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Exporting Transparency Through Mergers

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Abstract

Openness to trades can intensify competition in a country and confine the possibilities of rent creation and extraction. Mergers and acquisitions introduce competition in the markets and bring not only capital and technologies, but also new norms and policies. This study examines to what extend openness to trades and competition intensification through M&A could affect the level of corruption in a country. Our study focuses on the effect of M&A activity (as a proxy for openness to trades) on corruption levels. Using a large panel of 50 countries over a 16-year period, we find evidence that openness to trades helps countries reduce their level of corruption.

Keywords: corruption, mergers and acquisitions, openness to trades

1. Introduction

"There is no compromise when it comes to corruption. You have to fight it."

- A. K. Antony, former defence minister of India and member of the parliament (as cited in Ullekh, 2012).

There have been many studies on the effects of foreign direct investment (FDI) inflows on host country corruption, but no study has investigated the effects of mergers and acquisitions (M&A) on the host country's level of corruption. This is somewhat surprising since M&A are the most important component of FDI, the share of M&A in FDI has been increasing in recent years, and M&A have become a primary mode of internationalization (UNCTAD, 2000). At the same time, policy makers view corruption as a major hindrance to economic growth and development. As a result, the fight against corruption has received considerable attention and international organizations such as the UN, the IMF and the OECD have taken a special interest in anti-corruption movements. In fact, corruption is arguably the most serious problem in developing countries (e.g., Bardhan, 1997) and it is also a challenge for many developed countries (Kaufmann, 2004). Corruption can only be remedied if its causes and determinants are identified. This study find evidence that M&A activity is one of these determinants and decrease corruption.

Literature on corruption identifies three prerequisites for corruption: the discretionary power of public officials, the association of this power with economic rents, and the probability of these officials getting caught and being penalized (Jain, 2001). Lawyers often argue that the legal systems should be reformed so that the punishment for public officials who engage in corruption would be increased. Businessmen argue that bureaucrats should receive a higher salary so that their motivation to fraud would decrease. However, the existence of economic rents fosters corruption (Ades & Di Tella, 1997) and the possibility of corrupt transactions will decrease if bureaucrats have less opportunity to extract or create economic rents (Braguinsky, 1996). As one solution, Ades and Di Tella (1997) suggest an economist's approach to control corruption by increasing the competition in the markets. Competition can affect corruption in two ways: first, competition lowers the chances of the exploitation of discretionary power by officials. Reduced official discretion will reduce the potential for corruption (Rose-Ackerman, 1997). Second, Rose-Ackerman (1975) suggested that a way to reduce corruption is to introduce competition at the level of the official receiving bribes: when a bureaucrat dispenses a scarce benefit, the existence of competing officials to reapply in case of being asked a bribe will bid down the equilibrium amount of corruption. Competition can decrease the possibility of rent creation and extraction thus hindering

corruption.

Focusing on M&A activity as the proxy for openness and competition is reasonable for several reasons. First, cross-border deals occur frequently and the M&A market is voluminous. Second, foreign investors bring new culture, norms and technologies which are spilled over to domestic firms. M&A introduce more competition in host countries because they are by far the main type of investment in a foreign country and M&A are more effective in introducing change to the target firms through ownership. Third, domestic M&A facilitate the spread of these new norms and culture. The presence of foreign investors and multinationals along with domestic acquisitions therefore intensify competition. Moreover, competition restricts the profits of engaging in a corrupt transaction and discourages public officials from initiating corrupt behaviour.

In this study we investigate the effects of M&A on host country corruption. To the best of our knowledge, this is the first study that empirically analyzes the relationship between the intensity of M&A and local corruption. This study brings new insights into our understanding of corruption. We find evidence that both cross-border M&A volume and M&A number could decrease corruption in the target company. Moreover, the domestic M&A could lower corruption levels of the country.

1.1 Investment and Corruption

Corruption is usually understood as the "misuse of public power for private gain", where private gain may occur either to the individual official or to the group to which they belong. The issue of corruption has attracted the interest of many political scientists and economists in recent years. Early studies mainly focused on the consequences of corruption and showed that corruption deters economic development and growth. These bodies of literature have been pioneered by Mauro (1995), which reports a significant negative relationship between corruption and investment that extends to growth. Several consequent studies confirm and broaden Mauro's (1995) results and extend to other macroeconomic variables such as foreign direct investment. They find that corruption has an adverse effect on foreign investment and capital inflows because it renders a country unattractive to foreign investors (Wei, 2000a; Lambsdorff & Cornelius, 2000; Habib & Zurawicki, 2001; 2002; Lambsdorff, 2003).

Later studies investigate the causes of corruption to understand why some countries exhibit higher levels of corruption than others. They find that closed markets with imperfect competition are an important source of rents. In these markets, the possibility of corrupt transactions increases when the discretionary power of the relevant bureaucrats or public officials allows extraction or creation of economic rents (Tanzi, 1998; Rose-Ackerman, 1999; Jain, 2001). Lack of competition serves as a major cause of corruption and has attracted the interest of many scholars. There studies focus on the extent to which corruption can be explained by a low level of competition among private firms. Competition is assumed to lower the prices and therefore lower the profit margin for firms, thus firms have less money to offer as a bribe. In addition, increased competition results in a more efficient allocation of resources and dissipation of rents. Lambsdorff (2005) contends that in competitive environments, public servants and politicians have less to sell in exchange for bribes, and as a result, they are less motivated to start a corrupt career. This body of literature uses different indicators of competition. Lambsdorff (1999) argues that corruption is negatively correlated with different indicators of economic freedom. This result is largely supported by Goldsmith (1999) and Paldam (2002) for a sample of more than 60 countries. Ades and Di Tella (1995, 1997 and 1999) find a negative correlation between competition and corruption and argue that corruption is higher when bureaucrats have the potential to extract larger economic rents. They argue that openness to international trade will reduce the monopolistic power of domestic producers and strengthen market competition, which in turn narrows the rents available for bureaucrats to extract. "A natural approach to corruption control is to appeal to the concept of competition as it is argued that bribes are harder to sustain where perfect competition prevails" (Ades & Di Tella, 1999). They use country's openness, defined as the ratio of imports to GDP, as an alternative indicator of competition and find that openness, is negatively associated with corruption. Sung and Chu (2003), Sandholtz and Koetzle (2000), Sandholtz and Gray (2003), and Gerring and Thacker (2005) also report that economic competition as measured by the degree of a country's openness reduces corruption. Wei (2000b) applies a measure of "natural openness", which refers to the extent of openness in a country determined by its population and its remoteness from world trading centres. Using this alternative indicator of competition, he finds that natural openness is indeed a determinant of corruption, pointing out the helpful role of competition in decreasing corruption. Sachs and Warner (1995) assessed the number of years it has been open to trade as another possible measure of the extent of competition in a country. Treisman (2000) and Leite and Weidmann (1999) provide evidence that this variable negatively and significantly impacts on the level of corruption.

Recently researchers focused on the level of foreign direct investment (FDI) as a measure of the extent of competition and openness of a country. Larrain and Tavares (2004) use the ratio of FDI to GDP as an indicator of openness to trade and competition, and empirically find that higher exposure to FDI tends to be related to lower corruption levels. Pinto and Zhu (2016) also use FDI as a measure of competition and find that foreign investment may generate greater competition in the marketplace. When foreign investors compete with domestic firms, economic rents are driven away, and thereby the expected benefits of engaging in corruption is decreased.

