

The effect of the protection and stability of creditor rights on the fifth wave of M&As

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Abstract: In this paper, we evaluate the impact of creditor rights and political risk on both the number and the value of cross-border M&A flows in a gravity model estimated with a Poisson regression, a negative binomial model, and Heckman's two-stage selection model. Our results confirm that creditor-friendly rules and political risk decrease M&A inflows. The impact of formal legal rules is however mainly driven by politically stable countries, where those rules can be expected to hold. It therefore takes political stability for de jure rules to matter de facto.

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JEL Classification: F23, G18, G34, P16.

1. Introduction

Cross-border mergers and acquisitions (M&As) have now replaced Greenfield investments as the key mode of foreign direct investment. Indeed, according to the UNCTAD foreign investment database, the share of M&As in world foreign direct investment flows rose from 53% in 1987 to 67.4% in 2006. It even topped 80% in 2000, at the peak of the 1990s

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wave of M&As. Since the global volume of FDI has also broadly been on the rise over the last twenty years, the volume of cross-border M&As has reached unprecedented levels. It exceeded 880 billion dollars in 2006, admittedly less than the more than 1,140 billion dollars that were recorded in 2000 (UNCTAD, 2003, 2007).

However, while the volume of cross-border M&As has increased, all countries do not equally benefit from that trend, and M&A inflows are unevenly distributed across countries. More precisely, most M&As take place between rich countries, as Pryor (2001) points out. M&As therefore fit Lucas's (1990) paradox, according to which capital should, but does not, flow from rich to poor countries. Brakman et al. (2006) thus report that between 2001 and 2005 on average more than 84% of the world value of cross-border deals originated in Europe and North America alone, while the same two regions attracted 75.7% of the value of world M&As over the same period. Understanding what drives M&A flows away from those countries that need capital the most is therefore an urgent question of international economics and international finance.

Following the law and finance literature spurred by La Porta et al.'s (1997, 1998) seminal papers, research has so far emphasized the legal determinants of cross-border M&As. This is in particular the route chosen by Rossi and Volpin (2004). Focusing on differences in laws and regulation, they found that acquirers tend to come from richer countries with better accounting standards and stronger shareholder protection than their targets. Formal laws thus appear as a key explanation of the Lucas paradox.

By focusing on formal rules, the law and finance approach however overlooks the fact that the application and credibility of formal rules obviously matters: a rule, no matter how efficient, is of little value if it is not applied, or is likely not to be applied in the future. In other words, *de jure* rules have little impact if they are not *de facto* implemented. The analysis of *de jure* rules should therefore be complemented by the study of *de facto* rules. This approach was successfully followed by Safavian and Sharma (2007), who found that legal protections and efficient courts were strong complements in determining access to bank credit. Even more striking is the fact that financial outcomes vary across regions of the same country, namely where the formal law is the same across regions but court efficiency differs. Such findings were, for instance, reported by Bianco et al. (2005) for Italy, or Laeven and Woodruff (2007) for Mexico. The respective influence of *de facto* and *de jure* laws on cross-border M&As has, however, not been investigated yet.

That neglect of the impact of informal institutional factors on M&A flows is all the more striking since the impact of those factors on total FDI flows has been widely documented, starting with Schneider and Frey's (1985) seminal paper. This finding is robust to the estimation period and the empirical strategy, as recent contributions by Wei (2000), Busse and Hefeker (2007), Stein and Daude (2007), or Alfaro et al. (2008) underline. Political risk has in particular attracted attention because it determines the credibility of existing formal rules.

The aim of the present paper is precisely to gauge how creditors' rights determine cross-border M&A flows in the presence of political risk. To do so, we consider cross-country bilateral M&A flows on a panel of developed and developing countries over the fifth wave of M&As, namely 1990-2001. We estimate a gravity model and focus on the interaction of formal creditors' rights and political risk. Our results suggest that formal creditors' rights protection and lack of political risk are complements in determining a country's attractiveness to foreign investors.

To reach that conclusion, the next section describes our dataset and empirical strategy, section 3 displays our results, while section 4 concludes.

2. Methodology and data

Our main variable of interest is the number of cross-border M&As originating from the EU-15. We model these M&As bilaterally, taking into account both the acquiring and the target country by applying the gravity model. While this model was originally designed to study trade flows, it has since then been applied to capital flows. Influential examples are de Ménéil (1999), Wei (2000), or Portes et al. (2001). Moreover, Ashcroft et al. (1994), di Giovanni (2005), and Delannay and Méon (2006) use it specifically to model M&A flows.

The cross-border M&A figures are extracted from the Thomson Financial Products "*SDC Platinum*" database. This dataset documents merger operations worldwide. We extracted the number and value of operations involving world-wide acquisitions by firms in the European Union. As mentioned above European firms are among the most important players for cross-border M&As. Focusing on deals originating in Europe ensures a group of more or less homogenous acquirers. To apply the gravity model, that information was aggregated by pair

of countries and year of activity. We thus obtained a panel data set where basic observations are country-pairs.

As “SDC Platinum” is supposed to be exhaustive, a lack of reported operation must be interpreted as a true absence of operation rather than as an omission or missing data. A look at the data reveals that there are many country-pair – year observations with zero entries. Hence, the distribution of our dependent variable is skewed to the right and exhibits over-dispersion (i.e., the variance is larger than the mean). The appropriate econometric technique to cope with such a set-up is a negative binomial model. As we are using panel data we have to take this feature of the data into account as well. To do so, we use a random effects negative binomial model. In contrast to linear estimation techniques, the random effects only apply to the dispersion parameter.¹ To be more concrete consider that the number of M&As (y_{ijt}) originating from country i and targeted at country j in year t have the following mean and variance:

$$E(y_{ijt}) = e^{(\beta' X_{ijt})} = \lambda_{ijt} \quad (1)$$

$$Var(y_{ijt}) = \lambda_{ijt}(1 + \delta_{ij}), \quad (2)$$

Moreover, $y_{ijt}|\gamma_{ijt} \sim \text{Poisson}(\gamma_{ijt})$, where $\gamma_{ijt}|\delta_{ij} \sim \text{gamma}(\lambda_{ijt}, \delta_{ij})$ and δ_{ij} is the dispersion parameter, which is constant in the time dimension but allowed to vary randomly across country-pairs as $1/(1 - \delta_{ij}) \sim \text{Beta}(r, s)$. As described in Hausman et al. (1984) these assumptions lead to the following log-likelihood function:

$$\begin{aligned} \ln L = \sum_{i=1}^n \left[\ln \Gamma(r + s) + \ln \Gamma\left(r + \sum_{k=1}^{n_i} \lambda_{ik}\right) + \ln \Gamma\left(s + \sum_{k=1}^{n_i} y_{ik}\right) - \ln \Gamma(r) - \ln \Gamma(s) \right. \\ \left. - \ln \Gamma\left(r + s + \sum_{k=1}^{n_i} \lambda_{ik} + \sum_{k=1}^{n_i} y_{ik}\right) + \sum_{k=1}^{n_i} \left\{ \ln \Gamma(\lambda_{ik} + y_{ik}) - \ln \Gamma(\lambda_{ik}) - \ln \Gamma(y_{ik} + 1) \right\} \right], \quad (3) \end{aligned}$$

where Γ is the gamma distribution.² For tests of robustness we also present results using the random effects Poisson estimator, the other commonly used count data model.

