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Is U.S. Formalized Lobbying More about Nefarious Corruption or Benign Industry Information Provision? Evidence from Foreign Firms Lobbying in the U.S.

ABSTRACT

The literature on lobbying is at an impasse between those studies arguing that U.S. formal corporate lobbying with mandated disclosure is primarily a conduit for corruption and other studies that contend this type of corporate lobbying is primarily about benign industry information provision to policy makers. In this study, we ask whether instrumented home country corruption is a robust predictor of foreign firms' lobbying of U.S. policymakers. In a counterintuitive finding, we show that U.S. formal lobbying is far more likely to be conducted by companies from the least corrupt home countries. The results are highly robust to alternative explanations.

Introduction

Policy makers craft laws and regulations that influence the rules of the game for entire industries and, in turn, the ultimate profitability of those industries. Prior works found an interesting and initially counterintuitive correlation that the most profitable industries—such as financial services, defense, and healthcare—are also typically the most regulated industries since, often times, the laws and regulations enhance and protect the market power of the largest incumbents in those industries (Stigler 1971; Grossman and Helpman 1994; Peltzman 1976). Due to the fact that the presence and importance of the government and regulatory pressure have been growing fast not only for those highly regulated sectors but for the private sector as a whole, firms attempt to more actively influence this policy-making process (Cory, Lerner, and Osgood 2021).

Lobbying, as one of the means to influence policy-making process, has been considered and commonly mobilized as a strategy by firms in seeking out favorable laws and regulations (Austen-Smith 1995; Hojnacki and Kimbell 1998). Although scholars generally define lobbying as "the transfer of information in private meetings and venues between interest groups and politicians, their staffs, and agents" (de Figueiredo and Richter 2014, 3), the general public typically thinks that lobbying is bad and firms attempt to buy politics through lobbying (Drutman 2011). This negative perception of the public on lobbying is not much different from scholarly debate on lobbying; the literature is at an impasse with sharply contrasting points of view on the nature of lobbying (Bombardini and Trebbi 2020). One set of scholars argue that lobbying is mostly about corrupt dealings (Fredriksson, Neumayer, and Ujhelyi 2007; Grossman and Helpman 2001), whereas another group of scholars argue that lobbying is mostly about benign industry-specific information provision and education of politicians about which laws and

regulations increase business investment and activity (Ansolabehere, de Figueiredo, and Snyder 2003; Austen-Smith 1993; de Figueiredo and Tiller 2001; Hall and Deardorff 2006).

For instance, most literature argues that access to politicians is critical in lobbying (Ban and You 2019; Blanes i Vidal, Draca, and Fons-Rosen 2012). On the one hand, this access can be regarded as a type of corruption driven by personal ties or favortism (Cotton and Dellis 2016; Igan and Mishra 2014). On the other hand, lobbying through established access might signal the seriousness of interest groups and their efforts to influence on-going policy debates, potentially an effective way for politicians to calculate and understand the impact of their vote (Austen-Smith 1998; Wright 1996).

Therefore, the open question to answer is where U.S. legal corporate lobbying with mandated disclosure typically stands on the spectrum from benign education of politicians on the left-hand side to nefarious corruption on the right-hand side. This is an important research question for a number of reasons. First, although studies have shown that lobbying is an effective way to increase organizational performance (de Figueiredo and Silverman 2006; Richter, Samphantharak, and Timmons 2009), we do not know much about what institutional factors can drive corporate lobbying behaviors (Brasher and Lowery 2006), the very first step to understand corporate political activities. Second, the results of the study also may have an implication to policy makers. Many studies on corruption and institutions illustrate that institutional quality that can enhance transparency is a good way to deter corruption (Berg, Jiang, and Lin 2012; Bjørnskov 2011). If lobbying is truly benign and meant to foster policy discourse, this implies that lobbying can be an effective way to curb corruption and under-the-table dealings between firms and politicians; thus policy-makers must consider making lobbying more transparent and increase the disclosure requirments so that policy communication through lobbying cen be better implemented. Thus, in this paper, we seek to shed more light on the classic but critical question

on the fundamental nature of lobbying: *Is U.S. formalized lobbying with mandated disclosure more often consistent with benign industry-specific information provision or more often consistent with corrupt dealings with political players?*

Related Literature

The argument for why U.S. formal corporate lobbying with mandated disclosure more often involves benign industry information provision than nefarious corruption comes from how lobbying is structured, disclosed, and constrained in the U.S. context. Particularly in more developed countries such as the United States and the European Union member states, lobbying plays a key role in policy making (Baumgartner et al. 2009; Schnakenberg 2017), which is to a significant degree publicly observable and can be scrutinized. For instance, in the United States, all lobbying activities must be clearly reported and publicized in accordance with the Lobbying Disclosure Act (LDA) of 1995. Any surreptitious or unreported lobbying activities or any lobbying activities that involve an illegal transaction—such as bribery or kickbacks—can be prosecuted (e.g., Jack Abramoff's lobbying scandal and Paul Manafort's violation of the Foreign Agents Registration Act). Public officials and agents conducting lobbying are subject to legal prosecution (Dal Bó and Di Tella 2003), media coverage (Di Tella and Franceschelli 2011), and monitoring (Incerti 2020; Olken and Pande 2012). Moreover, the institutional capacity, in general, to punish the illegal quid pro quo type of lobbying operates effectively in these developed countries. As such, this institutional arrangement also influences behaviors of public officials and other participants such as lobbyists and interest groups, implying that they would have less incentive to engage in illegal behaviors. Thus, one can assume that legal enforcement and public scrutiny of illegal lobbying behaviors would work more effectively in a more developed economy. Thus, it is reasonable to ask whether the fundamental mechanisms through

which lobbying takes place in the United States are different from the illicit dealings of corruption (Chari, Hogan, and Murphy 2010; Svensson 2005).

This study leverages an insight from prior studies—namely that populations of actors are influenced by the level of corruption prevalent in their home country institutions when deciding how to conduct themselves in terms of corruption in a host country environment. Cultural studies (e.g., Hofstede 2001) suggest that societal cultural norms are deeply rooted in a society and operate as a guiding principle (Elaad, Krumer, and Kantor 2018; Jo 2021). Bribing \$1-\$2 to a police officer could be frequently tolerated in one country but prosecuted in another country. Because of this, many studies (e.g., Lambsdorff 2006; Olken 2009; Svensson 2003, 2005) have pointed out that existing survey measures of corruption may not be accurate, as their use causes perception biases, making it difficult to compare precisely the real level of corruption across different countries (Svensson 2003). Furthermore, it is still possible that certain individuals, firms, or entities could show very different behaviors from generally predicted behaviors driven by society's cultural norms (Hofstede 2001; Malesky, Gueorguiev, and Jensen 2015). The ecological fallacy states that societal culture can predict the average behavior of a population of firms but not the behavior of any individual firm. As Hofstede (2001, 16) noted, "Confusion between within-system and between-system (ecological) correlations is known as the ecological fallacy... The ecological fallacy is committed when the ecological correlations... are interpreted as if they apply to individuals. Doing so is attractive because ecological correlations are often stronger than individual correlations." For example, firms from Germany would, on average, be less corrupt, while individual German firms like Volkswagen and Siemens could show more corrupt behaviors (Lichtblau and Dougherty 2008).

This study provides robust empirical evidence using a quasi-experiment of different populations of foreign firms coming from different institutional contexts to do U.S. federal

lobbying. We find robust evidence consistent with the idea that U.S. federal lobbying is more about benign industry information provision than it is about nefarious corruption. We argue that populations of firms from countries that suffer less from corruption are more likely to engage actively in lobbying since lobbying is a legitimate way of communication, different from corruption or bribery. It is possible that lobbying by foreign entities in the United States is something unique and, thus, limited to only firms from certain countries. However, we are confident that our results are free of this potential issue for several reasons: (i) more than 2,000 foreign firms from 101 countries lobbied the U.S. federal government at some point during our sample time period, (ii) foreign firms spent approximately \$4.6 billion, or more than \$450 million yearly, on lobbying the U.S. federal government and their spending on outside lobbyists is 1.3 times more on average than domestic U.S. firms,¹ (iii) foreign firms are allowed to lobby the U.S. Congress and regulatory agencies just as U.S. firms do, and (iv) whether they are foreign owned is not disclosed in the lobbying report. In sum, it is not unreasonable to claim that examining foreign firm lobbying in the context of U.S. federal lobbying system is theoretically and empirically a good strategy, which can and will shed more light on the foundational nature of lobbying with mandated disclosure.