In this paper, we use M&A intensity as an indicator of competition in the country. The volume of cross-national mergers and acquisitions has been growing worldwide. In the last decades, M&A have become the most important component of capital inflows and foreign investment. While the degree of market diversification and competition reduces opportunities for rent creation, which in turn leads to less corruption, cross-national M&A activity intensifies competition and fosters openness to trade in a country, and as a result, decrease corruption. As put forward by Rose-Ackerman (1975), corruption may be less frequent if it has long-term negative consequences for the firms and individuals involved, as is the case with M&A activity. Both cross-national and domestic M&A activity can open the economy to international trade and intensify the degree of competition within a country. Thus, total M&A activity can be a good proxy for competition in a host country.

Cross-national economic ties can limit corruption by increasing its cost. Corrupt practices can perpetuate themselves more easily in closed economies, but in open markets corrupt officials would feel the pinch of international openness. Because bribe-paying companies suffer under international competition, they would have less money to offer, and bureaucrats would find that their corruption-related income declines. Greater exposure to international trades thus penalizes corruption. On the other hand, open societies not only import goods and capital from the rest of the world but also ideas, policies and norms. International integration has its domestic consequences. Openness to international transactions can introduce policy shifts and reform the domestic economies and politics of countries. The effects of international interactions are very substantial and can affect norms and practices that are usually determined by local social and cultural factors. Foreign investment not only brings capital, but also new technologies, marketing techniques, and management skills. The knowledge spillover through FDI has been extensively studied in the literature (Javorcik, 2004; Görg & Greenaway, 2004; Haskel et al., 2007; etc.). However, the spillover effect is much stronger for M&A because in international law, a full takeover leads to a change in the nationality of the target firm such that the acquirer's regulations will apply to the combined company, in effect replacing the target regulations, norms and policies (Bris & Cabolis, 2008). If the acquirer come from a more transparent country, better regulations and policies will be transferred to the target (Martynova & Renneboog, 2008), however an acquirer from a less transparent country would learn the skills, policies and norms from the target (Chen et al., 2012). Although corruption in a country has powerful domestic determinants, it is significantly affected by the level of international integration and openness which brings back home new norms, regulations, skills and norms. Sandholtz and Gray (2003) investigate such a relationship and find that being tied to international networks of exchange, communication and organization decreases the level of corruption. Knowledge spillovers thus are another channel through which M&A can decrease the level of corruption in a country.

Closed economies are associated with higher possibilities of rent creation and extraction. In these environments, the introduction of competition and openness to cross-border trades can be a basic remedy for corruption. M&A activity can open the gates of the economy and increase competition. It can also bring along ideas, norms and policies. In this paper, we assess M&A activity for each country through six separate measures. To gauge the intensity of M&A the literature uses the number of deals in a country and the dollar value of those deals. We use cross-border number per year, cross-border value per year, domestic number per year, domestic value per year, total number per year and total value per year. We hypothesize that a higher amount of M&A (measured by the number per year or value per year) will decrease corruption.

2. The Model

To measure the effects of country-specific institutional, cultural, and political variables that affect the level of corruption over time, panel data is a rational approach. Other studies that investigate the causes of corruption neglected the effect of time and used a simple OLS regression model. The dependent variable in the panel regression equation is the Transparency International measure of corruption and the independent variables are M&A activity measures plus the control variables. The panel model, which is used in the empirical analysis to test the hypotheses, is expressed as follows:

$$C_{i,t} = \alpha_0 + \beta M_{i,t-1} + \gamma' X_{i,t} + \lambda_t + \theta_i + \varepsilon_{i,t} \quad (1)$$

Where $C_{i,t}$ is the level of corruption measured by CPI; $M_{i,t-1}$ is the lagged M&A activity measures in country i at

time t; $X_{i,t}$ is the vector of control variables: former colony, per capita GDP (lagged), ethnolinguistic fractionalization, oil exporter, government expenditure, population, political rights, French legal origins, and primary religion; β and ɣ are the parameters to estimate; α_0 is the portion of intercept that is common to all years and countries; λ_t denotes year-specific effect common to all countries; θ_i is the source-country fixed effects; $\varepsilon_{i,t}$ is normal error terms with mean zero and variance σ^2_ε; i stands for the country (i = 1,…,N); and t stands for the year (t = 1,…,T). The prediction of β is also specific to the openness hypothesis; therefore, we hypothesize a positive relationship between corruption perceptions index and M&A (higher corruption index in associated with less corruption).

2.1 Control Variables

The abundant empirical literature on the determinants of corruption identifies a series of alternative conditions which will affect the analysis and choice of controls. Among the conditions found to affect corruption are:

2.1.1 Legal Systems

The most obvious cost of corruption is the risk of getting caught and punished (Treisman, 2000). The probability of getting caught and sanctioned depends in part on the country's legal system. The civil law system, which is found mostly in continental Europe and its former colonies, was introduced in the 19th century by Napoleon and Bismarck. La Porta et al. (1999) argue that the civil law system is "largely legislature created and is focused on discovering a just solution to a dispute (often from the point of view of the State), rather than on following a just procedure that protects individuals against the State". Civil law systems have largely been an instrument of the State in expanding its power and "can be taken as a proxy for an intent to build institutions to further the power of the State" (La Porta et al., 1999; Treisman, 2000). Thus, a civil law tradition is associated with lower governance, less efficient governments, and higher levels of corruption (La Porta et al., 1999).

2.1.2 Religion

Religious practices have the potential "to shape national views regarding property rights, competition, and the role of State" (Beck et al., 2003, p. 151; Stulz & Williamson, 2003; La Porta et al., 1999). "In religious traditions such as Protestantism, which arose in some versions as dissenting sects opposed to the State-sponsored religion, institutions of the church may play a role in monitoring and denouncing abuses by State officials" (Treisman 2000, p. 403). Since the Catholic and Muslim religions tend to limit the security of property rights and private contracting (Levine, 2005; Landes, 1998), these religions may be associated with lower government performance and higher corruption (La Porta et al., 1999). Moreover, Protestant countries have better creditor rights and less corruption (Stulz & Williamson, 2003).

2.1.3 Ethnolinguistic Fractionalization

Corruption is an illegal contract which cannot be enforced by courts. Treisman (2000) argues that ethnic communities and networks may serve as one of the mechanisms to "enhance the credibility of the private partner's commitment. In ethnically divided societies, ethnic communities may provide cheap information about and even internal sanctions against those who betray their coethnics" (Treisman, 2000, p. 406). Therefore, corruption contracts are strengthened within ethnic communities (Treisman, 2000). La Porta et al. (1999) measure such fractionalization and find that higher levels of fractionalization are associated with worse property rights and regulation, lower government efficiency, and higher corruption.

2.1.4 Political Freedom

Free association, free press, and regular and open electoral contests can increase the likelihood of divulging corrupt activities. Higher political rights enhance the opportunity of detecting and punishing those who engage in corruption (Lederman et al., 2005). "Countries with more political competition have stronger public pressure against corruption - through laws, democratic elections, and even the independent press - and so are more likely to use government organizations that contain rather than maximize corruption proceeds" (Shleifer & Vishny, 1993, p. 610). Moreover, Treisman (2007) finds that greater political rights are significantly related to lower perceived corruption.

