# DISCUSSION PAPER SERIES

No. 7735

**THE INTERNATIONAL
DIVERSIFICATION OF BANKS AND
THE VALUE OF THEIR CROSS-
BORDER M&A ADVICE**

Abe De Jong, Steven Ongena
and Marieke van der Poel

*FINANCIAL ECONOMICS*

**Centre for Economic Policy Research**

**www.cepr.org**

# THE INTERNATIONAL DIVERSIFICATION OF BANKS AND THE VALUE OF THEIR CROSS-BORDER M&A ADVICE

**Abe De Jong, Erasmus University Rotterdam**
**Steven Ongena, CentER, Tilburg University and CEPR**
**Marieke van der Poel, Erasmus University Rotterdam**

# ABSTRACT

## The international diversification of banks and the value of their cross-border M&A advice

This paper investigates the effects of international diversification of banks on the value of their M&A advice. We study bidder returns to 1,253 cross-border M&A announcements. We find that acquirers engaging a more internationally diversified financial advisor generate lower excess returns. Acquirers benefit most from advisors with a greater focus on their home country. These results suggest that the benefits of advisors' international diversification related to greater economies of scale and scope and the flexibility of allocating deals to the most skilled employee do not outweigh the costs emanating from a lack of country-specific knowledge and greater conflicts of interest.

Abe De Jong
Rotterdam School of Management
Erasmus University
PO Box 1738,
NL 3000 DR Rotterdam,
THE NETHERLANDS

Email: a.jong@fbk.eur.nl

For further Discussion Papers by this author see:
www.cepr.org/pubs/new-dps/dplist.asp?authorid=160052

Steven Ongena
Department of Finance
CentER, Tilburg University
PO Box 90153
5000 LE Tilburg
THE NETHERLANDS

Email: steven.ongena@uvt.nl

For further Discussion Papers by this author see:
www.cepr.org/pubs/new-dps/dplist.asp?authorid=144729

Marieke van der Poel
Rotterdam School of Management
Erasmus University
PO Box 1738,
NL 3000 DR Rotterdam,
THE NETHERLANDS

Email: mpoel@rsm.nl

## I.  Introduction

Over the past few decades the number and importance of mergers and acquisitions (M&A) have dramatically increased due to the worldwide removal of entry restrictions in many industries and the growing significance of services in the economy (Hijzen et al. (2008)). Investment bankers fulfill a crucial role in advising firms that engage in M&A transactions.[1] However, deregulation also reshaped the financial sector and caused an enormous international expansion by financial institutions during the same period. In this paper, we therefore examine the impact of the international diversification by banks on the value of their M&A advice provided in cross-border transactions.

International diversification in first instance is expected to positively influence the value of M&A advice, because of greater economies of scale and scope, and because of a bank's greater flexibility in the allocation of its resources. The main factors employed by a bank in "producing" M&A advice are its investment bankers, whose skills play an important role in the ultimate quality of the advice that is being given.[2] These bankers could for instance have the optimal skills to allocate targets, certify the deal, or negotiate deal terms. More internationally diversified banks have a greater flexibility in assigning (cross-border) M&A deals to investment bankers with more target- or acquirer-country specific experience (or advisory skills). Therefore, the advice of these banks can add more value to cross-border M&A deals.

However, international diversification can also have negative implications for the value of M&A advice. First, internationally diversified banks might lack the country-specific knowledge

---

[1] The M&As recorded in the Securities Data Corporate (SDC) database reflect the growing importance of banks in providing M&A advice. In 1990 for example banks advised M&As worth 47 percent of total deal value, while in 2005 this share had already grown to 75 percent. Among cross-border deals the banks' share grew from 51 percent in 1990 to 81 percent in 2005.

[2] Ertugrul and Krishnan (2009) for example show that individual bankers within investment banks explain a significant portion of M&A deal outcomes, suggesting that individual skills play a significant role in M&A advice.

and skills that more focused banks possess. Second, the coordination of activities and resources are more complex in more diversified banks, which can be especially problematic for banks due to its information-intensive character. Poor coordination of activities can result in inferior M&A advice. Third, conflicts of interest between banks and their clients can cause inferior M&A advice. Short-term-oriented fee contracts with clients and a bonus system that rewards individual bankers based on revenues provide incentives to maximize the number and the size of the transactions,[3] irrespective of the value creation in the deals (McLaughlin (1990); Rau (2000)).[4] Long-term reputation may put a limit on such short-term behavior (McLaughlin (1990)). But since a more internationally diversified position is likely to reduce reputation concerns, we expect that, for internationally diversified banks, the short-term benefits of inferior M&A advice are more likely to outweigh its long-term reputation costs.

Given that the banks' international diversification can have both positive and negative effects on the value of M&A advice, we empirically assess its net effect by analyzing the bidder's stock price reaction to the deal announcement. The underlying rationale is that more (less) valuable advice from an advising bank should lead to higher (lower) announcement returns.

We use a comprehensive measure of international diversification of banks. In particular, we calculate an entropy measure of diversification, as introduced by Jacquemin and Berry (1979)

---

[3] These bonus schemes are currently hotly debated. E.g., 'Does your M&A add value?', Financial Times of February 5, 2009; 'Bankers' fee bonanza as M&A surges', Financial Times of February 8, 2006; 'Banks write big salary checks again', Financial Times of May 23, 2004. The hearings of the U.S. Financial Crisis Inquiry Commission also provides relevant details about the compensation policies of investment bankers (see, e.g., the testimony of Lloyd C. Blankfein of Goldman Sachs on January 13, 2010, in which he mentions a "near perfect correlation between changes in net revenues and compensation" (http://www.fcic.gov/hearings/pdfs/2010-0113-Blankfein.pdf, p. 6). See Kaplan and Rauh (2009) for a comparison between different sectors of the income distribution in the highest income brackets. Investment banks comprise a large proportion of the highest income brackets.

[4] Information asymmetry between banks and their clients can deteriorate these conflicts of interest (see for example Bolton et al. (2007)). Mehran and Stulz (2007) review the possible conflicts of interests existing in financial institutions. Banks are better informed than their clients about the suitability of a cross-border M&A deal, while this information is difficult for the client to verify. Especially with cross-border M&A advice, the asymmetric information problem is likely to be greater for geographically diversified banks than for focused banks. This situation could create incentives for banks to pursue short-term strategies as described above.

and popularized by Palepu (1985). The entropy measure determines the diversification of previously advised M&A deals, taking into account both the number of countries in which the bank was active and the distribution of shares among these countries. In our setting, a higher entropy value implies that advising banks are active in more countries and/or have smaller, more equal market shares in these countries.

We focus on bank advisors in cross-border deals, as the competitive advantage provided by international diversification should be more important for cross-border deals than for domestic deals, making any estimate of its cost more conservative. Our empirical analysis comprises 1,253 M&A transactions announced between 1997 and 2005. Our evidence suggests that the costs of banks' international diversification outweigh its benefits, as we find that international diversification negatively influences bidders' abnormal returns. This valuation effect is economically relevant; an increase in one standard deviation of the bank's entropy measure decreases the bidder's abnormal returns by 0.67 percentage points.

Additional analyses indicate that the negative effect of international diversification is robust. First, more internationally diversified banks are likely to have a greater global market share. Since previous studies show that an advisor's market share negatively influences a bidder's abnormal returns (Rau (2000); Hunter and Jagtiani (2003)), the negative impact of our entropy measure may be an artifact of the bank's global market share. However, controlling for global market share does not change our results. Our results also remain robust when controlling for acquirers' global diversification and advisors' industry diversification.

Second, since our results indicate that more focused banks provide higher valued advice and target- and acquirer-country characteristics influence advisor choice, one would expect that specialization in the target or acquirer country leads to higher returns. We find that advisors'

focus on the target- and acquirer-nation positively influences bidders' abnormal returns, but the target-nation effect disappears after controlling for the choice of the advisor's target-nation focus. We further show that the target-nation or acquirer-nation focus effects do not explain the overall bank diversification effect.

Third, we control for the endogenous case in which the possible valuation effects influence the bidders' advisor choice. We show that acquirers select more globally diversified banks in deals that are large in absolute magnitude. Because the acquirers in these deals are large firms, we also find that the deals are small relative to the acquirer. Several country characteristics, such as investor protection and the local availability of experienced advisors, influence the bidders' decision on global diversification as well. A two-stage-least-squares regression leaves our finding of a negative net effect of global diversification on bidder returns unaffected. In sum, our study documents the relevance of the international footprint of the bank for the net value effect on the bidder's stock of the deal it advises.

Our study brings together two important strands of the literature. First, our paper fits within the literature on the geographic diversification in the banking industry. Evidence on the value of geographically diversified banks is mixed. Some studies show a positive relation between geographic diversification and bank value (e.g., Eisenbeis et al. (1984); Deng and Elyasiani (2008)), while other studies show a negative relation (e.g., DeLong (2001); Amihud et al. (2002)). Instead of investigating the impact of international diversification on bank value, we examine how it affects the value of their M&A advice. The banks' lower valued advice as associated with international diversification can be a potential source for their lower bank value. The current financial crisis illuminates the importance of the strategy and operations of large banks for the global economy. Their off-balance sheet activities and the conflicts of interests

embedded there have raised particular concerns. Our results justify the increased attention for banks' roles in advising M&As.[5]

Our paper also relates to the existing literature on the role of financial advisors with M&A deals. Servaes and Zenner (1996) identify three functions investment banks fulfill.[6] As advisors they reduce transaction costs, informational asymmetries between bidders and targets, and contracting costs. In addition, Allen et al. (2004) highlight the certification role of advisors. According to McLaughlin (1990), a conflict of interest between advisors and its client could arise from the fee structure in their contracts. Yet, the advisors' concerns about their reputation could partially mitigate this conflict. Empirical research indicates that advisors' characteristics in general and reputation in particular influence acquirer returns (e.g., Bowers and Miller (1990); Servaes and Zenner (1996); Rau (2000); Kale et al. (2003); Bao and Edmans (2009); Kisgen et al. (2009)). We extend this literature by analyzing a potentially overlooked source for the impact of advisors on bidder returns, i.e., their international diversification. A horse race between bank international diversification and market share (as a proxy for reputation) indicates that it is mostly diversification that explains returns.

The rest of the paper is organized as follows. Section II describes the data and defines advisor characteristics. Section III assesses their impact on acquirer valuation. Section IV models the choice of advisor for key deal, target, acquirer and nation characteristics and estimates a two-stage-least-squares regression for bidder returns. Section V provides additional robustness. We conclude in Section VI.

---

[5] See, e.g., 'Wall Street's biggest con is M&A "advice"', Wall Street Journal of September 17, 2009 and the Baker vs. Goldman Sachs & Co case about the advice on the acquisition of Lernout & Hauspie by Dragon Inc. in 2000 (September 15, 2009).
[6] See also Rosenbaum and Pearl (2009) for a detailed description of the M&A process from the perspective of an investment banker, ranging from confidentiality agreements and valuations to site visits and the preparation of marketing materials.

## II. Data on M&A transactions, advisor diversification, and control variables

We first describe the data and our sample of M&A transactions. We then define global diversification and our set of bank advisors. Finally, we describe the bidder returns and control variables. Appendix 1 contains an overview of all variables in this paper.

