

# Method of payment and risk mitigation in cross-border mergers and acquisitions\*

Peng Huang  
University of Waikato  
Email: [phuang@waikato.ac.nz](mailto:phuang@waikato.ac.nz)

Micah S. Officer  
Loyola Marymount University  
Email: [micah.officer@lmu.edu](mailto:micah.officer@lmu.edu)

Ronan Powell<sup>†</sup>  
University College Dublin  
Email: [ronan.powell@ucd.ie](mailto:ronan.powell@ucd.ie)

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## Abstract

We argue that the method of payment in cross-border mergers and acquisitions (M&As) can mitigate country-level governance risk for the acquirer. We find a greater use of stock as the method of payment in cross-border deals involving targets from countries with high governance risk relative to that in the acquirer's country. This increased use of stock in riskier cross-border deals is consistent with the optimal reaction of the acquirer to avoid overpayment, even though we also show that the use of stock (instead of cash) as the method of payment in cross-border deals is associated with a lower likelihood of deal completion. Furthermore, for more recent periods (i.e., after 2000) we show that the use of stock (cash) has increased (decreased) significantly in cross-border deals, resulting in convergence with the method of payment used in domestic deals.

*Keywords:* Cross-border M&A; cash deals; stock deals; governance risk; overpayment

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<sup>†</sup> Corresponding author.

# **Method of payment and risk mitigation in cross-border mergers and acquisitions**

## **Abstract**

We argue that the method of payment in cross-border mergers and acquisitions (M&As) can mitigate country-level governance risk for the acquirer. We find a greater use of stock as the method of payment in cross-border deals involving targets from countries with high governance risk relative to that in the acquirer's country. This increased use of stock in riskier cross-border deals is consistent with the optimal reaction of the acquirer to avoid overpayment, even though we also show that the use of stock (instead of cash) as the method of payment in cross-border deals is associated with a lower likelihood of deal completion. Furthermore, for more recent periods (i.e., after 2000) we show that the use of stock (cash) has increased (decreased) significantly in cross-border deals, resulting in convergence with the method of payment used in domestic deals.

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## 1. Introduction

The choice of method of payment in mergers and acquisitions (M&As) has important implications for both the acquirer and target, including post-takeover ownership structure, risk profile, and the allocation of gains from the transaction (Martin, 1996; Faccio and Masulis, 2005). The method of payment that the acquirer pays to target shareholders in an M&A deal can be cash, acquirer stock (in which an exchange ratio is specified for conversion of target shares into acquirer shares), or a combination of the two (mixed deals).<sup>1</sup> The existing literature shows that cash is the dominant alternative in U.S.-domestic M&A deals (e.g., Travlos, 1987; Martin, 1996), followed by acquirer stock, and mixed deals.

For cross-border deals, defined as those in which the bidder and target are domiciled in different countries, the choice of method of payment is likely to involve factors not considered by domestic-focused acquirers. While some recent studies have examined the determinants and wealth effects of cross-border M&As (Rossi and Volpin, 2004; Makaew, 2011; Erel, Liao, and Weisbach, 2012; Lin, Officer, and Shen, 2014), the choice of method of payment has received little attention, and is the focus of this study.

Our hypothesis is that an important element that should impact the method of payment in cross-border deals is the transparency, corporate governance, or institutional quality of the country in which the target is located. Specifically, when the country in which the target is domiciled exhibits weaker corporate governance practices or rules, weaker shareholder protection, or less transparency, a cross-border deal is substantially more risky for the acquirer. We refer to

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<sup>1</sup> There are more exotic payment structures (such as those involving debt and other considerations) that we do not consider in this paper.

this as governance risk. Because this risk (or opacity) restricts what the acquirer can know about the target because of the institutional environment in which that target resides, this governance risk increases the probability that the acquirer overpays for the target firm (Hansen, 1987). In this setting, the acquirer is likely to view a stock swap as a desirable method of payment because the use of acquirer stock to finance the deal helps protect against overpayment when negotiating with an opaque target (in this case, a target from a foreign country with greater governance risk, or lower transparency). The use of stock internalizes overpayment risk since both acquirer and target shareholders share any post-takeover losses arising from overpayment (as in Hansen, 1987).

The use of acquirer stock as the method of payment does, however, bring with it costs. Specifically, given the inherent uncertainty associated with that method of payment relative to the alternative (cash), especially given that the acquirer shares that are being offered are likely traded on an overseas exchange, target shareholders are likely to prefer, all else equal, all-cash offers by foreign bidders. Therefore, stock-swaps present a foreign acquirer with a tradeoff: using acquirer stock in the acquisition mitigates some of the risk of overpayment when the foreign target is relatively opaque, but using cash as a method of payment may increase the probability with which the deal is consummated.

Using a sample of 47,481 domestic and cross-border M&As in 46 countries for the period 1990 – 2010, we examine the determinants of the method of payment choice, and specifically whether relative (acquirer vs. target) country-level governance risk factors impact the method of payment. Extant studies (Faccio and Masulis, 2005; Makaew, 2011; Erel, Liao, and Weisbach, 2012) provide guidance for the country-level risk factors that we examine, including the level of

shareholder protection, corporate governance, financial reporting quality and transparency, and stock market performance. We find strong evidence that these country-level risk factors significantly influence the choice of method of payment in cross-border M&A deals, consistent with our hypothesis. Specifically, we find that the difference between country-level governance measures (using multiple different proxies) for the acquirer and target is associated with a significantly greater use of stock (and decreased use of cash) in cross-border M&A deals.

We also find that stock deals are more likely to occur when recent returns to the acquirer's home-country stock market (relative to the target's) are higher, and when the bidder maintains a stock listing (typically a cross-listing) in the target's country. This is consistent with the view that target shareholders are more likely to accept acquirer stock when they have more confidence in its relative value and ease of tradability. Taken together, our results suggest that greater relative country-level governance risk and target shareholder confidence in (or comfort with) the stock of the acquirer increases the probability that acquirer equity is used to finance a cross-border M&A deal. Further, we find evidence that the use of stock to finance cross-border deals is associated with lower rates of deal completion (compared to cash and mixed deals), leading to the tradeoff discussed above.

One byproduct of our analysis of the method of payment in cross-border M&A deals is that it reveals an interesting time trend: while cash is the preferred method of payment across all deals (domestic and cross-border), time-series analysis shows evidence of a statistically significant convergence in methods of payment for domestic and cross-border mergers. This convergence is driven by a decrease in the use of cash (and increase in the use of stock) in cross-border deals

over our sample period. For example, while the use of cash as the sole method of payment in the post-2000 period *increases* for domestic deals, there is a significant *decline* in cash-only cross-border deals. Furthermore, while the use of mixed- and stock-only methods of payment declines significantly in domestic deals after 2000, there is a significant increase in both types in cross-border deals.

We can at least partly explain this time trend with governance risk. We find that in the post-2000 period, the relative governance risk for acquirers in cross-border deals increases markedly, potentially because acquirers feel more confident in selecting targets from more opaque countries (possibly attributable to changes in technology, as in Castellani, Jimenez and Zanfei, 2016). This increase in relative (target vs. acquirer) risk helps to explain the greater use of stock in cross-border deals over time, but there is still some residual convergence after the year 2000 that these risk proxies (and other control variables) cannot explain.

The rest of the paper is organized as follows. The next section provides a brief overview of the literature and the testable hypotheses. Section 3 describes the econometric models and variables employed. Section 4 outlines the sample selection process, and reports some summary statistics. The multivariate regression results are reported in Section 5, followed by some robustness tests. Section 6 concludes.

## **2. Related literature and hypothesis development**

Theories related to information asymmetry around M&A deals usually relate to target valuation uncertainty, reducing the risk of bidder overpayment, and signaling bidder value or

quality. Hansen's (1987) model predicts that stock is more likely to be used by acquiring firms when there is considerable uncertainty (which Hansen refers to as asymmetric information) about the value of the target. By using stock, the risk of overpayment is reduced since post-takeover acquiring and target shareholders will share in any losses attributed to overpayment. On the other hand, Fishman's (1989) model predicts that bidders can signal confidence in their valuation of the target by offering cash. The use of an all-cash bid signals bidder confidence because in cash offers the bidder absorbs all losses arising from overpayment. Furthermore, Fishman (1989) also argues the use of cash will ward off competing bidders due to higher overpayment costs they would need to incur to match or exceed the bid.

We predict that bidding for foreign (as compared to domestic) targets is likely to involve significantly greater uncertainty for a potential acquirer. Differences in acquirer-target country-level governance and transparency factors, including measures of shareholder protection, political stability, geographic distance, language, and financial reporting quality are factors that are all likely to affect the amount of uncertainty that the bidder faces when evaluating a foreign target (see, e.g., Rossi and Volpin, 2004; Kang and Kim, 2010; Lim, Makhija, and Shenkar, 2012). Because uncertainty about the value of a foreign target potentially results in overpayment, acquirers may react to this governance risk by offering stock as the method of payment (thereby sharing any potential losses with the target).

However, because acquirer stock, especially from a foreign acquirer, is a risky method of payment from the perspective of target shareholders (at least relative to cash), target shareholders may prefer all-cash (or at least mixed) offers by foreign bidders. Equity offers confront a foreign

acquirer with a tradeoff: using acquirer stock in the acquisition may mitigate some of the risk of overpayment when the foreign target is opaque, but may also lower the probability that the deal is completed.

This leads to the following hypothesis:

*H1:* Since targeting a foreign firm is likely to involve greater governance risk or uncertainty, we predict that in cross-border M&A deals bidders will:

(a) offer stock if they value the loss from overpayment more than the risk of deal failure;

(b) offer cash if they value greater certainty about deal completion, or want to signal bidder confidence in target valuation (Fishman, 1989).

### **3. Variable definitions and econometric models**

#### *3.1. Country-level variables*

To capture the relative governance risk (or transparency) of the bidder and target countries, we employ several country-level factors, including (1) the revised anti-directors rights index (RADI); (2) a composite governance index, namely the International Country Risk Guide (ICRG); (3) whether the origins of a country's corporate law is English common law; (4) a transparency index, published by the World Bank (WB); and a more recent Corporate Governance Reform index (CGRI) created by Kim and Lu (2013). The RADI captures the legal protection of minority shareholders against expropriation by corporate insiders (La Porta et al., 1998; Djankov, La Porta, Lopez-de-Silanes and Shleifer (2008)).<sup>2</sup> The ICRG index is a weighted composite measure based

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<sup>2</sup> Our results are unchanged when we use the Djankov et al. (2008) anti-self-dealing index (ASDI).



on political, financial and economic risk indicators. A high (low) value indicates low (high) risk.

Countries whose corporate law is governed by English common law are argued to have greater shareholder rights (La Porta, Lopez-de-Silanes, Shleifer, and Vishny, 1998), therefore we create a common law indicator variable (equal to one for common law countries, and zero otherwise). The World Bank transparency index is also an aggregate-based index, capturing economic, institutional and political transparency, and so reflects ease of access to financial, economic and political information. A high value of the transparency index indicates easy public access to relevant and reliable information of markets, and legal and political systems, which strengthen a firm's ability to make better-informed decisions when negotiating the payment method. The ICRG index is more appealing because it is time-variant, so is likely to capture changes in risk over time.

The CGRI tracks significant governance reforms around the world from 1991 to 2007. The reforms are significant because they are regulated and enshrined in law by governments, as opposed to voluntary schemes that may have little impact. Examples include major corporate governance reforms to strengthen minority shareholder rights, improved disclosure requirements, and rules on board independence (see appendix of Kim and Lu, 2013 for specific details).

We measure all these factors on a relative basis (acquirer country minus target country), capturing the relative strength of the acquirer country to the target country. As discussed in the hypothesis section above, we expect a greater use of stock in M&A deals where the target country's governance risk is greater than the bidder country (and vice versa for cash).

Gravity measures, such as geographic distance and language, are also associated with

uncertainty in international investments. Large geographic distance and different languages between bidder and target countries increases the cost of communication and due diligence. For cross-border deals, we measure geographic distance as the weighted average distance between the major cities in each country. For domestic deals, distance is measured using the distance between the registered head offices of the bidder and target.<sup>3</sup> We use an indicator variable for cross-border deals in which the bidder and target have the same official language.