2.1.5 GDP per Capita

Some authors suggest that the problem of corruption lies in the low salaries bureaucrats receive (Treisman, 2000). They argue that to reduce the level of corruption, the wages of bureaucrats and public servants should be raised. The literature empirically shows that wealthier countries are less likely to be corrupt. To measure the wealth of a nation, GDP per capita is a natural option. Ades and Di Tella (1999) use per capita GDP as a control for the wealth of a nation.

2.1.6 Former Colonies

Acemoglu et al. (2001 & 2002) emphasize the importance of institutions, shaped by a country's colonization model. Mauro (1997) argues that it is difficult for countries that have been colonized to develop efficient institutions. Former colonies are considered less likely to have developed efficient and transparent local institutions because the colonizers' institution models "overlapped (and sometimes clashed) with previously existing informal institutions, fostering social fractionalization and hindering the mobility and social change required by the market" (Alonso, 2007, p. 71). Thus, the countries that have been colonized in the past are more corrupt.

2.1.7 Oil Exporter Countries

Leite and Weidmann (1999) present a model where economies abundant in natural resources show higher levels of corruption. They find that higher levels of natural resources are positively related to higher levels of corruption. Sachs and Warner (1995) show that natural resource economies grow more slowly, and they suggest this is due in part to a lower efficiency of government. Ades and Di Tella (1999) also find evidence that oil and corruption are correlated.

2.1.8 Government Expenditure

Many contemporary academic works suggest that a large public sector, measured by government expenditure, fosters corruption. The larger the role the government plays in the market - as producer and/or consumer - the greater its capacity to engage in corrupt activity, ceteris paribus. As a rule, "the larger the relative size and scope of the public sector, the greater will be the proportion of corrupt acts" (Scott, 1972, p. 9).

2.1.9 Size

To control for the size of the country, we use its population because several papers suggest a relationship between population and government efficiency (Treisman, 2000; Knack & Azfar, 2003).

3. Data

Our analysis is based on panel dataset of measures of corruption and its potential determinants in 50 countries. We estimate equations explaining corruption perceptions index as a function of openness to trade and country characteristics. Since we are combining a number of datasets, we have different numbers of observations for different variables. This makes the panel dataset unbalanced. The data spans from 1998 to 2013. The M&A data is downloaded from Thomson Reuters SDC mergers and acquisitions database. We use Corruption perceptions index from Transparency International as our main corruption measure. We use other databases to download the other variables. Appendix A summarizes the definition and sources of all the variables used in this article with their expected signs. Since we have 16 years of observations and 50 countries, the total number of potential observations is 800 (16 × 50).

4. Results and Discussion

4.1 Descriptive Statistics

Table 1 presents summary statistics for the corruption index, M&A activity measures and the control variables. Corruption perceptions index ranges from 0 to 10 and has the maximum of 10 and minimum of 1 in the sample data. CPI has a mean of 3.67 and standard deviation of 2.48, showing that most of the population's CPI is not far from the sample mean, indicating the severity of the problem of corruption in the world. For the measures of M&A, total number per year has the maximum of 11,019 and total value per year has the maximum of 1,589,574 million dollars. Fifty-eight percent of the countries in the sample were a colony, 42 percent have a French legal origin, 24 percent are protestant, and 12 percent are oil exporters.

Table 1. Summary statistics

Variable	Obs	Unit	Mean	Std. Dev.	Min	Max
CPI	793	Between 0 and 10	5.66	2.48	1	10
Domestic number per year	800	Count	303.96	917.51	0	8709
Domestic value per year	800	Million dollars	25856.70	114292.90	0	1226334
Cross-border number per year	800	Count	180.48	332.66	0	2580
Cross-border value per year	800	Million dollars	19977.50	49955.32	0	492604.8
Total number per year	800	Count	484.43	1228.60	0	11019
Total value per year	800	Million dollars	45834.19	156018.80	0	1589574
Per capita GDP	799	Dollars	19978.99	19031.53	274	100819
Former colony	800	Dummy	0.58	0.49	0	1
EF	800	Between 0 and 1	0.26	0.25	0.002	0.8567
Oil exporter	800	Dummy	0.12	0.33	0	1
Government expenditure	790	Million dollars	16.42	5.35	2.047121	31.59911
Population	799	Million	97.00	238.00	3.29	1360.00
Political rights	784	Between 1 to 7	2.32	1.74	1	7
French legal origin	800	Dummy	0.42	0.49	0	1
Primary religion	800	Dummy	0.24	0.43	0	1

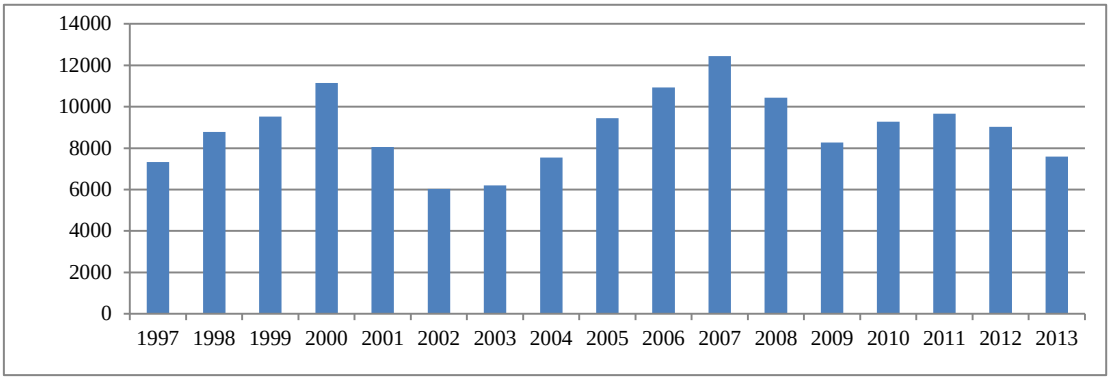
Table 2 presents the pairwise correlations matrix of dependent and independent variables. The two variables Cross-border number per year and Cross-border value per year are highly correlated. Their correlation coefficient is 0.9043, which confirms that the two variables actually measure the same thing. GDP per capita has a slightly high correlation with CPI, which is normal since GDP per capita is linked to corruption in the literature. Apart from the aforementioned variables, all other pairwise correlations between the independent variables are not high enough to cause a possible multicollinearity problem in the model. The correlation coefficients between main variables (total value per year and total number per year) and CPI are positive and significant, which shows that lower levels of corruption (higher index) are associated with more M&A activity.

Table 2. Pairwise correlation matrix

Correlation Matrix	CPI	Number per year	Value Per Year	Per Capita GDP	Former colony	EF	Oil exporter	Government Expenditure	Population	Political rights	French legal origin	Primary religion
CPI	1.0000											
Cross-border Number per year	0.3915**	1.0000										
Cross-border value per year	0.3010**	0.9043**	1.0000									
Per capita GDP	0.7891**	0.4239**	0.3202**	1.0000								
Former colony	-0.4469**	-0.3543**	-0.3140**	-0.5422**	1.0000							
Ethnolinguistic Fractionalization	-0.4722**	-0.1514**	-0.1347**	-0.4247**	0.3852**	1.0000						
Oil exporter	-0.2963**	-0.1632**	-0.1258**	-0.1109**	0.1895**	-0.0388	1.0000					
Government expenditure	0.5303**	0.1915**	0.1414**	0.5022**	-0.5216**	-0.3995**	-0.1839**	1.0000				
Population	-0.2662**	0.1038**	0.0699**	-0.2285**	-0.0388	0.2261**	-0.0719**	-0.1952**	1.0000			
Political rights	-0.6048**	-0.2984**	-0.2444**	-0.5760**	0.3921**	0.3467**	0.2647**	-0.4659**	0.2935**	1.0000		
French legal origin	-0.3538**	-0.2273**	-0.1539**	-0.3079**	0.0673	-0.2285**	0.1846**	-0.0930**	-0.1529**	0.0011	1.0000	
Primary religion	0.4210**	0.3915**	0.3239**	0.3774**	-0.1860**	-0.1007**	-0.0634	0.3766**	-0.1069**	-0.3160**	-0.4782**	1.0000

Figure 1 plots the number (Panel A) and dollar value (Panel B) of cross-border deals over the sample period. Both panels show similar patterns. Cross-border M&A activity increases throughout the 1990s, declines after the stock market crash of 2000, then increases from 2002 until 2007, declines with the economic recession of 2007, and stays volatile until 2013. Erel et al. (2012) find the same pattern in M&A activity.