We begin by using a variable on unpaid diplomatic parking tickets as an instrument to predict the exogenous component of home country corruption. The merit of this instrument is that it is about how populations of foreign diplomats act when it is reasonable for them to believe they will never be held accountable for engaging in corrupt activity. For years, New York City had a problem with foreign diplomats not paying their parking tickets. Mayor Michael Bloomberg increased law enforcement in this area, and the City made pre-enforcement data

¹ This figure is drawn from U.S. federal lobbying data for the period 1998–2012.

available to researchers. The predicted component of home country corruption is free of endogeneity concerns because there was no role for home country wealth levels in determining whether the diplomats could afford to pay their parking tickets. In fact, Fisman and Miguel (2007) argued that because of diplomatic immunity, each diplomat's wealth will not determine his/her decision not to pay parking violation tickets. In other words, each diplomat decides whether to pay his/her parking tickets without regard to personal wealth or country wealth, which makes unpaid diplomatic parking tickets, strictly speaking, an indicator of the exogenous component of home country corruption levels. Furthermore, there is no other causal pathway through which unpaid diplomatic parking tickets in a locality could determine formalized lobbying with mandated disclosure at the federal level, other than through the effect of home country corruption levels.

We take the exogenous component of home country corruption and use it to predict how much each country-population of firms spends on U.S. formal lobbying over time. The Lobbying Disclosure Act of 1995—modified in 2007 by the Honest Leadership and Open Government Act of 2007 following the Jack Abramoff lobbying scandal—mandates that all active lobbyists disclose and report their lobbying activities on behalf of an individual or an organization to the Clerk of the House of Representatives and the Secretary of the Senate in accordance with specific guidelines. The full lobbying data became available from the year 1998, and the data we utilize includes lobbying of U.S. Congress and/or a federal agency by different types of organizations, including foreign-owned companies during the period of 1998-2012.

Our results are consistent with the idea that formal lobbying with mandated disclosure in the United States may not be the key channel for corrupt activities between firms and politicians. We find instrumented home country corruption levels (the higher, the less corrupt) to be highly negatively associated with lobbying expenditures by populations of foreign firms grouped by

home country nationality. Crucially, we control for a wide range of alternative explanations, starting with the explanation that highly corrupt countries simply are involved in industries that do not lobby. As a robustness check, we refocus our attention on a different unit of analysis: the industry-home country-year combination. Through this test, we find that industry is not the hidden factor driving the fact that firms from highly corrupt countries do less lobbying. We also rule out the possibility that country income effect drives the results. This is also true after controlling for a number of alternative explanations, including how institutionally similar the home country is in its United Nations General Assembly (UNGA) voting patterns to that of the Unites States as well as human rights index. With bootstrapped clustered standard errors at the home country level, the results continue to be robust.

In sum, lobbying may be more often about educating policy makers about business conditions and the effect of regulations on investment incentives rather than corrupt activities, particularly in the United States or similar developed countries with better institutional characteristics. This might imply that other channels may be the real culprits of corruption in the more developed countries as a way to affect politicians. For example, contributions to politicianconnected charities may be a way to curry favor with politicians (Bertrand et al. 2020).

Data and Descriptive Statistics

Lobbying Data

The first major data source is the U.S. federal lobbying data we obtained from the Center for Responsive Politics. This data is available publicly and includes a number of elements that pertain to lobbying, such as lobbying client, lobbyists and lobbying firms hired, lobbying spending, congressional issues each lobbying transaction addresses, and federal agencies lobbied. However, the lobbying report does not disclose detailed characteristics of lobbying entities (e.g., foreign ownership), so we used other databases such as Capital IQ, Worldscope,

Orbis, and Zephyr to identify the precise ownership of each company. For firms identified as foreign, we manually searched the web to confirm the ownership as well as the country of origin. To identify a foreign company and its origin country, we used its global ultimate ownership (GUO). Namely, if the GUO of a certain company was foreign, we assumed the company was a foreign entity.

Please insert Figures 1.1 & 1.2 about here

Figures 1.1 and 1.2 present selected lobbying trends. In general, lobbying has been growing quickly in the United States. In 2012, organizations spent \$3.9 billion on lobbying, which is approximately 2.3 times the amount spent in 1998 (see Figure 1.1). In 1998, roughly 6,886 firms engaged in lobbying, and this number increased to 11,278 in 2012 (see Figure 1.2). Moreover, more than 11,000 lobbyists were registered in 2012.

Please insert Figures 2.1 & 2.2 about here

The same increasing lobbying pattern can be observed for foreign organizations in the United States. In 2012, total lobbying spending by foreign firms was more than \$431 million, which increased from \$133 million in 1998 (see Figure 2.1). The number of foreign firms that engaged in lobbying in the United States in 1998 was roughly 580, but this number increased by 1.6 times by 2012 (see Figure 2.2). This trend shows that foreign firms use lobbying as a political means to influence their regulatory environment. Along with the results of our data collection and analysis (e.g., foreign firms spend at least 1.3 times more money in hiring outside lobbyists; the percentage of foreign firms lobbying in the U.S. is much higher than that of U.S. firms),² anecdotal evidence (e.g., Massoglia and West 2018; Shinkman 2018) also suggests foreign entities commonly use lobbying to influence the U.S. policy-making process.

² This is calculated based upon the total number of U.S. and foreign firms in the U.S. (obtained from the U.S. Census Bureau).

The LDA states that firms must disclose—to the exact dollar—lobbying expenditures greater than \$10,000 per half-year time period until 2007 and greater than \$5,000 per quarter from 2008 onward. While companies must disclose expenditures less than \$10,000 per half-year time period until 2007 and expenditures less than \$5,000 from 2008 onward, the exact dollar value in this small minority of cases is not required by law. Because the practitioners we interviewed agreed that in most such cases the actual expenditure is close to the threshold, our baseline approach is to code such expenditures as being at the threshold dollar amount. In a robustness check in Tables 9 and 10, we show that our results are robust to instead coding such cases as \$0 in value.

Country Economic and Political Characteristics

We employ country-level data to gather information on multiple dimensions of a country. We utilize two of the most widely used corruption measures in academic research—the corruption index from the Heritage Foundation³ (Heritage Foundation corruption index hereafter) and the corruption measure in Kaufmann, Kraay, and Mastruzzi (2005),⁴ a part of World Governance Indicators (WGI) produced by the World Bank Group (WGI corruption index hereafter). These two measures are constructed on the basis that a country receives a higher score if it is considered to suffer less from corruption or be in a position to better control corruption. For example, if country A has a higher score than country B, country A is considered less corrupt than country B. The major difference between these corruption measures is the country and year they cover. During our sample time period, 1998-2012, the Heritage Foundation corruption index is available for all years, while the WGI corruption index has two missing years (1999 and

³ The Heritage Foundation corruption index ranges from 0 to 100.

⁴ The WGI corruption index ranges from -2.5 to 2.5, but in our data set, we add 2.5 to make a range from 0 to 5. The data is not available for 1999 and 2001, so we drop these years from our main analysis. We conducted additional analysis by interpolating missing years, but the results do not change and still support our arguments strongly.

2001). Thus, we decided to use the Heritage Foundation corruption index as the first main explanatory variable to be instrumented. We then conducted robustness tests using the alternative WGI corruption index.

Please insert Figure 3 about here

Figure 3 shows the relationship between the Heritage Foundation corruption index and the number of UN diplomats' unpaid parking tickets before New York City's legal enforcement. The average corruption index for the United States during the sample time period is just above 70. This figure illustrates that there is a negative relationship between the corruption index and the number of unpaid parking tickets. For example, some countries such as Denmark, Finland, New Zealand, and Sweden are ranked at the top while other countries like Chad, Egypt are located at the bottom. In this study, we instrument the Heritage Foundation and WGI corruption measures by the number of pre-enforcement parking violations. The pairwise correlation coefficient of the two corruption measures is 0.929, which implies that the two measures are not much different. Furthermore, using multiple sources of corruption measures and testing them ensures the validity of our empirical strategy.