The last set of country-level variables we use capture the relative performance of the acquirer and target stock markets (i.e., differences in returns), creditor rights (creditor rights index), and broader country factors that capture growth and financial market development. To measure country-level growth and wealth, we include the relative GDP growth rate. We use stock market capitalization divided by GDP as a proxy for a country's financial market development, since higher levels of financial market development are associated with lower financing costs. For shareholders of foreign targets, obtaining stock (via a stock swap) from a firm in a more developed financial market may also be an attractive option. In that vein, we add a cross-listed indicator variable (equal to one if the bidder shares are also listed on the target country's stock exchange, and zero otherwise) to capture the fact that bidder stock is likely to be dramatically more attractive to targets if listed on a local exchange.

### *3.2. Deal and other characteristics*

We include a cross-border indicator variable in our models to directly test if method of

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<sup>3</sup> Our results are unaffected by setting this distance equal to zero for domestic deals.

payment differs between domestic and cross-border deals. We also include several other deal variables to capture characteristics reported to affect method of payment choice (e.g., Faccio and Masulis, 2005; Masulis, Wang, and Xie 2007; Harford, Humphery-Jenner, and Powell, 2012). These include the target firm's organizational status (public, private, and subsidiary), reaction to the offer (hostile or friendly), whether the deal has more than one bidder (competed), and the relative size of the deal.

Private target owners may prefer cash to stock because of their concentrated and illiquid ownership, and parent firms frequently sell subsidiaries to reduce financial distress and restructure (Officer, 2007). Hence, the target usually prefers a cash payment if it is a private or subsidiary firm. On the other hand, the acquirer may also be concerned about the listing status of the target. Paying stock to a private target could dilute managerial ownership and increase monitoring of the acquirer because of the concentrated ownership in the private target (Masulis et al., 2007; Harford et al., 2012). We also expect cash to be more common for competing and hostile bids, since these deals are usually motivated by disciplinary reasons: getting the deal completed quickly, which is more likely to occur in a cash deal, is of greater importance.

Relative size is measured as the transaction value divided by acquirer total assets. Holding other factors constant, when the target is relatively large compared to the acquirer, it is costlier for the acquirer to make a cash-only acquisition bid. Also, uncertainty (or information asymmetry) about the target's intrinsic value increases when the target is relatively large (Hansen, 1987; Faccio and Masulis, 2005). Both these factors suggest greater use of stock as relative size increases. We also include some acquirer-level variables that are standard in the literature

explaining method of payment choice, including acquirer size, leverage, asset tangibility, and abnormal stock returns (Travlos, 1987; Rossi and Volpin, 2004; Faccio and Masulis, 2005).

### 3.3. *Econometric models*

We estimate probit model specifications similar to Rossi and Volpin (2004):

$$\begin{aligned} \text{MOP}_j = & \alpha + \beta^{(1)}\text{Crossborder}_j + \beta^{(2)}\text{Country\_factors}_j + \beta^{(3)}\text{Deal\_factors}_j + \\ & \beta^{(4)}\text{Firm\_factors}_j + \beta^{(5)}\text{Controls}_j + \varepsilon_j \end{aligned} \tag{1}$$

Where  $\text{MOP}_j$  is method of payment for deal  $j$ . We estimate the models using probit regressions, where for the main model of interest MOP equals one for cash-only deals, and zero otherwise (cash versus *any* stock).<sup>4</sup> Information on the choice of payment method and deal variables must be available for a deal to be included in our sample. We are careful in selecting the payment method data from Thomson's SDC Platinum Database. There are three data fields in SDC that are related to payment method. The most commonly used data field contains detailed method of payment percentages. However, this data field suffers from frequent inconsistencies, or even mistakes, as suggested in Faccio and Masulis (2005).<sup>5</sup> There are two other related data fields, which only classify the method of payment into categories. One of the fields is constructed

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<sup>4</sup> We also estimate a model comparing cash-only deals to mixed deals, where mixed deals are defined as those financed with a combination of cash and stock (i.e., excluding stock-only deals). The results (untabulated) are similar to those reported.

<sup>5</sup> Faccio and Masulis (2005) alleviate this problem by hand collecting payment method data based on descriptive information presented in SDC.

by SDC on the basis of certain assumptions, but has the most available information on payment method.<sup>6</sup> We can replicate the Faccio and Masulis (2005) sample, and get very close to the Rossi and Volpin (2004) sample size, only when we select the data field with the most complete information on the breakdown of payment method by percentages. Therefore, we focus on the broad categories of method of payment choice (instead of using detailed percentages) since this results in a significantly larger sample. We do, however, test the robustness of our findings to samples for which only complete payment percentages are available (see Section 6).

‘Crossborder’ is an indicator variable equal to one for cross-border deals, and zero otherwise. Cross-border deals are defined as those deals in which the bidder and target are domiciled in different countries.<sup>7</sup> ‘Country\_factors’ captures the relative country-level governance (or transparency) risk factors (Revised anti-director rights index (RADI), International country risk guide index (ICRG), Common law indicator, Transparency index, and the corporate governance reform index (CGRI)), gravity measures (distance and language), creditor rights, and relative stock market returns. These, and all the other variables employed in this paper, are defined in the appendix. ‘Deal\_factors’ captures deal-specific characteristics, including organizational status, deal mood (hostile or friendly), and relative size. ‘Firm\_factors’ captures acquirer-level characteristics, including size, leverage, asset tangibility, abnormal returns, and an indicator variable for whether the acquirer’s shares are cross-listed in the target’s country.

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<sup>6</sup> SDC has to make assumptions on payment method for certain deals where the information available is vague. This mostly happens when a deal is likely to be cash only.

<sup>7</sup> The results are robust to alternative definitions of cross-border, including defining bidder and target countries based on the country of origin of the bidder’s ultimate parent company. Furthermore, our results are similar when we estimate the models using a sample containing *only* cross-border deals (and exclude the cross-border indicator).

To control for possible outliers in the continuous firm and deal variables, we winsorize both tails of the distribution for each variable (within country) at the 0.5% level. The models also include some control variables ('Controls'), which mainly reflect country-level growth and financial market development. The models include industry, year, and bidder and target country fixed effects.<sup>8</sup> Robust clustered standard errors are reported at the bidder firm level. Using cluster adjusted standard errors at the bidder or target country-level or bidder-target country pairs level does not materially alter the statistical significance of the reported coefficients.

#### **4. Data and summary statistics**

Our sample contains M&A deals where a publicly traded bidder seeks to own more than 50% of the target's voting stock (i.e., a controlling stake). The sample is obtained from Thomson's SDC Platinum Mergers and Acquisitions database for the period from 1990 to 2010. Following the literature, we exclude exchange offers, LBOs, privatizations, recapitalizations, spin-offs, self-tender offers, repurchases, partial stock-stake purchases, and acquisitions of remaining interest. We also exclude the deals if the target or bidder is a government agency, belongs to the financial or utilities industry, or if the target and bidder have the same DataStream code. Financial and utilities industries are subject to different government regulations, so including them may lead to biased results, as frequently suggested in the literature.

Accounting information for the bidder is from WorldScope. Country-level risk measures

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<sup>8</sup> While time invariant risk measures will be mostly captured by country fixed effects, we show that the time variant risk measures (i.e., ICRG and CGRI), and other variables generally remain statistically significant when we control for bidder and target country fixed effects.

(RADI, ICRG, Common law, Transparency index, and the CGRI), gravity measures (distance and language), and relative stock market returns are obtained from various sources as described in the appendix. We identify an initial sample of 84,084 M&A deals from 46 countries for a controlling interest from SDC Platinum that have method of payment and country-level data, of which 22,994 (27%) are cross-border, and 61,090 are domestic. Applying all the sample requirements outlined above, including firm-level data, results in a sample of about 47,481 deals, of which 12,982 (27%) are cross-border, and 34,499 are domestic.

#### *4.1. Summary statistics*

Table 1 reports summary statistics on payment method choice for the full deal-level sample (Panel A) and the country-level sample (Panel B). The results are consistent across both samples, and show that cash-only is the preferred method of payment choice for all deals, whether domestic or cross-border. Differences in means show that cash is significantly more likely to be used in cross-border deals, with differences ranging from 16% for the full sample (Panel A) to about 12% when aggregated at the country-level (Panel B). The results also show that mixed and stock only deals are less likely to be used in cross-border deals, although differences are not as large when compared to cash.

In Panel A of Table A1 in the Internet appendix to this paper, we report acquirer-country level statistics on the method of payment (Panel B reports target-country level statistics). There are two noteworthy observations from Panel A. First, five countries (United States, United

Kingdom, Canada, Australia, and Japan) account for more than 75% of the sample.<sup>9</sup> Nevertheless, the results in Table 1, Panel B confirm that differences in method of payment hold when aggregated at the country-level, which will minimize this sample imbalance. Second, cash-only deals are more likely to occur in cross-border M&As than in domestic deals in 40 out of 46 countries in our sample, while bidders in only five countries are more likely offer stock-only payment in cross-border deals than in domestic. Four out of those five differences, however, are not statistically significant, and are mainly observed for countries with limited observations (such as Cyprus and Indonesia). In general, the statistics in the online appendix suggest that method of payment exhibits a similar pattern across the world.

Table 2 shows similar statistics, but for the time series over our sample period (1990 to 2010). While not specifically highlighted in the table, for all years the differences in payment methods between cross-border and domestic deals are both economically and statistically significant (mostly at the 5% level, at the 10% level for one year). Specifically, cash-only (stock-only) deals are consistently more popular in cross-border (domestic) deals.

Interestingly, however, the proportion of cross-border deals that are all-cash *declines* almost monotonically over our sample period (from 88% in 1990 to 69% in 2010), and the proportion of cross-border deals that include at least some stock (i.e., mixed or stock-only) consequently increases. By comparing the pre-2000 period with the post-2000 time period (last two rows of the table), it is clear that the increase in mixed payment methods in cross-border deals is the key

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<sup>9</sup> We exclude dominant countries (U.S. / U.K.) from our empirical models in robustness tests also reported in the Internet appendix (Table A2).



driver for this change, with an increase in mixed deals from 14% to 17% while the proportion of all-stock deals does not change much between these decades (10.8% vs. 11.4%).

Specifically, the proportion of mixed method-of-payment cross-border deals increases in our sample from 8% in 1990 to 20% in 2010. This is consistent with the time trend in the method of payment in domestic U.S. M&A deals identified in Boone, Lie, and Liu (2014). Those authors report that the proportion of mixed deals in domestic U.S. M&A transactions increases from about 10% of all deals in the early 1990s to over 30% by the end of the first decade in the 2000s (which is our sample period). Notably, the use of cash as the method of payment *increases* over this time period in the Boone et al. (2014) sample, a trend we also see for domestic deals in Table 2 (last two rows of the table).

The conclusion that we can draw from Table 2 is that there is a significant change in the method of payment in cross-border deals between 1990 and 2010: many more cross-border deals include some stock in the method of payment by the end of our sample period compared to the beginning. This slightly counter-intuitive result, that shareholders of foreign targets appear more willing in recent times to accept acquirer stock in an acquisition, is something that we will return to near the end of this paper.

The evolution of payment methods is also evident in Figure 1 (Panel A to C), which plots differences in average methods of payment between cross-border and domestic deals over time. In Panel A and C, for example, the wedge between the proportion of cash-only and stock-only deals in domestic and cross-border M&As is reasonably constant over time. However, in Panel B the proportionate use of mixed methods of payment in cross-border and domestic deals appears to

converge over time.<sup>10</sup> In fact, the difference between cross-border and domestic deals (lower line in the figure) approaches zero by the end of our sample period.

Table 3 reports summary statistics for the variables included in our empirical models. We report mean (median) values for all firms, differences between cross-border and domestic deals, and differences between the pre-2000 and post-2000 time periods. Noteworthy results from Panel A include that bidders involved in cross-border deals are significantly larger in size, have higher annual returns (especially after 2000), and lower leverage. Country-level variables (Panel B) show that targets involved in cross-border deals generally come from lower growth countries (GDP per capita). Importantly in our context, bargaining, transparency and minority rights are stronger in bidder than in target countries involved in cross-border deals. The last panel of Table 3 reports deal characteristics, and shows that cross-border deals are on average smaller (relative size), and are more likely to involve subsidiary targets. Noteworthy is that the relative size of cross-border deals has increased over time.