Panel A (Total number of cross-border deals)



Panel B (Total value of cross-border deals in $million)

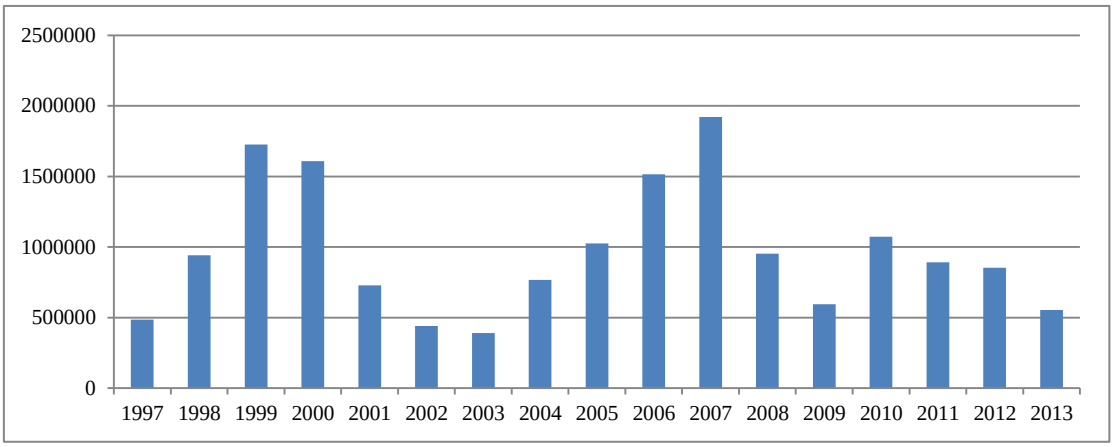


Figure 1. Cross-border M&A activity

4.2 Regression Results

To evaluate the effects of openness to trade and competition on corruption, we use a multivariate regression framework. Our goal is to analyze how M&A activity can affect the level of corruption in the host country over time. Because we are interested in the effects of M&A activity on corruption and how changes in M&A activity can influence corruption, we use panel analysis. Our dependent variable is the CPI which measures the corruption perception level over the entire sample period. Our independent variables are the M&A activity measures (number and dollar amount per year, domestic and cross-border) and several determinants of corruption suggested in the literature as control variables.

Table 3 presents random effect panel regression estimates of the determinants of corruption as represented by proxies of openness to trade and competition (domestic, cross-border and total M&A activity). The results are revealing. All measures of M&A activity show significant and positive association to CPI, meaning that M&A activity decrease the level of corruption in host countries. An increase in the level of M&A activity leads to an increase in the corruption index, which means less corruption. Coefficients of both cross-border number and cross-border value per year are significant and positive, showing that cross-border mergers can increase competition and spread the norms and cultures from the other side of the border. Domestic measures also show a positive and significant relation to corruption which shows that domestic mergers also play a big role in decreasing corruption by increasing competition. Coefficients of total activity in a country are greater than cross-border and domestic activities alone. This means that both cross-border and domestic mergers are important in increasing competition and, as a result, reducing corruption.

Table 3. Panel analysis of the determinants of corruption

	CPI	CPI	CPI	CPI	CPI	CPI	CPI
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Log cross-border value per year$_{(t-1)}$	0.056***						
	(3.52)						
Log cross-border number per year$_{(t-1)}$		0.182***					
		(3.85)					
Log domestic value per year$_{(t-1)}$			0.034**				
			(2.15)				
Log domestic number per year$_{(t-1)}$				0.146***			
				(3.1)			
Log Total value per year$_{(t-1)}$					0.057***		
					(2.78)		
Log Total number per year$_{(t-1)}$						0.206***	
						(3.67)	
Former colony	-0.889**	-0.801**	-0.942**	-0.846**	-0.892**	-0.808**	-0.929**
	(-2.21)	(-2.09)	(-2.3)	(-2.17)	(-2.21)	(-2.13)	(-2.25)
Log GDP per capita$_{(t-1)}$	0.172**	0.149*	0.168*	0.127	0.173**	0.107	0.242***
	(2.17)	(1.76)	(1.93)	(1.52)	(2.1)	(1.31)	(2.83)
EF	-2.177**	-2.029**	-2.087**	-2.116**	-2.108**	-2.027**	-2.112**
	(-2.47)	(-2.45)	(-2.27)	(-2.5)	(-2.39)	(-2.49)	(-2.31)
Oil Exporter	-1.184***	-1.05***	-1.125***	-1.063***	-1.156***	-1.02***	-1.223***
	(-3.12)	(-2.8)	(-2.87)	(-2.73)	(-3)	(-2.7)	(-3.09)
Log Government	0.047	0.063	0.053	0.03	0.05	0.055	0.053
Expenditure	(0.88)	(1.13)	(0.95)	(0.58)	(0.91)	(0.97)	(0.94)
Log population	-0.705***	-0.739***	-0.752***	-0.766***	-0.722***	-0.784***	-0.683***
	(-6.24)	(-6.92)	(-6.28)	(-6.39)	(-6.33)	(-6.98)	(-5.8)
Political rights	-0.083*	-0.076*	-0.094*	-0.085*	-0.089*	-0.075	-0.082*
	(-1.7)	(-1.68)	(-1.8)	(-1.78)	(-1.86)	(-1.64)	(-1.8)
French legal origin	-1.241***	-1.195***	-1.231***	-1.179***	-1.242***	-1.165***	-1.237***
	(-2.78)	(-2.93)	(-2.68)	(-2.73)	(-2.79)	(-2.84)	(-2.71)
Primary religion	0.757	0.674	0.736	0.686	0.738	0.66	0.784
	(1.49)	(1.44)	(1.4)	(1.44)	(1.47)	(1.44)	(1.53)
Constant	17.357***	17.696***	18.414***	18.667***	17.594***	18.624***	16.767***
	(8.09)	(8.25)	(7.98)	(8.07)	(8.03)	(8.51)	(7.34)
Observations	753	768	711	753	763	773	775
R^2	0.75	0.78	0.74	0.77	0.75	0.78	0.74

Note. This table presents estimates of panel regressions of the effects of cross-border and domestic mergers and acquisitions on corruption. The dependent variable is corruption perception index (CPI) for the year t and country i. To control for endogeneity, some independent variables are lagged one year. Heteroskedasticity-corrected t-statistics are in parentheses. The variable definitions are provided in Appendix A. ∗∗∗, ∗∗, and ∗ denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Most of the control variables are significant and have the expected sign. Former colony has a negative and significant coefficient in all the models. Whilst higher values of CPI mean that the country is less corrupt, these results confirm the literature stating that former colonies cannot develop efficient institutions and are more corrupt (lower CPI). The coefficient of Log per capita GDP is significant for most of the model specifications. This shows that GDP per capita and corruption are negatively associated and higher GDP per capita is linked to less corruption in a country. As predicted in the literature, Ethnolinguistic fractionalisation is also significant and negative which shows that more ethnolinguistic fractionalisation in a country is linked to higher corruption. Moreover, Oil exporter dummy is strongly significant and negative in all the M&A measures. As stated before, oil exporter countries tend to be more corrupt. Contrary to what is predicted in the literature, the coefficients of government expenditure are not significant in any M&A measures. Political rights coefficients are also significant and negative. This shows and increase in the variable (being less politically free) will decrease the CPI (being more corrupt). Thus, higher political freedom in country is linked to less corruption in a country. French legal origins dummy is also significant and negative stating that countries with civil law systems tend to

be more corrupt. Interestingly primary religion is not significant in any M&A measures contrary to what is reported in the literature.