Please insert Figures 4.1 & 4.2 about here

Figures 4.1 and 4.2 present the overall corruption trend for both Heritage Foundation and WGI corruption index in the United States and all other countries. As shown in these figures, during the time period of our analysis, overall corruption levels for all other countries remained about the same, while the level for the United States decreased slightly.

Please insert Table 1 about here

Table 1, panel A presents summary statistics for country-level variables included in the first stage along with our main instrument, the number of pre-enforcement UN diplomats' unpaid parking tickets in the City of New York. In the first stage of the instrumental variable analysis,

we further control for variables, logged GDP per capita of a focal country and whether a country receives U.S. aid, that could affect the overall degree of corruption of a country and the propensity to follow local rules (Fisman and Miguel 2007).

In the second stage of the analysis, we include country-level control variables that can determine incentives to engage in and intensity of lobbying in the United States, and the summary statistics of these variables included in the second stage are presented in Table 1, panel B. The economic activity (e.g., inward or outward economic orienationa) and size of the economy could be related to the likelihood to engage in corporate activities in a foreign host country. Thus, first, we include various economic characteristics of a home country. We include logged total trade amounts between a home country and the United States. And we further control for the logarithm of annual GDP in U.S. dollars in order to account for the size of country economy. Moreover, we include the percentage of export amounts to the U.S. to total export amounts of a focal country to measure economic ties with the United States that would affect incentives to engage in U.S. policy-making processes. In addition, it is generally assumed that a country's innovative capability also influences income and corruption; so we include the number of patents granted per capita in the United States to control for country-level capability (Furman, Porter, and Stern 2002). Lastly, we include a number of institutional and political characteristics of a country. A democracy is generally assumed to develop as country income increases. Furthermore, the development of democracy could also be intertwined with the degree of corruption. The degree of democracy also could determine the international relations between the home country and the United States (Monten 2005; Talbott 1996); thus, we include the Polity IV measure of governance, which captures the extent of democratization in the home country (e.g., Acemoglu et al. 2008; Marshall, Gurr, and Jaggers 2016). In calculating the distance measure, we first subtract the U.S. polity score from the home country polity score. And, then we make

this value absolute to construct the final distance measure. The absolute distance of POLCON III political constraints that identify political structure and policy stability is also included (Henisz 2000).⁵ Moreover, prior studies in international trade and finance (e.g., Portes and Rey 2005; Siegel, Licht, and Schwartz 2011) show that geographic distance influences the relative propensity of foreign direct investment which, in turn, affects firms' operations in the host country. Hence, we include geographic distance between the United States and a focal country. In addition, to measure military or political ties that could affect the relationship and closeness between the United States and a counterpart country, we include a binary variable to indicate whether a country is a member of North Atlantic Treaty Organization (NATO). We also include year fixed effects in all specifications in order to control for any potential cyclical pattern.

Please insert Table 2 about here

Empirical Analysis and Results

Identification Strategy: Two-Stage Least Squares with an Instrumental Variable

We employ a two-stage least squares approach using an instrumental variable to alleviate potential endogeneity concerns. In particular, issues of reverse causality and omitted variable bias may arise, given that firms from countries with less corruption have better institutions (Djankov et al. 2003; Svensson 2005), which would allow them to accumulate necessary resources or capital for various types of economic activities—lobbying in our study context—at home and abroad. Furthermore, there may be unobservable factors that could potentially influence the decision of firm lobbying.

The use of an instrumental variable should be theoretically and empirically justified, and the exclusion restrictions conditions that must be met are: (i) the main instrument must be

⁵ We also tested our regression with the algebraic difference of both measures between home country and the U.S. but the results do not change.

strongly correlated with the endogenous independent variable in the first stage, and (ii) the error term in the second stage must not be associated with the instrument in the first stage. In the current study context, our identification assumption is that a revealed preference on corruption (number of UN diplomats' parking violations) is a strong predictor of perceived corruption in the first stage but has no direct effect on the degree or intensity of firm lobbying at the country level (country lobbying spending) in the second stage of our regression analyses. First, we strongly believe that the UN diplomats' number of parking violations before the enforcement (the instrument) should be strongly associated with the country corruption measures (the endogenous variable), and thus the UN diplomats' number of parking violations before the enforcement is a desirable instrument. Tolerance on corruption is quite idiosyncratic across different countries because corruption is assumed to be a deeply ingrained social norm (Hofstede 2001). This implies that behaviors related to corruption can be easily manifested and reproduced in each individual when there is neither a large wealth effect nor significant enforcement/punishment for corrupt behaviors (Fisman and Miguel 2007). Therefore, the number of unpaid parking tickets by foreign diplomats in New York City before the enforcement should be strongly correlated with the perceived corruption measure in the first stage.

With regard to the second property of the exclusion restrictions, an individual's revealed preference should not be highly correlated with individual firms' lobbying decisions. As Fisman and Miguel (2007) argued, the total number of UN diplomats' parking violations is the sum of each individual diplomat's revealed preference on rule breaking in parking in a condition under which enforcement does not exist. Thus, it is not unreasonable to argue that each diplomat's corrupt behavior is least likely to influence the lobbying decision of foreign firms in the host country. Furthermore, it is unlikely that the lobbying decisions of executives in a foreign firm would affect each UN diplomat's parking violation behaviors, or that the choice of diplomats not

to pay their parking ticket would in any direct way or via the other control variables in the second stage impact the choice of foreign firms to lobby. Therefore, we believe that the two most important conditions of exclusion restrictions to use instrumental variables are met.

The theoretical justification of the validity of our instrument is also strongly supported by various test results. In our main specification (Table 3, column 1), Kleibergen-Paap rk Wald F statistic for weak identification test is 72.759 with that 5% maximal IV relative bias is 13.91 and 10% maximal IV size is 22.50, which rules out the possibility of there being a weak instrument issue. Furthermore, although the exogeneity condition is believed to be met for the main instrument, the number of UN diplomats' parking violations, we test whether we have any overidentification issue by including control variables; the Hansen J statistic for the overidentification test for the main specification is 1.261 whose chi-square p-value is 0.5322 which fails to reject the null hypothesis that overidentification restrictions are valid. These test statistics do not vary much in all other specifications in Table 3 (models 2-5) but show the qualitatively same results, which strongly supports the exogeneity of the instrument and thus validates our identification strategy and the use of our instruments.

The Second-stage Regression Results with the Instrumented Corruption Index

We use two-stage least squares with built-in STATA function 'ivregress 2sls' or 'ivreg2' to test our hypothesis. In our main econometric analysis, our dependent variable is *Log total Lobbying Spending*_{*it*}, or total lobbying spending (logged) by each country, where *i* and *t* denote the country and time, respectively. Since our main unit of analysis is the country-year, there are 145 countries and a total of 2,065 country-year observations across 15 years (1998-2012). Thus, the second-stage regression equation is

Log total lobbying spending_{*i*,t} =
$$\alpha + \beta_c C_{i,t} + \gamma X_{i,t} + \varepsilon_{i,t}$$

where $C_{i,t}$ is the *instrumented corruption index* for country *i* at time *t* and $X_{i,t}$ is a vector of all country-level control variables. Standard errors in the second stage are corrected for clustering at the country level and all regression specifications include year fixed effects.

Similar to the above second-stage regression equation at the country level, we also analyze country lobbying spending by year at the two-digit North American Industry Classification System (NAICS) level. In other words, we aggregate foreign firms' total lobbying spending in corresponding industries by each country. One of the most important alternative explanations against our argument could be that industry characteristics—rather than the degree of home country corruption—could drive the results. In other words, each country has its own strong industrial foundation that would determine the intensity of lobbying, so industry-specific effects could be a more determining factor than home country corruption. In order to rule out this possibility, we run separate regression analyses at the industry-country level; the regression equation is

Log total lobbying spending_{*i*,*j*,*t*} = $\alpha + \beta_c C_{i,t} + \gamma' X_{i,j,t} + \varepsilon_{i,j,t}$ *i* is a country, *j* is the corresponding two-digit NAICS industry, and *t* is time.

