 1% level.

\*\*Significant at the 5% level.

#### Appendix: Variable Definitions and Sources

Variable	Definition	Source
IB Geographical Distance	Distance in kilometers between the capital of the M&A advising bank country and capital of the target country.	mapsofworld.com
Acq. Geographical Distance	The distance in kilometers between the capital of the acquirer country and capital of the target country.	Thomson One Banker
IB Cultural Distance	Euclidean distance between the M&A advising bank country and the target country based on the traditional versus secular/rational and the survival versus self-expression orientations as reported in the Inglehart and Welzel (2010) cultural map.	Thomson One Banker/ Inglehart-Welzel map
Acq. Cultural Distance	Euclidean distance between the acquirer country and the target country based on the traditional versus secular/rational and the survival versus self- expression orientations as reported in the Inglehart and Welzel (2010) cultural map.	Thomson One Banker/ Inglehart-Welzel map
IB Deal Experience	Number of M&A deals advised by the investment bank in the target country in the previous five years.	Thomson One Banker
Acq. Deal Experience	Number of M&A deals completed by the acquiring firm in the target country in the previous five years.	Thomson One Banker
IB Global Experience	Total number of M&A deals advised by the investment bank worldwide in the previous five years.	Thomson One Banker
Acq. Global Experience	Total number of M&A deals completed by the acquiring firm worldwide in the previous five years.	Thomson One Banker
Acq. International Experience	Total number of cross-border M&A deals completed by the acquiring firm.	Thomson One Banker
Acq. Size		Thomson One Banker
CAR	Cumulative adjusted returns calculated by subtracting the firm's headquarters country stock market return from the firm's stock market return for a specific window around the M&A announcement date.	Thomson One Banker and Datastream

(Continued)

Appendix. Continued.

Variable	Definition	Source
Days to Completion	Number of days from the first announcement of the M&A attempt to the day the deal is completed with the acquisition of all the target shares.	Thomson One Banker
Deal Value	Natural logarithm of the value of the M&A deal in millions of dollars.	Thomson One Banker
Success	Indicator variable equal to 1 when the deal is successfully completed.	Thomson One Banker
ΔRO4	Change in abnormal return on assets (ROA) measure as the difference between the median abnormal ROA for the three years following the merger and the abnormal ROA for the year before the merger. The abnormal ROA is calculated as the firm's ROA minus the two-digit SIC industry median ROA in the acquirer's country.	Worldscope
Private	Indicator variable equal to 1 if the target firm is privately held, and 0 otherwise.	Thomson One Banker
% Cash	Percentage of the deal value that the acquirer paid in cash versus exchanging shares.	Thomson One Banker
% Shares Acquired	Percentage of target shares acquired in the M&A transaction.	Thomson One Banker
Syndicate Size	Number of banks advising the acquiring firms on the M&A deal.	Thomson One Banker
Disclosure Distance	Difference between the disclosure index of the target's country and the acquirer's country in the year of the deal. The disclosure index measures (1) what corporate body can provide legally sufficient approval for the transaction; (2) whether immediate disclosure of the transaction to the public, the shareholders, or both is required; (3) whether disclosure in the annual report is required; (4) whether disclosure by someone to the board of directors is required; and (5) whether it is required that an external body review the transaction before it takes place. The index ranges from 0 to 10, with higher values indicating greater disclosure.	World Bark's Doing Business report
Rule of Law Distance	Difference between the rule of law index of the target's country and the acquirer's country in the year of the deal. The index goes from -2.5 to 2.5 and considers perceptions of crime, the effectiveness of the judiciary, and the enforceability of contracts. The measure is constructed using data drawn from dozens of data sources produced by international organizations, risk-rating agencies, think tanks, and private organizations.	World Bank's Worldwide Governance Indicators
GDP Growth Distance	Difference between GDP growth of the target's country and the acquirer's country in the year of the deal.	World Development Indicators database
Per Capita GDP Distance	Difference between the per capita GDP of the target's country and the acquirer's country in the year of the deal.	World Development Indicators database
Stock Market Distance	Difference between the aggregated stock market capitalization in millions of dollars of the target's country and the acquirer's country in the year of the deal.	World Development Indicators database