While our dependent variable is available for all country-year observations, this is not true for some of our explanatory variables. Thus our panel dataset is unbalanced and the

¹ In particular, it is not possible to simply include country dummies as this would lead to biased estimates. While conditional fixed effects negative binomial models exist, Guimarães (2008) has shown that they do not necessarily remove the individual fixed effects.

² To enhance readability, the cross-sectional dimension of our panel in equation (3) is just denoted i . Of course, is actually bilateral, i.e., pairs of acquiring and target countries (ij).

number of observations also depends on the choice of explanatory variables. To account for common shocks, we include annual time dummies in all specifications. Our selection of the covariates follows the logic of the gravity model of international trade, which seems to be the natural choice given our bilateral set-up.

In a nutshell, the gravity model of international trade argues that the amount of bilateral trade is positively related to the size of the trading partners and to the proximity between them, both geographic as well as cultural.³ The first question is then to choose a measure of size. The literature that applies the gravity model to capital flows has not reached a consensus on how to measure a country's size. Portes et al. (2001) and di Giovanni (2005), for instance, employ market capitalization. This measure is, however, only available for a limited set of countries, most of them developed. Using that measure would accordingly bias our dataset towards richer and more politically stable countries. Eaton and Tamura (1994) or Loungani et al. (2002) simply measure size by the size of countries' populations. De M n il (1999) or Wei (2000) suggest to use total GDP instead.

To keep the better of two worlds, we therefore measure the size of countries by using both (log of) population and (log of) GDP per capita of the acquiring and the target country. To allow for comparisons both over time and across countries we use purchasing power parity GDP in constant year 2000 international dollars. Both size measures are taken from World Bank (2006).

Distance has both a geographic and a cultural/historical dimension. We measure geographic distance by the (log of) geographic distance between the countries' largest cities, as well as a set of dummy variables inspired by Rose (2004). This set of measures of distance is complemented by a variable indicating if the country-pair shares a common border.

Geographic distance has been repeatedly found to negatively affect bilateral capital flows, see, e.g., de M n il (1999), di Giovanni (2005) or Portes and Rey (2005). That distance may hinder the movements of an immaterial phenomenon may seem odd at first glance. Unlike the costs of transporting material goods, the costs of trading capital should not increase with geographical distance. The current consensus is, therefore, to interpret geographic distance as a proxy of informational costs. Portes et al. (2001), Loungani et al. (2002), Portes and Rey (2005), and Goldberg et al. (2005) provide evidence that part of the impact of geographic distance indeed captures informational costs.

³ For a theoretical foundation of the gravity model applied to trade flows see Anderson and van Wincoop (2003), for a well known application see Rose (2004).

If informational costs matter, it is important to complement geographic distance by other dimensions of distance. For that reason, we have an indicator of sharing a common official language, to control for cultural proximity. We also control for historical ties by employing a dummy variable taking on a value of 1 if the country-pair has ever been in a colonial relationship. The source for all distance related variables is CEPII (2006). Finally, and more M&A specific, we include a dummy variable indicating whether the acquiring and the target country share a common legal origin according to Easterly and Sewadeh (2001). Stein and Daude (2007) for instance found a positive impact of common legal origin on bilateral FDI flows.

Our central variables of interest are, however, the level of creditors' rights and political constraints in the two countries. We operationalize the former by using an index developed by La Porta et al. (1998). The index ranges from 0 to 4 with higher values indicating more creditors' rights. It assigns one point for each of the following (see La Porta et al. 1998, p. 1124): (a) giving restrictions such as creditors' consent, (b) secured creditors are able to gain possession of their security upon approval of a reorganization petition, (c) secured creditors rank first in the distribution of assets resulting from a bankruptcy, (d) the debtor does not regain the administration of its property pending the resolution of the reorganization.

Concerning the proxy for political constraints in a country we use three alternative measures. First, we use the Political Constraints III (POLCONIII) index developed by Henisz (2002). This measure of political constraints estimates the feasibility of policy change by using data on the number of independent branches of government (executive, lower and upper legislative chambers) with veto power over policy. Besides the number of veto players this index also captures the distribution of preferences of the members of the different branches of government. In a nutshell, the index quantifies how easy it is to change the legislative status quo for the government. If there are no veto players and the executive is free to alter policy at their discretion, the index takes a value of zero. In contrast, if there is one veto player whose preferences do not overlap with the executive the value of the index would be one, as it is certain that no deviation from the status quo will be made. The more veto players exist, the higher is the value of the political constraints index. The distribution of preferences is measured by the fractionalization of the different branches of government. The more fractionalized the branches are, the higher the political constraint. In our sample the value of the POLCONIII index ranges from 0, e.g., Jordan over the entire sample period, to

0.72, for Belgium in 2000 and 2001.

As a first alternative measure for the constraints on the executive we take the Political Constraints V (POLCONV) index developed by Henisz (2000). It uses the same methodology as the POLCONIII described above but also takes two additional potential veto players into account: sub-federal units and the judiciary. Given the two potential additional veto players the values of the POLCONV are generally higher as compared to the POLCONIII. In our sample the POLCONV ranges between 0 and 0.89, again for Belgium in 2000 and 2001.

Our third alternative measure is the variable “Political Risk” taken from the International Country Risk Guide (ICRG) produced by Political Risk Services. This index is based on experts’ assessments of the political risk associated with a particular country. It is therefore a broad measure of political hazard. It has been widely used in empirical studies, such as Knack and Keefer (1995). It ranges from 9.83 (Lebanon 1990) to 96.08 (Netherlands 2001), with higher values indicating less political risk.

A final potential alternative to measure constraints on the government is the variable “Checks and Balances,” developed by Keefer and Stasavage (2003) and available at the Database of Political Institutions. Given that all results obtained by this index are comparable to the results presented in this paper, we refrain from including them in this study. They are, however, available upon request. Overall, our dataset spans the years 1990-2001, that is the whole fifth wave of M&As.

Apart from being interested in the importance of creditors’ rights and the probability of sudden changes in the political decision process, we are interested in the interaction between the two processes. In other words: do legal rules still matter if they are likely to be changed? One way to model such a question econometrically would be via the introduction of an interaction term between our two central variables. However, as demonstrated by Ai and Norton (2003) in non-linear models such as negative binomial and Poisson the interpretation of interaction effects is far from being straightforward. Unlike in linear models (such as the OLS) the t-statistic of the coefficient of the interaction term is essentially meaningless since standard econometric programs ignore the fact the interaction term is not an independent variable but rather the product of two regressors. We sidestep this problem in the following way: instead of explicitly modeling the interaction between creditors’ rights and political constraints, we introduce an implicit interaction. We partition our sample in quartiles of the distribution of the respective political constraints variable. We then run our regression for

these four sub-samples. If there is no interaction between the two central variables the coefficient of the creditor rights should not differ across the four sub-samples.⁴

3. Results

In this section, we present and discuss our econometric results. We first consider the number of deals between pairs of countries and then turn to their values.