In Table 3 through 10, each column is constructed in the same pattern. Column 1 is the baseline main model with country-level control variables. Columns 2 through 5 show the results of supplemental models to rule out any alternative explanations, which include additional control variables. Column 2 includes legal origins as additional control variables to account for institutional differences between the home country and the United States to engage in lobbying (La Porta et al. 1998). Column 3 includes total campaign contribution amounts aggregated at the country level. The pattern or degree of lobbying could be idiosyncratic depending upon firms' overall political activities or the type of lobbying each firm conducts. Prior literature generally argues that firms' campaign contributions are good predictors of their other political activities

(Snyder 1992), which could be highly correlated with lobbying spending (Austen-Smith 1993). Thus, we calculate the firms' total campaign contributions by each country and include it as an additional control variable in our main analysis. Furthermore, the purpose of lobbying could drive the degree of lobbying. For example, firms might need to lobby more aggressively if a certain regulation is more immediate and influential (Getz 1997). Also, if the outcome of lobbying is less uncertain but more immediate (such as appropriations decisions), lobbying patterns might be different. Thus, in order to control for heterogeneity in lobbying purpose, we also include the total number of congressional bills addressed and the total number of appropriations issues addressed in column 4. Column 5 controls for all additional variables included in columns 2 through 4.

Please insert Tables 3-4 about here

Table 3 is our main table with an instrumented Heritage Foundation corruption index at the country level. In general, the income effect and economic ties between the home country and the United States is statistically significant in predicting lobbying spending. The size of the country's economy manifested as GDP is positively associated with lobbying spending. This might imply that the degree of lobbying spending at the country level is positively influenced by the overall size of the country's economy or wealth as predicted. Most importantly, the coefficients for instrumented corruption index, our main variable of interest, is statistically significant in our main model (column 1) at the p-value<0.001. This is also true in all other specifications regardless of additional control variables included in all models in Table 3. The value of coefficients of instrumented Heritage Foundation corruption index ranges from 0.071 to 0.099. Given that the Heritage Foundation corruption index is constructed between 0 and 100, as the corruption index increases by 1, approximately country lobbying increases by 7.1% to 9.9%. Table 4 presents the results whose bootstrap resampling is conducted 10,000 times and clustered

standard errors are corrected at the country level. The results do not change but still are aligned with the main results presented in Table 3.

Please insert Figures 5-8 about here

Figures 5 through 8 show the marginal effect of the instrumented Heritage Foundation corruption index on lobbying spending: Figure 5 controlling for all control variables in the main regression equation, Figure 6 controlling only for GDP of each country, Figure 7 controlling only for number of patents per capita granted in the United States, and Figure 8 controlling for both GDP and patents per capita of each country. As these figures illustrate, as our main explanatory variable—the instrumented corruption index—increases, lobbying spending also increases. Figures 6 through 8 in particular present a positive relationship between the instrumented corruption index and lobbying spending, even after controlling for income and other institutional effects. Substantively similar patterns are observed with the instrumented WGI corruption index. This shows that our instrumented corruption index is a strong and robust predictor of lobbying spending, which is consistent with the argument that lobbying is more often a benign method of communication between firms and elected politicians. In order to subject our current results to further testing, we look at lobbying spending at the industry-country level, and the results are presented in Tables 5 through 8.

Please insert Tables 5-8 about here

Tables 5 through 8 present the results of two-stage least squares for NAICS two-digit industry and Tables 7 and 8 further add industry fixed effects in addition to all variables included in Tables 5 and 6. Tables 6 and 8 present the results with bootstrapped standard errors which each corresponds to Tables 5 and 7 respectively. Similar to Table 3, Tables 5 and 7 show qualitatively same results that the main predictor variable—the instrumented corruption index is statistically significant in predicting total lobbying spending by industry-country. These results

are also still supported with bootstrapped standard errors (Tables 6 and 8). In sum, these results rule out the possibility that industry characteristics driven by home country is not the main driver of lobbying spending, which strongly supports our argument that home country social norms on corruption is a strong predictor of the degree of lobbying engagement.

Please insert Tables 9-10 about here

Tables 9 and 10 present the results with the lobbying amounts where the threshold amounts are coded 0 instead. As noted above, due to the disclosure requirements, lobbying fee below a certain threshold is not reported in the lobbying report. Although our interviews with lobbyists confirm that our main approach is appropriate to the extent that lobbying fee charged by lobbyists in most cases is around the threshold amounts even if the report does not disclose the exact amounts, we still take a conservative approach in aggregating lobbying amounts by each home country by taking these lobbying amounts zero not to overestimate the total lobbying amounts at the country level. Table 9 provides the main results while Table 10 presents the results with bootstrapped standard errors by clustering at the country level. The coefficients of the instrumented Heritage Foundation corruption index are statistically significant at p-value<0.001, which still strongly supports the main argument.

Please insert Tables 11-12 about here

In Table 11, we made an effort to address a competing hypothesis arguing that the inclusion of yet other country-level control variables might make our result of interest disappear. First, international relations between home and host countries can affect relative economic activities of foreign companies in a host country (e.g., trade deals, diplomatic conflict) so we attempt to take this into account by controlling for annual average of GDELT Goldstein scale which shows the positive or negative international relations between the home country and the United States (column 1). We also control for percentage of United Nations General Assembly

(UNGA) votes cast the same as the United States (Voeten 2013) in a given year to account for home country's ideological similarity with the United States. If a home country has a similar ideological view which is manifested in foreign policy (Gartzke 1998), the home country is more likely to have better ties with the United States, which could promote the economic activities in the United States (column 2). In column 3, we also control for human rights index. Promoting human rights has been one of the most important goals in U.S. foreign policy (Lai and Morey 2006); thus this is also highly likely to define the relationship between two countries similar to democratic ideology.

In columns 4 through 7, we try to rule out the effect of home country institutions, particularly those related to human and economic development. First, we rule out the possibility that human capital theory is driving our results. Human capital theory argues that country institutions and their development are driven by growth in human capital and income (Glaeser et al. 2004; Harstad and Svensson 2011). In other words, as a country invests more in human capital development, incomes increase, and the country can better develop institutions that result in less corruption. Following this argument, we include: (i) the number of science and technology personnel, and (ii) the percentage of GDP spent on higher education, which we obtained from the World Bank. Second, as noted earlier, Furman and his colleagues (2002) claim that investment in innovative infrastructure is important in developing national innovative capacity. In the context of our study, this relates directly to the ability of a country to develop appropriate institutions and to increase national income, which would result in less corruption. Hence, we include aggregated R&D expenditures of a country and total cumulative number of patents granted as additional control variables. Although two additional variables show statistically significant effects on the dependent variable, the robustness of our main predictor variable does not change, which sustains our argument (columns 3 and 4 in Table A4).

Regardless of additional control variables included in Table 11, the coefficients of instrumented corruption index are positive and statistically significant that firms from less corruption countries spend more on lobbying. The results are also strongly supported with bootstrapped standard errors (Table 12). The same regression analyses from Tables 3 to 12 are conducted with WGI corruption index instrumented, and the results still strongly support the argument that political lobbying with mandated disclosure in the United States is more often consistent with benign industry information provision than with being an instrument of corruption. The results of the supplementary analyses can be provided upon request.

Conclusion

Using a unique data set covering foreign firms' U.S. federal lobbying, we examine the relationship between lobbying and corruption. On the one hand, it is commonly assumed that lobbying and corruption are positively associated because prior literature has generally conceptualized lobbying as another manifested form of corruption (Campos and Giovannoni 2007). In other words, scholars have thought of lobbying as a form of bribery or corruption, particularly in more developed countries (Harstad and Svensson 2011). On the other hand, in other parts of the literature, lobbying is seen as a pure policy communication between interest groups and policy makers (Austen-Smith 1993; de Figueiredo and Richter 2014; Drutman 2015). In this study, we attempt to tease apart the real relationship between lobbying and corruption in developed countries—particularly whether it is nefarious corruption or benign information provision. By looking at foreign firms' lobbying in the United States, we show that home country corruption (more corruption) is negatively associated with formal U.S. lobbying. We conduct multiple analyses and include country, as well as industry, lobbying spending as a main dependent variable while controlling for lobbying heterogeneity driven by different types of lobbying aims, targets, and outcomes. Furthermore, we test the alternative hypothesis: that the

ability of a country to develop more desirable institutions will determine the degree of corruption which, in turn, will determine lobbying intensity. However, our arguments that a country suffering from less corruption is more likely to engage in lobbying are robust and consistent, regardless of different specifications and analyses. This suggests that lobbying is more of a communication method than a form of corruption, which supports the traditional definitions of lobbying (de Figueiredo and Richter 2014; Hall and Deardorff 2006).