### A. Data and sample

From the *Securities Data Corporation* (SDC) database we collect all cross-border deals (1) in which acquirers engage an advisor, (2) that are announced between January 1$^{st}$, 1997 and December 31$^{st}$, 2005, (3) that are larger than $ 10 million, (4) in which at least 50% of the shares were acquired, and (5) that resulted in a 95% or more ownership (by the acquirer) after acquisition. 2,218 deals satisfy these criteria. Table 1 provides an overview of the sample composition.


[Table 1 around here]


In 300 deals the acquirer is not listed, in 246 deals the acquirer or target is a financial firm (i.e., the primary SIC is between 6000 and 6999), and in 45 cases the designation of the acquirer is unclear (as the relative size of the acquisition versus the acquirer is larger than or equal to one). In 279 of the remaining 1,627 deals, acquirers hire more than one advisor.[7] We loose a further 95 observations because of data availability and reliability (i.e., we trim the one and ninety-nine percentile cumulative abnormal returns; more on excess stock return calculations in the next

---

[7] Section V discusses a robustness test where we add the deals in which firms engage multiple advisors back to our sample of 1,253 deals in which firms engage only one advisor.

section). We are left with 1,253 fully and reliably documented deals in which listed non-financial acquirers choose one advisor.

We document 298 different acquirer-/target-nation combinations in total. Table 2 reports the twenty most important target and acquirer nations, but we observe at least one acquisition in 32 other target nations and 18 other acquirer nations in the sample. Most observations (18%) in our sample deals are between firms from the US and the UK.

[Table 2 around here]

B. Advisor international diversification

Assume there are $A$ advisors ($a : 1, ..., A$) operating in $C$ countries ($c : 1, ..., C$) and that advisor $z$ advises a number of deals $d_{zx}$ in country $x$ during some time period ($d_{zx} \geq 0$). We first define advisor country share as the ratio of the number of deals that the bank advised in nation $c$ during the year prior to the cross-border acquisition announcement year and the total number of deals that the bank advised during the same period. We then define the international diversification of an advisor to equal the sum of advisor country share times the natural logarithm of one over advisor country share across all nations in which the advisor operates.[8] Hence the *international diversification, $Div_z$,* of an advisor $z$ with deals in some countries ($c : 1, ..., C_z$) equals:

---

[8] Instead of basing international diversification on the number of deals, we also calculate the measure based on the value of deals. However, in some cases advisors report deals in a country without their values. For the value-based entropy measure, we exclude those deals without values and recalculate international diversification using country shares based on deal values. Results are unaffected. As in traditional top tier rankings we use one year of deals.

$$Div_z = \sum_{c=1}^{C_z} \left( \left( \frac{d_{zx}}{\sum\limits_{c=1}^{C} d_{zc}} \right) \ln \left( \frac{d_{zx}}{\sum\limits_{c=1}^{C} d_{zc}} \right)^{-1} \right). \tag{1}$$

This measure is similar to the entropy measure of diversification defined in Jaquemin and Berry (1979) and Palepu (1985).[9] This entropy measure accounts comprehensively for both the *number* of countries as well as the *share of deals* in each country. For example, the diversification of an advisor equally present in two countries, i.e., with a 50/50 split, equals ln(2) = 0.69, while a 90/10 split halves the measure to 0.32. Diversification of an advisor equally present in three countries almost doubles the measure to ln(3) = 1.09.

For our calculations we downloaded all completed deals from SDC. Only completed deals are relevant when calculating the international diversification of the advisor, as from the acquirers' perspective it is the set of completed deals rather than the withdrawn ones that matter most when selecting a specific degree of diversification in an advisor.[10] As in Rau (2000) advisors receive full credit only for deals in which they provide services to the acquirer and not to the target. Advisors also receive full credit for deals in which acquirers engage multiple advisors. We further base our international diversification measure on the advisors' ultimate parents. To avoid misclassification, we account for all mergers and acquisitions among advising banks during our sample period.[11]

---

[9] As is common in the economic and strategic management literature we use a logarithmic function, entropy, as our measure of concentration/diversification. The entropy is decomposable so that it gives a natural way to measure concentration. The Herfindahl index which is popular in measuring market concentration is actually an approximation to the entropy (Booth and Booth (2009)).

[10] The acquirer may not be able to observe or have less information about incomplete deals. In addition, acquirers may be weary about the advisors' incentives to report and boast about incomplete deals.

[11] For example *Citicorp* and *Travelers Group* merged into *Citigroup* in 1998. If a cross-border acquisition announcement takes place in 1997 with *Citicorp* as an acquirer advisor, SDC classifies *Citigroup* as parent advisor. We adjust for this misclassification by considering the deals of *Citicorp* in 1996, but not the deals of *Travelers Group*. However, if a cross-border announcement takes place in 1998 with *Citigroup* as acquirer advisor, we

Table 3 lists advisor characteristics, abnormal returns, and control variables in our model for abnormal returns. Panel A lists the key statistics for all 1,253 observations. Panel B lists the number of our sample observations and the mean values of international diversification by target or acquirer origin of the merging firms.


[Table 3 around here]


Advisor international diversification varies widely across deals (Panel A) and countries (Panel B). The average score for the entropy measure is 1.68, while the 25th and 75th percentiles are, respectively 1.26 and 1.92. High average diversification in a "target country", Argentina for example with 4 deals and an average diversification value of 2.23, suggests that bidders doing deals that involve Argentinean targets are mostly advised by internationally diversified banks. Low diversification in a country, Israel for example with 14 deals and an average diversification of 0.94, implies that bidders acquiring firms from Israel are advised by internationally focused banks. Similarly, deals involving acquirer firms in Portugal are mostly advised by diversified banks while deals with Korean acquirers are advised by focused banks.

We define an advisor's target-nation (acquirer-nation) focus as the ratio of the number of advised deals that take place in the target nation (acquirer nation) and the total number of advised deals during two years prior to the year of the cross-border M&A announcement.[12] The average (median) target-nation focus equals 20.12% (4.46%) with a standard deviation of 27.74%. For

consider all deals advised by *Citicorp* and *Travelers Group* in 1997, even though these financial institutions were then not merged yet. The reason for including the deals of both is that we cannot know if the bidder who reports *Citigroup* as advisor hired either *Citicorp* or *Travelers Group*. A more practical reason for our focus on the parent advisor is the occasional use by SDC of somewhat different names for the same subsidiary.

[12] Basing the advisor's target-nation or acquirer-nation focus on the total deal value rather than the number of deals does not alter our results.

acquirer-nation focus, the average (median) equals 25.93% (9.67%) with a standard deviation of 30.85%.

We further create a dummy which equals one for advisors that belong to the global top five advisors, and equals zero otherwise. We use the same procedure for the classification of a global top five advisor as for our international diversification measure. That is, we calculate the market share of an advisor's ultimate parent based on the number of deals completed by the parent advisor relative to all completed deals reported by SDC per year. We classify an advisor as a global top five advisor when its parent belongs to the top five in terms of market share during the year prior to the cross-border M&A announcement.[13]

### C. Announcement returns and control variables

We calculate the acquirers' stock price reactions in a three-day window − i.e., minus one to plus one day − when deals are announced. We use the market model with the acquirer country's market index to calculate the Cumulative Abnormal Returns (CARs). The estimation window runs from 110 days until 10 days prior to the deal announcement. As indicated before, to make sure that outliers do not influence our results, we exclude the extreme one-percentile CAR observations from our sample (the one-percentile threshold equals -19.8% and the 99-percentile threshold equals 23.9%). Table 3 shows that the average (median) three-day CAR of the 1,253 acquisition deals is 1.03% (0.50%) with a standard deviation of 5.95%. The average CAR is significantly different from zero at a less than one percent level.

In addition to the short-term abnormal returns, we investigate the value implications for a half-year window, starting five days before the announcement date until 125 days after the

---

[13] In otherwise unreported analysis we find that our results do not change when using different definitions of global advisors, such as a global top five dummy based on the value of deals instead of the number of deals and a global top ten or top twenty dummy based on the number of deals or the value of the deals.

announcement date. Although a longer window adds more noise to our analysis, more information about the deal might become available to the market within this period influencing acquirers' returns. We lose 63 observations due to data availability and another 23 observations, because we exclude the extreme one-percentile CAR observations (the one-percentile threshold equals -146.1% and the 99-percentile threshold equals 133.7%), leaving us with 1,167 observations. In contrast to the positive average three-day CAR, our results indicate a negative average and median half-year CAR (-6.44% and -4.21%, respectively). Although the average CAR is significantly different from zero, the large standard deviation that equals 43.21% is most likely due to the many contaminating events that occur during this long time window.

We incorporate several deal characteristics in our analyses. We define a dummy variable *d(Stock payment)* that equals one if at least a proportion of the payment consists of stock, and equals zero otherwise. Of our sample deals, 18% involve a payment including stock. The dummy *d(Tender offer)* equals one for tender offers, and zero otherwise. 15% of the transactions are tendered. The dummy variable *d(Related acquisition)* equals one if the target and acquirer have at least one equal 3-digit SIC code, and equals zero otherwise. 74% of the deals involve a related acquisition. We introduce a dummy variable *d(Complex deal)* that equals one if the reaction of the target to the acquirer's bid upon the initial disclosure of the offer price is hostile or unsolicited, or if there are more than one bidder, and equals zero otherwise. Given this definition, only 3% of all deals can be classified as complex.

As target characteristics, we define *Relative transaction size* the ratio of the transaction value and the asset size of the acquirer. On average, the target is around 1/9$^{th}$ of the acquirer in asset size. We include a dummy variable *d(Target hires advisor)* that equals one if the target firm hires an advisor, and equals zero otherwise. In 67% of the deals the target also engages an advisor. We

incorporate a dummy variable *d(Target is listed)* that equals one if the target is listed, and equals zero otherwise. Of all targets, 24% are listed. We define *ln(1+ Number of SIC codes of target)* to be the natural logarithm of one plus the number of SIC codes of the industries in which the target operates. The average (median) target is operating in 2 (2) different industries.

We define the acquirer's *Tobin's q* as the acquirer's market value of total assets over its book value of total assets, where the market value of total assets equals the book value of total assets plus market value of equity minus book value of equity. The *Tobin's q* averages 2.56. The acquirer's *free cash flow to assets* ratio is defined as EBITDA scaled by the market value of total assets. The average ratio equals 0.43 percentage points.

## III.  Acquirers' stock price reactions

### A.  The impact of advisor diversification

The main objective of this paper is to investigate the influence of advisor diversification on acquirer returns. Table 4 reports the estimated coefficients and statistical significance levels from ordinary least squares regressions of the CARs in percent around cross-border deal announcements. Advisor international diversification is featured as the main independent variable in four models.


[Table 4 around here]


The independent variables in Model I are international diversification and dummies for year, industry (one digit SIC) and country (we include dummies for the top ten target and top ten acquirer countries only). We also add deal, target, and acquirer characteristics. As in Moeller and Schlingemann (2005) we include stock payment, tender offer, related acquisition, and complex

12

deal dummies, relative transaction size, a target-is-listed dummy, acquirer Tobin's q, and acquirer free cash flow to assets. With the addition of the acquirers' Tobin's q and free cash flows we control for the situation in which the bidder is responsible for the abnormal returns around the deal announcement, which is the case when bidders engage an advisor only for executing the deal, either because the bidder has its own skills to identify good deals or because of empire-building tendencies (Bao and Edmans (2009)). We also include ln(1 + Number of SIC codes of target) and a target-hires-advisor dummy.