3.1. *The number of M&A deals*

Tables 1 to 3 show our main estimation results with respect to the number of cross-border M&As originating from the EU. Table 1 reports the results of estimations that pool all pairs of countries, while Tables 2 and 3 distinguish quartiles of political constraints. The coefficients given in the tables represent incidence-rate ratios. As such, a one unit change in the corresponding variable represents an expected change in the number of M&As of $(\text{coefficient}-1) \cdot 100$ percent. Hence, all values above 1 indicate a M&A increasing relationship while the reverse is true for values below 1. The lower bound of the incidence-rate ratio is zero which would indicate that an increase in X by one unit would set the expected value of y to zero (i.e., a change by -100 percent).

For concreteness consider the dummy variable indicating a common official language in Table 1, column 1. The coefficient value of 2.385 indicates that, *ceteris paribus*, a common official language leads to an increase in the expected number of M&As by 138.5%. While this number might seem very large consider the following: cross-border M&As are infrequent events. The unconditional mean over all country-pair – year observations is 0.45 in our sample (in contrast to an estimated 0.40 according to the specification in column 1 in Table 1). So a doubling of the expected effect at the predicted mean would raise the expected number of M&As from essentially zero to one. Looking at the other cultural distance measure we can confirm the importance of culture. A common colonial relationship increases the expected number of mergers between 160% and 222%. Both cultural proximity proxies are

⁴ We focus our analysis using sub-sample regressions on the target countries as our acquiring countries are more or less homogenous with respect to our two central variables. We also exclude the political constraint variable from the analysis as it was used to form the subsets and hence the variable is bounded. Note, however, including it does not alter our findings.

significant at the 1% level across all specifications. Evidence for the common legal origin is mixed. While it is significant according to the negative binomial results, this is not true according to the Poisson regressions. If significant, the estimated effect corresponds to an increase in our dependent variable of about 20%.

Turning to geographic measures we can confirm the importance of distance. Note, that the bilateral distance (in kilometers) has been entered in logarithmic terms. Hence, a 1 point increase has different implications pending on the starting point. In our sample the mean value for the log of bilateral distance is 8.3. Increasing this by 1 to 9.3 equals an increase in the distance of 7,000 km. According to the estimations such an increase would lead to a reduction in the expected number of M&As of approximately 40%. In contrast to the distance variable, the common border measure is always statistically insignificant at conventional levels.

As regards our measures of size, we can confirm the importance of both GDP per capita and population. They are both significant at the 1% level in all specifications. As both measures are entered in logarithmic form, we again have to be cautious when interpreting the magnitude of the estimated effect. As we are focusing on M&As from the EU an increase in the log of GDP per capita by one roughly corresponds to going from the minimal value, i.e., 5,750 \$, to the maximum of 38,000 \$. Such an increase would imply a jump in M&As of about 300% according to the negative binomial results and around 200% according to the Poisson estimates. The target countries in our sample are much more heterogeneous. Thus a one point increase of the log of GDP per capita in the targeted country (starting from the mean value) corresponds to an increase of approximately 10,000 \$. According to the estimations this would yield an increase in our dependent variable of about 200%.

The results with respect to the size of the population suggest that there is not much difference between acquiring and target countries. A one point increase in the log (starting at the mean values) implies an increase of 27 million in the former while it is 26 million in the latter. Across all specifications such an increase suggests roughly a doubling of the number of predicted M&As.

After evaluating the impact of the control variables, we can now turn to the two central variables. First, consider the role of creditors' rights. As expected, they enhance M&A activity from the point of view of the acquiring country. A one point increase in the index leads to a 10% raise in the number of predicted mergers and acquisitions, this result is significant at the 5% level, at least. The same is not true when looking at the target country.

Here an increase in creditors' rights lead to a reduction of cross-border mergers. Interestingly, the magnitude of the negative effect for the target country is almost identical to the positive effect for an acquiring country. The magnitude of those effects is very stable across specifications and not much affected by the set of control variables. Our results therefore suggest that M&A activity tends to originate in countries with high creditors' protection and targets countries with low protection.⁵

This result is reminiscent of Rossi and Volpin (2004), who report the probability that a successful merger is cross-border is higher in countries where investor protection is lower. More to the point, they also report that acquiring firms tend to originate in countries with stronger shareholder protection than target firms. One should, however, recall that those authors do not estimate a full-fledged gravity model where the dependent variable is the number of deals. Instead, they obtain the first result thanks to cross-country regressions in which the dependent variable is the cross-border ratio, i.e., the share of completed deals that are indeed cross-border. The second result is obtained with an ordered-pair analysis where the dependent variable is the share of cross-border deals in the target country that originate from the source country.

Finally, we focus on the impact of political constraints. The POLCONIII result suggests that an increase of the index value of one standard deviation (equal to an increase of 0.1) would yield a 10% increase in M&As while the Poisson estimates suggest a 20% increase. While the coefficient for the target country is very similar, there is much more variation in the constraint index. Hence, an increase by one standard deviation is now equal to an increase in the index by 0.2. Such an increase would roughly increase the number of M&As by 40%.

Taking the additional veto players of the POLCONV index into account, it is apparent that they do not seem to play a major role in acquiring countries: the coefficient is insignificant in the negative binomial case while it is marginally significant in the Poisson regression. One reason might be that the European countries, which form the acquiring countries in our sample, are rather homogenous according to this measure.⁶ This makes it

⁵ As an alternative we have also run models using the difference in creditors' rights between the acquiring and the target country and can confirm the finding that the direction seems to be from strongly to weakly protected countries.

⁶ While the minimum and maximum values of 0.40 and 0.89 suggest some variability, the mean and standard deviation of 0.78 and 0.05 illustrate that most countries score high in our sample.

difficult to properly quantify the effect. When switching to the target countries, however, we see that there the additional veto players seem to matter greatly. An increase in constraints by one standard deviation (equivalent to an increase of the index by 0.3) would result in an expansion of M&As by 120% according to both estimation methods. This is interesting since one of the two additional veto players that are taken into account in POLCONV and that are not taken into account in POLCONIII is the judiciary. The finding that the coefficient of the former is larger than the latter points to an important role of the application of legal rules, which is precisely what we want to focus upon.

Our third political measure, the ICRG political risk index, has the same difficulties with respect to the homogenous set of acquiring countries. Hence, we obtain one insignificant and one negative relationship from the regressions for the acquirer.⁷ In the target country the importance of stable policies are confirmed. The magnitude of the effect is much smaller as before: a one standard deviation increase (i.e., 12.6 points) only leads to an increase of 0.1% in M&As. This result is in line with Moser et al. (2008) who find that politically riskier countries tend to receive less exports.