Our empirical strategy helps tease apart the relationship between lobbying and corruption. First, U.S. federal lobbying data makes it possible to measure different types of lobbying activities more precisely. Furthermore, analyzing the lobbying behaviors of multiple countries in the United States enables us to overcome commonly raised concerns of a crosscountry study as well as institutional heterogeneity in social norms across different countries. Second, our empirical approach using the revealed preference of unpaid parking tickets in New York City as an instrument not only alleviates problems of survey-based corruption indexes, but also minimizes issues of reverse causality. Finally, although it is still possible that certain individual organizations or entities might not behave as we predicted, this study manifests that country institutions, corruption, are deeply rooted in society and individuals, which allows us to better understand the effect of corruption on formalized lobbying.

Corruption is pervasive and has enduring negative effects on all dimensions of the daily lives of citizens and country development. Thus, a great deal of effort has been made to eradicate corruption and related problems at many different levels (Banerjee, Mullainathan, and Hanna 2012). However, we continue to see that corruption is quite pervasive and difficult to detect. What is notable is that U.S. laws on corporate lobbying force firms to disclose a great deal namely about when they lobby, which lobbyists are hired, how much they spend, and what issues they discuss. Our study's findings suggest that this kind of mandated data disclosure, combined

with legal liability for violating these rules of data disclosure, can be quite successful in creating an equilibrium in which formal corporate lobbying is more often associated with benign industry information provision than with corruption. The implication of our study is further supportive for the larger idea that mandated data disclosure, when combined with legal liability, can be a powerful tool for combating corruption (Cordis and Warren 2014; Florini 2007; Peisakhin 2012). Lastly, our study also has an important implication of country culture or institution as a driver of corporate political activities. Other than easily observable characteristics of firms or industries, our knowledge on corporate political activites, particularly the fundamental driver of lobbying, is far from complete (Brasher and Lowery 2006). By showing that home-country cultural orientation, particularly corruption, is one of the important determinants of lobbying, our study contributes to the literature on coroporate political activities.

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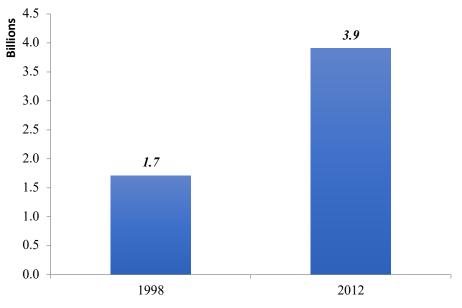


FIGURE 1.1. TOTAL LOBBYING SPENDING IN THE U.S.

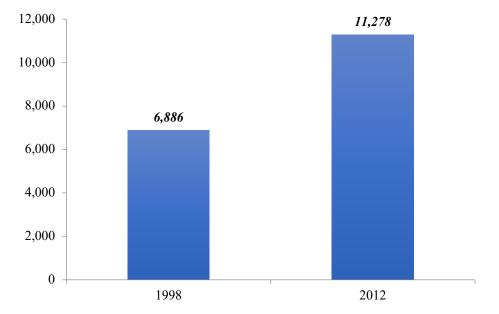


FIGURE 1.2. TOTAL NUMBER OF FIRMS ENGAGING IN LOBBYING IN THE U.S.

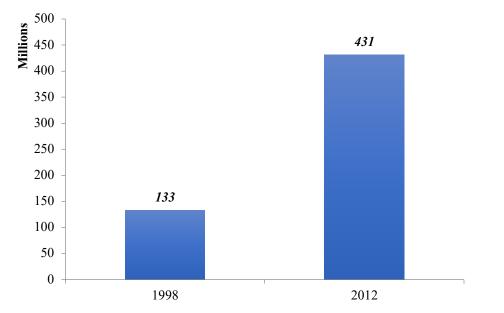


FIGURE 2.1. TOTAL LOBBYING SPENDING BY FOREIGN FIRMS IN THE U.S.

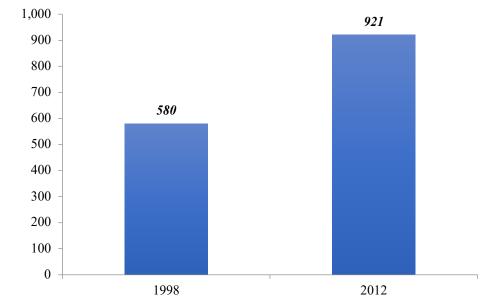


FIGURE 2.2. TOTAL NUMBER OF FOREIGN FIRMS ENGAGING IN LOBBYING IN THE U.S.

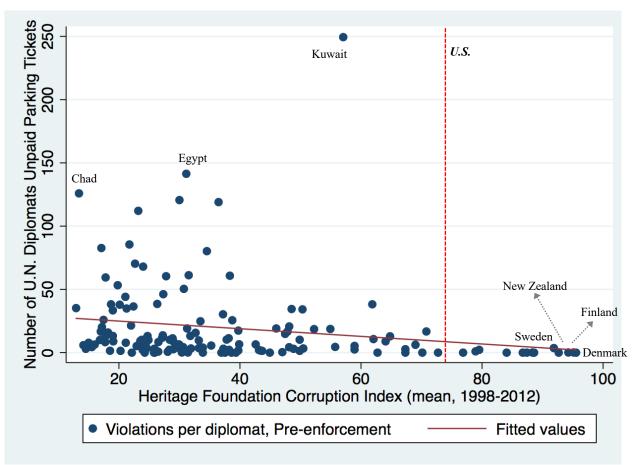
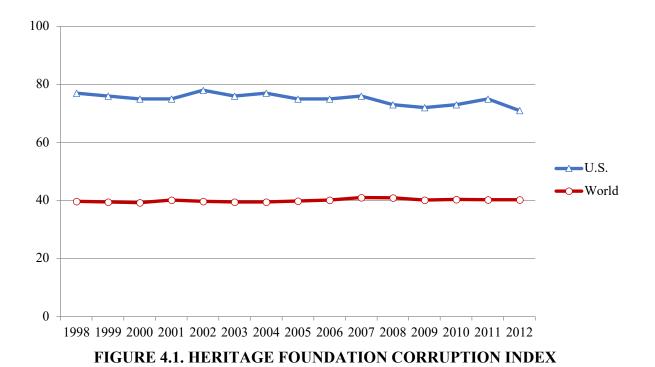


FIGURE 3. NUMBER OF PARKING VIOLATIONS AND HERITAGE FOUNDATION CORRUPTION INDEX



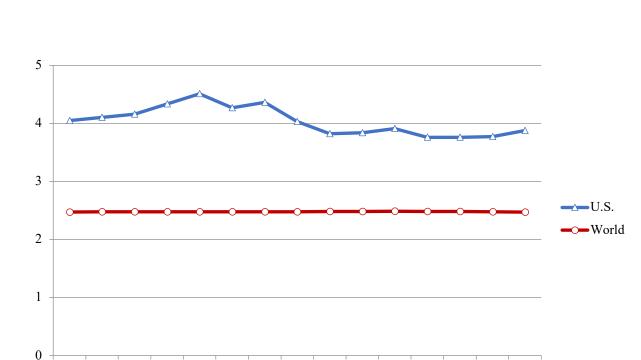


FIGURE 4.2. WORLD GOVERNANCE INDICATORS CORRUPTION INDEX

1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012

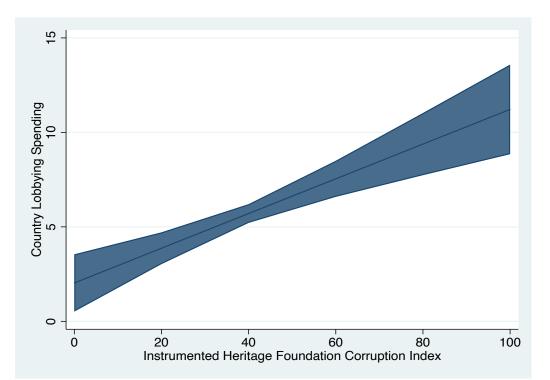


FIGURE 5. MARGINAL EFFECT OF INSTRUMENTED HERITAGE FOUNDATION CORRUPTION INDEX ON LOBBYING SPENDING AFTER CONTROLLING FOR ALL CONTROL VARIABLES