We find that the coefficient on diversification is negative, statistically significant (at the one percent level) and economically relevant. An increase of one standard deviation in global diversification in Model I decreases acquirer CAR by 0.67 percentage points (= 0.73 * 0.0092).

The estimated coefficients on the other variables are in line with previous studies. Acquirers experience higher abnormal returns when they announce an acquisition of non-listed firms (e.g., Servaes and Zenner (1996); Moeller et al. (2005); Moeller and Schlingemann (2005)). The coefficient on d(Target is listed) is statistically significant at the one percent level. A listed target decreases acquirer CARs by 2.75 percentage points in Model I, a sizeable drop as the bidding for publicly listed target stock seemingly transfers wealth to target stockholders. The coefficients of the other variables are not significant.[14]

Since factors that influence the decision to engage an advisor might also influence the wealth effects to the announcement (e.g., Servaes and Zenner (1996); Kale et al. (2003)), Model II controls for the decision of firms whether or not the engage an advisor by means of a Heckman (1979) procedure. We first estimate which firms engage an advisor by means of a binary logit

---

[14] Table 4 shows the most conservative results, as the international diversification coefficient becomes more negative and retains its significance for different short-term event windows, such as [-5;+5], [-1;+5], and [-5,+1]. Moreover, with those other event windows the coefficients for relative size and the number of industries in which the target operates become significantly positive at a five percent significance level.

regression and subsequently add its Inverse Mills Ratio (IMR) to the list of independent variables in the OLS regression explaining the acquirer's CAR.

To estimate advisor selection, the same selection criteria for cross-border deals in which firms engage advisors (see Section IIA) provides us 2,189 cross-border deals in which firms do not engage advisors. In our binary logit regression, we use absolute and relative transaction size, the number of target SIC codes, the bidder's acquisition experience, and dummies for stock payments, related acquisitions, complex deals, deals where targets engage an advisor, listed targets, and deals that require regulatory approval. Appendix I provides a description of the variables. The results of the selection model are as follows (robust standard errors in parentheses):

$$d(\text{acquirer hires advisor}) = -3.576 + 0.632*\ln(\text{Value transaction}) + 0.116*d(\text{Stock payment})$$
$$\quad\quad\quad\quad\quad\quad (0.188)\quad (0.038) \quad\quad\quad\quad\quad\quad\quad\quad (0.114)$$

$$+\ 0.102*d(\text{Related acquisition}) + 0.163*d(\text{Regulatory approval}) + 0.077*d(\text{Complex})$$
$$\quad (0.092)\quad\quad\quad\quad\quad\quad\quad (0.100)\quad\quad\quad\quad\quad\quad\quad\quad (0.348)$$

$$+\ 0.952*\text{Relative Size} + 0.545*d(\text{Target hires advisor}) + 1.168*d(\text{Target is listed})$$
$$\quad (0.329)\quad\quad\quad\quad\quad (0.088)\quad\quad\quad\quad\quad\quad\quad\quad (0.141)$$

$$+\ 0.097*\ln(1 + \text{Number of SIC codes of target}) - 0.227*\ln(1+\text{Acq. experience});$$
$$\quad (0.107)\quad\quad\quad\quad\quad\quad\quad\quad\quad\quad\quad (0.035)$$

McFadden's Adj. $R^2 = 19.9\%$.                                                            (2)

In line with Servaes and Zenner (1996) and Kale et al. (2003), we find that acquirers are more likely to engage an advisor when they buy a larger firm and when they have less acquisition experience. In addition, we find that the likelihood of engaging advisors increases when the target engages an advisor or when the target is listed. We add the Inverse Mills Ratio derived from this selection model to Model II in Table 4 and show that its coefficient is not

significant. In addition, international diversification retains its significantly negative effect on the acquirer's abnormal returns.[15]

Model III provides the estimates of the same regression as Model II, but for half-year abnormal returns. Consistent with the short-term abnormal returns, we find that international diversification negatively influences half-year returns. With a *p*-value of 11.6%, the coefficient is close to significance. Furthermore, several other factors significantly impact bidder value over the longer term. As in Loughran and Vijh (1997) and Rau and Vermaelen (1998), we find that acquirers that complete tender offers generate higher abnormal returns, while stock acquirers generate lower returns. Consistent with the results of Rau and Vermaelen (1998) and Bao and Edmans (2009), the acquirer's Tobin's $q$ negatively influences its half-year abnormal returns.[16] As Moeller and Schlingemann (2005), we find that deals with listed targets and more complex deals negatively influence abnormal returns. Finally, we find that acquiring more diversified targets positively influences the acquirer's half-year returns, which is consistent with the findings of Kale et al. (2003) on short-term acquirer returns.

Because previous empirical studies find a negative impact of an acquirer advisor's market share on the acquirer's abnormal returns (e.g., Rau (2000); Bao and Edmans (2009)), an alternative explanation for our findings is that the negative effect of a bank's global diversification is an artifact of the negative influence of a bank's global market share. Models IV and V consider this issue for three-day abnormal returns. In Model IV, we add a dummy for advisors that belong to the global top five advisors, while we exclude international

---

[15] The estimates in Model II are robust to removal or adding of explanatory variables in the selection equation.
[16] Although a firm's Tobin's $q$ can be a proxy for the firm's skills, the negative impact may reflect an acquisition by an overvalued firm.

diversification. In Model V, we add both the global top five dummy and international diversification.

The results indicate that a global top tier advisor negatively affects a bidder's abnormal returns, yet this result is not robust, as the addition of international diversification makes the global top tier dummy insignificant. As international diversification remains significant and negative even with the inclusion of a global top tier dummy, this result demonstrates that diversification rather than an advisor's market share negatively affects bidder returns. In unreported analyses, we find that these results remain similar when controlling for the selection of advisors as examined by means of the Heckman (1979) procedure (results are available on request).[17]

### B. The effect of target-nation and acquirer nation focus

So far, we have shown that advisors affect deal value. Acquirers that select advisors that are geographically concentrated benefit most. A question that follows from this result is from which type of concentration acquirers benefit most. Since the benefit of geographical concentration is the advisor's country-specific skills and knowledge, we expect a focus on the target or acquirer country to have a positive impact on the acquirer's returns. This line of reasoning corroborates the results of Benou et al. (2007), who find that top tier advisors active in the region of foreign high-tech targets positively influence acquirers' announcement returns.

---

[17] In our analyses, we did not distinguish between different types of banks though it is not impossible that because of lending and other cross-selling commercial banks for example may have additional information about targets or acquiresr. In unreported analyses, we classify banks as commercial banks, investment banks, or miscellaneous. We introduce dummy variables for each of these three bank groups. We estimate three regressions based on Model I of Table 4, where we add a bank group dummy and an interaction term between this bank group dummy and international diversification. These regressions do not result in significant interaction coefficients, while the effect of international diversification remains unaltered. It should be noted that the investment bank dummy yields a coefficient of -0.007, which is significant at the 10% level.

Table 5 reports the estimated coefficients from regressions of the bidder CARs in percent around cross-border deal announcements. We include the same variables as in the regressions in Table 4, except for advisors' international diversification which we replace by advisors' country focus. Models I and II document target-nation focus and acquirer-nation focus separately, while Model III documents target-nation and acquirer-nation focus simultaneously. By including both types of focus simultaneously, the coefficients represent the impact of target- or acquirer-nation focus relative to third-nation focus, i.e., the percentage of deals the bank advised in countries other than the target or acquirer nation. Models IV and V control for the decision of firms whether or not to engage an advisor by means of the same Heckman (1979) procedure as in Table 4.

[Table 5 around here]

In line with our expectations, the results indicate that both target- and acquirer-nation focus positively influence the bidder's announcement returns. The coefficients of Model III indicate that an increase of one standard deviation in the target-nation or acquirer-nation focus increases the acquirer's abnormal returns by 0.50 percentage points (= 0.28 * 0.018) or 0.66 percentage points (= 0.31 * 0.021), respectively.

Because international diversification is negatively correlated with target-nation and acquirer-nation focus, our negative international diversification coefficient in Table 4 might be an artifact of target-nation and acquirer-nation focus. To separate those two effects, we orthogonalize international diversification on target-nation and acquirer-nation focus and add the orthogonalized value to Model V. We show that international diversification retains its negative

impact on deal value after excluding the effects of target- and acquirer-nation focus. Target-nation focus is no longer significant.

In sum, our findings indicate that the costs of diversified international experience exceed its benefits, resulting in a negative net effect for the value of M&A advice. Thus, greater geographical focus seems to benefit the value of M&A advice. One type of geographical focus that is beneficial for the bidder's returns when doing a cross-border deal is an advisor's greater focus on the acquirer nation, potentially because top management and shareholders that are mostly based there will be better serviced.[18]

## IV.    Endogenous advisor selection

In our analysis we assume that the choice of advisor diversification is exogenous. In this section we explicitly model advisor choice and allow for the possibility that the (expected) valuation effects determine diversification choice. We instrument diversification with a set of variables and perform two-stage-least-squares (2SLS) regressions on bidder returns.

---

[18] In addition to our abnormal returns analyses, we investigate another dimension of deal performance, which is the deal completion time (i.e., the number of days between the deal announcement date and the deal completion date). Hunter and Jagtiani (2003) suggest that a shorter time to complete a deal may be a reflection of greater advisor effort. They empirically show that top-tier advisors are faster to complete deals, while proxies for deal complexity increase deal completion time. Bao and Edmans (2009) and Ertugrul and Krishnan (2009) find that investment banks and particular individual investment bankers are associated with faster deal completion time. In addition, those banks or bankers that need less time to complete deals also tend to generate higher abnormal returns, suggesting that investment banks and bankers possess skills along different dimensions. To investigate whether an advisor's international diversification influences deal completion time, we estimate the same regression as Regression I from Table 4, but replace abnormal returns with deal completion time (excluding its extreme one percentiles. Results are available on request). We find a positive international diversification coefficient of 6.57, which is significant at the one percent level. When controlling for advisor selection by means of the same Heckman (1979) procedure as Regression II from Table 4, the international diversification coefficient drops to 3.34 and becomes less significant (*p*-value equals 0.123). In sum, not only do internationally diversified banks negatively influence acquirers' abnormal returns; they also need more time to complete deals.

A. Determinants of advisor selection

1. Deal, target, and acquirer characteristics

Given the importance of advisor characteristics for the valuation of the acquirer when announcing an M&A deal, we study its determinants in this section. We relate advisor diversification choice to their functions as described by Servaes and Zenner (1996). Our empirical model relies on deal, target, and acquirer characteristics, and also accounts for target-, acquirer-, and bilateral-nation characteristics that can be naturally linked to the choice of global diversification of the advisor. Appendix 1 provides an overview of the definitions of all variables. In Table 6 we provide the summary statistics for all variables that are not included in Table 3. Apart from motivating all variables, we will mainly describe the statistics of the acquirer experience and country-related variables.