## **5. Regression results**

### *5.1. Method of payment choice*

Table 4 contains the regression models. We estimate equation (1) using probit regressions, where the dependent variable is equal to one for cash only deals, and zero otherwise (i.e., any

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<sup>10</sup> Graphs (unreported) using country-pairs to control for over-sampled countries provide similar conclusions. The time series observations in these graphs comprise the annual averages of payment method ratios for all country-pairs. Although there are relatively limited observations for earlier time-periods, on average, the ratio of cash deals has decreased over time in cross-border deals relative to domestic. Further, the ratio of mixed and stock only deals has consistently increased over time.

stock). We estimate eight model specifications for the five relative risk measures separately (RADI, ICRG, Common law indicator, Transparency index, and the CGRI; models (1) to (5)), a full model (model (6)), which includes all relative risk measures, and a full model (model (7)) that also includes bidder and target country fixed effects.

The positive and significant coefficient on the cross-border indicator for all model specifications shows that cash is the preferred method of payment for cross-border deals. This result is consistent with Rossi and Volpin (2004) and Faccio and Masulis (2005).<sup>11</sup>

The relative country-level risk measures reported in Table 4 provide support for the view that relative risk is an important factor in the method of payment choice. The variables included in the model are all measured as the difference between acquirer-country and target-country governance proxy.<sup>12</sup> For example, ‘ICRG composite (A-T)’ is the difference between the International country risk guide index for the acquirer and target countries, with positive (negative) differences indicating that the acquirer country is considered less (more) risky than the target’s country.

The results in Table 4 provide support for our hypothesis that greater uncertainty about the institutional environment in the target’s country (as captured by the relative country risk for the bidder) significantly decreases the likelihood of using cash to finance cross-border deals. Including all five country-risk proxies together in one model (model (6)) suggests that these factors have a consistent impact on the method of payment (all coefficients are significantly

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<sup>11</sup> If we exclude all risk measures (a baseline model) from the models reported in Table 4, the coefficient (partial effect) on the cross-border indicator has a value of 0.155. This value is larger than any of the values reported, suggesting that the country risk measures absorb some (but not all) of the differences in method of payment choice between cross-border and domestic deals.

<sup>12</sup> Because our sample includes domestic as well as cross-border deals, these relative measures are equal to zero for domestic deals. This has little impact on our results, however: as noted earlier, we obtain qualitatively similar results for samples excluding domestic M&A deals.

negative), and thus must all be capturing a different aspect of governance uncertainty about the target's country. More importantly, some of our time variant measures retain significance after controlling for bidder and target country fixed effects (model (7)), and after constraining the sample to exclude dominant countries (i.e., the U.K. and U.S. deals), unsuccessful deals, and deals where specific details of method-of-payment are not available on Thomson's SDC Platinum database.<sup>13</sup>

These results suggest that when the target country has greater governance risk (or uncertainty) than the acquirer country, measured using broad index-based proxies capturing economic, political, and institutional-transparency factors as well as specific proxies for shareholder rights and common-law legal origin, an observed acquisition is more likely to involve the acquirer's stock as part of the method of payment. This is consistent with the seminal model in Hansen (1987), which predicts that the use of stock allows the acquirer to share risk (about, for example, governance, valuation (overpayment), or expropriation (a genuine concern in some cross-border acquisitions)) with target shareholders. Our results demonstrate that broad country-level risk proxies appear to significantly influence the method of payment in the direction predicted by theories based on risk-sharing.

Some of the country-level governance (or risk) proxies used in Table 4 are quite broad, capturing several different aspects of a country's environment and institutions. For example, the International country risk guide index (ICRG) is comprised of proxies for the stability and

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<sup>13</sup> Table A2 in the Internet appendix reports robustness results using different sample constructions. The time invariant measures of relative risk are insignificant in model 7 and other robustness models reported largely because the country-level fixed effects subsume their variance.

institutional quality of a country on financial, economic, and political dimensions. In untabulated analyses, we break this broad country-level index into its components, to help shed light on which kinds of risk may be driving the significant evidence of risk-sharing that we observe in Table 4.

The results of these analyses suggest that the significantly negative coefficient in Table 4 on the International country risk guide index (acquirer minus target) is being driven largely by the political risk component. It appears that the quality of the target country's political institutions significantly impacts acquirers' impressions of the need for risk sharing with target shareholders: greater political risk significantly predicts more equity-based (and less all-cash) method of payment in cross-border M&A deals. It may be the case that political risk increases the possibility that the acquirer overvalues a given target whose business model may be dependent on the political climate in their home country, or simply the case that acquirers concerned about expropriation are more inclined to share such risk with the former shareholders of their newly acquired assets.

In Table 4 we also find some support for the increased use of equity when the bidder is also listed in the target's country (cross-listed). Target shareholders are also more likely to accept bidder stock when the bidder's stock market is performing better than the target's. Important deal and firm-level variables in determining method of payment in domestic and cross-border deals include target organizational status, with private and subsidiary deals more likely to attract cash offers. Consistent with the literature on domestic M&A deals, hostile and competed deals are less likely to use equity, which would be less attractive when the speed of deal completion is of primary importance.

Larger bidders are also more likely to use cash, and unsurprisingly, higher bidder stock returns and target relative size increase the use of equity. Equity is also likely to be utilized more for high-tech deals, consistent with the idea that these deals involve greater uncertainty (or risk) for the bidder, which equity use partly mitigates. Furthermore, the evidence in Table 4 is consistent with merging parties in more “similar” countries (i.e., geographically closer and speaking the same language) being more likely to use at least some equity in their merger agreement: familiarity, at least culturally, seems to play an important role in cross-border mergers and acquisitions (see also Ahern, Daminelli, and Fracassi, 2015).

Overall, cross-border deals, on average, are more likely to be financed first with cash or second with a mix of cash and equity. Relative target-country risk is an important factor in determining method of payment choice, with a greater use of equity used in deals with greater relative target country risk.

### *5.2. The impact of the method of payment choice on deal completion*

As noted earlier in the paper, equity offered by a foreign acquirer is potentially perceived as a risky method of payment from the perspective of target shareholders: because the acquirer’s equity is traded on a foreign stock exchange, target shareholders may prefer all-cash offers by foreign bidders in cross-border mergers and acquisitions. This presents a foreign acquirer with a tradeoff: using acquirer stock in the acquisition mitigates some of the risk of overpayment when the foreign target is opaque, but may also lower the probability with which the deal is consummated.

The probit regressions in Table 5 provide evidence concerning the element of this tradeoff that prior tables do not address: that the use of acquirer stock in cross-border acquisitions may be associated with lower completion (or success) probability relative to all-cash or mixed offers. The dependent variable in all probit regressions in Table 5 is an indicator variable equal to one if the deal is completed successfully (and equal to zero otherwise).<sup>14</sup> Model 1 includes controls for cash and mixed methods of payment (but excludes relative risk measures). Model 2 includes the relative country risk factors, and models 3 to 8 examine sub-samples of cross-border and domestic deals, where country fixed effects are added to the last four models (5 and 8). Additionally, in models 7 and 8 we substitute predicted values (from a first stage model) for the stock only and mixed method of payment indicator variables, to address possible simultaneity arising from the impact of relative country governance risk on method of payment choice (in Table 4). That is, bidding managers are likely to account for relative country governance risk when considering the appropriate method of payment. The first stage models used to generate the predicted values for stock only and mixed payment method variables are estimated using model 7 from Table 4.

The results reported for models 1 to 2 for the full sample in Table 5 suggest cross-border deals are equally likely to be completed successfully compared to offers for domestic targets. Deals financed with stock only have significantly lower completion probabilities (relative to the omitted category, which is cash-only deals). Looking at the sample breakout for cross-border and

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<sup>14</sup> The model specification is similar to equation 1, but with the inclusion of an additional variable, bidder toehold, which prior research shows positively impacts deal completion.

domestic deals (model 3 to 8) confirms that stock as a method of payment significantly impedes deal completion (relative to cash only), and that this appears (at the margin) to be more evident in cross-border deals, although difference with domestic deals is not statistically significant (untabulated). This is even true in the regressions (models 7 and 8) where we account for the simultaneity between method of payment choice and completion.

Taken together, the results suggest that acquirers face a substantial tradeoff with their method of payment choice. A cash-only (or even mixed, including some cash) offer appears to provide the most significant increase in the likelihood that the proposed deal is completed (i.e., accepted by the shareholders of the foreign target firm). Cash, however, does not provide the contingent pricing characteristics that a stock-swap offer does, potentially reducing its viability in a cross-border deal for a target from an opaque (or high-risk) country (as in Table 4).

The impact of other factors on deal completion is consistent with expectations and prior literature. For example, larger bidders, greater toeholds, larger relative deal size, and intra-industry deals are positively correlated with deal completion for cross-border deals. Not surprisingly, hostile and competed deals have lower probabilities of success.<sup>15</sup>

### *5.3. The time series of the method of payment choice*

Earlier results in this paper provide some evidence of a decrease in the differences in method of payment between domestic and cross-border deals. Specifically, for cross-border deals we

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<sup>15</sup> In robustness tests reported in Table 7, we also include several target firm-level variables to better capture firm-level uncertainty (or information asymmetry) and target valuation. While the resulting sample size is relatively small, the results are consistent with those reported in Table 5.



observed a decrease in the use of all cash deals, and an increase in the use of equity. To test whether the differences are statistically significant, Table 6 reports the results of a similar regression specification to that used in Table 4, but includes a post-2000 indicator variable, and cross-border \* post-2000 interaction term. The results confirm a significant decline in the use of cash in cross-border deals after 2000 relative to any stock (model 1), and are robust to bidder and target country fixed effects (model 2). On the other hand, the post-2000 indicator, which reflects the choice in domestic deals, is positive and significant in both models, indicating an increase in the use of cash in domestic deals after 2000. The results provide some support for the view that differences in method of payment choice between domestic and cross-border deals has declined over our sample period, especially post-2000.

The increase (decrease) in the use of equity (cash) in cross-border deals, resulting in closer convergence with method of payment choice with domestic deals, could be explained by several factors, including improvements in governance, reporting quality, greater cross-border trade and globalization. If this is the case, we should observe a decrease in the differences in our relative country-level risk measures for cross-border deals over our sample period. Figure 2 reports the time series of target country relative risk, measured using the time-variant ICRG index. The figure shows an increase in relative risk, particularly post-2000, suggesting that bidders in cross-border deals have increasingly targeted higher risk countries (at least on a differential basis). While there could be several explanations for this, which are beyond the scope of this paper (including sourcing more valuable growth options), the increase over time in the relative risk of the target country compared to the acquiring country does help explain the increased use of equity

in cross-border deals as a way of mitigating (or sharing) that greater risk.

#### *5.4. Robustness tests*

We conduct several robustness tests to ensure our results are not sensitive to sample selection and model specification issues. As described in the sample selection, in our main tests we use all domestic and cross-border deals, which include completed and failed deals. We also use the broad method of payment categories (cash, stock, mixed) as provided by SDC platinum, as opposed to the more detailed percentage breakdown, which is a less frequently populated field in the data. To examine if our less constrained sample selection criteria results in any bias, we re-estimate the regression models in Table 4 using different sample compositions, including (1) a sample that has the full method of payment percentage breakdown; (2) a sample of only completed M&As; (3) a sample meeting both criteria (1) and (2); and samples containing target firms based on different organization status types (i.e., private, subsidiary and public). The results reported in Table A2 in the Internet appendix show that our time variant measures of relative risk generally retain statistical significance, indicating that our findings are mostly robust to sample construction concerns.