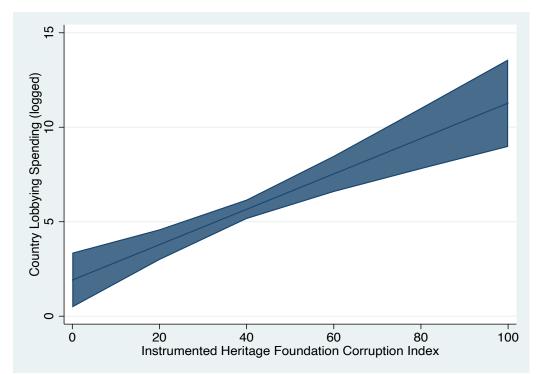


FIGURE 6. MARGINAL EFFECT OF INSTRUMENTED HERITAGE FOUNDATION CORRUPTION INDEX ON LOBBYING SPENDING ONLY CONTROLLING FOR GDP

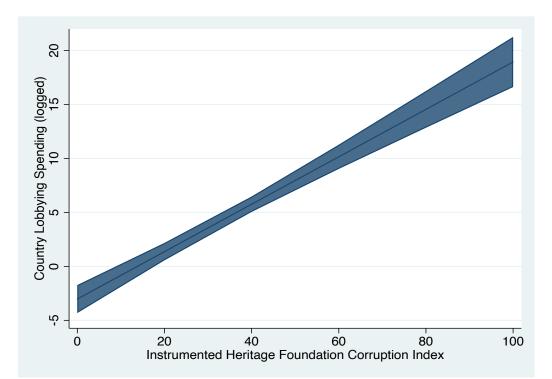


FIGURE 7. MARGINAL EFFECT OF INSTRUMENTED HERITAGE FOUNDATION CORRUPTION INDEX ON LOBBYING SPENDING ONLY CONTROLLING FOR NUMBER OF PATENTS PER CAPITA

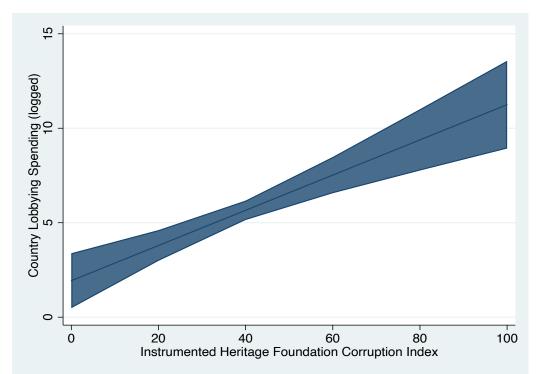


FIGURE 8. MARGINAL EFFECT OF INSTRUMENTED HERITAGE FOUNDATION CORRUPTION INDEX ON LOBBYING SPENDING AFTER CONTROLLING FOR BOTH GDP AND NUMBER OF PATENTS PER CAPITA

		Standard			
Variable	Mean	deviation	Observations		
	A. First-stage variables				
Number of unpaid parking tickets	19.307	33.032	2,384		
Received U.S. aid (indicator)	0.710	0.454	3,856		
Log GDP per capita (USD)	8.169	1.664	3,077		
	B. Second-stage variables				
Log total lobbying spending	4.036	6.107	3,868		
Corruption index (Heritage Foundation)	40.000	22.810	2,606		
Corruption index (WGI)	-0.022	1.004	2,761		
Log total trade amount with the U.S.					
(USD)	19.593	3.482	3,643		
Log GDP (USD)	23.458	2.545	3,077		
% of export amounts to the U.S. vs. total					
export amounts	0.094	0.348	3,693		
Number of per capita patents granted in					
the U.S. (in thousands)	0.025	0.163	3,248		
Polity IV measure distance	6.550	6.424	2,591		
POLCON III distance	0.193	0.145	2,747		
Geographic distance (kms/in millions)	0.009	0.004	3,440		
NATO member (indicator)	0.099	0.298	3,693		

TABLE 1—DESCRIPTIVE STATISTICS

		^	Heritage	``	/
		Violations per	Foundation	WGI	Total lobbying
	Country	diplomat, pre-	corruption	corruption	spending
Country name	code	enforcement	index (mean)	index (mean)	(mean, USD)
Albania	ALB	85.5	22.313	1.788	58,000
Algeria	DZA	25.6	38.125	1.881	165,000
Angola	AGO	82.7	17.364	1.184	17,500
Argentina	ARG	4	29.563	2.074	113,071
Armenia	ARM	10.2	28.250	1.891	0
Australia	AUS	0	86.813	4.468	2,994,951
Austria	AUT	2.2	79.438	4.359	115,485
Azerbaijan	AZE	0	22.250	1.447	250,714
Bahrain	BHR	38.2	61.188	2.857	81,429
Bangladesh	BGD	33.4	19.500	1.419	114,583
Belarus	BLR	2.7	28.688	1.823	165,000
Belgium	BEL	2.7	67.813	3.916	7,496,346
Benin	BEN	50.4	30.688	1.834	0
Bhutan	BTN	18.6	53.200	3.213	0
Bolivia	BOL	3.1	26.000	1.931	80,000
Bosnia and Herzegovina	BIH	34.9	21.938	2.180	0
Botswana	BWA	18.7	55.313	3.418	390,000
Brazil	BRA	30.3	37.250	2.464	1,336,397
Bulgaria	BGR	119	36.250	2.328	0
Burkina Faso	BFA	0	26.063	2.219	ů 0
Burundi	BDI	38.2	18.727	1.401	0
Cambodia	KHM	10	24.625	1.411	69,000
Cameroon	CMR	44.1	21.313	1.455	0
Canada	CAN	0	88.375	4.516	19,500,000
Central African Republic	CAF	0	25.583	1.461	0
Chad	TCD	125.9	13.813	1.273	0
Chile	CHL	16.7	70.875	3.934	168,125
China	CHN	9.6	33.375	2.006	1,161,161
Colombia	COL	0	33.875	2.224	229,063
Comoros	COM	10.1	23.800	1.674	5,000
Congo, Dem. Rep.	COG	7.8	15.625	1.444	0
Congo, Rep.	COD	6.4	16.375	1.090	16,250
Costa Rica	CRI	10.2	49.750	3.056	31,333
Cote d'Ivoire	CIV	68	23.875	1.535	0
Croatia	HRV	6.6	39.875	2.493	20,000
Cyprus	CYP	2.5	59.188	3.608	163,406
Czech Republic	CZE	19.1	45.875	2.813	100,000
Denmark	DNK	0	95.438	4.949	3,538,095
Djibouti	DJI	6.5	29.938	1.969	0
Dominican Republic	DOM	0.1	30.125	1.835	124,167
Ecuador	ECU	0	24.438	1.679	40,000
Egypt, Arab Rep.	EGY	141.4	31.000	1.977	73,750
El Salvador	SLV	1.7	39.375	2.114	60,000
Eritrea	ERI	0.8	26.200	2.294	400,000

TABLE 2—AVERAGE UNPAID PARKING VIOLATIONS, DIFFERENT
CORRUPTION INDEX, AND LOBBYING SPENDING (1998-2012)