As we have argued before, while it is certainly very valuable to analyze the role of both creditors' rights and political constraints, it might not be enough to examine them in separation. In Tables 2 and 3, we present the outcome of our implicit interaction between both concepts. As describe above, we split our sample used in Table 1 in four sub-samples according to the four quartiles of the distribution of the respective political constraints measure. Therefore, the first quartile contains the least constrained countries (i.e., most risk) and the last contains the most constrained ones (i.e., most stable). We refrain from interpreting the covariates again as they are qualitatively unchanged compared to Table 1 and, more importantly, do not vary much for the four sub-samples. Due to the difficulty of the homogeneity of the constraints variables in the acquiring country described above we also refrain from going over these results. The finding of the importance of creditors' rights in the acquiring countries from Table 1 is confirmed. The magnitude of the estimated effect is also more or less unchanged. Things change dramatically, however, when we concentrate on our implicit interaction. In all but one specification the creditors' rights are only significant in the target countries with the highest constraints, i.e., the highest probability that the rules will

⁷ In our sample the minimum and maximum values are 60 and 96, while again the mean and the standard deviation of 82 and 6 suggest that most countries score high on the index.

remain unchanged.⁸ Not only that, the magnitude of the effect has approximately doubled in most specifications. In a nutshell, *de jure* creditors' rights only matter where they are reliable enough. Elsewhere they lack credibility too much to affect investors' behaviors. In other words, *de jure* rules that do not result in *de facto* rules are of no great consequence for the number of deals targeting a country.

3.2. The value of deals

So far we have learned that low creditors' rights and high political security individually increase the number of cross-border mergers and acquisitions in target countries. Moreover, creditors' rights matter particularly when they are highly secured. Looking at the sheer number of transactions might not be enough, however. Most people would rate one giant M&A such as the acquisition of Mannesmann by Vodafone in the year 2000 with a total value of more than 200 billion USD as much more important than three "minor" M&As valued each at 100 million USD. Moreover, from a macroeconomic point of view, the volume of capital flows in a country is determined by the value of deals and not by their number.

To take that into account, we change our dependent variable. Instead of the count variable we are using the total value of all M&As for each country-pair – year observation. This change in the explanatory variable also forces us to alter the estimation set-up. The total value of the annual M&A activity is certainly not a count variable. However, standard OLS is not applicable given the zero observations. If these zero entries were random, OLS would be applicable. Clearly, they are not: if the price for a M&A exceeds the net present value of such a deal, the observed value will be zero. To account for this non-randomness we resort to a two-step Heckman approach as developed and described by Heckman (1979). In the first step, a probit estimation is conducted determining the probability of observing a non-zero outcome. From this first step one can calculate the hazard of non-observance, i.e., the inverse Mills' ratio. In the second step, a linear regression, is augmented by the inverse Mills' ratio to correct for the non-randomness of selection. In order to properly estimate the first step it is common to include a "selection" variable which determines the probability of observing a positive value but does not affect the value as such. In our case this variable will be the

⁸ The only exception is the specification with POLCONV in Table 2 in which the creditor's rights are also marginally significant for the 0.5 and the 0.75 quantiles. However, the most significant coefficient is estimated for the highest quartile.

common border dummy. We have seen in Tables 1 to 3 that this variable did not determine the number of M&As. It is therefore highly unlikely that it will influence the value of M&As. It is, however, very conceivable that the decision to engage in M&A activity is more likely in a neighboring country. For the regression analysis, we use the logarithm of the M&A values to account for the vast range of observations.⁹

The result of the empirical exercise is presented in Table 4. For each of our constraint measures, the first column represents the result of the second stage which explains the annual total values of each country-pair. Note that the coefficients of the second stage now represent (semi-)elasticities depending on the explanatory variable being logarithms, or not. Hence, having a common language increases the value of M&As by roughly 90%, while a 1% increase in the acquiring country's GDP per capita leads to a 4% increase in the value of M&As. In the second column of each political risk measure, denoted, e.g., (1a), the first stage results are displayed. Note that these are the coefficients of a probit estimation and, hence, only the sign and significance level is interpretable. We see that our "selection" variable works, since a positive M&A flow is more likely between neighboring countries. Moreover, we see that all covariates influence both the probability of observing a positive value and the actual amount of the M&As. All the signs correspond to the results of Table 1.

Turning the attention to the creditors' rights we see a differentiated picture. A high value of creditors' rights increase the likelihood of outgoing M&A activity but not the total value of the deals. The opposite is true for the creditor's rights in the target country. As with the number of deals lower values stimulate M&As, but now this is only true for the total value and not for the likelihood of a positive number of M&As. A one point decrease of the creditors' rights index leads to a 10% increase in the total value of the mergers and acquisitions.

The problem of the homogeneity of the EU acquiring countries described above seems to be more severe in the Heckman set-up. It seems that this leads to the negative coefficient for both POLCONIII and POLCONV. The ICRG instead yields the expected positive result, a one standard deviation increase in the index (i.e., 12.6 points) suggests an increase in the value of the M&As by 130%.

⁹ Taking logarithms turns all zero observations into missing values. This has no implications for the two-step estimator, however, because in the first step a dummy variable is used and in the second step missing values are treated as zeros.

More importantly, we get the same pattern as in Table 1 for the target country. All three measures suggest that more political security in the target increases both the likelihood and the value of the mergers. An increase in the value of the POLCONIII and the POLCONV indices of 0.1 points would increase the value of M&As by 10% and 22%, respectively. This finding confirms our results for the count of takeovers. Overall results for both the count and the value of deals confirm Daude and Stein's (2007) finding that political stability is the institutional dimension that affects FDI the most.

After confirming the findings of our separate analysis of creditors' rights and political constraints, we also revisit our key interaction result. We again partition our sample in four sub-samples according to the quartiles of the constraints in the target country. On the one hand, this facilitates the comparison with our previous results while on the other hand, we sidestep the interaction interpretation in the first step probit estimation. The results are presented in Table 5. First, we again see that most of our covariates are relatively stable across the different samples. The odd results for the political constraints in the acquiring country remain.

Remarkably, we again find that the result for the importance of creditors' right breaks down for activity targeted at the riskiest countries. For the upper three quartiles the result is more or less confirmed. Once more, the most interesting variable in this set-up is the creditors' rights index in the target country. Just as in Tables 2 and 3 we find that the more secure these rights are, the higher is their significance level and their magnitude. For example, according to column 4 (the highest quartile of POLCONIII) a one point reduction in creditors' rights would increase M&A value by 30%.¹⁰ In other quartiles, creditors' rights fail to have a significant impact on the value of pairwise M&A flows. The findings for the value of deals therefore confirm that formal legal rules only matter where they are stable enough.