The second set of robustness tests examine model specification, which includes econometric technique and variables used. Estimating the regression models using logit (instead of probit) provides similar results. We also examine endogeneity concerns arising from possible omitted variables by adding additional country-level, bidder, and target firm-specific variables. Specifically, we examine differences between bidder and target countries in foreign currency

exchange rates, stock-market return volatility, and income tax rates, measured over the calendar year prior to deal announcement as in Erel et al. (2012).<sup>16</sup> <sup>17</sup> We also include target firm-specific variables similar to those that we use for the acquirer (i.e., size, leverage, tangibility and prior returns), and target stock return volatility (see, e.g., Moeller, Schlingemann and Stulz, 2007; Boehme, Danielsen, Kumar and Sorescu, 2009; Berkman, Dimitrov, Jain, Koch and Tice, 2009), to control for target characteristics that might impact the method of payment choice. Lastly, we include target takeover premium, proxied for using the three-day cumulative abnormal announcement return.<sup>18</sup>

The results in Table 7 show that our key conclusions remain largely unchanged by including these additional variables. Some of the findings for the additional variables reported in Table 7 are worth highlighting. There is some evidence that greater relative tax rates reduce the likelihood of an all-cash bid (Panel A), and increase the probability of cross-border deal completion (Panel B). While differences between bidder and target countries are important, rates of tax in the target country are equally or more important in determining method of payment choice. Currency appreciation increases the likelihood of deal completion, potentially due to greater bidder

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<sup>16</sup> We also examine whether greater bilateral trade between countries impacts the method of payment choice, since greater trade flows might reduce information asymmetry between bidder and target countries. We examine this using a cross-border only sample, including the other variables as described in Table 7. Including bilateral trade reduces the sample size to only 6,973 observations (from a cross-border only sample of 12,750). We do not find a significant relation, although the other results are generally unchanged, albeit with lower levels of statistical significance.

<sup>17</sup> We do not investigate the impact of differences in *capital gains* tax rates between acquirer and target countries because Boone et al. (2014) report inconclusive evidence that capital gains taxes impact the method of payment choice in domestic U.S. M&A deals. The tax treatment of foreign-country stock received in a cross-border acquisition would further complicate a factor (capital gains taxes) that already appears to have limited influence on the method of payment choice.

<sup>18</sup> Including the takeover premium in our models is likely to raise endogeneity concerns, especially in method of payment regressions. We examine (untabulated) if method of payment predicts target premiums (while including other variables reported in Table 7) and find that relative to mixed deals, indicators for cash only and stock only deals have positive coefficients, but are statistically insignificant.

bargaining power (Lin, Officer, and Shen, 2014). Greater relative and target country stock market volatility decreases the likelihood of bid success and, as expected, bidder toeholds are positively correlated with the use of cash and cross-border deal completion.

Not surprisingly, including additional target firm-specific characteristics has a significant (downward) impact on the sample size, largely due to the fact that such data are available only for publicly listed targets. Of the target firm-level variables, firm size is statistically significant, and has a negative coefficient in the method of payment regression, suggesting that larger targets are less likely to be financed solely by cash. Furthermore, all the deal completion regressions indicate that deals involving larger targets are less likely to be completed. Higher target firm stock return volatility also significantly reduces deal completion likelihood, as might be expected. Lastly, we show that larger takeover premiums are significantly associated with the use of cash as the method of payment, and increase the likelihood of deal completion, consistent with Fishman (1989).

The other results are generally consistent with those reported in Tables 4 and 5, although we do lose some statistical significance for some coefficients, possibly due to the large reduction in sample size arising from the inclusion of the additional variables. Importantly, for deal completion, we continue to find that the use of equity significantly decreases the likelihood of cross-border deal completion.<sup>19</sup> The results in Table 7 (Panel B) also show that mixed payment cross-border deals have greater success, which is more consistent with predictions by Eckbo et al.,

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<sup>19</sup> Using predicted values for stock only and mixed method of payment (as in models 7 and 8 in Table 5) does not significantly alter our findings.

(1990), that greater use of cash likely signals higher bidder quality to target shareholders. More importantly for our predictions, controlling for additional firm-level variables do not alter our conclusions regarding the importance of relative country risk. The key time *variant* measure of relative risk, the ICRG composite index, remains statistically significant in explaining method of payment, as reported in Table 7 (Panel A).

## **6. Conclusions**

Choice of payment method in M&A deals is an active and important area in the M&A literature. Prior studies show that choice in payment method has important implications for both the acquirer and target. We find that cash (stock) payment is the more (less) preferred choice in cross-border than in domestic deals, but that such differences have narrowed somewhat over our sample period. We find that relative target country risk is an important factor in determining whether a bidder uses greater equity in financing cross-border deals.

Further, we show that the greater use of equity is more consistent with cross-border bidders increasingly targeting higher relative risk countries, but also involves a tradeoff for acquirers because the use of *cash* appears to have a significantly positive impact on the probability with which an announced deal is consummated. Our results provide new evidence concerning the determinants of the method of payment in both domestic and cross-border M&A deals, the effect of the method of payment choice on deal completion, and time series variation in method of payment choice.

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## Appendix

Variable Descriptions. This table provides definitions for all dependent and independent variables used in the regressions. Independent variables are grouped into three broad categories: country factors, acquirer characteristics and deal characteristics. All variables are measured in the year before deal announcement date.

Variables	Definition
<i>Dependent Variables</i>	
Cash only	Indicator variable that equals one if the deal is paid with only cash, and equals zero otherwise (or equals zero for mixed deals in “cash versus mixed” models). Mixed deals are paid for with a combination of cash and stock but exclude stock only deals (source: Thomson’s SDC Platinum).
<i>Independent Variables</i>	
<b>Country factors</b>	
Cross-border	Indicator variable that equals one if acquirer and target are from different countries, and equals zero otherwise (source: Thomson’s SDC Platinum).
International Country Risk Guide (ICRG) composite index	The ICRG composite index is an overall measure of a country’s risk which equals $50\% \times \text{political risk rating} + 25\% \times (\text{financial and economic risk ratings})$ , the larger the value, the smaller the risk. Political risk is a measure of assessing the political stability of the countries covered by ICRG on a comparable basis. Economic risk is a measure of assessing a country’s current economic strengths and weaknesses. Financial risk is a measure of assessing a country’s ability to pay its way, particularly a country’s ability to finance its official, commercial, and trade debt obligations (source: <a href="http://www.prsgroup.com">www.prsgroup.com</a> ).
Common law	Indicator variable that equals one if the legal origin of the country is the English law, and equals zero otherwise. (La Porta et al., 1998).
Revised Anti-directors rights index (RADI)	A measure for shareholder protection aggregating six shareholder rights (source: La Porta et al., 1998), but revised by Djankov et al. (2008).
Transparency index	An aggregation of economic/institutional transparency, and political transparency. A high value of the index indicates easy public access to relevant and reliable information of markets, and legal and political systems (source: Bellver and Kaufmann 2005).
Corporate Governance Reform (CGRI) index	Indicator variable that equals one if the country has undertaken a corporate governance reform in the year, and equals zero otherwise (Kim and Lu, 2013).



Geographic distance	Internal (or intra-national) and international bilateral distances (source: Mayer and Zignago (2011). CEPII calculate distance between two countries based on bilateral distances between the biggest cities of those two countries, those inter-city distances being weighted by the share of the city in the overall country's population. The weighted average distance within and between countries.
Same official language	Indicator variable that equals one if the official language between two countries is the same or if the deal is not a cross-border deal, and equals zero otherwise (source: CEPII). Official or national languages are those that are spoken by at least 20% of the population of the country (and spoken in another country of the world).
Cross-listed	Indicator variable that equals one if the bidder's shares are cross-listed in the target country, and equals zero otherwise (source: DataStream).
Creditor rights	Proxy for creditor protection aggregated from four different creditor rights (source: Djankov et al. 2008).
Stock market return	Sourced from the S&P Global Stock Indices, which measure the annual US\$ price change in covered stock markets (source: World Bank).
Market capitalization/GDP	The sum of share price multiplied by the number of shares outstanding for listed domestic companies excluding investment companies, mutual funds, or other collective investment vehicles, divided by gross domestic product in the year (source: World Bank).
GDP growth	Annual percentage growth rate of GDP at market prices based on constant local currency (source: World Bank).
GDP per capita	The gross domestic product divided by midyear population in current US\$ (source: World Bank).
<b>Acquirer characteristics</b>	
Acquirer size	Natural log of acquirer total asset value in the year before M&A announcement, in US\$ (source: WorldScope).
Acquirer leverage	The sum of total debt and deal value divided by the sum of total asset plus deal value in the year before M&A announcement, in US\$ (sources: Thomson's SDC

Platinum and WorldScope).

Acquirer tangibility      Net property, plant and equipment (source: WorldScope).

Acquirer stock return      Annual individual stock return in the year before M&A announcement (source: WorldScope).

**Deal characteristics**

Relative size      Deal value divided by acquirer total asset (sources: Thomson's SDC Platinum and WorldScope).

Private target      Indicator variable that equals one if the target is a private company, and equals zero otherwise (source: Thomson's SDC Platinum).

Subsidiary target      Indicator variable that equals one if the target is a subsidiary, and equals zero otherwise (source: Thomson's SDC Platinum).

Intra-industry      Indicator variable that equals one if the acquirer and target are in the same industry, and equals zero otherwise (source: Thomson's SDC Platinum).

High-tech deal      Indicator variable that equals one if the acquirer and target are high-tech companies, and equals zero otherwise (source: Thomson's SDC Platinum).

Hostile deal      Indicator variable that equals one if the deal is hostile, and equals zero otherwise (Thomson's SDC Platinum).

Competing offer      Indicator variable that equals one if there are competing bids for the same deal, and equals zero otherwise (source: Thomson's SDC Platinum).

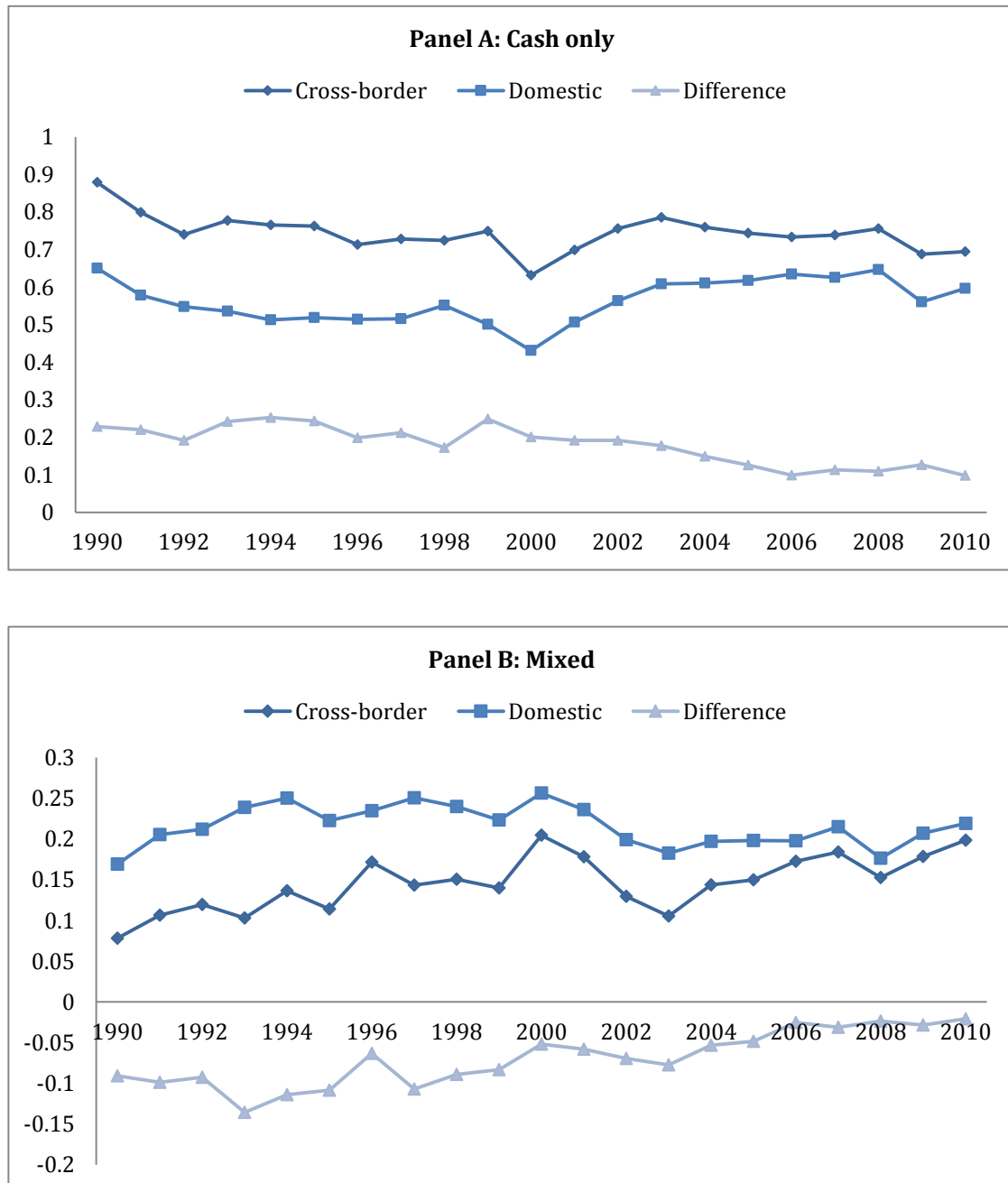
Completed deal      Indicator variable that equals one if a takeover for a controlling interest is completed successfully, and 0 otherwise (source: Thomson's SDC Platinum).