Estonia	EST	10.7	62.188	3.362	95,000
Ethiopia	ETH	60.4	27.750	1.845	17,500
Fiji	FJI	15.7	31.875	2.167	0
Finland	FIN	0.1	95.063	4.880	888,000
France	FRA	6.2	69.063	3.886	27,500,000
Gabon	GAB	2.2	37.688	1.771	80,000
Gambia, The	GMB	1.5	19.563	1.912	0
Georgia	GEO	9.8	25.313	2.166	645,367
Germany	DEU	1	79.000	4.334	33,700,000
Ghana	GHA	11.4	38.188	2.401	0
Greece	GRC	0	44.250	2.754	94,063
Guatemala	GTM	0.1	31.125	1.889	47,778
Guinea	GIN	10.9	24.250	1.533	0
Guinea-Bissau	GNB	35.2	13.533	1.411	0
Guyana	GUY	2.3	28.125	1.965	20,000
Haiti	HTI	3	14.750	1.148	85,000
Honduras	HND	5.5	24.375	1.656	141,500
Hungary	HUN	3.3	50.188	2.983	40,000
India	IND	6.2	29.938	2.059	1,767,923
Indonesia	IDN	36.5	22.875	1.694	67,778
Iran, Islamic Rep.	IRN	15.9	18.750	1.883	0
Ireland	IRL	0	76.750	4.071	16,400,000
Israel	ISR	0	66.750	3.418	5,979,804
Italy	ITA	14.8	46.938	2.827	5,976,286
Jamaica	JAM	0	37.250	2.094	20,000
Japan	JPN	Ő	70.750	3.804	34,200,000
Jordan	JOR	3	48.625	2.676	166,625
Kazakhstan	KAZ	21.4	22.313	1.538	355,000
Kenya	KEN	7.8	21.188	1.536	49,091
Korea, Rep.	KOR	0.4	47.438	2.929	2,485,024
Kuwait	KWT	249.4	56.375	3.044	202,822
Kyrgyz Republic	KGZ	5.2	22.813	1.465	0
Lao PDR	LAO	6.2	15.688	1.404	35,556
Latvia	LVA	0	38.813	2.624	175,000
Lebanon	LBN	1.4	20.563	1.803	280,625
Lesotho	LSO	19.1	31.500	2.481	22,000
Liberia	LBC	13.7	28.200	1.624	30,000
Libya	LBY	8.3	17.875	1.461	5,000
Lithuania	LTU	2.1	43.438	2.679	125,000
Macedonia, FYR	MKD	3.3	32.500	2.079	45,000
Madagascar	MDG	8.8	29.063	2.134	45,000 0
Malawi	MWI	13.2	31.688	1.964	0
Malaysia	MYS	1.4	49.438	2.759	815,084
Malaysia	MLI	37.9	20.625	1.941	0
Mauritania	MRT	11.3	28.563	2.100	0
Mauritius		20.7	48.333	2.991	
Mexico	MUS MEX	20.7	48.555 33.625	2.991	49,063
Moldova	MEA MDA	4 0.7	28.125	1.836	2,251,243 0
	MNG	10.3	37.125	2.012	82,500
Mongolia Morocco					
Morocco	MAR MOZ	60.8	38.063	2.273	146,288
Mozambique	MOZ	112.1	23.438	1.996	150,000

Namibia	NAM	4.3	47.875	2.783	0
Nepal	NPL	16.7	17.313	1.874	0
Netherlands	NLD	0	88.625	4.642	15,400,000
New Zealand	NZL	0.1	94.313	4.856	492,292
Nicaragua	NIC	4.9	24.500	1.811	23,750
Niger	NER	20.2	17.688	1.706	0
Nigeria	NGA	59.4	18.188	1.384	ů 0
Norway	NOR	0	87.563	4.619	1,572,992
Oman	OMN	0 0	61.813	2.901	0
Pakistan	PAK	70.3	22.813	1.573	586,111
Panama	PAN	0	38.938	2.181	1,427,862
Papua New Guinea	PNG	5.6	33.778	1.406	0
Paraguay	PRY	13.2	19.188	1.377	0
Peru	PER	3.1	37.063	2.201	132,455
Philippines	PHL	11.7	27.063	1.909	218,188
Poland	POL	1.7	44.063	2.884	149,222
Portugal	PRT	8.9	63.875	3.574	61,821
Romania	ROU	3.6	33.375	2.219	16,250
Russian Federation	RUS	2.1	23.938	1.567	972,756
Rwanda	RWA	13.1	19.813	2.399	0
Saudi Arabia	SAU	34.2	49.938	2.317	852,915
Senegal	SEN	80.2	34.188	2.209	60,000
Serbia	SRB	38.5	27.286	2.014	362,500
Sierra Leone	SLE	25.9	18.000	1.593	0
Singapore	SGP	3.6	91.875	4.732	856,694
Slovak Republic	SVK	6.5	42.438	2.738	73,571
Slovenia	SVN	5.3	58.938	3.411	15,000
South Africa	ZAF	34.5	48.063	2.774	486,387
Spain	ESP	12.9	64.625	3.654	2,184,622
Sri Lanka	LKA	17.4	39.313	2.247	132,600
Sudan	SDN	120.6	26.500	1.250	5,000
Swaziland	SWZ	4.4	30.625	2.195	52,000
Sweden	SWE	0	92.688	4.755	2,431,393
Switzerland	CHE	0.1	88.313	4.626	34,600,000
Syrian Arab Republic	SYR	53.3	20.188	1.586	0
Tajikistan	TJK	4.4	16.000	1.404	ů 0
Tanzania	TZA	8.4	26.750	1.851	45,000
Thailand	THA	24.8	33.500	2.231	254,962
Togo	TGO	10	17.333	1.594	0
Trinidad and Tobago	TTO	1.4	42.938	2.340	ů 0
Tunisia	TUN	16.7	47.250	2.490	Ő
Turkey	TUR	0	37.250	2.390	86,818
Turkmenistan	TKM	5.9	14.250	1.189	0
Uganda	UGA	3.5	24.563	1.628	55,333
Ukraine	UKR	13.1	24.625	1.571	125,714
United Arab Emirates	ARE	0	72.438	3.434	504,231
United Kingdom	GBR	0	83.688	4.340	68,500,000
Uruguay	URY	4.5	56.625	3.550	20,000
Uzbekistan	UZB	8.9	18.875	1.416	20,000
Venezuela, RB	VEN	9.2	23.250	1.464	429,000
Vietnam	VNM	10	25.125	1.886	12,500
		10	201120		12,000

Yemen, Rep.	YEM	9.2	17.813	1.553	13,333
Zambia	ZMB	61.2	31.563	1.859	10,000
Zimbabwe	ZWE	46.2	27.000	1.263	26,667

Note. Higher score in each corruption index indicates less corruption.

SPENDING AND HERITA			oying spending		
Dependent variable	(1)	(2)	(3)	(4)	(5)
Heritage Foundation Corruption	0.092***	0.099***	0.071***	0.090***	0.076***
Index (instrumented)	(0.019)	(0.025)	(0.019)	(0.019)	(0.025)
Log total trade amount with the	0.392**	0.357*	0.317**	0.363*	0.313*
U.S. (USD)	(0.196)	(0.189)	(0.159)	(0.191)	(0.163)
Log GDP (USD)	1.294***	1.317***	1.096***	1.268***	1.107***
	(0.224)	(0.221)	(0.195)	(0.222)	(0.205)
% of export amounts to the U.S.	0.407	-0.092	0.753	0.644	0.577
vs. total export amounts	(1.933)	(1.937)	(1.513)	(1.909)	(1.532)
Number of per capita patents	0.646	1.619	-1.320**	0.012	-0.723
granted in the U.S (in thousands)	(0.863)	(1.004)	(0.516)	(0.594)	(0.653)
Polity IV distance	-0.094*	-0.105**	-0.056	-0.098*	-0.063
-	(0.053)	(0.053)	(0.050)	(0.053)	(0.051)
POLCON III distance	1.181	1.073	-0.080	1.429	-0.206
	(1.655)	(1.611)	(1.492)	(1.661)	(1.536)
Geographic distance (kms/in	74.878	61.850	134.148	98.874	142.534
millions)	(94.883)	(104.156)	(87.073)	(95.395)	(96.866)
NATO member (indicator)	-0.872	-0.628	-1.085	-1.198	-0.945
	(0.871)	(0.815)	(0.718)	(0.831)	(0.679)
Log total campaign contributions	· · · ·	× ,	0.388***	× ,	0.361***
			(0.065)		(0.073)
Total number of congressional				-1.660	1.255
bills addressed (in thousands)				(1.310)	(1.317)
Total number of appropriations				0.073***	-0.011
issues addressed (in thousands)				(0.024)	(0.022)
Legal origin (U.K.)		0.555			-0.568
		(1.043)			(1.382)
Legal origin (French)		0.802			-0.105
		(1.253)			(1.530)
Legal origin (German)		-1.552			-1.504
		(1.195)			(1.406)
Constant	-38.849***	-39.203***	-32.772***	-37.861***	-32.783***
	(3.706)	(3.584)	(3.517)	(3.680)	(3.869)
Year fixed effects	Included	Included	Included	Included	Included
Observations	2,065	2,065	2,065	2,065	2,065
Number of countries	145	145	145	145	145
R-squared	0.565	0.574	0.608	0.572	0.610