4.3 Robustness Checks

In this section, we use different approaches to test the robustness of the results.

4.3.1 Alternative Corruption Measure

To gain robustness, we use an alternate measure of corruption in the analysis. The Political Risk Services corruption index (ICRG) is another measure of perceived corruption which is widely used in the literature. This is particularly important since corruption is measured through surveys on the respondent's subjective perceived level of corruption. Using different indices of corruption reduces the risk of a respondent's misjudgment on their perceived level of corruption. The ICRG has a correlation coefficient of 0.8864 with CPI. Table 1.4 presents random effect panel regression estimates of the determinants of corruption. The dependent variable is ICRG and independent variables are measures of M&A activity.

Table 4. Robustness tests, alternate corruption measure

	ICRG	ICRG	ICRG	ICRG	ICRG	ICRG
Log cross-border value per year(t-1)	0.05***					
	(2.78)					
Log Cross-border number per year(t-1)		0.13*				
		(1.68)				
Log Domestic value per year(t-1)			-0.007			
			(-0.47)			
Log Domestic number per year(t-1)				0.128***		
				(2.89)		
Log Total value per year(t-1)					0.033*	
					(1.95)	
Log Total number per year(t-1)						0.15**
						(2.32)
Former colony	-0.396	-0.339	-0.437	-0.369	-0.421	-0.358
	(-1.57)	(-1.37)	(-1.64)	(-1.49)	(-1.64)	(-1.46)
Log GDP per Capita(t-1)	0.079	0.05	0.126	0.029	0.083	0.016
	(0.74)	(0.41)	(1.12)	(0.26)	(0.75)	(0.13)
EF	-0.862	-0.726	-0.785	-0.745	-0.807	-0.716
	(-1.65)	(-1.54)	(-1.54)	(-1.62)	(-1.56)	(-1.57)
Oil Exporter	-0.245	-0.195	-0.332**	-0.169	-0.253	-0.173
	(-1.42)	(-1.32)	(-2.02)	(-0.98)	(-1.44)	(-1.12)
Log Government expenditure	-0.072	-0.044	-0.138**	-0.074	-0.064	-0.047
	(-1.19)	(-0.69)	(-2.13)	(-1.26)	(-1.02)	(-0.73)
Log population	-0.31***	-0.338***	-0.289***	-0.371***	-0.317***	-0.376***
	(-3.61)	(-3.58)	(-3.38)	(-4.42)	(-3.65)	(-4.01)
Political rights	-0.168***	-0.169***	-0.161**	-0.163***	-0.171***	-0.158***
	(-2.74)	(-2.82)	(-2.52)	(-2.6)	(-2.69)	(-2.66)
French legal origin	-0.258	-0.219	-0.255	-0.19	-0.257	-0.19
	(-0.95)	(-0.88)	(-0.93)	(-0.76)	(-0.94)	(-0.78)
Primary religion	0.587	0.578**	0.685**	0.58**	0.613**	0.582**
	(1.95)	(2.1)	(2.33)	(2.13)	(2.09)	(2.16)
Constant	8.544***	9.024***	8.384***	9.872***	8.739***	9.775***
	(3.93)	(3.8)	(3.7)	(4.42)	(3.94)	(4.05)
Observations	759	775	716	759	770	775
R2	0.64	0.66	0.61	0.66	0.63	0.78

Note. This table presents estimates of random effect model of cross-border and domestic mergers and acquisitions activity. The dependent variable is Political Risk Services corruption index (ICRG) for the year t and country i. To control for endogeneity, some independent variables are lagged one year. Heteroskedasticity-corrected t-statistics are in parentheses. The variable definitions are provided in Appendix A. ∗∗∗, ∗∗, and ∗ denote statistical significance at the 1%, 5%, and 10% levels, respectively.

The results are similar to Table 3 and confirm our results. The coefficients of both cross-border number and value per year are positive and statistically significant. Domestic measures show a positive and significant relation to ICRG in at least one measure, and the coefficients of both total number and value per year are significant. Former colony, GPD per capita, EF and French legal origin do not show significance in any measures, but the coefficients of primary religion are statistically significant in most of the measures.

4.3.2 Longer Lags

Curing corruption is not easy. Corruption is rooted in the quality of a country's institutions, and institutional norms and policies may take years to change. As a result, we use longer lags in the second robustness checks to see if M&A activity from previous years has an effect on corruption. we use 2 year and 5 year lags in Table 5, which presents estimates of Pooled OLS model of cross-border and domestic merger and acquisition activity.

Table 5. Robustness tests, longer lags

Lagged 2 years	CPI	CPI	CPI	CPI	CPI	CPI
Log cross-border value per year(t-2)	0.266***					
	(9.48)					
Log Cross-border number per year(t-2)		0.702***				
		(13.53)				
Log Domestic value per year(t-2)			0.173***			
			(6.24)			
Log Domestic number per year(t-2)				0.52***		
				(11.49)		
Log Total value per year(t-2)					0.271***	
					(8.33)	
Log Total number per year(t-2)						0.68***
						(12.93)
Control Variables	Yes	Yes	Yes	Yes	Yes	Yes
Observations	750	768	709	752	760	773
R2	0.82	0.86	0.81	0.84	0.83	0.85
Lagged 5 years	CPI	CPI	CPI	CPI	CPI	CPI
Log cross-border value per year(t-5)	0.221***					
	(8.04)					
Log Cross-border number per year(t-5)		0.672***				
		(13.48)				
Log Domestic value per year(t-5)			0.168***			
			(6.27)			
Log Domestic number per year(t-5)				0.459***		
				(11.59)		
Log Total value per year(t-5)					0.238***	
					(7.55)	
Log Total number per year(t-5)						0.611***
						(12.91)
Control Variables	Yes	Yes	Yes	Yes	Yes	Yes
Observations	741	761	704	746	755	770
R2	0.82	0.85	0.81	0.83	0.82	0.84

Note. This table presents estimates of Pooled OLS model of cross-border and domestic mergers and acquisition activity. The dependent variable is corruption perception index (CPI) for the year t and country i. To control for endogeneity, some independent variables are lagged. Heteroskedasticity-corrected t-statistics are in parentheses. The variable definitions are provided in Appendix A. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

All measures of lagged M&A activity show significant and positive association to CPI, meaning that these activities decrease the level of corruption in host countries. The results of this table further confirm the results.