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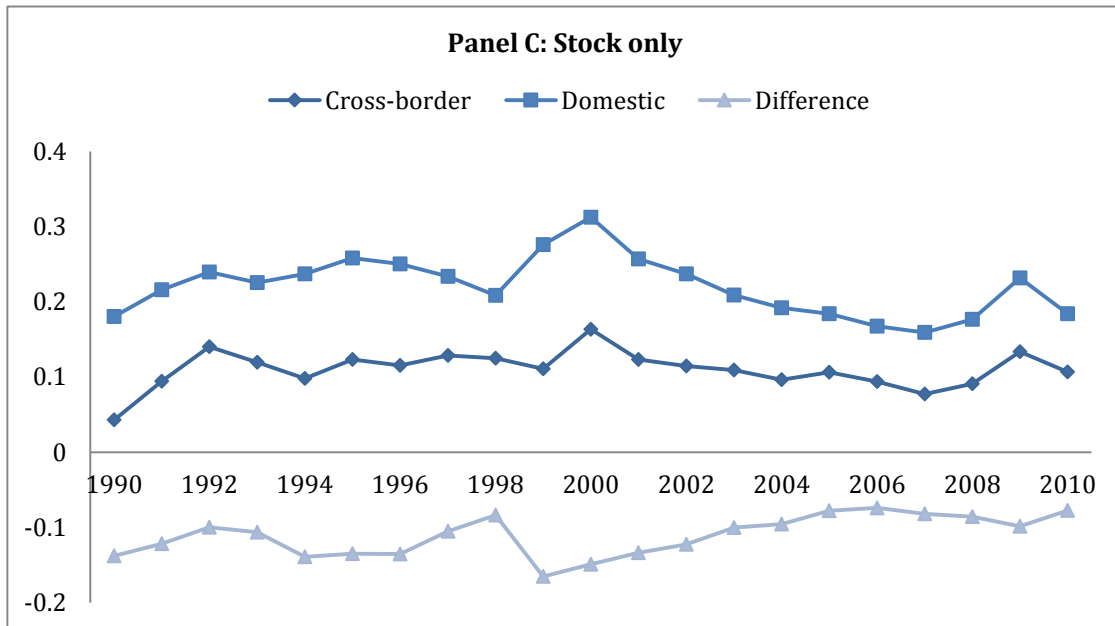
**Figure 1**

**Time series of the payment method**

This figure shows the trends of the differences of payment method between cross-border and domestic deals in the world through 1990-2010. The sample of 84,084 deals is separated into three categories according to traditional payment method grouping: 100% cash, mixed or 100% stock. Panel A to Panel C plot payment method for cross-border deals (Cross-border), domestic deals (Domestic) and their differences (Difference) for each of the three payment types.

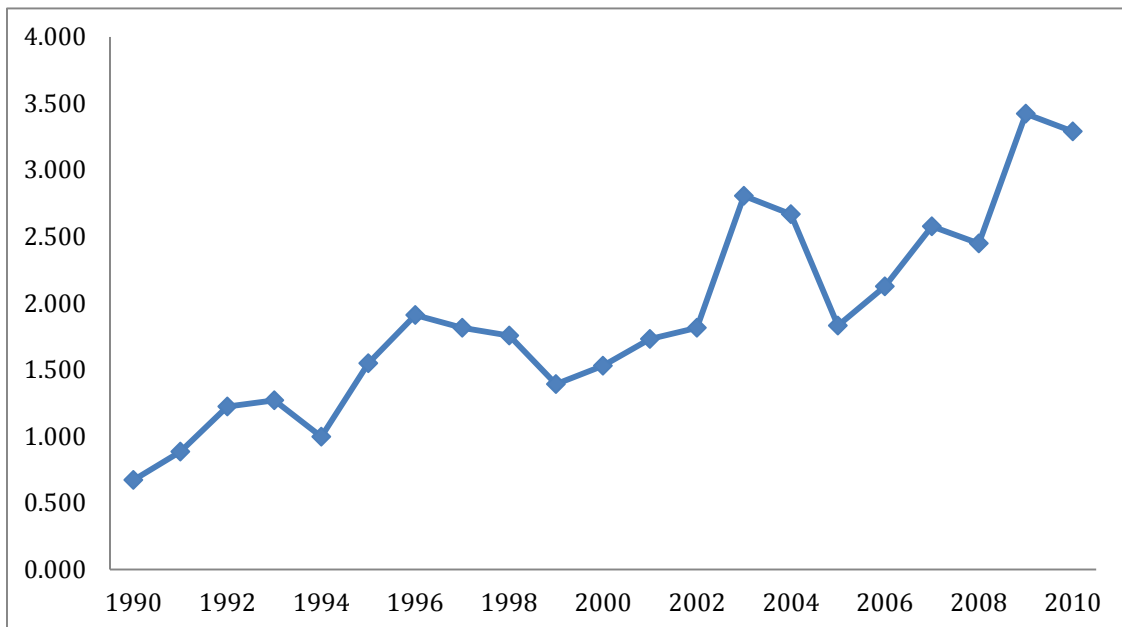


**Figure 1, continued**  
**Time series of the payment method**



**Figure 2**

The figure shows the relative risk of cross-border M&A deals over the sample period. Relative risk is measured using the time-variant ICRG composite index, and is calculated as the bidder country ICRG index minus the target country ICRG index.



**Table 1**

Sample composition and differences in method of payment. This table shows the sample composition, and differences in average method of payment for domestic and cross-border deals for the period 1990-2010. Statistics are reported for the full sample (Panel A) and aggregated at the country-level (Panel B). All cash (stock) are defined as deals in which cash (stock) comprised 100% of the method of payment. Mixed deals comprise of both a cash and stock component. \*\*\*, \*\*, \* denote that differences in means between domestic and cross-border are statistically significant at the 1%, 5%, and 10% levels, respectively.

	Sample size	All cash	Mixed	All stock
<i>Panel A: Full sample</i>				
Cross-border	22,994	0.725	0.162	0.112
Domestic	61,090	0.567	0.225	0.207
Difference		0.158***	-0.063***	-0.095***
<i>Panel B: Country-level</i>				
Cross-border	46	0.827	0.100	0.073
Domestic	46	0.705	0.117	0.178
Difference		0.122***	-0.017	-0.105***

**Table 2**

Time series of payment method choice. This table presents the time series of the average proportion of cash only, mixed and stock only deals in cross-border and domestic transactions from 1990 to 2010. All differences in proportions between cross-border and domestic deals are statistically significant at the 5% level (except for the difference between the proportion of mixed deals between cross-border and domestic transactions in 2010, which is significant at the 10% level).

Year	Cross-border				Domestic			
	#	All cash	Mixed	All stock	#	All cash	Mixed	All stock
1990	474	0.876	0.083	0.041	986	0.666	0.170	0.164
1991	371	0.797	0.108	0.095	1138	0.588	0.208	0.203
1992	385	0.743	0.121	0.136	1493	0.559	0.216	0.226
1993	488	0.773	0.116	0.110	1788	0.548	0.239	0.214
1994	652	0.751	0.146	0.103	2387	0.520	0.255	0.225
1995	767	0.768	0.112	0.120	2493	0.525	0.227	0.248
1996	875	0.716	0.177	0.107	3131	0.520	0.241	0.239
1997	1,152	0.716	0.149	0.136	3705	0.515	0.253	0.232
1998	1,331	0.721	0.159	0.120	3796	0.556	0.243	0.201
1999	1,399	0.732	0.148	0.120	3597	0.500	0.232	0.268
2000	1,755	0.627	0.210	0.162	4004	0.430	0.263	0.308
2001	1,159	0.682	0.185	0.133	2991	0.507	0.245	0.247
2002	909	0.740	0.142	0.117	2716	0.569	0.211	0.220
2003	931	0.781	0.110	0.109	2481	0.633	0.192	0.175
2004	1,203	0.747	0.151	0.102	3352	0.619	0.205	0.177
2005	1,386	0.737	0.156	0.107	3437	0.631	0.207	0.162
2006	1,669	0.723	0.180	0.097	3829	0.640	0.205	0.155
2007	1,938	0.729	0.188	0.083	4356	0.631	0.226	0.142
2008	1,615	0.748	0.155	0.096	3398	0.655	0.185	0.161
2009	1,112	0.681	0.187	0.133	2913	0.558	0.219	0.223
2010	1,423	0.693	0.200	0.107	3099	0.606	0.230	0.164
<2000	7,894	0.746	0.140	0.114	24514	0.536	0.236	0.228

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>=2000	15,100	0.724	0.168	0.108	36576	0.586	0.209	0.204
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**Table 3**

Summary statistics. The table reports summary statistics using a sample of 47,481 M&A deals for the key variables used in the regression analysis for the sample period 1990 to 2010 and two sub-samples (about ten years before and after 2000). Mean (medians) are reported for both cross-border (CB) and domestic deals. Differences test whether the mean (median) differs between cross-border and domestic groups.

Variables	1990 - 2010			Pre-2000			Post-2000		
	CB	Domestic	Diff	CB	Domestic	Diff	CB	Domestic	Diff
<i>Panel A: Firm-level variables</i>									
Ln Assets	12.60 (12.72)	11.81 (11.87)	0.80*** (0.85)	13.00 (12.89)	12.06 (11.97)	0.95*** (0.92)	12.35 (12.58)	11.64 (11.79)	0.72*** (0.79)
Asset tangibility	0.27 (0.22)	0.28 (0.21)	-0.01*** (0.01)	0.29 (0.26)	0.30 (0.23)	0.00 (0.03)	0.25 (0.18)	0.27 (0.18)	-0.02*** (-0.01)
Leverage	0.21 (0.18)	0.23 (0.17)	-0.02*** (0.01)	0.22 (0.20)	0.23 (0.19)	-0.01*** (0.01)	0.21 (0.16)	0.24 (0.16)	-0.03*** (0.00)
Annual stock return	0.23 (0.18)	0.21 (0.17)	0.01* (0.01)	0.27 (0.20)	0.28 (0.21)	-0.02* (-0.01)	0.20 (0.16)	0.16 (0.14)	0.03*** (0.02)
<i>Panel B: Country-level variables</i>									
Acquirer GDP per capita	10.19 (10.32)	10.18 (10.34)	0.00 (-0.02)	10.04 (10.12)	10.09 (10.19)	-0.05*** (-0.07)	10.30 (10.54)	10.27 (10.54)	0.04*** (0.00)
Acquirer capitalization/GDP	4.64 (4.76)	4.68 (4.80)	-0.04*** (-0.03)	4.62 (4.71)	4.69 (4.75)	-0.07*** (-0.04)	4.66 (4.84)	4.68 (4.84)	-0.02*** (0.00)
Acquirer market return	9.47 (13.60)	10.32 (13.60)	-0.85*** (0.00)	10.63 (14.50)	12.85 (19.20)	-2.22*** (-4.70)	8.56 (13.30)	7.99 (8.99)	0.57* (4.31)
Acquirer transparency	1.59 (1.74)	1.69 (1.81)	-0.10*** (-0.07)	1.66 (1.74)	1.83 (2.03)	-0.17*** (-0.29)	1.54 (1.74)	1.57 (1.74)	-0.03*** (0.00)
Acquirer RADI	3.87 (4.00)	3.64 (3.00)	0.23*** (1.00)	3.87 (4.00)	3.57 (3.00)	0.30*** (1.00)	3.87 (4.00)	3.71 (4.00)	0.16*** (0.00)