[Table 6 around here]

A firm can reduce its transaction costs by hiring an advisor that identifies potential targets, values them, and creates bids at a lower cost (Servaes and Zenner (1996)). We expect that transaction costs not only drive acquirers' decision to hire an advisor, but also influence their choice of advisor diversification. To account for transaction costs, we include absolute and relative target size and dummies for deal complexity, for deals in which the target engages an advisor, for deals with a stock payment, and for deals that require regulatory approval.[19]

---

[19] Servaes and Zenner (1996) argue that acquirers typically face higher transaction costs in the acquisition of larger firms, which tend to be more difficult to value due to their complex structure. Additional levels of complexity are deals with more bidders for the same target as well as deals with opposing targets. Acquirers may even face opposition and/or tougher negotiations when the target hires an advisor to thwart any deal or to assist it with the negotiation (e.g., Ma (2007)). Furthermore, including stock requires special expertise in designing the payment

Information asymmetry between acquirers and targets is also a principal hurdle to any transaction (Servaes and Zenner (1996)). It might be larger for unrelated acquisitions and for acquisitions of more diversified targets. We also account for the public listing status of the target.[20]

We expect the acquirer's acquisition experience to influence their choice for advisor diversification. We account for three types of acquisition experience. First, because more acquisitions may make it optimal for the acquirer to bear the fixed cost to set up an internal group dealing with M&As (Servaes and Zenner (1996)), we account for the number of acquisitions that the bidder has accomplished in the past. The average (median) acquirer managed around 13 (6) such deals. Second, experience in the target nation can make country-specific skills less valuable for the acquirer. In our sample, 36% of the acquirers had experience in the target nation. Third, cross-border acquisition experience might determine how much the acquirer prizes global and/or country experience. On average, 36% of the acquirers' previous acquisitions were cross-border acquisitions.

### 2. Target-, acquirer-, and bilateral-nation characteristics

Next, we include six characteristics of both the target and the acquirer nation. The degree of competition among advisors in the target and acquirer nation may determine the choice of advisor diversification. Two proxies for competition are the number of advisors active in the country and the advisor Herfindahl index. There are on average (median) 112 (77) advisors

---

package and in possibly issuing new shares (Servaes and Zenner (1996)). Especially with cross-border acquisitions, stockholders might be reluctant to receive foreign stock (Rossi and Volpin (2004)). Finally, when acquirers need regulatory approval, advisors with more experience in dealing with the regulator can provide this service at a lower cost than the acquirer itself.

[20] The public listing of the target may reduce information asymmetries as more information on firm value is publicly available. However, knowing how to deal with the target's shareholders and the listing regulations may be of first order importance in accomplishing the deal, hence increasing the need for a knowledgeable advisor.

competing in target nations and 117 (63) advisors operating in acquirer nations.[21] The mean

Herfindahl index equals 0.07 in target nations and 0.06 in acquirer nations.

The third characteristic is openness, which can also be a characteristic that is relevant for

advisor diversification choice. Although the acquirer may not be able to rely on an advisor from

a closed acquirer or target nation, country-specific skills become more important in such nations

when planning a cross-border acquisition. In our sample, the mean country's import and export

accounts for around 60% of the country's GDP.

The sophistication of the financial markets in the target nation can simplify the valuation of

the target, reducing the need for target-nation specific knowledge. On the other hand,

sophisticated financial markets in the target or acquirer nation may allow only higher quality

financial advisors to thrive there, enhancing the attractiveness of an advisor from that nation.

Given that the financial sophistication index ranges from 0 (lowest) to 7 (highest), the mean

financial sophistication in the target nation equals 6.1, in the acquirer nation 6.2.[22]

Investor protection in both the target and acquirer nation also matters (Rossi and Volpin

(2004)). We expect that stricter investor protection in the target nation makes a concierge from

the target nation more useful, while stricter investor protection in the acquirer nation may make

an advisor from the acquirer nation more appealing. With an index range between zero (no

---

[21] To maintain consistency the statistics for the nation characteristics are also calculated per deal. Many deals take place either in the US or the UK giving these nations' characteristics larger weights. The average number of advisors in the other acquirer and target countries equals 33 and 24 over the sample period.

[22] We derive all the variables from the Global Competitiveness Report 2005, because the versions of earlier years up to the beginning of our sample period provide the scores of fewer countries or do not provide these scores at all. For instance, we do not have the financial sophistication scores for 1997. The 2002 report has this information for 46 of our sample countries, while this number increases to 49 countries in the 2005 report. As the correlation between the scores of the 46 available countries in 2002 and 2005 equals 0.922, we do not expect that the year from which we derive the scores determines our results. To analyze as many acquirer-/target-country combinations as possible, we impute the mean value of our sample countries to complete the remaining missing values.

protection) and ten (full protection), the mean investor protection in the target nation equals 6.9, in the acquirer nation 7.0.

Formalism in a country's legal system can make regulation more specific, but also more elaborate, protracted, inconsistent and even unfair in its judicial procedures and decisions (Djankov et al. (2003)). We argue that acquirers' need for an advisor's country-specific skills increases with the degree of formalism of the involved countries. The formalism index as documented in Table 6 ranges between zero and seven, where a low value indicates a lower degree of formalism. Mean formalism in the target nation equals 6.9, in the acquirer nation 7.0. Finally, we include the logarithm of *GDP per capita* of both the target and acquirer nations as controls. Mean GDP per capita in purchasing power parity adjusted U.S. dollars is 28,374 and 29,743 in target and acquirer nations respectively.

In addition to the characteristics of the target and the acquirer nation, we also include a set of variables that we label "bilateral" as they measure differences between characteristics of the target and acquirer nation. First, a greater distance possibly makes the engagement of a more geographically diversified advisor more of a necessity. The mean distance between target and acquirer nations is 5,000 km. Second, if the legal origin of the target and acquirer nation (*à la* La Porta et al. (1997))) differs, an advisor familiar with the target nation may be more valuable. In 50% of the deals, the target and acquirer nation have the same legal origin.[23] Third, cultural distance between the two countries can play a comparable role in that acquirers might search for advisors with experience in the cultures of both countries involved. Finally, the need for a more diversified advisor might be greater for deals where the target and acquirer nation do not share the same language. In 50% of the deals, target and acquirer nation have the same language.

---

[23] Deals based on a random match between the 49 countries in La Porta et al. (1997) for example would result in the same legal origin in 34% of the cases.

B.  Results

1.  Advisor choice

Table 7 contains the estimations of advisor choice in Panel A and the 2SLS results for the bidder returns in Panel B. Model I in Panel A reports the estimated coefficients with its robust standard errors in parentheses and its significance level (Column 1) and the changes in the dependent variable following a change of two standard deviations in each of the independent variables (Column 2) for a specification in which the dependent variable is the international diversification of the advisor. We assess the effects of a change of two standard deviations in the continuous independent variables and a change of one unit in dummy independent variables. International diversification starts at zero. We report ordinary least squares estimates to simplify the economic relevancy assessment, but results are virtually unaffected if we estimate a tobit model. Models II and III replace international diversification with either target-nation or acquirer-nation focus.


[Table 7 around here]


The results in Panel A show that acquirers tend to select internationally diversified advisors if the value of the transaction is larger. The effect is also economically relevant. For a two standard deviation increase in ln(Value transaction) the increase in international diversification is 34.5% (remember that the mean of the global diversification measure equals 168%). On the other hand, the acquisition of a relatively large target impels an acquirer to select an advisor that is less internationally diversified. Model III suggests that firms acquiring relatively large targets tend to engage advisors with greater acquirer-nation focus.

23

Transactions involving stock payment result in the choice of advisors with less international diversification, but with greater specialization in the acquirer nation. A stock payment presumably requires more expertise in the stock market of the acquirer nation to manage the payment successfully. The results further indicate that acquirers engage advisors specialized in the target nation when the target engages an advisor or is listed, confirming that knowing how to deal with the target's shareholders, listing regulations and dispersed ownership may require local expert advice.

Target- and acquirer-nation characteristics play a role in determining the choice of advisor. The number of advisors in both nations positively affects the degree of international diversification of the selected advisor (though the coefficient for the target nation is only marginally significant, its economic relevancy is sizeable). So does the advisor market concentration in the acquirer nation.[24] Globally diversified advisors come from more segmented markets and the higher the number of advisors in a market the more likely it seems that bidders select advisors that are globally diversified. At the same time, acquirers select advisors specialized in the target nation (acquirer nation) when the number of advisors in the target nation (acquirer nation) is greater and the target nation (acquirer nation) knows less competition among advisors. The choice for target-nation or acquirer-nation focus may be the result of a preference for a strong market position of a few possible advisors.

The results further suggest that acquirers tend to engage advisors with a greater focus on the target nation (acquirer nation), when the target nation (acquirer nation) has a less open economy. Furthermore, deals involving countries with more financial sophistication and investor protection

[24] When using the value of the deals rather than their number to calculate Herfindahl advisors, the coefficient looses its significance. Given the skewness of the deal value distribution, using the number of deals may provide a more accurate and stable assessment of market concentration.

seem to require more domestically focused advisors. We can clarify this relation by means of Models II and III, suggesting that stricter investor protection in the target or acquirer nation induces acquirers to select advisors that specialize in the target or acquirer nation, respectively.

Formalism and economic development in the acquirer nation, but not in the target nation influence advisor choice. In particular, acquirers from countries that are economically less developed and feature greater formalism tend to engage more domestically focused advisors, with a specific focus on the acquirer nation. From the bilateral country characteristics, only cultural distance between the target and acquirer nation significantly influences advisor choice. Acquirers tend to engage advisors that specialize in the target nation when the cultural distance between the two countries is greatest.

## 2. Bidder returns

In Panel B we present the two-stage-least-squares regressions that account for the possibility that the (expected) valuation effects determine the advisor choices of acquirer. In Model I the effect of international diversification is consistently negative and significant. Our results do not only remain robust when controlling for this selection procedure, the negative impact of diversification becomes even more negative.

In Model II we account for the possibility that valuation effects determine the acquirer's decision on target- or acquirer-nation focus. It should be noted that the impact of target-nation focus on bidder's returns is only significant relative to third-nation focus, yet looses its significance after addressing its endogeneity by means of instrumentation. Acquirer-nation focus, on the other hand, does not lose its significance.

## V. Robustness analyses

In this section we investigate the effect of the international diversification of the bidders, advisor industry diversification and multiple advisor deals on our results.

### A. International diversification of the bidders

Moeller and Schlingemann (2005) show that increases in acquirers' international diversification negatively influence acquirer returns. Their result suggests that our negative advisors' international diversification effect might be an artifact of the increase in international diversification of the acquirers themselves. We test this issue by interacting the *advisor's* international diversification with a proxy for the marginal increase in the *acquirer's* international diversification. Our proxy is a dummy that equals one for acquirers that have acquisition experience in the target country in the ten years prior to their cross-border acquisition announcement and zero otherwise. The acquirer's international diversification is more likely to increase for firms without such experience. We use the same control variables as Model I in Table 4.

Our (untabulated) results suggest that the first order effect is the advisor's international diversification. The coefficient for international diversification remains significantly negative (coefficient equals -1.00%, *p*-value equals 0.001), while the coefficients for target-country experience and the interaction are not significant (coefficients equal -0.92% and 0.34% and *p*-values equal 0.406 and 0.554, respectively).

### B. Advisors' industry diversification

Next to advisors' international diversification, acquirers can also regard an advisor's industry diversification or specialization as important. For instance, industry-specific knowledge of banks

can enhance the quality of deal valuations and negotiations. In addition, these banks might have more extensive networks, which can help them in locating potential targets, also internationally. Since international and industry diversification are likely to be correlated, we examine whether our international diversification effect remains robust when controlling for industry diversification. We calculate industry diversification the same way as our international diversification proxy, but based on the shares of industries that the bank advised (on a three-digit SIC code) instead of countries. In line with our expectations, we find that international and industry diversification are highly correlated (correlation coefficient equals 0.71).