Our results may at first seem to contrast with Daude and Fratzscher's (2008) recent finding that the volume of FDI is little affected by investor protection. At the same time, they offer a possible rationale. When running pooled regressions, we indeed find an impact of creditor rights on M&A inflows, which contrast with their result. A first rationalization of that contrast may lie in methodological differences. Daude and Fratzscher (2008) focus on foreign capital stocks while our dependent variable is the volume of bilateral M&A flows. Also their

¹⁰ Table 5 does not include results for the ICRG index which were suppressed to enhance readability. Creditors' rights in the target country were only significant in the third quartile at the 1% level of significance. Results are available upon request.

result rests essentially on a cross-section of country fixed effects. They first estimate a gravity equation including fixed effects for target and source countries. In a second step, they take the estimated target country fixed effects and regress them on (time-invariant) institution proxies. There may, however, be a more substantial reason to the difference between their result and ours, which is provided in our second set of regressions. Daude and Fratzscher (2008) pool countries with both different investor protection and different political stability. They consequently cannot identify those countries where legal protection indeed matters. This is what our regressions by quartile allow. We only find a relationship in the subset of countries where political constraint is high enough. Elsewhere, our results are in line with Daude and Fratzscher's (2008).

As a test of robustness, we have replicated all our approaches incorporating the sub-index of social globalization taken from the KOF Index of Globalization 2008 developed by Dreher (2006) and updated by Dreher et al. (2008). This sub-index consists of variables measuring personal contact, data on information flows and data on cultural proximity. It ranges between 0 and 100 where higher values indicate a higher level of social integration. While social globalization itself is positively and significantly related to M&As both from the acquirer's and the target's perspective our other results remain unchanged. That ensures that our results are not driven by some countries on which it is to obtain information easy for investors. If such "easy access" countries would have a particular pattern of regulation and political constraints our interpretation of the results would be not justified. However, this is apparently not the case.¹¹

4. Concluding remarks

In this paper, we evaluated the determinants of both the number and the value of cross-border M&A flows in a gravity model, with a view to measuring the impact of creditor rights and political risk. We studied both the number and the value of cross-border deals. Since the number of deals between two countries is small and discrete, the model was estimated thanks to both a Poisson regression and a negative binomial model. It was fitted to the value of deals with Heckman's two-stage approach, to account for the large number of countries for which no deal was reported over our period of study. When using pooled regressions, our results

¹¹ The results are not presented to save space. They are available upon request.

confirm that formal legal rules and political risk affect M&A flows. More precisely, political stability increases M&A inflows, while creditor-friendly rules deter them.

The key new finding however appears when distinguishing target countries according to political stability. It then appears that previous results on formal legal rules are mainly driven by relatively stable countries, where those rules can be reasonably expected to hold. Those results thus draw a link between the law and finance literature and the literature that emphasizes the sensitivity of capital flows to political risk. While the former has shown that formal rules impact financial phenomena, the latter has emphasizes their sensitivity to political phenomena. Our results suggest that if legal rules matter, they only matter where political stability allows them to be reliable enough.

Table 1: Determinants of the Number of European Cross-Border M&As, 1990-2001

	(1)	(2)	(3)	(4)	(5)	(6)
Common border	1.177 (0.81)	1.149 (0.72)	1.088 (0.43)	1.157 (0.61)	1.123 (0.51)	1.031 (0.13)
Common official language	2.385 (4.22)***	2.018 (3.53)***	2.117 (3.74)***	2.770 (4.24)***	2.284 (3.54)***	2.447 (3.81)***
Colonial history	2.609 (4.59)***	2.748 (4.98)***	2.697 (4.86)***	2.974 (4.46)***	3.222 (4.93)***	3.149 (4.75)***
Distance (log)	0.615 (10.28)***	0.611 (10.67)***	0.621 (10.23)***	0.573 (10.87)***	0.570 (11.15)***	0.575 (10.90)***
Common legal origin	1.209 (1.69)*	1.256 (2.08)**	1.236 (1.92)*	1.115 (0.87)	1.181 (1.36)	1.157 (1.19)
GDP p.c. acquiring country (log)	4.035 (5.02)***	4.459 (5.41)***	4.586 (5.36)***	2.680 (3.86)***	2.927 (4.22)***	3.254 (4.51)***
GDP p.c. target country (log)	3.337 (21.94)***	2.683 (16.85)***	3.180 (17.08)***	3.529 (21.65)***	2.846 (16.98)***	3.473 (17.99)***
Population acquiring country (log)	1.935 (14.78)***	1.878 (14.89)***	1.912 (14.71)***	2.002 (14.26)***	1.925 (13.92)***	1.912 (13.32)***
Population target country (log)	1.790 (18.42)***	1.751 (18.06)***	1.808 (18.50)***	1.929 (19.08)***	1.868 (18.62)***	1.958 (19.11)***
Creditor's rights acquiring country	1.134 (3.53)***	1.141 (3.73)***	1.114 (2.93)***	1.111 (2.80)***	1.108 (2.77)***	1.096 (2.42)**
Creditor's rights target country	0.932 (1.92)*	0.930 (2.05)**	0.928 (2.08)**	0.909 (2.47)**	0.908 (2.54)**	0.907 (2.56)**
Political constraints III acquiring country	2.028 (2.27)**			3.053 (4.00)***		
Political constraints III target country	2.134 (4.13)***			1.912 (3.84)***		
Political constraints V acquiring country		1.055 (0.06)			4.707 (1.71)*	
Political constraints V target country		5.145 (9.19)***			5.094 (9.54)***	
ICRG political risk acquiring country			0.998 (0.30)			0.990 (1.97)**
ICRG political risk target country			1.013 (3.42)***			1.010 (2.86)***
Method	Neg. Bin.	Neg. Bin.	Neg. Bin.	Poisson	Poisson	Poisson
Observations	15,484	15,386	14,392	15,484	15,386	14,392
Number of pairs	1,372	1,358	1,302	1,372	1,358	1,302

Notes: The table reports the results of random effects negative binomial (Neg. Bin.) and Poisson panel regressions. The dependent variable is the number of cross-border mergers and acquisitions originating from Europe. The coefficients reported in the table are incidence-rate ratios, i.e., a one unit change in the corresponding variable represents an expected change in the number of M&As of (coefficient minus 1) times 100 percent. All regressions include annual time dummies. Absolute t-values are given in parentheses below the coefficient.

*/**/** indicate significance at the 10/5/1-% level.