Table 3 (continued)

Acquirer creditor rights	2.03 (1.00)	1.78 (1.00)	0.26*** (0.00)	2.09 (1.00)	1.71 (1.00)	0.38*** (0.00)	1.99 (1.00)	1.84 (1.00)	0.15*** (0.00)	-0.23 (0.00)
Target GDP growth	3.20 (3.10)	3.06 (3.08)	0.14*** (0.02)	3.47 (3.84)	3.68 (4.11)	-0.21*** (-0.27)	2.98 (2.67)	2.48 (2.61)	0.50*** (0.06)	0.71 (0.33)
Target GDP per capita	9.86 (10.18)	10.18 (10.34)	-0.32*** (-0.16)	9.81 (10.07)	10.09 (10.19)	-0.28*** (-0.12)	9.90 (10.47)	10.27 (10.54)	-0.36*** (-0.08)	-0.08 (0.04)
Target capitalization/GDP	4.37 (4.54)	4.68 (4.80)	-0.31*** (-0.26)	4.30 (4.44)	4.69 (4.75)	-0.39*** (-0.31)	4.42 (4.64)	4.68 (4.84)	-0.26*** (-0.19)	0.13 (0.12)
Target market return	10.80 (12.70)	10.32 (13.60)	0.48** (-0.90)	10.50 (12.70)	12.85 (19.20)	-2.35*** (-6.50)	11.04 (12.80)	7.99 (8.99)	3.05*** (3.81)	5.40 (10.31)
Target transparency	1.38 (1.67)	1.69 (1.81)	-0.32*** (-0.14)	1.50 (1.72)	1.83 (2.03)	-0.33*** (-0.31)	1.28 (1.55)	1.57 (1.74)	-0.29*** (-0.19)	0.05 (0.12)
Target RAD1	3.56 (3.50)	3.64 (3.00)	-0.08*** (0.50)	3.63 (3.50)	3.56 (3.00)	0.07*** (0.50)	3.51 (3.50)	3.71 (4.00)	-0.20*** (-0.50)	-0.27 (-1.00)
Target creditor rights	1.88 (1.00)	1.78 (1.00)	0.10*** (0.00)	1.94 (1.00)	1.71 (1.00)	0.23*** (0.00)	1.83 (1.00)	1.84 (1.00)	-0.01 (0.00)	-0.23 (0.00)
<i>Panel C: Deal-level variables</i>										
Relative size	0.16 (0.05)	0.18 (0.08)	-0.02*** (-0.03)	0.13 (0.05)	0.18 (0.09)	-0.06*** (-0.05)	0.17 (0.06)	0.18 (0.07)	0.00 (-0.01)	0.05 (0.04)
Public target indicator	0.11	0.13	-0.02***	0.13	0.14	-0.02***	0.09	0.11	-0.02***	0.00
Private target indicator	0.51	0.55	-0.04***	0.50	0.56	-0.05***	0.52	0.55	-0.04***	0.02
Subsidiary target indicator	0.38	0.32	0.06***	0.37	0.30	0.07***	0.39	0.34	0.05***	-0.02
Intra-industry indicator	0.59	0.58	0.01***	0.55	0.56	-0.01**	0.62	0.59	0.03***	0.04
High-tech deal indicator	0.29	0.28	0.01***	0.26	0.25	0.01**	0.31	0.30	0.01**	0.00
Hostile deal indicator	0.00	0.01	0.00	0.01	0.01	0.00**	0.00	0.00	0.00**	0.00
Completed deal indicator	0.78	0.78	0.00	0.83	0.83	0.01	0.74	0.75	0.01	0.00

**Table 4**

Method of payment probit regressions. The table reports probit regressions predicting method of payment choice (cash offer versus any stock). The coefficient values are reported as partial effects. The models are estimated on a sample of domestic and cross-border mergers and acquisitions over the period 1990 to 2010. All variable definitions are reported in the appendix. All regressions control for industry and year fixed effects, and model 7 also includes bidder and target country fixed effects (coefficients suppressed). Standard errors are corrected for heteroskedasticity and clustering at the acquirer firm level. P-values are reported in parentheses. \*\*\*, \*\*, \* denotes statistical significance at the 1%, 5%, and 10% levels, respectively.

Cash v any stock Variables	ICRG (1)	Common Law (2)	RADI (3)	Transparency (4)	CGRI (5)	All (6)	All (7)
Cross-border dummy	0.135*** (0.000)	0.131*** (0.000)	0.132*** (0.000)	0.132*** (0.000)	0.131*** (0.000)	0.141*** (0.000)	0.108*** (0.000)
ICRG composite(A-T)	-0.004*** (0.000)					-0.004*** (0.000)	-0.006*** (0.000)
Common law(A-T)		-0.103*** (0.000)				(0.000)	(0.000)
						-0.053*** (0.003)	-0.042 (0.429)
RADI(A-T)			-0.039*** (0.000)			-0.015** (0.018)	-0.001 (0.951)
Transparency(A-T)				-0.107*** (0.000)		-0.053*** (0.000)	0.037 (0.335)
CGRI(A-T)					-0.059*** (0.000)	-0.026* (0.082)	-0.033** (0.039)
Weighted distance	0.004 (0.316)	0.010** (0.012)	0.010** (0.016)	0.010** (0.010)	0.005 (0.168)	0.010*** (0.010)	0.021*** (0.000)
Same language	-0.026** (0.033)	-0.030** (0.018)	-0.031** (0.015)	-0.033*** (0.007)	-0.023* (0.057)	-0.039*** (0.002)	-0.021 (0.108)
Cross-listed	-0.044* (0.095)	-0.070** (0.013)	-0.083*** (0.004)	-0.094*** (0.001)	-0.059** (0.028)	-0.091*** (0.002)	-0.101*** (0.001)
Stock market return(A-T)	-0.066** (0.018)	-0.093*** (0.001)	-0.100*** (0.001)	-0.126*** (0.000)	-0.084*** (0.003)	-0.111*** (0.000)	-0.071** (0.021)
Creditor rights(A-T)	0.012*** (0.001)	0.017*** (0.000)	0.013*** (0.000)	0.006 (0.107)	0.016*** (0.000)	0.014*** (0.000)	-0.020* (0.083)

ICRG composite(T)	-0.008*** (0.000)	-0.007*** (0.000)	-0.006*** (0.000)	-0.007*** (0.000)	-0.006*** (0.000)	-0.009*** (0.000)	-0.007*** (0.000)
Common law(T)	-0.006 (0.647)	-0.035*** (0.014)	0.008 (0.568)	-0.002 (0.887)	0.002 (0.893)	-0.015 (0.357)	-0.553*** (0.002)
RADI(T)	-0.004 (0.398)	-0.013*** (0.007)	-0.031*** (0.000)	-0.009* (0.073)	-0.008 (0.101)	-0.018*** (0.003)	0.477 (0.133)
Transparency(T)	-0.005 (0.737)	0.000 (0.981)	-0.005 (0.740)	-0.036*** (0.016)	-0.003 (0.824)	-0.020 (0.191)	-0.101 (0.676)
CGRI(T)	0.007 (0.482)	0.018* (0.068)	0.012 (0.209)	0.010 (0.296)	-0.008 (0.473)	0.007 (0.520)	-0.012 (0.347)
Stock market return(T)	-0.035 (0.150)	-0.048* (0.053)	-0.054*** (0.032)	-0.051*** (0.048)	-0.044* (0.072)	-0.046* (0.072)	-0.012 (0.637)
Creditor rights(T)	0.017*** (0.000)	0.020*** (0.000)	0.018*** (0.000)	0.017*** (0.000)	0.019*** (0.000)	0.018*** (0.000)	-0.040 (0.121)
Market cap./GDP(T)	-0.032*** (0.002)	-0.026*** (0.014)	-0.029*** (0.006)	-0.038*** (0.000)	-0.029*** (0.005)	-0.036*** (0.001)	-0.089*** (0.000)
GDP growth(T)	0.001 (0.627)	0.001 (0.718)	-0.001 (0.764)	0.001 (0.561)	0.001 (0.458)	0.001 (0.782)	-0.001 (0.727)
GDP per capita(T)	-0.010 (0.325)	-0.011 (0.251)	-0.007 (0.459)	-0.006 (0.564)	-0.009 (0.342)	-0.007 (0.477)	-0.094*** (0.001)
Acquirer size	0.035*** (0.000)	0.034*** (0.000)	0.035*** (0.000)	0.035*** (0.000)	0.036*** (0.000)	0.034*** (0.000)	0.033*** (0.000)
Acquirer leverage	0.024 (0.239)	0.019 (0.329)	0.017 (0.389)	0.019 (0.336)	0.024 (0.225)	0.014 (0.480)	0.005 (0.800)
Acquirer tangibility	0.037** (0.024)	0.041** (0.012)	0.042** (0.012)	0.035** (0.034)	0.037** (0.025)	0.039** (0.017)	0.037** (0.035)
Acquirer stock return	-0.010** (0.010)	-0.010** (0.015)	-0.010** (0.015)	-0.010** (0.011)	-0.010** (0.010)	-0.010** (0.015)	-0.009** (0.025)
Relative size	-0.520*** (0.000)	-0.515*** (0.000)	-0.514*** (0.000)	-0.515*** (0.000)	-0.519*** (0.000)	-0.509*** (0.000)	-0.506*** (0.000)

Private	0.144** (0.000)	0.147*** (0.000)	0.148*** (0.000)	0.147*** (0.000)	0.145*** (0.000)	0.149*** (0.000)	0.147*** (0.000)
Subsidiary	0.302*** (0.000)	0.303*** (0.000)	0.304*** (0.000)	0.303*** (0.000)	0.302*** (0.000)	0.305*** (0.000)	0.302*** (0.000)
Intra-industry	-0.017*** (0.009)	-0.016*** (0.012)	-0.016*** (0.014)	-0.016*** (0.017)	-0.017*** (0.011)	-0.015*** (0.020)	-0.014** (0.018)
High-tech	-0.070*** (0.000)	-0.067*** (0.000)	-0.068*** (0.000)	-0.068*** (0.000)	-0.069*** (0.000)	-0.069*** (0.000)	-0.071*** (0.000)
Hostile	0.071*** (0.007)	0.071*** (0.007)	0.070*** (0.009)	0.073*** (0.006)	0.071*** (0.008)	0.071*** (0.007)	0.069*** (0.010)
Competing offer	0.079*** (0.000)	0.080*** (0.000)	0.080*** (0.000)	0.080*** (0.000)	0.080*** (0.000)	0.079*** (0.000)	0.076*** (0.000)
Observations	47,481	47,481	47,403	47,481	47,481	47,403	47,403
Pseudo-R <sup>2</sup>	0.213	0.214	0.214	0.215	0.213	0.216	0.224
Country fixed-effects	No	No	No	No	No	No	Yes

**Table 5**

Deal completion probit regressions. The table reports probit regressions predicting deal completion. The coefficient values are reported as partial effects. The dependent variable is an indicator variable equal to 1 if a takeover for a controlling interest is completed successfully, and 0 otherwise. The models are estimated on a sample of domestic and cross-border mergers and acquisitions over the period 1990 to 2010. Model 1 is estimated on the full sample (All) and controls for stock and mixed methods of payment, but excludes country relative risk measures. Model 2 includes country relative risk measures. Models 3 to 8 are estimated on sub-samples of cross-border and domestic deals only. Models 7 and 8 use predicted values for stock only and mixed methods of payment variables using a similar regression specification used in Table 4. All variable definitions are reported in the appendix. All regressions control for industry and year fixed effects, and models 5 to 8 also include bidder and target country fixed effects, respectively (coefficients suppressed). Standard errors are corrected for heteroskedasticity and clustering at the acquirer firm level. P-values are reported in parentheses. \*\*\*, \*\*, \* denotes statistical significance at the 1%, 5%, and 10% levels, respectively.