We estimate two regressions, both regressions with the same control variables as Model I in Table 4 (results are untabulated and available on request). In the first regression, we replace international diversification with industry diversification. The coefficient is significantly negative (coefficient equals -0.74%, $p$-value equals 0.001), suggesting that advisors with a greater industry focus generate the higher acquirer returns. In the second regression, we run a horse race between international and industry diversification. We find that international diversification remains significantly negative (coefficient equals -0.68%, $p$-value equals 0.09), while industry diversification loses its significance (coefficient equals -0.29%, $p$-value equals 0.387). These results also hold when using deal values for the calculation of international and industry diversification.

### C. Multiple advisors

Since there is no unique way to combine the measure for international diversification for multiple advisors, our basic analysis does not include deals in which firms hire multiple advisors. Deals where firms engage multiple advisors are typically more complex and may therefore require a selection procedure that is different from that of hiring a single advisor. We check

whether these deals significantly influence our results in two ways: first, by adding 240 deals with multiple advisors to our 1,253 observations of our basic regression (i.e., Model I of Table 4); second, by estimating the basic regression for the 240 multiple-advisor deals only (results are available on request).[25] We simply average the international diversification proxy and the two focus proxies of all advisors involved in the deal.

When adding the multiple-advisor deals to our original sample, we find that the coefficient measuring the impact of international diversification on bidders' abnormal returns remains significantly negative (coefficient equals -0.8% with a $p$-value of 0.001). Although the international diversification coefficient loses its significance in the regression with only the subsample of 240 multiple-advisor deals, the size of the coefficient is unaffected (coefficient equals -0.8%, $p$-value equals 0.276). Acquirer-nation focus remains positive, but loses its significance both for the full sample and the multiple-advisor sample (coefficient equals 0.9% with $p$-value equals 0.224; coefficient equals -1.1% with $p$-value equals 0.706, respectively).

## VI.    Conclusion

In this paper, we examine 1,253 cross-border acquisitions in the period 1997 to 2005 to get a better understanding of how the international orientation of banks influences the value of their services. In particular, we examine the impact of a bank's international diversification in their M&A advice on a bidder's announcement returns. We show that the net effect of greater global orientation on returns is negative. This finding suggests that more diversified banks lack the country-specific knowledge and skills that a focused bank possesses to give good M&A advice.

---

[25] Our original sample consists of 279 deals with multiple advisors. We drop 38 deals due to data availability and one deal because the abnormal returns are outside the one percentile thresholds of the one advisor deals. Of the 240 deals, 198 deals are with two advisors, 32 deals with three advisors, eight deals with four advisors, and two deals with five advisors.

Accordingly, additional evidence suggests that the value of M&A advice improves with advisors' focus on the acquirer nation. The inferior advice of more internationally diversified banks can also be caused by greater conflicts of interest between the bank and its client due to smaller reputation concerns.

Because of the additional complexity of dealing with foreign, economic and regulatory practices and conditions in cross-border deals, we examine the selection of advisors. We find that acquirers will select internationally diversified advisors for deals that are large in absolute but small in relative size, and when nations are less financially sophisticated, less economically developed and when investors are less protected. Since possible valuation effects may influence bidders' advisor choices, we control for this situation and find that global diversification retains its negative effect on the acquirer's stock.

# References

Allen, L., Jagtiani, J., Peristiani, S. and Saunders, A., 2004. The Role of Bank Advisors in Mergers and Acquisitions. Journal of Money, Credit, and Banking 36, 197-224.

Amihud, Y., DeLong, G. L. and Saunders, A., 2002. The Effects of Cross-Border Bank Mergers on Bank Risk and Value. Journal of International Money and Finance 21, 857-877.

Bao, J. and Edmans, A., 2009. Do Investment Banks Have Skill? Performance Persistence of M&A Advisors. Mimeo, MIT Sloan School of Management.

Benou, G., Gleason, K. C. and Madura, J., 2007. Impact of Visibility and Investment Advisor Credibility on the Valuation Effects of High-Tech Cross-Border Acquisitions. Financial Management 36, 69-89.

Bolton, P., Freixas, X. and Shapiro, J., 2007. Conflicts of Interest, Information Provision, and Competition in the Financial Services Industry. Journal of Financial Economics 85, 297-330.

Booth, D. and Booth, S., 2009. On the Mathematics behind the Entropy Diversification Measure in Strategic Management. International Journal of Mathematics in Operational Research 1, 532-540.

Bowers, H. M. and Miller, R. E., 1990. Choice of Investment Banker and Shareholders' Wealth of Firms Involved in Acquisitions. Financial Management 19, 34-44.

DeLong, G. L., 2001. Stockholder Gains from Focusing versus Diversifying Mergers. Journal of Financial Economics 59, 221-252.

Deng, E. and Elyasiani, E., 2008. Geographic Diversification and BHC Return and Risk Performance. Journal of Money, Credit and Banking 40, 1217-1238.

Djankov, S., La Porta, R., Lopez-de-Silanes, F. and Shleifer, A., 2003. Courts. Quarterly Journal of Economics 118, 453-518.

Eisenbeis, R. A., Harris, R. S. and Lakonishok, J., 1984. Benefits of Bank Diversification: The Evidence from Shareholder Return. Journal of Finance 39, 881-892.

Ertugrul, M. and Krishnan, K., 2009. Advisor Skill and Acquisition Performance: Do Investment Bankers Make a Difference? Mimeo, Northeastern.

Heckman, J. J., 1979. Sample Selection Bias as Specification Error. Econometrica 47, 153-161.

Hijzen, A., Görg, H. and Manchin, M., 2008. Cross-Border Mergers and Acquisitions and the Role of Trade Costs. European Economic Review 52, 849-866.

Hofstede, G., 1991. Cultures and Organizations: Software of the Mind. McGraw-Hill: Berkshire.

Hunter, W. C. and Jagtiani, J., 2003. An Analysis of Advisor Choice, Fees, and Effort in Mergers and Acquisitions. Review of Financial Economics 12, 65-81.

Jacquemin, A. P. and Berry, C. H., 1979. Entropy Measure of Diversification and Corporate Growth. Journal of Industrial Economics 27, 359-369.

Jaquemin, A. P. and Berry, C. H., 1979. Entropy Measure of Diversification and Corporate Growth. Journal of Industrial Economics 27, 359-369.

Kale, J. R., Kini, O. and Ryan, H. E., 2003. Financial Advisors and Shareholder Wealth Gains in Corporate Takeovers. Journal of Financial and Quantitative Analysis 38, 475-501.

Kaplan, S. N. and Rauh, J., 2009. Wall Street and Main Street: What Contributes to the Rise in the Highest Incomes. Review of Financial Studies Forthcoming.

Kisgen, D. J., Qian, J. Q. and Song, W., 2009. Are Fairness Opinions Fair? The Case of Mergers and Acquisitions. Journal of Financial Economics 91, 179-207.

Kogut, B. and Singh, H., 1988. The Effect of National Culture on the Choice of Entry Mode. Journal of International Business Studies 19, 411-432.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A. and Vishny, R. W., 1997. Legal Determinants of External Finance. Journal of Finance 22, 1131-1150.

Loughran, T. and Vijh, A. M., 1997. Do Long-Term Shareholders Benefit from Corporate Acquisitions? Journal of Finance 52, 1765=1790.

Ma, Q., 2007. Mergers and Investment Banks: How Do Banks Help Targets? Mimeo, Cornell University.

McLaughlin, R. M., 1990. Investment-Banking Contracts in Tender Offers: An Empirical Analysis. Journal of Financial Economics 28, 209-232.

Mehran, H. and Stulz, R. M., 2007. The Eonomics of Conflicts of Interest in Financial Institutions. Journal of Financial Economics 85, 267-296.

Moeller, S. B. and Schlingemann, F. P., 2005. Global Diversification and Bidder Gains: A Comparison between Cross-Border and Domestic Acquisitions. Journal of Banking and Finance 29, 533–564.

Moeller, S. B., Schlingemann, F. P. and Stulz, R. M., 2005. Wealth destruction on a Massive Scale: A study of Acquiring Firm Returns in the Merger Wave of the Late 1990s. Journal of Finance 60, 757-782.

Palepu, K., 1985. Diversification Strategy, Profit Performance and the Entropy Measure. Strategic Management Journal 6, 239-255.

Rau, P. R., 2000. Investment Bank Market Share, Contingent Fee Payments, and the Performance of Acquiring Firms. Journal of Financial Economics 56, 293-324.

Rau, P. R. and Vermaelen, T., 1998. Glamour, Value and the Post-Acquisition Performance of Acquiring Firms. Journal of Financial Economics 49, 223-253.

Rosenbaum, J. and Pearl, J., 2009. Investment Banking: Valuation, Levered Buyouts, and Mergers and Acquisitions. Wiley Finance: Hoboken NJ.

Rossi, S. and Volpin, P. F., 2004. Cross-Country Determinants of Mergers and Acquisitions. Journal of Financial Economics 74, 277-304.

Servaes, H. and Zenner, M., 1996. The Role of Investment Banks. Review of Financial Studies 9, 787-815.

## TABLE 1. SAMPLE COMPOSITION

This table lists the total number of cross-border deals of at least $10 million in which 50% of the shares are acquired to obtain at least 95% ownership after the acquisition. The table further lists the number of acquirers that are not listed, the number of deals involving financial firms, the number of deals for which the designation of the acquirer is unclear, the number of deals in which the acquirer engages more than one advisor, and the resulting number of deals that we analyze.

|  | Number of Deals |
|---|---|
| Total number of cross-border deals in which acquirers engage an advisor:<br>> $ 10 million, 50% acquired shares, 95% ownership after acquisition | 2,218 |
| Acquirer is not listed | 300 - |
| Acquirer or target is financial firm (i.e., primary SIC 6000-6999) | 246 - |
| The designation of the acquirer is unclear (relative size of acquisition is larger than or equal to one) | 45 - |
| Acquirer hires more than one advisor | 279 - |
| Data availability | 95 - |
| Total number of observations in the analysis | 1,253 |

**TABLE 2. TARGET AND ACQUIRER COUNTRIES**

This table lists the twenty target countries with the highest number of cross-border deals and the number of deals originating from each of these countries. Other target countries include (number of deals between brackets): Korea (11), Singapore (10), India (9), Hong Kong (8), South Africa (7), Japan (6), Austria (5), Chile (5), Mexico (5), Argentina (4), Indonesia (4), Poland (4), Russian Federation (4), Taiwan (4), Bermuda (2), Czech Republic (2), Luxembourg (2), Malaysia (2), Philippines (2), Puerto Rico (2), Venezuela (2), Colombia (1), Ecuador (1), Ghana (1), Greece (1), Guernsey (1), Iceland (1), Mauritania (1), Pakistan (1), Thailand (1), Bangladesh (1), Sri Lanka (1).