Table 2: M&As and the Interaction between Constraints and Creditor's Rights, Negative Binomial, 1990-2001

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Common border	2.73E-06 (0.00)	0.683 (1.13)	0.999 (0.00)	1.000 (0.00)	5.890 (1.21)	9.106 (2.35)**	1.356 (1.15)	0.661 (1.81)*	7.316 (1.57)	1.404 (0.47)	1.107 (0.31)	0.804 (1.02)
Common official language	1.956 (1.12)	2.010 (1.95)*	2.143 (2.89)***	1.686 (1.50)	1.555 (0.71)	11.89 (3.62)***	4.282 (4.61)***	1.421 (1.46)	3.905 (2.14)**	4.283 (3.21)***	4.195 (4.61)***	1.376 (1.28)
Colonial history	2.986 (2.04)**	4.889 (4.36)***	2.492 (3.22)***	3.217 (3.19)***	3.171 (2.20)**	0.518 (0.96)	2.144 (2.37)**	4.413 (5.48)***	1.997 (1.07)	1.422 (0.82)	2.231 (2.64)***	5.696 (5.98)***
Distance (log)	4.062 (3.98)***	0.551 (6.96)***	0.586 (6.59)***	0.630 (6.43)***	1.320 (1.02)	0.562 (3.55)***	0.686 (5.33)***	0.602 (7.90)***	1.205 (0.96)	0.556 (4.52)***	0.587 (6.82)***	0.586 (9.17)***
Common legal origin	1.493 (1.04)	1.070 (0.34)	1.250 (1.32)	1.473 (2.23)**	1.437 (0.96)	1.111 (0.31)	0.938 (0.40)	1.612 (2.98)***	0.807 (0.67)	1.341 (1.21)	1.249 (1.26)	1.668 (3.19)***
GDP p.c. acquiring country (log)	38.60 (2.67)***	1.553 (0.98)	5.019 (3.45)***	16.49 (5.10)***	86.95 (2.87)***	7.444 (1.74)*	2.892 (2.86)***	13.30 (5.87)***	6.616 (1.49)	3.803 (1.60)	11.11 (3.87)***	3.893 (3.92)***
GDP p.c. target country (log)	2.306 (4.73)***	3.862 (11.31)***	3.121 (13.12)***	3.279 (12.17)***	2.141 (3.88)***	4.036 (7.48)***	3.611 (11.82)***	2.834 (11.21)***	5.420 (8.44)***	3.955 (8.94)***	3.254 (10.75)***	2.000 (4.53)***
Population acquiring country (log)	2.122 (4.85)***	1.870 (7.60)***	2.019 (10.37)***	2.002 (9.94)***	2.056 (4.56)***	2.030 (5.39)***	2.077 (11.24)***	1.900 (11.08)***	2.643 (6.52)***	2.113 (7.19)***	2.369 (11.66)***	1.746 (9.58)***
Population target country (log)	1.544 (5.06)***	1.945 (9.20)***	1.890 (12.49)***	1.649 (8.21)***	1.858 (7.30)***	1.534 (4.27)***	2.064 (13.14)***	1.659 (10.40)***	1.907 (6.94)***	1.965 (9.69)***	2.091 (13.55)***	1.819 (12.54)***
Creditor's rights acquiring country	0.954 (0.41)	1.266 (3.42)***	1.148 (2.39)**	1.137 (2.26)**	1.015 (0.12)	1.290 (2.22)**	1.100 (1.68)*	1.118 (2.28)**	1.001 (0.01)	1.193 (2.00)**	1.027 (0.43)	1.143 (2.76)***
Creditor's rights target country	1.078 (0.53)	0.935 (1.04)	0.941 (1.00)	0.788 (3.88)***	0.912 (0.60)	0.836 (1.65)*	0.899 (1.73)*	0.889 (2.27)**	1.092 (0.83)	1.062 (0.61)	0.957 (0.62)	0.911 (1.95)*
Political constraints III acquiring country	0.522 (0.50)	1.683 (0.79)	1.335 (0.60)	1.071 (0.13)								
Political constraints V acquiring country					0.002 (1.83)*	0.080 (0.97)	0.460 (0.63)	0.803 (0.19)				
ICRG political risk acquiring country									1.028 (1.00)	1.031 (1.65)*	1.021 (1.67)*	0.992 (1.14)
Observations	3,906	3,961	3,865	3,878	3,808	3,863	3,844	3,871	3,598	3,579	3,610	3,605
Number of pairs	560	681	635	607	588	713	566	578	700	922	818	462
Quantile	0.25	0.5	0.75	1	0.25	0.5	0.75	1	0.25	0.5	0.75	1

Notes: The table reports the results of random effects negative binomial regressions. The dependent variable is the number of cross-border mergers and acquisitions originating from Europe. The sample is partitioned according to the quartiles of the distribution of the constraints in the target country (Quantile). The coefficients reported in the table are incidence-rate ratios, i.e., a one unit change in the corresponding variable represents an expected change in the number of M&As of (coefficient minus 1) times 100 percent. All regressions include annual time dummies. Absolute t-values are given in parentheses below the coefficient.

*/**/** indicate significance at the 10/5/1-% level.

Table 3: The Number of M&As and the Interaction between Constraints and Creditor's Rights, Poisson, 1990-2001