	All (1)	All (2)	Cross-border (3)	Domestic (4)	Cross-border (5)	Domestic (6)	Cross-border (7)	Domestic (8)
Cross-border dummy	0.005 (0.466)	0.009 (0.219)						
Stock only	-0.016*** (0.004)	-0.018*** (0.001)	-0.025** (0.038)	-0.016** (0.012)	-0.021* (0.081)	-0.012* (0.058)	-0.220*** (0.003)	-0.079* (0.076)
Mixed	-0.003 (0.476)	-0.006 (0.183)	-0.004 (0.661)	-0.006 (0.283)	-0.002 (0.843)	-0.004 (0.500)	-0.098 (0.235)	-0.244*** (0.000)
ICRG composite(A-T)		-0.002*** (0.003)	-0.002*** (0.002)		-0.001 (0.304)		-0.001 (0.429)	
Common law(A-T)		-0.034*** (0.000)	0.004 (0.774)		-0.011 (0.771)		-0.022 (0.578)	
RADI(A-T)		0.018*** (0.000)	-0.001 (0.768)		-0.002 (0.886)		-0.001 (0.924)	
Transparency(A-T)		0.051*** (0.000)	0.062*** (0.000)		0.022 (0.506)		0.018 (0.585)	
CGRl(A-T)		-0.003 (0.720)	0.012 (0.234)		0.001 (0.914)		0.002 (0.885)	
ICRG composite(T)	-0.002*** (0.001)	-0.002*** (0.000)	-0.004*** (0.001)	-0.002*** (0.003)	-0.000 (0.858)	0.003*** (0.006)	0.000 (0.981)	0.003*** (0.004)
Common law(T)	-0.059*** (0.000)	-0.077*** (0.000)	-0.006 (0.735)	-0.099*** (0.000)	0.351 (0.268)	-0.293*** (0.000)	0.003 (0.966)	0.573*** (0.003)
RADI(T)	0.019*** (0.000)	0.030*** (0.000)	-0.008 (0.177)	0.046*** (0.000)	-0.172 (0.297)	0.043 (0.307)	0.034 (0.309)	-0.463*** (0.002)
Transparency(T)	0.082*** (0.000)	0.102*** (0.000)	0.119*** (0.000)	0.099*** (0.000)	0.111 (0.442)	0.324*** (0.001)	-0.074 (0.382)	1.405*** (0.000)
CGRl(T)	-0.002 (0.726)	-0.003 (0.672)	0.022 (0.132)	-0.005 (0.471)	0.015 (0.428)	-0.007 (0.445)	0.014 (0.441)	0.003 (0.741)

Stock market return(A-T)	-0.042** (0.016)	-0.004 (0.803)	0.021 (0.356)		0.009 (0.706)	0.009 (0.722)	
Creditor rights(A-T)	0.001 (0.482)	0.005** (0.016)	0.004 (0.199)		0.007 (0.549)	0.008 (0.497)	
Stock market return(T)	-0.045*** (0.005)	-0.035*** (0.022)	0.006 (0.839)	-0.044** (0.020)	0.010 (0.718)	-0.019 (0.320)	-0.016 (0.392)
Creditor rights(T)	0.009*** (0.000)	0.010*** (0.000)	0.005 (0.242)	0.011*** (0.000)	0.014 (0.458)	0.025*** (0.009)	0.130*** (0.000)
Market cap./GDP(T)	0.001 (0.878)	0.005 (0.393)	0.013* (0.075)	0.001 (0.923)	0.011 (0.464)	-0.019 (0.172)	0.020 (0.221)
GDP growth(T)	-0.001 (0.606)	-0.000 (0.821)	0.002 (0.345)	0.001 (0.565)	0.002 (0.378)	0.003* (0.080)	0.002 (0.262)
GDP per capita(T)	0.011** (0.037)	0.008 (0.172)	0.014* (0.073)	0.004 (0.626)	0.032 (0.252)	-0.105*** (0.000)	0.039 (0.164)
Weighted distance	0.002 (0.364)	-0.002 (0.493)	-0.003 (0.374)		0.004 (0.378)		0.001 (0.855)
Same language	-0.007 (0.294)	-0.004 (0.521)	-0.005 (0.561)		-0.005 (0.643)		-0.000 (0.992)
Cross-listed	-0.002 (0.904)	0.028 (0.101)	0.022 (0.188)		0.022 (0.219)	0.036** (0.042)	
Toehold	0.035** (0.013)	0.049** (0.031)	0.622** (0.023)	0.044** (0.036)	0.483*** (0.005)	0.028*** (0.004)	0.491*** (0.006)
Acquirer size	0.021*** (0.000)	0.021*** (0.000)	0.021*** (0.000)	0.021*** (0.000)	0.020*** (0.000)	0.020*** (0.000)	0.018*** (0.000)
Acquirer leverage	-0.080*** (0.000)	-0.077*** (0.000)	-0.024 (0.275)	-0.091*** (0.000)	-0.027 (0.221)	-0.089*** (0.000)	-0.020 (0.357)
Acquirer tangibility	-0.021** (0.023)	-0.018* (0.050)	-0.028 (0.119)	-0.017 (0.109)	-0.018 (0.343)	-0.006 (0.565)	-0.020 (0.285)
Acquirer stock return	0.005** (0.028)	0.005** (0.030)	0.003 (0.492)	0.006** (0.043)	0.003 (0.485)	0.006** (0.026)	0.005 (0.335)
Relative size	0.105*** (0.000)	0.099*** (0.000)	0.077*** (0.006)	0.106*** (0.000)	0.081*** (0.004)	0.109*** (0.000)	0.145*** (0.000)
Private	0.040*** (0.000)	0.040*** (0.000)	0.020 (0.103)	0.046*** (0.000)	0.012 (0.317)	0.044*** (0.000)	-0.008 (0.609)
Subsidiary	0.013** (0.028)	0.015** (0.014)	-0.011 (0.337)	0.024*** (0.001)	-0.014 (0.239)	0.022*** (0.002)	-0.049*** (0.001)

Intra-industry	0.009** (0.019)	0.008** (0.033)	0.014** (0.039)	0.005 (0.250)	0.011* (0.099)	0.004 (0.389)	0.013* (0.072)	0.009** (0.045)
High-tech	0.007 (0.170)	0.006 (0.232)	0.019** (0.044)	0.002 (0.798)	0.022** (0.026)	0.000 (0.963)	0.028** (0.006)	0.009 (0.203)
Hostile	-0.256*** (0.000)	-0.255*** (0.000)	-0.204*** (0.000)	-0.270*** (0.000)	-0.198*** (0.000)	-0.260*** (0.000)	-0.219*** (0.000)	-0.249*** (0.000)
Competing offer	-0.238*** (0.000)	-0.239*** (0.000)	-0.248*** (0.000)	-0.236*** (0.000)	-0.249*** (0.000)	-0.226*** (0.000)	-0.268*** (0.000)	-0.224*** (0.000)
Observations	47,464	47,386	12,941	34,444	12,941	34,444	12,941	34,444
Pseudo-R <sup>2</sup>	0.153	0.157	0.164	0.165	0.185	0.172	0.186	0.174
Country fixed-effects	No	No	No	No	Yes	Yes	Yes	Yes



**Table 6**

Method of payment regressions and convergence. The table reports probit regressions predicting method of payment choice (cash versus any stock). The coefficient values are reported as partial effects. The models are estimated on a sample of domestic and cross-border mergers and acquisitions over the period 1990 to 2010. Post-2000 is a dummy variable equal to 1 for deals occurring for years 2000 to 2010, and zero otherwise. The interaction term Cross-border\*Post-2000 captures differences in method of payment for cross-border deals post-2000. All variable definitions are reported in the appendix. All regressions control for industry and year fixed effects, and model 2 also includes bidder and target country fixed effects (coefficients suppressed). Standard errors are corrected for heteroskedasticity and clustering at the acquirer firm level. P-values are reported in parentheses. \*\*\*, \*\*, \* denotes statistical significance at the 1%, 5%, and 10% levels, respectively.

Variables	Cash v any stock (1)	Cash v any stock (2)
Cross-border dummy	0.157*** (0.000)	0.115*** (0.000)
Post-2000 dummy	0.057*** (0.000)	0.135*** (0.000)
Cross-border*Post-2000	-0.038*** (0.005)	-0.035*** (0.001)
ICRG composite(A-T)	-0.004*** (0.000)	-0.005*** (0.000)
Common law(A-T)	-0.067*** (0.000)	-0.034 (0.439)
RADI(A-T)	-0.010 (0.112)	-0.001 (0.953)
Transparency(A-T)	-0.054*** (0.000)	0.029 (0.345)
CGRI(A-T)	-0.019 (0.179)	-0.026** (0.048)
Weighted distance	0.012*** (0.002)	0.017*** (0.000)
Same language	-0.038*** (0.003)	-0.017 (0.115)
Cross-listed	-0.088*** (0.002)	-0.077*** (0.001)
Stock market return(A-T)	-0.064** (0.016)	-0.060** (0.017)
Creditor rights(A-T)	0.015*** (0.000)	-0.017* (0.084)
ICRG composite(T)	-0.010*** (0.000)	-0.005*** (0.000)
Common law(T)	-0.039*** (0.007)	-0.917* (0.089)
RADI(T)	-0.009 (0.140)	0.403 (0.124)
Transparency(T)	-0.033** (0.020)	-0.092 (0.643)

CGRI(T)	0.030*** (0.000)	-0.010 (0.314)
Stock market return(T)	0.020* (0.088)	-0.010 (0.626)
Creditor rights(T)	0.020*** (0.000)	-0.033 (0.116)
Market cap./GDP(T)	-0.046*** (0.000)	-0.070*** (0.000)
GDP growth(T)	0.009*** (0.000)	-0.001 (0.689)
GDP per capita(T)	0.018** (0.040)	-0.080*** (0.001)
Acquirer size	0.034*** (0.000)	0.027*** (0.000)
Acquirer leverage	0.015 (0.464)	0.004 (0.794)
Acquirer tangibility	0.040** (0.017)	0.030** (0.037)
Acquirer stock return	-0.002 (0.528)	-0.007** (0.022)
Relative size	-0.508*** (0.000)	-0.415*** (0.000)
Private	0.149*** (0.000)	0.121*** (0.000)
Subsidiary	0.304*** (0.000)	0.278*** (0.000)
Intra-industry	-0.015** (0.022)	-0.012** (0.019)
High-tech	-0.072*** (0.000)	-0.057*** (0.000)
Hostile	0.073*** (0.005)	0.061** (0.017)
Competing offer	0.079*** (0.000)	0.069*** (0.000)
Observations	47,403	47,403
Pseudo-R <sup>2</sup>	0.212	0.225
Country fixed-effects	No	Yes

**Table 7**

Method of payment and deal completion probit regressions: Additional robustness tests. The table reports additional robustness probit regressions predicting cash versus any stock method of payment choice (Panel A) and deal completion (Panel B). The coefficient values are reported as partial effects. The models are estimated on a sample of domestic and cross-border mergers and acquisitions over the period 1990 to 2010. All variable definitions are reported in the appendix. The models in Panel A (Panel B) are identical to those reported in Table 6 (Table 7), but include 4 additional variables: tax, currency appreciation, stock market volatility and bidder toehold. Models 3 and 4 (Panel A) and all models in Panel B also include additional firm-level target characteristics, which are only available for publicly listed targets. All models include industry and year fixed effects, and selected models (denoted ‘yes’ or ‘no’) include bidder and target country fixed effects (coefficients suppressed). Standard errors are corrected for heteroskedasticity and clustering at the acquirer firm level. P-values are reported in parentheses. \*\*\*, \*\*, \* denotes statistical significance at the 1%, 5%, and 10% levels, respectively.