| Target nation | ISO | Acquirer nation | | | | | | | | | | | | | | | | | | | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | US | GB | DE | CA | FR | NL | AU | SE | CH | ES | IT | NO | DK | BR | CN | IE | BE | IL | FI | NZ | Other | Total |
| United States | US | 0 | 124 | 25 | 53 | 37 | 24 | 13 | 13 | 13 | 0 | 4 | 1 | 1 | 0 | 0 | 8 | 5 | 3 | 9 | 1 | 37 | 371 |
| United Kingdom | GB | 102 | 0 | 10 | 4 | 8 | 8 | 5 | 7 | 9 | 0 | 3 | 1 | 3 | 0 | 0 | 12 | 1 | 1 | 1 | 0 | 11 | 186 |
| Germany | DE | 46 | 16 | 0 | 3 | 1 | 2 | 2 | 2 | 6 | 1 | 4 | 1 | 0 | 0 | 0 | 0 | 5 | 0 | 4 | 0 | 5 | 98 |
| Canada | CA | 60 | 10 | 1 | 0 | 5 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 83 |
| France | FR | 20 | 19 | 2 | 3 | 0 | 3 | 0 | 3 | 2 | 0 | 5 | 1 | 2 | 0 | 0 | 1 | 2 | 1 | 0 | 0 | 1 | 65 |
| Netherlands | NL | 12 | 14 | 1 | 1 | 5 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 6 | 45 |
| Australia | AU | 14 | 7 | 1 | 2 | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 5 | 8 | 43 |
| Sweden | SE | 11 | 8 | 3 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 2 | 41 |
| Switzerland | CH | 7 | 2 | 3 | 2 | 1 | 3 | 1 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 27 |
| Spain | ES | 3 | 7 | 2 | 0 | 1 | 2 | 1 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 3 | 23 |
| Italy | IT | 5 | 7 | 0 | 0 | 2 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 19 |
| Norway | NO | 3 | 5 | 0 | 0 | 2 | 1 | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 19 |
| Denmark | DK | 6 | 2 | 1 | 0 | 0 | 1 | 0 | 3 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 18 |
| Brazil | BR | 7 | 0 | 0 | 1 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 17 |
| China | CN | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 7 | 16 |
| Ireland | IE | 6 | 9 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| Belgium | BE | 3 | 1 | 1 | 1 | 1 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 15 |
| Israel | IL | 12 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| Finland | FI | 4 | 1 | 0 | 0 | 0 | 1 | 0 | 6 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| New Zealand | NZ | 1 | 1 | 0 | 2 | 1 | 0 | 6 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| Other | Other | 35 | 24 | 2 | 2 | 10 | 4 | 3 | 2 | 4 | 0 | 1 | 1 | 0 | 1 | 3 | 0 | 1 | 1 | 0 | 0 | 17 | 111 |
| Total | Total | 362 | 258 | 52 | 76 | 78 | 56 | 34 | 41 | 42 | 1 | 25 | 15 | 11 | 1 | 4 | 22 | 15 | 7 | 29 | 7 | 117 | 1,253 |

**TABLE 3. SUMMARY STATISTICS OF ADVISOR CHARACTERISTICS, ABNORMAL RETURNS, AND CONTROL VARIABLES,**

Panel A of this table lists the mean, standard deviation and quartile percentiles of advisor characteristics, bidder returns, and control variables for all 1,253 observations. We report all variables in percentages, except for international diversification, the number of target SIC codes, and acquirer Tobin's *q*. We define all variables in Appendix 1. Panel B lists the number of observations and the mean values of global diversification, by nation and by target or acquirer origin of the merging firms. The bottom row lists the total number of observations and the means across the countries.

Panel A.

| | Mean | Standard deviation | 25th Percentile | Median | 75th Percentile |
|---|---|---|---|---|---|
| International diversification | 1.68 | 0.73 | 1.26 | 1.92 | 2.24 |
| Global top 5 dummy | 24.98 | 43.31 | 0.00 | 0.00 | 0.00 |
| Target-nation focus | 20.12 | 27.74 | 0.26 | 4.46 | 34.49 |
| Acquirer-nation focus | 25.93 | 30.85 | 0.51 | 9.67 | 49.16 |
| CAR [-1;+1] | 1.03 | 5.95 | -2.20 | 0.50 | 4.00 |
| CAR [-5;+125] | -6.44 | 43.21 | -27.81 | -4.21 | 19.24 |
| d(Stock payment) | 18.44 | 38.79 | 0.00 | 0.00 | 0.00 |
| d(Tender offer) | 15.48 | 36.19 | 0.00 | 0.00 | 0.00 |
| d(Related acquisition) | 74.06 | 43.85 | 0.00 | 100.00 | 100.00 |
| d(Complex deal) | 3.19 | 17.59 | 0.00 | 0.00 | 0.00 |
| Relative transaction size | 10.97 | 15.04 | 1.56 | 5.11 | 13.39 |
| d(Target hires advisor) | 66.96 | 47.05 | 0.00 | 100.00 | 100.00 |
| d(Target is listed) | 23.86 | 42.64 | 0.00 | 0.00 | 0.00 |
| ln(1 + Number of SIC codes of target) | 1.11 | 0.43 | 0.69 | 1.10 | 1.39 |
| Acuirer Tobin's q | 2.57 | 2.48 | 1.33 | 1.78 | 2.70 |
| Acquirer free cash flow to assets | 0.43 | 6.04 | -0.98 | 1.00 | 2.78 |

Panel B.

| Nation | Number of observations | | International diversification | |
|---|---|---|---|---|
| | Target origin | Acquirer origin | Target origin | Acquirer origin |
| Argentina | 4 | 0 | 2.23 | |
| Australia | 43 | 34 | 1.70 | 1.96 |
| Austria | 5 | 8 | 1.79 | 1.71 |
| Bahamas | 0 | 2 | | 2.73 |
| Bangladesh | 1 | 0 | 2.53 | |
| Belgium | 15 | 15 | 1.72 | 1.47 |
| Bermuda | 2 | 13 | 1.48 | 1.66 |
| Brazil | 17 | 1 | 1.86 | 2.44 |
| Canada | 83 | 76 | 1.44 | 1.54 |
| Chile | 5 | 1 | 2.03 | 1.90 |
| China | 16 | 4 | 1.80 | 2.20 |
| Colombia | 1 | 0 | 0.50 | |
| Czech Republic | 2 | 0 | 1.76 | |
| Denmark | 18 | 11 | 1.56 | 1.63 |
| Ecuador | 1 | 0 | 2.39 | |
| Finland | 13 | 29 | 1.80 | 1.56 |
| France | 65 | 78 | 1.69 | 1.79 |
| Germany | 98 | 52 | 1.62 | 1.91 |
| Ghana | 1 | 0 | 2.48 | |
| Greece | 1 | 2 | 2.26 | 1.66 |
| Guernsey | 1 | 0 | 0.46 | |
| Hong Kong | 8 | 14 | 1.85 | 1.61 |
| Iceland | 1 | 0 | 2.33 | |
| India | 9 | 11 | 1.88 | 1.99 |
| Indonesia | 4 | 0 | 2.20 | |
| Ireland-Rep | 16 | 22 | 1.25 | 1.41 |
| Israel | 14 | 7 | 0.94 | 1.80 |
| Italy | 19 | 25 | 1.90 | 1.86 |

| | | | | |
|---|---|---|---|---|
| Japan | 6 | 28 | 1.66 | 1.69 |
| Luxembourg | 2 | 1 | 2.14 | 2.30 |
| Malaysia | 2 | 2 | 1.99 | 2.10 |
| Mauritania | 1 | 0 | 2.07 | |
| Mexico | 5 | 7 | 1.84 | 2.06 |
| Netherlands | 45 | 56 | 1.89 | 1.93 |
| New Zealand | 13 | 7 | 2.12 | 1.61 |
| Norway | 19 | 15 | 1.51 | 1.75 |
| Pakistan | 1 | 0 | 0.96 | |
| Philippines | 2 | 0 | 0.77 | |
| Poland | 4 | 0 | 2.05 | |
| Portugal | 0 | 4 | | 2.35 |
| Puerto Rico | 2 | 0 | 1.55 | |
| Russian Fed | 4 | 4 | 1.58 | 2.05 |
| Singapore | 10 | 4 | 1.89 | 2.15 |
| South Africa | 7 | 10 | 1.74 | 2.04 |
| Korea | 11 | 1 | 1.91 | 0.83 |
| Spain | 23 | 1 | 2.02 | 2.54 |
| Sri Lanka | 1 | 0 | 2.57 | |
| Sweden | 41 | 41 | 1.72 | 1.68 |
| Switzerland | 27 | 42 | 1.82 | 1.83 |
| Taiwan | 4 | 4 | 1.77 | 2.17 |
| Thailand | 1 | 1 | 1.90 | 2.76 |
| United Kingdom | 186 | 258 | 1.63 | 1.69 |
| United States | 371 | 362 | 1.69 | 1.52 |
| Venezuela | 2 | 0 | 1.00 | |
| Total / Mean | 1,253 | 1,253 | 1.75 | 1.89 |

**TABLE 4. THREE-DAY CUMULATIVE ABNORMAL RETURNS AND GLOBAL DIVERSIFICATION**

This table reports the estimated coefficients, the statistical significance levels and the standard errors. Models I, IV, and V are ordinary least squares regressions. In Models II and III, we control for the decision to hire an advisor by means of a Heckman (1979) procedure. In all models except Model III, the dependent variable is the three-day cumulative abnormal return on acquirers' stocks in percent around cross-border deal announcements, CAR(-1,1). The dependent variable in model III is the half-year cumulative abnormal returns, CAR(-5,125). The estimation window runs from 110 days until 10 days prior to the deal announcement. The independent variable of interest is international diversification. International diversification is the entropy measure of diversification defined in Jaquemin and Berry (1979) and Palepu (1985) which equals the sum across all nations where the advisor operates of advisor country shares times the natural logarithm of one over advisor country shares (based on the number of deals during the last year). Appendix I provides the definition of the other independent variables. All regressions include dummies for year, industry and country (i.e., the ten most occurring target and acquirer countries). The number of observations used in the regressions is 1,253. *, **, *** represent statistical significance, based on Huber-White standard errors (reported in parentheses), at the 10%, 5%, and 1% levels, respectively.

| | I | II | III | IV | V |
|---|---|---|---|---|---|
| *Independent Variables* | ols | Heckman | Heckman | ols | ols |
| International diversification | -0.92 *** | -0.90 *** | -3.00 | | -0.83 *** |
| | (0.26) | (0.26) | (1.91) | | (0.27) |
| Global top 5 dummy | | | | -0.89 ** | -0.49 |
| | | | | (0.39) | (0.40) |
| d(Stock payment) | -0.55 | -0.55 | -20.07 *** | -0.57 | -0.58 |
| | (0.58) | (0.58) | (3.97) | (0.59) | (0.58) |
| d(Tender offer) | 0.86 | 0.86 | 12.79 ** | 0.79 | 0.81 |
| | (0.80) | (0.80) | (5.42) | (0.81) | (0.80) |
| d(Related acquisition) | -0.35 | -0.31 | 0.07 | -0.39 | -0.35 |
| | (0.39) | (0.40) | (2.93) | (0.39) | (0.39) |
| d(Complex deal) | 0.68 | 0.70 | -11.82 * | 0.55 | 0.68 |
| | (0.83) | (0.83) | (6.19) | (0.82) | (0.83) |
| Relative transaction size | 2.23 | 2.50 | -4.86 | 2.45 * | 2.17 |
| | (1.48) | (1.56) | (9.20) | (1.46) | (1.47) |
| d(Target hires advisor) | 0.41 | 0.58 | -0.76 | 0.37 | 0.43 |
| | (0.38) | (0.47) | (3.37) | (0.38) | (0.37) |
| d(Target is listed) | -2.75 *** | -2.65 *** | -8.42 * | -2.80 *** | -2.74 *** |
| | (0.75) | (0.78) | (5.07) | (0.76) | (0.75) |
| ln(1 + Number of SIC codes of target) | 0.18 | 0.21 | 7.74 *** | 0.12 | 0.18 |
| | (0.42) | (0.42) | (2.86) | (0.41) | (0.42) |
| Acuirer Tobin's q | 0.08 | 0.08 | -1.35 ** | 0.08 | 0.08 |
| | (0.10) | (0.10) | (0.67) | (0.10) | (0.10) |
| Acquirer free cash flow to assets | 0.80 | 0.92 | 27.77 | 0.42 | 0.84 |
| | (2.87) | (2.89) | (20.59) | (2.80) | (2.87) |
| Inverse mills ratio | | 0.22 | -3.90 | | |
| | | (0.34) | (2.59) | | |
| Year, industry, and country dummies | Yes | Yes | Yes | Yes | Yes |
| Adjusted *R*-squared | 4.3% | 4.5% | 6.9% | 3.8% | 4.6% |