5.3.3 Random Effects vs. Fixed Effect and Pooled OLS

To check the validity of the random effect model, Table 6 compares fixed effect and pooled OLS results.

Table 6. Robustness tests, OLS vs. fixed effect

	Pooled OLS					
	CPI	CPI	CPI	CPI	CPI	CPI
Log cross-border value per year$_{(t-1)}$	0.306***					
	(10.9)					
Log Cross-border number per year$_{(t-1)}$		0.779***				
		(15.3)				
Log Domestic value per year$_{(t-1)}$			0.156***			
			(5.53)			
Log Domestic number per year$_{(t-1)}$				0.557***		
				(12.21)		
Log Total value per year$_{(t-1)}$					0.293***	
					(8.95)	
Log Total number per year$_{(t-1)}$						0.745***
						(13.93)
Former colony	-0.154	-0.123	-0.27**	-0.178**	-0.219	-0.168*
	(-1.51)	(-1.41)	(-2.43)	(-1.84)	(-2.09)	(-1.85)
Log GDP per Capita$_{(t-1)}$	0.475***	0.09	0.691***	0.259***	0.47***	0.052
	(6.58)	(1.18)	(8.27)	(3.21)	(5.7)	(0.62)
EF	-0.827***	-1.165***	-0.476**	-1.017***	-0.739***	-1.131***
	(-3.63)	(-5.59)	(-1.96)	(-4.73)	(-3.24)	(-5.45)
Oil Exporter	-0.69***	-0.333***	-0.613***	-0.334***	-0.6***	-0.273**
	(-6.06)	(-3.02)	(-4.85)	(-2.88)	(-5.29)	(-2.42)
Log Government expenditure	0.134	0.066	0.092	0.069	0.122	0.075
	(1.51)	(0.76)	(0.92)	(0.85)	(1.38)	(0.91)
Log population	-0.66***	-0.837***	-0.579***	-0.847***	-0.681***	-0.921***
	(-17.18)	(-19.16)	(-12.02)	(-17.19)	(-14.82)	(-18.65)
Political rights	-0.075**	-0.082**	-0.069**	-0.095***	-0.083**	-0.091***
	(-2.15)	(-2.74)	(-1.82)	(-2.67)	(-2.37)	(-2.81)
French legal origin	-1.115***	-1.008***	-1.046***	-0.937***	-1.108***	-0.939***
	(-11.35)	(-11.37)	(-10.17)	(-10.55)	(-11.48)	(-11.04)
Primary religion	0.376***	0.201***	0.47***	0.19**	0.376***	0.172*
	(3.48)	(2.25)	(4.18)	(1.99)	(3.56)	(1.96)
Constant	10.799***	16.876***	8.748***	16.422***	11.191***	18.275***
	(9.26)	(12.61)	(6.01)	(11.27)	(8.4)	(12.7)
Observations	753	768	711	753	763	773
R^2	0.83	0.86	0.81	0.84	0.83	0.86
	Fixed Effect					
	CPI	CPI	CPI	CPI	CPI	CPI
Log cross-border value per year$_{(t-1)}$	0.046***					
	(3.69)					
Log Cross-border number per year$_{(t-1)}$		0.136***				
		(3.81)				
Log Domestic value per year$_{(t-1)}$			0.028**			
			(2.34)			
Log Domestic number per year$_{(t-1)}$				0.117***		
				(4.22)		
Log Total value per year$_{(t-1)}$					0.048***	
					(3.5)	
Log Total number per year$_{(t-1)}$						0.165***
						(4.71)
Former colony						
Log GDP per Capita$_{(t-1)}$	0.259***	0.268***	0.297***	0.219***	0.27***	0.225***
	(3.93)	(4.04)	(4.53)	(3.23)	(4.1)	(3.33)
EF						
Oil Exporter						
Log Government expenditure	0.03	0.044	0.04	0.017	0.034	0.038
	(0.67)	(0.96)	(0.79)	(0.37)	(0.76)	(0.85)

Log population	-1.73***	-1.822***	-2.043***	-1.61***	-1.743***	-1.784***
	(-4.15)	(-4.46)	(-4.87)	(-4.01)	(-4.28)	(-4.47)
Political rights	-0.067**	-0.069**	-0.092***	-0.078***	-0.081***	-0.071**
	(-2.33)	(-2.43)	(-3.22)	(-2.8)	(-2.88)	(-2.56)
French legal origin						
Primary religion						
Constant	32.811***	34.073***	38.231***	31.094***	32.906***	33.591***
	(4.87)	(5.15)	(5.61)	(4.78)	(4.99)	(5.2)
Observations	753	768	711	753	763	773
R^2	0.41	0.45	0.44	0.46	0.43	0.46

Note. This table presents estimates of Pooled OLS and fixed effect panel model of cross-border and domestic mergers and acquisition activity. The dependent variable is corruption perception index (CPI) for the year t and country i. To control for endogeneity, some independent variables are lagged. Heteroskedasticity-corrected t-statistics are in parentheses. The variable definitions are provided in Appendix A. Country and time fixed effects are included. ∗∗∗, ∗∗, and ∗ denote statistical significance at the 1%, 5%, and 10% levels, respectively.

As it is presented in Table 6, all the measures of M&A activity are statistically significant in both Pooled OLS and fixed effect panel analysis. The results confirms our previous results in table 3.

4.3.4 Regional Subsamples

To test the robustness of the sample data, we divide the data into regional subsamples and test the hypotheses for each subsample. The regional subsamples are: North and South America, Europe, Africa and the Middle East, and Asia and Oceania. Since the subsamples are fairly small, we use the simple OLS regression to estimate the coefficients. Table 7 summarizes the results. Results of domestic M&A activity are not shown in the interest of brevity.

Table 7. Robustness tests, regional subsamples

	North and South America				**Europe**			
	CPI	CPI	CPI	CPI	CPI	CPI	CPI	CPI
Log Cross-border value per $year_{(t-1)}$	0.161***				0.473***			
	(3.34)				(7.14)			
Log Cross-border number per $year_{(t-1)}$		0.482***				1.13***		
		(3.78)				(10.39)		
Log Total value per $year_{(t-1)}$			0.192***				0.48***	
			(3.48)				(6.57)	
Log Total number per $year_{(t-1)}$				0.604***				1.105***
				(4.16)				(9.47)
Former colony	0.253	0.266	0.321	0.458	-1.03***	-1.335***	-1.119***	-1.285***
	(1.07)	(1.03)	(1.38)	(1.91)	(-5.95)	(-8.42)	(-6.26)	(-8.27)
Log GDP per $Capita_{(t-1)}$	-0.499***	-0.633***	-0.562***	-0.727***	0.109	-0.095	0.141	-0.066
	(-3.33)	(-4.03)	(-3.58)	(-4.22)	(0.66)	(-0.61)	(0.82)	(-0.38)
EF	-5.186***	-5.245***	-5.017***	-5.031***	0.747	-0.171	0.858	-0.078
	(-8.49)	(-9.22)	(-8.6)	(-9.12)	(1.08)	(-0.28)	(1.24)	(-0.13)
Oil Exporter	-1.811***	-1.679***	-1.779***	-1.55***	-0.672***	-0.632***	-0.765***	-0.662***
	(-6.37)	(-5.95)	(-6.11)	(-5.45)	(-3.86)	(-3.92)	(-4.48)	(-3.71)
Log Government expenditure	0.035	-0.014	-0.008	-0.069	0.652***	0.234**	0.694***	0.328**
	(0.26)	(-0.11)	(-0.05)	(-0.5)	(2.93)	(2.53)	(2.8)	(2.31)
Log population	-0.918***	-1.046***	-0.968***	-1.185***	-0.857***	-1.239***	-0.89***	-1.314***
	(-9.25)	(-7.46)	(-9.31)	(-7.9)	(-9.52)	(-12.75)	(-9.37)	(-11.51)
Political rights	-0.16	-0.087	-0.183	-0.104	-1.826***	-1.043***	-2.286***	-1.66***
	(-1.23)	(-0.61)	(-1.39)	(-0.75)	(-5.75)	(-3.71)	(-5.67)	(-5.11)
French legal origin	-5.393***	-4.848***	-5.331***	-4.456***	-1.231***	-0.587***	-1.31***	-0.83***
	(-12.76)	(-10.42)	(-13.09)	(-9.07)	(-5.78)	(-3.39)	(-5.87)	(-4.5)
Primary religion	Omitted[1]	Omitted[1]	Omitted[1]	Omitted[1]	0.52***	0.466***	0.484***	0.215
					(3.27)	(3.4)	(2.77)	(1.39)
Constant	29.822***	32.13***	30.91***	34.153***	16.395***	23.765***	16.711***	24.658***
	(11.77)	(10.65)	(11.6)	(10.72)	(7.31)	(10.46)	(7.26)	(9.22)
Observations	172	175	172	175	256	256	256	256
R^2	0.87	0.82	0.88	0.80	0.81	0.71	0.82	0.74