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Common border	1.25E-10 (0.00)	0.520 (1.71)*	0.988 (0.04)	1.129 (0.40)	4.982 (0.94)	9.839 (2.36)**	1.163 (0.49)	0.650 (1.69)*	11.07 (1.44)	1.309 (0.38)	1.026 (0.07)	0.809 (0.88)
Common official language	1.536 (0.67)	2.701 (2.43)**	2.289 (2.69)***	2.088 (1.94)*	1.711 (0.81)	13.22 (3.53)***	4.422 (4.20)***	1.478 (1.42)	4.551 (2.17)**	3.702 (2.76)***	4.642 (4.67)***	1.385 (1.09)
Colonial history	3.638 (2.34)**	3.614 (3.13)***	3.038 (3.36)***	3.352 (2.99)***	3.404 (2.13)**	0.482 (0.98)	2.520 (2.62)***	5.111 (5.18)***	1.908 (0.91)	1.438 (0.80)	2.551 (2.96)***	6.349 (5.26)***
Distance (log)	4.064 (3.92)***	0.524 (7.06)***	0.570 (6.73)***	0.612 (6.76)***	1.416 (1.29)	0.505 (4.25)***	0.640 (5.95)***	0.592 (7.89)***	1.224 (0.99)	0.514 (5.28)***	0.561 (7.45)***	0.573 (9.02)***
Common legal origin	1.411 (0.88)	1.097 (0.43)	0.991 (0.05)	1.408 (1.89)*	1.200 (0.46)	1.133 (0.35)	0.873 (0.75)	1.532 (2.40)**	0.936 (0.20)	1.440 (1.49)	1.197 (0.98)	1.541 (2.33)**
GDP p.c. acquiring country (log)	23.39 (2.42)**	1.031 (0.08)	3.714 (3.06)***	10.98 (4.40)***	170.7 (3.13)***	14.72 (2.24)**	2.211 (2.30)**	7.370 (4.94)***	10.92 (1.77)*	3.793 (1.60)	10.97 (3.99)***	2.520 (2.99)***
GDP p.c. target country (log)	2.315 (4.70)***	3.927 (11.02)***	2.227 (12.91)***	3.364 (12.23)***	2.327 (4.35)***	4.401 (7.60)***	3.844 (11.86)***	2.972 (11.29)***	5.784 (8.49)***	4.058 (9.06)***	3.390 (10.81)***	2.330 (5.34)***
Population acquiring country (log)	1.987 (4.37)***	2.045 (8.19)***	2.041 (9.74)***	1.961 (9.40)***	2.230 (4.99)***	2.104 (5.49)***	2.113 (10.40)***	1.858 (9.89)***	2.843 (6.78)***	1.992 (6.49)***	2.274 (10.95)***	1.786 (9.10)***
Population target country (log)	1.492 (4.51)***	2.162 (9.98)***	1.964 (12.65)***	1.700 (8.43)***	1.828 (6.65)***	1.605 (4.78)***	2.233 (13.71)***	1.744 (10.65)***	2.115 (8.05)***	1.940 (9.33)***	2.161 (13.41)***	1.967 (13.08)***
Creditor's rights acquiring country	0.959 (0.35)	1.230 (2.99)***	1.112 (1.74)*	1.135 (2.22)**	0.945 (0.46)	1.206 (1.61)	1.098 (1.58)	1.084 (1.62)	0.981 (0.17)	1.200 (2.07)**	1.034 (0.52)	1.112 (2.13)**
Creditor's rights target country	1.007 (0.05)	0.985 (0.21)	0.953 (0.75)	0.770 (4.32)***	0.846 (1.09)	0.829 (1.70)*	0.896 (1.57)	0.865 (2.79)***	1.086 (0.77)	1.066 (0.65)	0.919 (1.18)	0.902 (2.09)**
Political constraints III acquiring country	0.613 (0.40)	2.619 (1.62)	2.196 (1.78)*	1.564 (0.90)								
Political constraints V acquiring country					0.001 (1.90)*	0.039 (1.20)	2.354 (0.63)	3.255 (0.96)				
ICRG political risk acquiring country									1.045 (1.61)	1.024 (1.32)	1.015 (1.38)	0.983 (2.70)***
Observations	3,906	3,961	3,865	3,878	3,808	3,863	3,844	3,871	3,598	3,579	3,610	3,605
Number of pairs	560	681	635	607	588	713	566	578	700	922	818	462
Quantile	0.25	0.5	0.75	1	0.25	0.5	0.75	1	0.25	0.5	0.75	1

Notes: The table reports the results of random effects Poisson regressions. The dependent variable is the number of cross-border mergers and acquisitions originating from Europe. The sample is partitioned according to the quartiles of the distribution of the constraints in the target country (Quantile). The coefficients reported in the table are incidence-rate ratios, i.e., a one unit change in the corresponding variable represents an expected change in the number of M&As of (coefficient minus 1) times 100 percent. All regressions include annual time dummies. Absolute t-values are given in parentheses below the coefficient.

*/**/** indicate significance at the 10/5/1-% level.

Table 4: Determinants of the Value of European Cross-Border M&As, 1990-2001

	(1)	(1a)	(2)	(2a)	(3)	(3a)
Common border		0.185 (2.39)**		0.190 (2.45)**		0.134 (1.69)*
Common official language	0.905 (3.57)***	0.449 (6.33)***	0.843 (3.41)***	0.376 (5.20)***	0.765 (3.21)***	0.389 (5.37)***
Colonial history	2.239 (6.96)***	0.627 (8.18)***	2.205 (6.68)***	0.656 (8.34)***	2.305 (7.17)***	0.723 (9.23)***
Distance (log)	-0.903 (7.77)***	-0.285 (14.84)***	-0.927 (7.81)***	-0.290 (15.01)***	-0.831 (7.67)***	-0.285 (14.70)***
Common legal origin	1.164 (7.10)***	0.188 (4.42)***	1.129 (6.83)***	0.184 (4.28)***	1.298 (7.78)***	0.235 (5.42)***
GDP p.c. acquiring country (log)	3.950 (5.07)***	1.617 (11.50)***	3.94 (5.07)***	1.588 (11.16)***	2.027 (2.91)***	1.164 (7.64)***
GDP p.c. target country (log)	2.608 (9.91)***	0.698 (30.05)***	2.342 (10.45)***	0.575 (22.61)***	2.095 (9.25)***	0.584 (17.97)***
Population acquiring country (log)	1.226 (8.87)***	0.352 (20.00)***	1.342 (9.14)***	0.385 (22.39)***	1.532 (9.65)***	0.454 (23.14)***
Population target country (log)	1.300 (9.85)***	0.356 (27.69)***	1.29 (10.05)***	0.345 (26.36)***	1.313 (10.22)***	0.376 (28.15)***
Creditor's rights acquiring country	0.039 (0.71)	0.061 (3.85)***	0.089 (1.56)	0.075 (4.68)***	-0.068 (1.29)	0.032 (1.91)*
Creditor's rights target country	-0.108 (2.02)**	-0.015 (0.94)	-0.105 (1.94)*	-0.014 (0.89)	-0.085 (1.65)*	-0.002 (0.14)
Political constraints III acquiring country	-3.049 (4.12)***	-0.978 (5.05)***				
Political constraints III target country	1.012 (2.43)**	0.559 (5.83)***				
Political constraints V acquiring country			-6.187 (4.56)***	-1.354 (3.74)***		
Political constraints V target country			2.220 (4.46)***	0.975 (11.66)***		
ICRG political risk acquiring country					0.115 (6.76)***	0.030 (7.17)***
ICRG political risk target country					0.057 (5.58)***	0.020 (8.10)***
Observations	15,483	15,483	15,385	15,385	14,391	14,391
Censored observations	13,494	13,494	13,409	13,409	12,413	12,413

Notes: The table reports the results of Heckman two-step regressions. The dependent variable is the logarithm of the value of cross-border mergers and acquisitions originating from Europe. The second step, explaining the value is presented first while the first step modeling the likelihood of observing a positive outcome (via a probit regression) is presented in the columns marked with (a). All regressions include annual time dummies. Absolute t-values are given in parentheses below the coefficient.

*/**/** indicate significance at the 10/5/1-% level.