**TABLE 5. THREE-DAY CUMULATIVE ABNORMAL RETURNS AND ADVISOR NATIONAL FOCUS**

This table reports the estimated coefficients, the statistical significance levels and the standard errors. Models I, II, and III are ordinary least squares regressions. In Models IV and V, we control for the decision to hire an advisor by means of a Heckman (1979) procedure. The dependent variable is the three-day cumulative abnormal return on acquirers' stocks in percent around cross-border deal announcements, CAR(-1,1). The estimation window runs from 110 days until 10 days prior to the deal announcement. The independent variable of interest is advisor nationality. Target-nation (acquirer-nation) nationality is the ratio of deals in which the bank advised deals in the target nation (acquirer nation) to the total number of deals advised by the bank over a period of two years prior to the cross-border deal announcement. We orthogonalize international diversification on target-nation and acquirer-nation focus and add the orthogonalized value to Model V. International diversification is the entropy measure of diversification defined in Jaquemin and Berry (1979) and Palepu (1985), which equals the sum across all nations where the advisor operates of advisor country shares times the natural logarithm of one over advisor country shares (based on the number of deals during the last year). Appendix I provides the definition of the other independent variables. All regressions include dummies for year, industry and country (i.e., the ten top target and ten top acquirer country). The number of observations used in the regressions is 1,253. *, **, *** represent statistical significance, based on Huber-White standard errors (reported in parentheses), at the 10%, 5%, and 1% levels, respectively.

| Independent Variables | I<br>ols | II<br>ols | III<br>ols | IV<br>Heckman | V<br>Heckman |
|---|---|---|---|---|---|
| Target-nation focus | 0.88 | | 1.80 * | 1.74 * | 1.31 |
| | (0.87) | | (0.93) | (0.93) | (0.96) |
| Acquirer-nation focus | | 1.54 * | 2.13 ** | 2.05 ** | 1.75 ** |
| | | (0.81) | (0.87) | (0.87) | (0.86) |
| Orthogonalized international diversification | | | | | -0.83 ** |
| | | | | | (0.35) |
| d(Stock payment) | -0.48 | -0.55 | -0.54 | -0.54 | -0.55 |
| | (0.59) | (0.59) | (0.59) | (0.59) | (0.58) |
| d(Tender offer) | 0.88 | 0.89 | 0.88 | 0.88 | 0.86 |
| | (0.81) | (0.81) | (0.81) | (0.81) | (0.80) |
| d(Related acquisition) | -0.40 | -0.37 | -0.37 | -0.32 | -0.31 |
| | (0.40) | (0.39) | (0.40) | (0.40) | (0.40) |
| d(Complex deal) | 0.58 | 0.54 | 0.65 | 0.69 | 0.70 |
| | (0.82) | (0.82) | (0.83) | (0.82) | (0.83) |
| Relative transaction size | 2.70 * | 2.35 | 2.39 | 2.83 * | 2.47 |
| | (1.48) | (1.49) | (1.49) | (1.57) | (1.59) |
| d(Target hires advisor) | 0.29 | 0.37 | 0.35 | 0.63 | 0.58 |
| | (0.38) | (0.38) | (0.38) | (0.48) | (0.47) |
| d(Target is listed) | -2.91 *** | -2.73 *** | -2.83 *** | -2.65 *** | -2.64 *** |
| | (0.78) | (0.76) | (0.77) | (0.80) | (0.79) |
| ln(1 + Number of SIC codes of target) | 0.13 | 0.11 | 0.11 | 0.15 | 0.20 |
| | (0.42) | (0.41) | (0.41) | (0.42) | (0.42) |
| Tobin's q | 0.08 | 0.09 | 0.08 | 0.09 | 0.08 |
| | (0.10) | (0.10) | (0.10) | (0.10) | (0.10) |
| Free cash flow to assets | 0.23 | 0.48 | 0.51 | 0.71 | 0.93 |
| | (2.77) | (2.84) | (2.85) | (2.88) | (2.89) |
| Inverse Mills ratio | | | | 0.36 | 0.22 |
| | | | | (0.34) | (0.34) |
| Year, industry, and country dummies | Yes | Yes | Yes | Yes | Yes |
| Adjusted R-squared | 3.4% | 3.7% | 3.9% | 3.9% | 4.3% |

**TABLE 6. SUMMARY STATISTICS OF ADVISOR CHOICE VARIABLES**

This table lists the mean, median and standard deviation (St.dev.) of deal, acquirers' acquisition-experience, target-nation, acquirer-nation, and bilateral-nation characteristics. Appendix I provides the definition of the other variables.

| | Mean | Median | St.dev. |
|---|---|---|---|
| *Deal characteristics* | | | |
| ln(Value transaction) | 4.975 | 4.909 | 1.488 |
| d(Regulatory approval) | 0.386 | 0 | 0.487 |
| | | | |
| *Acquirer's acquisition experience* | | | |
| ln(1+ Acquisition experience) | 1.829 | 1.946 | 1.309 |
| d(Acquirer experience in target nation) | 0.358 | 0 | 0.480 |
| % Cross-border acquisition experience | 0.360 | 0.333 | 0.330 |
| | | | |
| *Target-nation characteristics* | | | |
| ln(Number of advisors) | 4.259 | 4.159 | 1.115 |
| Herfindahl advisors | 0.072 | 0.049 | 0.106 |
| Openness | 0.602 | 0.547 | 0.469 |
| Financial sophistication | 6.084 | 6.100 | 0.770 |
| Investor protection | 6.906 | 8.000 | 1.668 |
| Formalism | 3.059 | 2.970 | 0.697 |
| ln(GDP per capita ) | 10.179 | 10.280 | 0.475 |
| | | | |
| *Acquirer-nation characteristics* | | | |
| ln(Number of advisors) | 4.385 | 4.357 | 0.974 |
| Herfindahl advisors | 0.058 | 0.049 | 0.040 |
| Openness | 0.611 | 0.547 | 0.455 |
| Financial sophistication | 6.200 | 6.400 | 0.628 |
| Investor protection | 7.022 | 8.000 | 1.638 |
| Formalism | 2.942 | 2.970 | 0.643 |
| ln(GDP per capita ) | 10.256 | 10.282 | 0.347 |
| | | | |
| *Bilateral characteristics* | | | |
| ln(Distance) | 7.977 | 8.623 | 1.223 |
| d(Same legal origin) | 0.501 | 1 | 0.500 |
| Cultural distance | 1.187 | 0.497 | 1.261 |
| d(Similar language) | 0.549 | 1 | 0.498 |

**TABLE 7. TWO-STAGE–LEAST-SQUARES MODEL**

This table reports the estimated coefficients, the statistical significance levels and the standard errors. Panel A reports the ordinary least squares estimates of advisor choice. The dependent variables are international diversification (Model I) and the target- and acquirer-nation focus (Models II and III) of the advisor. Diversification and focus are expressed in percent. Appendix 1 provides the variable definitions. The first column reports the estimated coefficients for each specification, while the second column reports the changes in the dependent variable following a change of two standard deviations (sd) in each of the continuous independent variables or a change from zero to one in each of the dummy variables. Panel B reports the 2SLS results for the bidder returns. *, **, *** represent statistical significance, based on Huber-White standard errors (in parentheses), at the 10%, 5%, and 1% levels, respectively.

Panel A.

| | International diversification I | | Focus | | | |
|---|---|---|---|---|---|---|
| | | | II | | III | |
| | | +2 sd | Target nation | +2 sd | Acquirer nation | +2 sd |
| *Deal characteristics* | | | | | | |
| ln(Value transaction) | 11.594 *** | 34.5 | -0.018 | -0.1 | -0.689 | -2.0 |
| | (1.629) | | (0.509) | | (0.561) | |
| d(Stock payment) | -10.715 * | -10.7 | -1.807 | -1.8 | 5.586 *** | 5.6 |
| | (5.566) | | (1.696) | | (2.083) | |
| d(Related acquisition) | 0.527 | 0.5 | -0.587 | -0.6 | 1.331 | 1.3 |
| | (4.621) | | (1.589) | | (1.598) | |
| d(Regulatory approval) | 4.016 | 4.0 | -0.696 | -0.7 | -0.263 | -0.3 |
| | (4.386) | | (1.497) | | (1.461) | |
| d(Complex deal) | 5.386 | 5.4 | -3.610 | -3.6 | -0.054 | -0.1 |
| | (11.189) | | (4.249) | | (2.691) | |
| *Target characteristics* | | | | | | |
| Relative size | -47.156 *** | -14.2 | -7.981 | -2.4 | 19.076 *** | 5.7 |
| | (16.314) | | (5.270) | | (5.674) | |
| d(Target hires advisor) | -3.887 | -3.9 | 3.827 ** | 3.8 | -2.890 | -2.9 |
| | (5.121) | | (1.515) | | (1.869) | |
| d(Target is listed) | -3.735 | -3.7 | 9.081 *** | 9.1 | -6.932 *** | -6.9 |
| | (5.199) | | (1.971) | | (1.684) | |
| ln(1 + Number of SIC codes of target) | 7.041 | 6.0 | -1.221 | -1.0 | 0.489 | 0.4 |
| | (4.804) | | (1.637) | | (1.699) | |
| *Acquirer characteristics* | | | | | | |
| ln(1+ Acquisition experience) | 3.092 | 8.1 | 0.108 | 0.3 | 0.308 | 0.8 |
| | (2.134) | | (0.725) | | (0.685) | |
| d(Acquirer experience in target nation) | 2.340 | 2.3 | 3.390 * | 3.4 | 0.642 | 0.6 |
| | (5.563) | | (1.852) | | (1.972) | |
| % Cross-border acquisition experience | 6.460 | 4.3 | -3.226 | -2.1 | -3.529 | -2.3 |
| | (7.084) | | (2.279) | | (2.395) | |