	Asia and Oceania				Africa and Middle East			
	CPI	CPI	CPI	CPI	CPI	CPI	CPI	CPI
Log Cross-border value per $year_{(t-1)}$	0.203***				0.038			
	(4.4)				(1.41)			
Log Cross-border number per $year_{(t-1)}$		0.738***				0.246***		
		(7.75)				(3.04)		
Log Total value per $year_{(t-1)}$			0.185***				0.003	
			(3.69)				(0.09)	
Log Total number per $year_{(t-1)}$				0.557***				0.195**
				(6.65)				(2.62)
Former colony	-0.273	0.22	-0.33	0.259	0.62	0.147	0.647	0.001
	(-0.77)	(0.72)	(-0.93)	(0.82)	(1.38)	(0.33)	(1.53)	(0)
Log GDP per $Capita_{(t-1)}$	0.929***	0.312**	0.954***	0.479***	0.563***	0.507***	0.65***	0.518***
	(7.34)	(2.05)	(7.24)	(3.51)	(6.01)	(5.62)	(7.48)	(5.53)
EF	1.495*	-1.156	1.746**	-0.461	-0.678	0.939	-0.527	0.935
	(1.71)	(-1.35)	(2.01)	(-0.54)	(-0.66)	(0.78)	(-0.52)	(0.85)
Oil Exporter	Omitted[1]	Omitted[1]	Omitted[1]	Omitted[1]	0.154	0.732	0.203	0.884*
					(0.33)	(1.42)	(0.45)	(1.75)
Log Government expenditure	0.063	-0.089	0.011	-0.073	0.112*	0.164**	0.144**	0.16**
	(0.4)	(-0.7)	(0.07)	(-0.53)	(1.76)	(2.25)	(2.11)	(2.14)
Log population	-0.532***	-0.746***	-0.52***	-0.682***	-0.577***	-0.862***	-0.557***	-0.922***
	(-6.77)	(-9.03)	(-6.65)	(-8.64)	(-2.77)	(-3.55)	(-2.74)	(-3.92)
Political rights	-0.018	-0.085**	-0.007	-0.024	-0.327***	-0.218***	-0.307***	-0.209***
	(-0.44)	(-2.22)	(-0.16)	(-0.68)	(-4.47)	(-3.43)	(-4.42)	(-3.49)
French legal origin	-1.142***	-0.849***	-1.23***	-0.886***	0.216	0.951	0.227	0.96
	(-6.27)	(-4.97)	(-6.88)	(-5.11)	(0.39)	(1.44)	(0.41)	(1.56)
Primary religion	0.618**	-0.18	0.764***	0.132	-0.066	-0.022	-0.094	0.136
	(2.15)	(-0.62)	(2.69)	(0.47)	(-0.21)	(-0.08)	(-0.32)	(0.5)
Constant	4.687***	13.839***	4.275***	10.857***	9.812***	13.432***	8.753***	14.392***
	(2.13)	(5.32)	(1.99)	(4.92)	(3.18)	(3.78)	(2.99)	(4.07)
Observations	212	215	215	216	113	122	120	126
R^2	0.85	0.88	0.85	0.87	0.91	0.92	0.91	0.91

Note. This table presents estimates of OLS regression of cross-border and total M&A activity. The dependent variable is corruption perception index (CPI) for the year t and country i. To control for endogeneity, some independent variables are lagged one year. Heteroskedasticity-corrected t-statistics are in parentheses. The variable definitions are provided in Appendix A. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

[1] The variable is omitted because of collinearity.

Most of the subsamples have positive and statistically significant coefficients for all the measures of M&A activity, which confirms the idea that M&A activity can reduce the level of corruption in these subsamples. As for Africa and the Middle East, at least one of the two M&A activity pairs (number or value) is statistically significant, which further confirms the results.

4.3.5 Outliers

To identify the outliers, we used a scatter plot to visually identify the possible outliers. Figure 2 and Figure 3 show the scatter plot for total number per year and total value per year vs. CPI index. A cursory look at these graphs suggests that the United States and the United Kingdom are indeed outliers. As a robustness check, we remove these two countries from the sample data and run regressions to determine the effect of M&A activity on corruption.

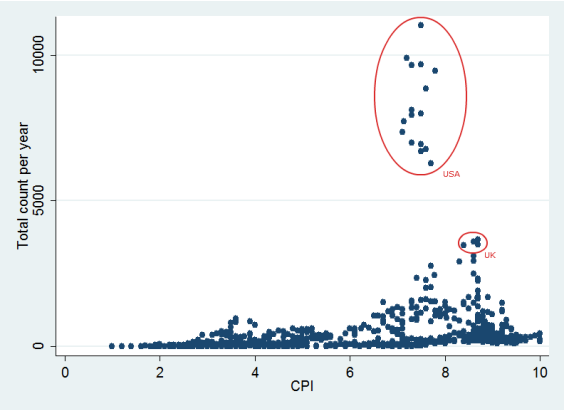


Figure 2. Scatter plot of total number per year and CPI

The horizontal line represents corruption perception index and the vertical line represents the total number per year. Circled observations are noteworthly.

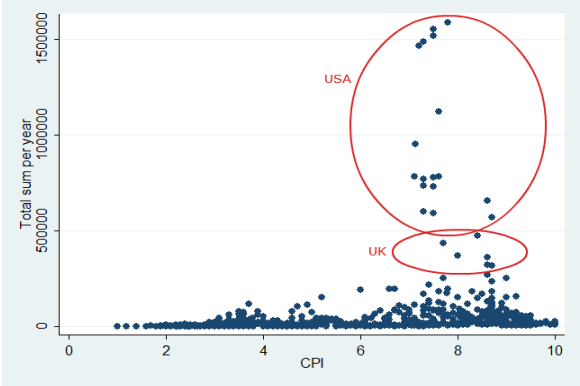


Figure 3. Scatter plot of total value per year and CPI

The horizontal line represents corruption perception index and the vertical line represents the total number per years. Circled observations are noteworthy.