Table 5 The Value of M&As and the Interaction between Constraints and Creditor's Rights, 1990-2001

	(1)	(1a)	(2)	(2a)	(3)	(3a)	(4)	(4a)	(5)	(5a)	(6)	(6a)	(7)	(7a)	(8)	(8a)
Common border		-2.909 (0.00)		-0.055 (0.31)		0.109 (0.79)		0.252 (2.10)**		1.010 (1.57)		0.627 (2.06)**		0.545 (3.69)***		-0.107 (0.98)
Common official language	2.660 (0.51)	0.497 (2.25)**	0.868 (1.45)	0.377 (2.30)**	0.879 (1.75)*	0.507 (4.28)***	0.827 (2.51)**	0.256 (1.91)*	-1.277 (0.79)	-0.009 (-0.03)	-1.940 (1.25)	1.105 (4.55)***	1.709 (3.57)***	0.913 (6.02)***	0.261 (1.04)	0.215 (2.09)**
Colonial history	5.013 (0.88)	0.485 (2.51)**	2.299 (2.61)***	0.866 (5.06)***	2.002 (3.93)***	0.545 (3.97)***	1.624 (2.46)**	0.658 (4.27)***	3.671 (1.40)	0.572 (2.68)***	2.353 (2.32)**	-0.173 (0.72)	0.753 (1.72)*	0.396 (2.42)**	2.209 (4.92)***	1.102 (8.13)***
Distance (log)	5.502 (0.68)	0.724 (5.34)***	-0.818 (-3.19)***	-0.328 (7.89)***	-0.979 (4.32)***	-0.331 (8.29)***	-0.497 (2.35)**	-0.256 (8.02)***	0.591 (0.90)	0.117 (1.04)	0.187 (0.39)	-0.253 (4.19)***	-0.656 (4.60)***	-0.270 (7.53)***	-0.637 (4.73)***	-0.299 (9.80)***
Common legal origin	2.048 (0.92)	0.149 (1.07)	1.139 (3.36)***	0.118 (1.26)	1.017 (3.17)***	0.092 (1.13)	1.083 (3.03)***	0.382 (5.40)***	1.598 (1.50)	0.207 (1.42)	0.943 (1.97)**	0.027 (0.20)	0.598 (2.74)***	0.056 (0.72)	0.979 (4.22)***	0.314 (4.54)***
GDP p.c. acquiring country (log)	12.320 (0.59)	1.756 (3.30)***	2.710 (2.12)**	0.976 (3.36)***	4.467 (2.88)***	1.800 (7.09)***	3.654 (2.10)**	2.014 (8.32)***	4.404 (0.62)	1.856 (3.07)***	0.141 (0.09)	0.424 (1.08)	1.005 (1.17)	1.347 (5.49)***	5.115 (3.80)***	2.369 (10.54)***
GDP p.c. target country (log)	4.290 (0.88)	0.448 (6.56)***	2.675 (3.97)***	0.781 (13.40)***	3.146 (7.17)***	0.689 (16.53)***	1.531 (3.14)***	0.644 (15.15)***	1.616 (1.45)	0.294 (3.73)***	0.270 (0.28)	0.639 (8.96)***	2.123 (6.26)***	0.728 (13.82)***	1.947 (6.59)***	0.656 (14.62)***
Population acquiring country (log)	2.755 (0.71)	0.345 (5.87)***	1.238 (4.36)***	0.327 (8.31)***	1.561 (5.81)***	0.402 (12.48)***	0.722 (2.62)***	0.358 (12.32)***	1.575 (1.50)	0.308 (5.02)***	-0.218 (0.50)	0.303 (6.27)***	1.130 (5.51)***	0.464 (14.30)***	1.059 (5.84)***	0.400 (15.76)***
Population target country (log)	2.094 (0.89)	0.213 (6.43)***	1.410 (4.22)***	0.375 (11.27)***	1.553 (6.26)***	0.412 (16.46)***	0.698 (3.28)***	0.282 (11.25)***	1.379 (1.30)	0.306 (9.02)***	0.073 (0.25)	0.191 (4.82)***	1.176 (5.85)***	0.459 (16.51)***	1.058 (7.51)***	0.339 (14.65)***
Creditor's rights acquiring country	-0.243 (-0.46)	0.013 (0.31)	0.101 (0.70)	0.114 (3.19)***	0.082 (0.76)	0.046 (1.54)	0.002 (0.02)	0.067 (2.45)**	-0.083 (0.27)	0.053 (1.13)	-0.308 (0.99)	0.160 (3.59)***	-0.034 (0.42)	0.077 (2.52)**	0.045 (0.71)	0.037 (1.47)
Creditor's rights target country	-0.211 (0.28)	0.017 (0.31)	-0.007 (0.07)	0.014 (0.44)	0.027 (0.22)	-0.017 (0.58)	-0.296 (2.50)**	-0.088 (2.58)***	-0.371 (0.83)	-0.070 (1.14)	-0.152 (0.66)	-0.102 (2.31)**	-0.083 (1.11)	-0.017 (0.56)	-0.146 (1.84)*	-0.034 (1.19)
Political constraints III acquiring country	-5.771 (0.75)	-0.411 (0.70)	-2.354 (1.53)	-0.815 (1.93)*	-2.638 (1.78)*	-1.141 (3.20)***	-4.119 (3.12)***	-1.301 (3.98)***								
Political constraints V acquiring country									-14.730 (1.28)	-2.592 (1.92)*	-3.504 (0.72)	-1.716 (1.72)*	-5.533 (2.86)***	-1.743 (2.64)***	-5.748 (3.47)***	-1.179 (2.20)**
Observations	3,906	3,906	3,960	3,960	3,865	3,865	3,878	3,878	3,808	3,808	3,863	3,863	3,843	3,843	3,871	3,871
Censored observations	3,796	3,796	3,522	3,522	3,138	3,138	3,163	3,163	3,721	3,721	3,713	3,713	3,122	3,122	2,853	2,853
Quantile	0.25	0.25	0.5	0.5	0.75	0.75	1	1	0.25	0.25	0.5	0.5	0.75	0.75	1	1

Notes: The table reports the results of Heckman two-step regressions. The dependent variable is the logarithm of the value of cross-border mergers and acquisitions originating from Europe. The second step, explaining the value is presented first while the first step modeling the likelihood of observing a positive outcome (via a probit regression) is presented in the columns marked with (a). The sample is partitioned according to the quartiles of the distribution of the constraints in the target country (Quantile). All regressions include annual time dummies. Absolute t-values are given in parentheses below the coefficient.

*/**/*** indicate significance at the 10/5/1-% level.

Appendix

Table 6 Summary Statistics

Variable	Mean	Std. Dev.	Min	Max
Number of M&As	0.445	3.007	0	147
Value of M&As (log)	2.286	6.016	0	26.047
Common border	0.033	0.178	0	1
Common official language	0.075	0.263	0	1
Colonial history	0.052	0.221	0	1
Distance (log)	8.305	0.937	4.088	9.883
Common legal origin	0.268	0.443	0	1
GDP p.c. acquiring country (log)	10.006	0.186	9.560	10.391
GDP p.c. target country (log)	8.658	1.101	6.185	10.459
Population acquiring country (log)	16.588	1.021	15.070	18.226
Population target country (log)	16.534	1.382	14.388	20.964
Creditor's rights acquiring country	1.995	1.086	0	4
Creditor's rights target country	1.896	1.183	0	4
Political constraints III acquiring country	0.473	0.096	0.225	0.718
Political constraints III target country	0.312	0.214	0	0.718
Political constraints V acquiring country	0.768	0.051	0.391	0.894
Political constraints V target country	0.485	0.315	0	0.894
ICRG political risk acquiring country	81.908	6.639	60.42	96.08
ICRG political risk target country	67.721	12.606	11.33	96.08

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