| | | | | | | |
|---|---|---|---|---|---|---|
| *Target-nation characteristics* | | | | | | |
| ln(Number of advisors) | 7.606 * | 17.0 | 11.970 *** | 26.7 | -1.400 | -3.1 |
| | (4.581) | | (1.009) | | (1.628) | |
| Herfindahl advisors | -6.031 | -1.3 | 41.793 *** | 8.9 | 0.265 | 0.1 |
| | (29.938) | | (4.706) | | (10.050) | |
| Openness | 4.195 | 3.9 | -4.505 *** | -4.2 | 2.163 | 2.0 |
| | (5.865) | | (1.174) | | (1.827) | |
| Financial sophistication | -11.387 ** | -17.5 | -0.989 | -1.5 | 0.684 | 1.1 |
| | (4.734) | | (1.122) | | (1.949) | |
| Investor protection | -5.772 *** | -19.3 | 2.077 *** | 6.9 | 0.389 | 1.3 |
| | (1.982) | | (0.508) | | (0.693) | |
| Formalism | -5.010 | -7.0 | 1.409 | 2.0 | 0.456 | 0.6 |
| | (3.706) | | (1.033) | | (1.318) | |
| ln(GDP per capita ) | 0.172 | 0.2 | 2.110 | 2.0 | -2.249 | -2.1 |
| | (6.487) | | (1.368) | | (2.684) | |
| *Acquirer-nation characteristics* | | | | | | |
| ln(Number of advisors) | 14.766 ** | 28.8 | -7.900 *** | -15.4 | 16.256 *** | 31.7 |
| | (6.222) | | (2.179) | | (1.609) | |
| Herfindahl advisors | 182.760 * | 14.7 | -65.218 ** | -5.2 | 99.429 *** | 8.0 |
| | (95.946) | | (31.300) | | (22.365) | |
| Openness | 11.532 * | 10.5 | -1.906 | -1.7 | -5.178 *** | -4.7 |
| | (6.014) | | (1.892) | | (1.438) | |
| Financial sophistication | -7.571 | -9.5 | 0.257 | 0.3 | 0.705 | 0.9 |
| | (5.342) | | (1.820) | | (1.433) | |
| Investor protection | -7.159 *** | -23.5 | 0.871 | 2.9 | 2.091 *** | 6.9 |
| | (1.978) | | (0.665) | | (0.645) | |
| Formalism | -6.648 | -8.5 | -2.028 | -2.6 | 4.751 *** | 6.1 |
| | (4.051) | | (1.311) | | (1.146) | |
| ln(GDP per capita ) | -19.878 *** | -13.8 | 1.717 | 1.2 | 6.823 *** | 4.7 |
| | (6.061) | | (2.004) | | (1.544) | |
| *Bilateral characteristics* | | | | | | |
| ln(Distance) | 0.901 | 2.2 | -0.748 | -1.8 | -0.647 | -1.6 |
| | (1.789) | | (0.593) | | (0.600) | |
| d(Same legal origin) | 4.777 | 4.8 | 0.169 | 0.2 | 2.056 | 2.1 |
| | (6.214) | | (1.820) | | (2.262) | |
| Cultural distance | 2.962 | 7.5 | 1.039 * | 2.6 | 0.029 | 0.1 |
| | (2.189) | | (0.532) | | (0.810) | |
| d(Similar language) | 5.658 | 5.7 | -1.180 | -1.2 | -1.736 | -1.7 |
| | (5.986) | | (1.658) | | (2.082) | |
| Constant | 412.729 *** | | -41.224 * | | -123.730 *** | |
| | (86.826) | | (22.934) | | (29.114) | |
| Adjusted R2: | 11.0% | | 35.2% | | 36.8% | |

Panel B.

| Independent Variables | 2sls | 2sls |
|---|---|---|
| International diversification | -3.10 *** | |
| | (0.82) | |
| Target-nation focus | | -3.73 |
| | | (4.74) |
| Acquirer-nation focus | | 13.12 *** |
| | | (4.38) |
| d(Stock payment) | -0.68 | -1.07 * |
| | (0.50) | (0.58) |
| d(Tender offer) | 0.80 | 1.00 |
| | (0.76) | (0.83) |
| d(Related acquisition) | -0.24 | -0.23 |
| | (0.41) | (0.44) |
| d(Complex deal) | 1.03 | 0.37 |
| | (1.05) | (1.17) |
| Relative transaction size | 1.27 | -0.06 |
| | (1.30) | (1.66) |
| d(Target hires advisor) | 0.64 | 0.86 * |
| | (0.41) | (0.48) |
| d(Target is listed) | -2.56 *** | -1.61 * |
| | (0.68) | (0.91) |
| ln(1 + Number of SIC codes of target) | 0.32 | -0.01 |
| | (0.43) | (0.47) |
| Tobin's q | 0.05 | 0.10 |
| | (0.08) | (0.09) |
| Free cash flow to assets | 2.09 | 2.31 |
| | (3.01) | (3.31) |
| Year, industry, and country dummies | Yes | Yes |
| Adjusted R-squared | 1.64% | -17.31% |

**APPENDIX 1. VARIABLE DEFINITIONS**

This table lists the variable name, definition, unit, and source (Src.). Units include: 0/1: dummy variable that equals one or zero, $-mln: millions of US dollars, $-PPP: purchase power adjusted US dollars, %: percentage, km: kilometers, and x-y: range going from x to y. Sources include: D: doingbusiness.com, DLLS: Djankov et al. (2003), F: Factbooks, GCR: Global Competitiveness Report 2005-2006, K/H: Kogut and Singh (1988) and Hofstede (1991), LLSV: La Porta et al. (1997), M: mapcrow.info, DS: Datastream, SDC: Securities Data Corporation database, and WDI: World Development Indicators.

| Variable Name | Definition | Unit | Src. |
|---|---|---|---|
| *Cumulative Abnormal Returns* | | | |
| CAR(-1,1) | The percentage three-day Cumulative Abnormal Returns (CARs) of cross-border deal announcements. The estimation window runs from 110 days until 10 days prior to the deal announcement. | % | DS |
| CAR(-5,125) | The percentage half-year Cumulative Abnormal Returns (CARs) of cross-border deal announcements, cumulated over the period starting five days prior to the announcement until 125 days after the announcement. The estimation window runs from 110 days until 10 days prior to the deal announcement. | % | DS |
| *Advisor Characteristic* | | | |
| International Diversification | The entropy measure of diversification defined in Jaquemin and Berry (1979) and Palepu (1985) which equals the sum across all nations where the advisor operates of advisor country shares times the natural logarithm of one over advisor country shares (based on the number of deals during the last year). | - | SDC |
| d(Global top 5) | =1 if the advisor belongs to the global top five in terms of market share during the year prior to the cross-border M&A announcement. | - | SDC |
| Target-nation focus | The ratio of the number of advised deals that take place in the target nation and the total number of advised deals during two years prior to the year of the cross-border M&A announcement. | % | SDC |
| Acquirer-nation focus | The ratio of the number of advised deals that take place in the acquirer nation and the total number of advised deals during two years prior to the year of the cross-border M&A announcement. | % | SDC |
| *Deal Characteristics* | | | |
| ln(Value transaction) | Natural logarithm of the value of the transaction. | $-mln | SDC |
| d(Stock payment) | = 1 if at least a proportion of the payment consists of stock, = 0 otherwise. | 0/1 | SDC |
| d(Tender offer) | =1 if SDC classifies the deal as a tender offer | 0/1 | SDC |
| d(Related acquisition) | = 1 if the target and acquirer have at least one equal 3-digit SIC code, = 0 otherwise. | 0/1 | SDC |
| d(Regulatory approval) | = 1 if regulatory agencies have to approve the deal, = 0 otherwise. | 0/1 | SDC |
| d(Complex deal) | = 1 if the reaction of the target to the acquirer's bid upon the initial disclosure of the offer price is hostile or unsolicited, or if there are more than one bidder, = 0 otherwise. | 0/1 | SDC |

| *Target Characteristics* | | | |
|---|---|---|---|
| Relative transaction size | Ratio of the transaction value to the market value of the acquirer. We measure the market value of the acquirer at the beginning of the year of the acquisition announcement and equals the book value of the acquirer's assets minus its book value of equity plus its market value of equity. | - | SDC |
| d(Target hires advisor) | = 1 if target hires an advisor, = 0 otherwise. | 0/1 | SDC |
| d(Target is listed) | = 1 if target is listed, = 0 otherwise. | 0/1 | SDC |
| ln(1+ Number of SIC codes of target) | Natural logarithm of one plus the number of SIC codes of the target. | - | SDC |
| *Acquirer Characteristics* | | | |
| ln(1+ Acquisition experience) | Natural logarithm of one plus the number of deals in the ten years prior to the cross-border deal in which the acquirer and/or acquirer parent obtained at least 50% of the assets to own at least 95%. | - | SDC |
| d(Acquirer experience in target nation) | = 1 if the acquirer and/or acquirer parent has acquisition experience in target nation in the ten years period prior to the cross-border acquisition, = 0 otherwise. | 0/1 | SDC |
| % Cross-border acquisition experience | Percentage of cross-border deals in the ten years prior to the cross-border deal in which the acquirer and/or acquirer parent obtained at least 50% of the assets to own at least 95% (equals zero if there were no cross-border deals or no deals). | % | SDC |
| Tobin's *q* | Ratio of the market value of total assets to the book value of total assets. The market value of total assets equals book value of total assets plus market value of equity minus book value of equity. | - | SDC |
| Free cash flow to assets | EBITDA scaled by the market value of total assets. The market value of total assets equals book value of total assets plus market value of equity minus book value of equity. | - | SDC |
| *Target- Nation Characteristics* | | | |
| ln(Number of advisors) | Natural logarithm of the number of advisors operating in the target nation. We calculate the number of advisors over two years prior to the year in which the cross-border acquisition announcement takes place. | - | SDC |
| Herfindahl advisors | Sum of shares squared (in number of deals) of advisors operating in the target nation. We base advisors' market share on deals announced during the two years prior to the cross-border acquisition announcement. | - | SDC |
| Openness | Ratio of target nation's import plus export to its GDP. | % | WDI |
| Financial sophistication | Financial market sophistication (1=lowest, 7=highest). | 1-7 | GCR |
| Investor protection | Investor protection index of the nation (0=no protection, 10=full protection). | 0-10 | D |
| Formalism | Aggregate measure of substantive and procedural intervention in lower-court proceedings for evicting a non-paying private residence tenant (0=lowest, 7=highest). | 0-7 | DLLS |
| ln(GDP per capita) | Gross domestic product per capita of the nation. | $-PPP | WDI |
| *Acquirer-Nation Characteristics* | | | |
| ln(Number of advisors) | Natural logarithm of the number of advisors operating in the acquirer nation. We calculate the number of advisors over two years prior to the year in which the cross-border acquisition announcement takes place. | - | SDC |

| Herfindahl advisors | Sum of shares squared (in number of deals) of advisors operating in the acquirer nation. We base advisors' market share on deals announced during the two years prior to the cross-border acquisition announcement. | - | SDC |
|---|---|---|---|
| Openness | Ratio of acquirer nation's import plus export to its GDP. | % | WDI |
| Financial sophistication | Financial market sophistication (1=lowest, 7=highest). | 1-7 | GCR |
| Investor protection | Investor protection index of the nation (0=no protection, 10=full protection). | 0-10 | D |
| Formalism | Aggregate measure of substantive and procedural intervention in lower-court proceedings for evicting a non-paying private residence tenant (0=lowest, 7=highest). | 0-7 | DLLS |
| ln(GDP per capita) | Gross domestic product per capita of the nation. | $-PPP | WDI |
| *Bilateral Nation Characteristics* | | | |
| ln(Distance) | Natural logarithm of the physical distance between the target and acquirer nation. | km | M |
| d(Same legal origin) | = 1 if the legal origin of the target and acquirer nation is the same, = 0 otherwise. | 0/1 | LLSV |
| Cultural distance | Kogut and Singh (1988) index that aggregates the differences in the four Hofstede (1991) cultural dimensions between the target and acquirer nation. | - | K/H |
| d(Similar language) | = 1 if any of the languages of the target and acquirer nation are similar, = 0 otherwise. | 0/1 | F |