Table 9. Robustness tests, removing outliers

	CPI	CPI	CPI	CPI
Log Cross-border value per year$_{(t-1)}$	0.054***			
	(3.38)			
Log Cross-border Number per year$_{(t-1)}$		0.173***		
		(3.67)		
Log Total value per year $_{(t-1)}$			0.053***	
			(2.62)	
Log Total number per year $_{(t-1)}$				0.192***
				(3.45)
Former colony	-0.813**	-0.738*	-0.814**	-0.749**
	(-2.03)	(-1.93)	(-2.03)	(-1.97)
Log GDP per Capita$_{(t-1)}$	0.19**	0.168**	0.192**	0.13
	(2.42)	(2.01)	(2.36)	(1.61)
EF	-2.09**	-1.955**	-2.021**	-1.958**
	(-2.43)	(-2.4)	(-2.35)	(-2.43)
Oil Exporter	-1.166***	-1.04***	-1.139***	-1.016***
	(-2.99)	(-2.72)	(-2.88)	(-2.63)
Log Government expenditure	0.056	0.073	0.06	0.065
	(0.97)	(1.21)	(1.01)	(1.06)

Log population	-0.737***	-0.763***	-0.752***	-0.803***
	(-5.96)	(-6.51)	(-6.02)	(-6.56)
Political rights	-0.082*	-0.075*	-0.088*	-0.075
	(-1.67)	(-1.67)	(-1.84)	(-1.63)
French legal origin	-1.232***	-1.19***	-1.233***	-1.163***
	(-2.78)	(-2.91)	(-2.79)	(-2.83)
Primary religion	0.593	0.536	0.572	0.53
	(1.12)	(1.1)	(1.09)	(1.1)
Constant	17.659***	17.886***	17.866***	18.721***
	(7.66)	(7.82)	(7.61)	(8.05)
Observations	721	736	731	741
R^2	0.75	0.78	0.75	0.78

Note. This table presents estimates of random effect model of cross-border and total M&A activity. The dependent variable is corruption perception index (CPI) for the year t and country i. To control for endogeneity, some independent variables are lagged one year. Heteroskedasticity-corrected t-statistics are in parentheses. The variable definitions are provided in Appendix A. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Table 9 sums up the results of random effect model panel regression. The results of this table match the previous results and support the hypothesis. All the M&A activity measures all statistically significant and have the expected sign. In fact, these outlier countries do not affect the results.

5. Conclusion

This paper makes a systematic attempt to estimate the effects of openness to trades through mergers and acquisitions on corruption. We use two different measures of corruption (CPI and ICRG) and two different measures of M&A activity (number and dollar amount per year) on a sample of 50 countries during the 1998-2013 period. Our results indicate that M&A activity is a robust determinant of corruption. More M&A activity results in lower national levels of corruption in a host country. This result is robust due to result confirmation in a series of robustness checks. The literature has previously suggested that higher corruption levels deter foreign direct investment and mergers and acquisitions. Here we find that the opposite causality also holds; higher merger and acquisition activity is shown to deter corruption.

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Appendix A

Definition and expected signs of the variables

Variable Name	Definition and Source	Expected Sign
Corruption indexes:		
Corruption Perception Index	Corruption Perception Index (CPI) is the index produced annually by Transparency International. This index has become a widely-used measure of corruption in the literature. It is an aggregated, standardized "poll of polls" of experts, international business people, and citizens of each country covered. Every score thus captures the perceptions of both foreigners and nationals of the country being assessed. Transparency International uses a similar definition of corruption as us: "the misuse of public power for private benefit." The index assigns a score, ranging from 0 (most corrupt) to 10 (least corrupt), to each country in each year. From 2013 Transparency International decided to present the index ranging from 0 to 100. For simplicity the index is divided by 10 for 2012 and 2013. Source: Transparency International, various years.	
International Country Risk Guide	International Country Risk Guide (ICRG) corruption index is an index produced by Political Risk Services. This index is a survey-based indicator, which has been widely used in the economics literature. This index is produced monthly. We use the mean of the months of each year as the index for that year. The index scales from 0 to 6. Low scores on the ICRG corruption index indicate that "high government officials are likely to demand special payments". Source: Political Risk Services, various years.	
Merger and Acquisition activity:		
Cross-border number per year	As a measure of M&A activity, we calculate the natural logarithm of the number of all cross-national deals which happened in a year for each country, whether the country was target or acquirer. We include only deals for which the acquirer owns less than 50% of the shares prior to transaction and owns at least 50% of the shares after the transaction. Deals with no information about before or after percentage of shares owned are excluded. The data is collected from Thomson Reuters's SDC Platinum database spanning from 1998 to 2013.	+
Cross-border value per year	We have another measure of M&A activity which is the natural logarithm of the sum of all cross-national deals' transaction value in US dollars, whether the country was target or acquirer. The deals with no information on deal value, or deals which did not make the acquirer the owner of 50% of the share were excluded. Our data is taken from Thomson Reuters's SDC Platinum database for the years 1998 to 2013.	+
Domestic number per year	This variable is the natural logarithm of the total number of domestic M&A deals per years in a country. We excluded the deals which did not make the acquirer a controlling shareholder (more than 50% of the shares) or the deals which the acquirer was already a controlling shareholder. The data is downloaded from Thomson Reuters's SDC Platinum database.	+
Domestic value per year	This variable is the natural logarithm of the total domestic transaction value in US dollars. The deals which do not pass the ownership of 50% of the shares are excluded. This variable is downloaded from Thomson Reuters's SDC Platinum database.	+
Total number per year	We construct this variable as the natural logarithm of the total number of domestic and international deals in a country. This variable is simply a natural logarithm of the sum of Cross-border count per year and Domestic count per year.	+
Total value per year	This variable is the natural logarithm of the total value of the cross-national and domestic deals in a country per year. The variable is the sum of Cross-border sum per year and Domestic sum per year.	+
Control Variables:		
Former colony	is a dummy variable that takes the value of one if the country was a former colony after 1825 and zero otherwise. Source: Barro and Lee (1994).	-
Per capita GDP	is the natural logarithm of the per capita GDP in US dollars. Source: World Bank and Taiwan National Statistics.	+
Ethnolinguistic Fractionalization	Ethnolinguistic Fractionalization (ER) measures ethnolinguistic fractionalization which is the probability that two randomly selected individuals within a country belong to the same religious and ethnic group scaling from 0 to 1. Source: La Porta et al. (1999).	-
Oil exporter	is a dummy variable for oil exporting countries. The dummy takes the value of 1 if the country's fuel export is more than 30% of the total merchandise exports. Source: World Bank.	-
Government expenditure	is the natural logarithm of the government final consumption expenditure as a share of GDP. Source: World Bank and Taiwan National Statistics.	-
Population	is the natural logarithm of the total population of a country. Source: World Bank and Taiwan National Statistics.	-

Political rights	is the degree to which people are free to participate in the political process, freedom to vote for distinct alternatives in legitimate elections, freedom to compete for public office, join political parties and organizations, and elect representatives who have a decisive impact on public policies and are accountable to the electorate. This index is scaled from 0 to 7 which 1 denotes a high political freedom. Source: Freedom House.	-
French legal origin	is a dummy variable denoting if the legal origin of the country is civil French law. Source: La Porta et al. (1999).	-
Primary religion	is a dummy variable which takes the value 1 if the primary religion of the country is Protestant. Source: La Porta et al. (1999).	+