<i>Panel A</i>		<i>Method of payment</i>			
		Cash v any stock	Cash v any stock	Cash v any stock	Cash v any stock
Variables		(1)	(2)	(3)	(4)
Cross-border dummy		0.084*** (0.000)	0.071*** (0.000)	0.179*** (0.000)	0.139*** (0.001)
ICRG composite(A-T)		-0.003** (0.010)	-0.004** (0.020)	-0.011** (0.048)	-0.015** (0.024)
Common law(A-T)		0.003 (0.877)	0.040 (0.496)	-0.145 (0.330)	-0.064 (0.712)
RADI(A-T)		-0.011* (0.071)	0.004 (0.832)	-0.017 (0.760)	-0.003 (0.956)
Transparency(A-T)		-0.025** (0.020)	0.056* (0.093)	-0.055 (0.522)	-0.012 (0.894)
CGRI(A-T)		-0.019 (0.140)	-0.021 (0.131)	-0.060 (0.266)	-0.038 (0.489)
Income tax(A-T)		-0.002*** (0.005)	-0.003* (0.069)	0.006 (0.120)	0.006 (0.152)
Currency appreciation(A-T)		-0.080 (0.190)	-0.044 (0.470)	0.148 (0.520)	0.030 (0.902)
Stock market volatility(A-T)		-1.462 (0.390)	-3.133 (0.115)	0.371 (0.961)	-4.876 (0.554)
Stock market return(A-T)		0.004 (0.894)	0.016 (0.578)	0.009 (0.939)	0.002 (0.988)
Creditor rights(A-T)		0.009** (0.036)	-0.028* (0.053)	0.014 (0.681)	0.031 (0.404)
ICRG composite(T)		-0.008*** (0.000)	-0.004** (0.031)	-0.024*** (0.000)	-0.025*** (0.000)
Common law(T)		0.018 (0.294)	-0.027 (0.896)	-0.173 (0.526)	-0.054 (0.848)
RADI(T)		-0.018*** (0.001)	-0.006 (0.937)	-0.608** (0.034)	-0.538* (0.071)
Transparency(T)		-0.010 (0.410)	0.184** (0.017)	-0.060 (0.800)	-0.030 (0.914)

CGRI(T)	0.009 (0.410)	-0.011 (0.452)	0.066 (0.203)	0.085 (0.128)
Income tax(T)	-0.002*** (0.002)	-0.004*** (0.002)	0.005 (0.289)	0.004 (0.405)
Currency appreciation(T)	0.022 (0.564)	0.030 (0.431)	0.174 (0.154)	0.131 (0.323)
Stock market volatility(T)	-1.591 (0.243)	-1.525 (0.318)	14.923*** (0.010)	12.102* (0.050)
Stock market return(T)	0.032 (0.181)	0.049* (0.055)	0.194** (0.030)	0.142 (0.141)
Creditor rights(T)	0.024*** (0.000)	-0.017 (0.739)	0.379* (0.067)	0.358* (0.099)
Market cap./GDP(T)	-0.033*** (0.000)	-0.056*** (0.002)	-0.183** (0.011)	-0.159** (0.042)
GDP growth(T)	-0.002 (0.309)	0.001 (0.828)	0.018* (0.078)	0.014 (0.174)
GDP per capita(T)	-0.007 (0.465)	-0.063** (0.033)	-0.183 (0.110)	-0.176 (0.152)
Weighted distance	0.001 (0.721)	0.007 (0.133)	0.017 (0.333)	0.025 (0.176)
Same language	-0.015 (0.182)	-0.010 (0.414)	0.002 (0.957)	0.016 (0.672)
Cross-listed	-0.071*** (0.002)	-0.074*** (0.003)	-0.227*** (0.002)	-0.184** (0.012)
Acquirer toehold	0.001*** (0.005)	0.001*** (0.007)	0.002** (0.031)	0.002** (0.048)
Acquirer size	0.034*** (0.000)	0.034*** (0.000)	0.035*** (0.000)	0.036*** (0.000)
Acquirer leverage	0.004 (0.818)	-0.003 (0.868)	-0.140** (0.048)	-0.189** (0.011)
Acquirer tangibility	-0.001 (0.960)	0.001 (0.962)	-0.034 (0.643)	-0.002 (0.980)
Acquirer stock return	0.004 (0.282)	0.004 (0.293)	0.041** (0.012)	0.037** (0.030)
Relative size	-0.338*** (0.000)	-0.329*** (0.000)	-0.414*** (0.000)	-0.357*** (0.000)
Private	0.136*** (0.000)	0.136*** (0.000)		
Subsidiary	0.252*** (0.000)	0.252*** (0.000)		
Intra-industry	-0.014** (0.027)	-0.013** (0.038)	-0.061*** (0.003)	-0.058*** (0.008)
High-tech	-0.042*** (0.000)	-0.043*** (0.000)	-0.002 (0.953)	-0.011 (0.712)

Hostile	-0.024 (0.548)	-0.021 (0.594)	0.039 (0.509)	0.062 (0.290)
Competing offer	0.056*** (0.006)	0.054*** (0.008)	0.084*** (0.003)	0.083*** (0.004)
Target size			-0.022*** (0.008)	-0.022** (0.018)
Target leverage			0.030 (0.362)	-0.003 (0.936)
Target tangibility			0.079 (0.148)	0.076 (0.194)
Target stock returns			0.001 (0.969)	-0.004 (0.802)
Target stock return volatility			-0.001 (0.152)	-0.001 (0.253)
Target takeover premium				0.103** (0.011)
Observations	26,083	25,991	2,205	1,989
Pseudo-R <sup>2</sup>	0.246	0.252	0.364	0.368
Country fixed effects	No	Yes	Yes	Yes

Table 7 (continued)

Variables	<i>Deal completion</i>					
	All	Cross-border	Domestic	All	Cross-border	Domestic
	(1)	(2)	(3)	(4)	(5)	(6)
Cross-border dummy	0.074 (0.167)			0.019 (0.751)		
Stock only	-0.011 (0.672)	-0.209*** (0.002)	-0.005 (0.874)	-0.006 (0.813)	-0.364*** (0.007)	-0.009 (0.778)
Mixed	0.040 (0.118)	0.267** (0.018)	0.035 (0.228)	0.053** (0.046)	0.291*** (0.000)	0.044 (0.164)
ICRG composite(A-T)	0.009 (0.170)	0.018 (0.342)		0.003 (0.686)	0.002 (0.852)	
Common law(A-T)	0.375 (0.114)	-1.467*** (0.010)		0.579* (0.069)	-1.297* (0.075)	
RADI(A-T)	-0.114 (0.131)	-0.537 (0.609)		-0.189** (0.049)	-1.311*** (0.000)	
Transparency(A-T)	-0.065 (0.635)	-0.030 (0.929)		-0.166 (0.286)	-0.412*** (0.001)	
CGRI(A-T)	0.005 (0.935)	-0.706*** (0.001)		0.004 (0.952)	-0.743*** (0.000)	
Income tax(A-T)	-0.002 (0.734)	0.047* (0.054)		-0.008 (0.346)	0.049*** (0.006)	
Currency appreciation(A-T)	0.021 (0.937)	0.661*** (0.000)		0.177 (0.523)	1.477*** (0.000)	
Stock market volatility(A-T)	-10.014 (0.219)	-58.267** (0.021)		-7.170 (0.419)	-47.716*** (0.002)	
Stock market return(A-T)	-0.131 (0.369)	0.769** (0.040)		-0.125 (0.440)	-0.138 (0.732)	
Creditor rights(A-T)	-0.015 (0.746)	0.258 (0.350)		0.009 (0.846)	0.675* (0.066)	
ICRG composite(T)	0.007 (0.349)	0.062** (0.018)	0.005 (0.613)	0.009 (0.263)	0.040 (0.107)	0.005 (0.624)
Common law(T)	-0.163 (0.640)	0.710 (0.691)	-0.662 (0.174)	0.257 (0.586)	-0.073 (0.919)	0.251 (0.501)
RADI(T)	-0.296 (0.210)	3.361 (0.360)	-0.905 (0.105)	-0.153 (0.347)	-1.282** (0.011)	-0.855** (0.033)
Transparency(T)	0.094 (0.804)	-6.474 (0.244)	-0.739* (0.082)	0.389 (0.304)	0.084 (0.887)	2.340 (0.101)
CGRI(T)	0.150*** (0.009)	-0.283** (0.031)	0.163** (0.031)	0.176*** (0.003)	-0.279** (0.032)	0.198** (0.023)
Income tax(T)	0.006 (0.308)	0.112* (0.093)	0.010 (0.157)	0.003 (0.612)	0.113*** (0.000)	0.008 (0.325)
Currency appreciation(T)	-0.084 (0.548)	-0.206 (0.652)	-0.088 (0.595)	-0.105 (0.470)	0.273 (0.517)	-0.121 (0.488)

Stock market volatility(T)	-7.498 (0.231)	-49.997*** (0.002)	-11.423 (0.136)	-7.949 (0.226)	-60.658*** (0.000)	-13.348 (0.116)
Stock market return(T)	0.007 (0.944)	0.756** (0.025)	0.080 (0.510)	0.010 (0.937)	0.703** (0.013)	0.158 (0.248)
Creditor rights(T)	0.117 (0.487)	-2.876 (0.235)	0.484 (0.433)	-0.053 (0.502)	-0.023 (0.879)	1.781* (0.089)
Market cap./GDP(T)	-0.182* (0.053)	-0.615 (0.110)	-0.299** (0.011)	-0.176* (0.084)	-1.810** (0.023)	-0.318** (0.020)
GDP growth(T)	-0.005 (0.718)	-0.000 (0.965)	-0.022 (0.116)	-0.009 (0.493)	0.032 (0.276)	-0.032** (0.040)
GDP per capita(T)	0.048 (0.747)	-0.061 (0.790)	0.139 (0.448)	0.083 (0.600)	0.248 (0.519)	0.140 (0.478)
Weighted distance	0.028 (0.206)	0.013 (0.542)		0.022 (0.369)	-0.010 (0.693)	
Same language	0.013 (0.759)	0.130 (0.324)		0.057 (0.208)	0.022 (0.681)	
Cross-listed	0.002 (0.977)	0.263** (0.039)		-0.022 (0.802)	0.482*** (0.000)	
Acquirer toehold	0.193*** (0.001)	0.035*** (0.001)	0.511 (0.675)	0.125** (0.038)	0.028** (0.011)	0.205 (0.872)
Acquirer size	0.042*** (0.000)	0.005 (0.895)	0.057*** (0.000)	0.036*** (0.000)	-0.018 (0.251)	0.056*** (0.000)
Acquirer leverage	-0.044 (0.597)	0.107 (0.226)	-0.026 (0.771)	-0.113 (0.185)	-0.391 (0.111)	-0.083 (0.389)
Acquirer tangibility	0.023 (0.730)	-0.073** (0.047)	0.039 (0.632)	0.040 (0.560)	-0.152** (0.036)	0.089 (0.299)
Acquirer stock return	0.037** (0.026)	-0.108*** (0.000)	0.054*** (0.005)	0.043*** (0.010)	-0.177*** (0.000)	0.057*** (0.006)
Relative size	0.054 (0.559)	-0.024 (0.806)	0.096 (0.372)	0.056 (0.559)	0.345 (0.178)	0.101 (0.367)
Intra-industry	0.033 (0.122)	-0.194*** (0.000)	0.042* (0.086)	0.016 (0.486)	-0.238* (0.058)	0.028 (0.298)
High-tech	0.008 (0.775)	-0.229** (0.041)	0.004 (0.898)	0.013 (0.667)	-0.078 (0.151)	0.015 (0.652)
Hostile	-0.244*** (0.000)	-0.546* (0.092)	-0.271*** (0.000)	-0.237*** (0.000)	-0.571*** (0.000)	-0.269*** (0.000)
Competing offer	-0.289*** (0.000)	-0.440** (0.037)	-0.280*** (0.000)	-0.278*** (0.000)	-0.587*** (0.001)	-0.268*** (0.000)
Target size	-0.017* (0.067)	-0.110* (0.094)	-0.022** (0.046)	-0.015 (0.136)	-0.102*** (0.000)	-0.027** (0.040)
Target leverage	-0.027 (0.413)	0.383 (0.150)	-0.016 (0.667)	0.025 (0.484)	0.633*** (0.000)	0.054 (0.277)
Target tangibility	0.059 (0.283)	0.009 (0.927)	0.017 (0.794)	0.063 (0.284)	-0.056 (0.534)	0.033 (0.641)

Target stock returns	-0.001 (0.924)	0.096*** (0.000)	-0.003 (0.850)	0.013 (0.394)	0.186*** (0.000)	0.017 (0.361)
Target stock return volatility	-0.001 (0.231)	-0.013** (0.045)	-0.001 (0.511)	-0.001 (0.267)	-0.015*** (0.000)	-0.000 (0.675)
Target takeover premium				0.083** (0.038)	0.371*** (0.003)	0.047 (0.323)
Observations	1,477	237	1,089	1,346	217	990
Pseudo-R <sup>2</sup>	0.371	0.918	0.372	0.380	0.948	0.389
Country fixed-effects	Yes	Yes	Yes	Yes	Yes	Yes