TABLE 3—TWO-STAGE LEAST SQUARES (2SLS) REGRESSION RESULTS: LOBBYINGSPENDING AND HERITAGE FOUNDATION CORRUPTION INDEX (COUNTRY)

	ANDAKD EI		oying spending	g (country)	
Dependent variable	(1)	(2)	(3)	(4)	(5)
Heritage Foundation Corruption	0.092***	0.099***	0.071***	0.090***	0.076***
Index (instrumented)	(0.021)	(0.027)	(0.021)	(0.021)	(0.027)
Log total trade amount with the	0.392*	0.357	0.317*	0.363	0.313
U.S. (USD)	(0.238)	(0.232)	(0.193)	(0.233)	(0.199)
Log GDP (USD)	1.294***	1.317***	1.096***	1.268***	1.107***
	(0.263)	(0.263)	(0.225)	(0.261)	(0.239)
% of export amounts to the U.S.	0.407	-0.092	0.753	0.644	0.577
vs. total export amounts	(2.104)	(2.114)	(1.668)	(2.080)	(1.697)
Number of per capita patents	0.646	1.619	-1.320	0.012	-0.723
granted in the U.S (in thousands)	(4.731)	(4.517)	(2.353)	(3.239)	(3.043)
Polity IV distance	-0.094*	-0.105*	-0.056	-0.098*	-0.063
5	(0.055)	(0.055)	(0.052)	(0.055)	(0.054)
POLCON III distance	1.181	1.073	-0.080	1.429	-0.206
	(1.695)	(1.655)	(1.529)	(1.695)	(1.575)
Geographic distance (kms/in	74.878	61.850	134.148	98.874	142.534
millions)	(98.778)	(109.707)	(90.555)	(99.020)	(102.282)
NATO member (indicator)	-0.872	-0.628	-1.085	-1.198	-0.945
· · · · · ·	(0.912)	(0.883)	(0.755)	(0.875)	(0.753)
Log total campaign contributions	(*** -=)	(0.000)	0.388***	(0.0.0)	0.361***
6 1 6			(0.069)		(0.079)
Total number of congressional			()	-1.660	1.255
bills addressed (in thousands)				(1.808)	(1.798)
Total number of appropriations				0.073**	-0.011
issues addressed (in thousands)				(0.036)	(0.028)
Legal origin (U.K.)		0.555		(0.000)	-0.568
8()		(1.200)			(1.612)
Legal origin (French)		0.802			-0.105
88()		(1.399)			(1.751)
Legal origin (German)		-1.552			-1.504
		(1.339)			(1.636)
Constant	-38.849***	-39.203***	-32.772***	-37.861***	-32.783***
	(3.933)	(3.936)	(3.663)	(3.876)	(4.153)
Year fixed effects	Included	Included	Included	Included	Included
Observations	2,065	2,065	2,065	2,065	2,065
Number of countries	145	145	145	145	145
R-squared	0.565	0.574	0.608	0.572	0.610

TABLE 4—TWO-STAGE LEAST SQUARES (2SLS) REGRESSION RESULTS: LOBBYING SPENDING AND HERITAGE FOUNDATION CORRUPTION INDEX WITH BOOTSTRAPPED STANDARD ERRORS (COUNTRY)

SPENDING AND HERITAGE FO		Total lobbying			
Dependent variable	(1)	(2)	(3)	(4)	(5)
Heritage Foundation Corruption	0.019***	0.018**	0.017***	0.020***	0.015**
Index (instrumented)	(0.007)	(0.009)	(0.006)	(0.006)	(0.007)
Log total trade amount with the	0.098*	0.069	0.058	0.069	0.035
U.S. (USD)	(0.058)	(0.055)	(0.046)	(0.050)	(0.044)
Log GDP (USD)	0.239***	0.278***	0.244***	0.237***	0.263***
e ()	(0.064)	(0.067)	(0.055)	(0.059)	(0.056)
% of export amounts to the U.S.	0.085	-0.294	0.324	0.269	0.104
vs. total export amounts	(0.772)	(0.683)	(0.636)	(0.707)	(0.551)
Number of per capita patents	3.518***	3.953***	3.140***	2.975***	3.221***
granted in the U.S (in thousands)	(1.037)	(1.090)	(0.894)	(0.817)	(0.812)
Polity IV distance	-0.016	-0.014	-0.016	-0.021	-0.016
-	(0.019)	(0.019)	(0.017)	(0.017)	(0.016)
POLCON III distance	0.082	0.128	0.101	0.204	0.169
	(0.523)	(0.491)	(0.409)	(0.445)	(0.372)
Geographic distance (kms/in	-53.682*	-93.121**	-35.955	-41.245	-56.570*
millions)	(28.646)	(37.275)	(23.417)	(25.746)	(29.250)
NATO member (indicator)	0.829	0.978*	0.689	0.629	0.705*
	(0.591)	(0.594)	(0.467)	(0.488)	(0.415)
Log total campaign contributions	`		0.945***	. ,	0.735***
			(0.044)		(0.058)
Total number of congressional				0.025***	0.014**
bills addressed (in thousands)				(0.005)	(0.006)
Total number of appropriations				0.512***	0.401***
issues addressed (in thousands)				(0.110)	(0.111)
Legal origin (U.K.)		0.792		. ,	0.152
		(0.687)			(0.596)
Legal origin (French)		0.244			-0.228
		(0.645)			(0.564)
Legal origin (German)		-0.486			-0.808
		(0.755)			(0.585)
Constant	-7.557***	-7.860***	-7.040***	-7.121***	-6.633***
	(1.116)	(1.415)	(0.962)	(1.015)	(1.183)
Year fixed effects	Included	Included	Included	Included	Included
Observations	41,260	41,260	41,260	41,260	41,260
Number of countries	145	145	145	145	145
R-squared	0.242	0.253	0.334	0.321	0.377

TABLE 5—TWO-STAGE LEAST SQUARES (2SLS) REGRESSION RESULTS: LOBBYINGSPENDING AND HERITAGE FOUNDATION CORRUPTION INDEX (INDUSTRY-COUNTRY)

		· · · · · · · · · · · · · · · · · · ·	g spending (ind	<i>.</i>)
Dependent variable	(1)	(2)	(3)	(4)	(5)
Heritage Foundation Corruption	0.019**	0.018**	0.017***	0.020***	0.015**
Index (instrumented)	(0.008)	(0.009)	(0.006)	(0.007)	(0.007)
Log total trade amount with the	0.098	0.069	0.058	0.069	0.035
U.S. (USD)	(0.070)	(0.068)	(0.056)	(0.060)	(0.053)
Log GDP (USD)	0.239***	0.278***	0.244***	0.237***	0.263***
	(0.079)	(0.084)	(0.067)	(0.072)	(0.068)
% of export amounts to the U.S.	0.085	-0.294	0.324	0.269	0.104
vs. total export amounts	(0.773)	(0.698)	(0.635)	(0.704)	(0.557)
Number of per capita patents	3.518	3.953	3.140	2.975	3.221
granted in the U.S (in thousands)	(6.497)	(6.298)	(5.368)	(5.310)	(4.593)
Polity IV distance	-0.016	-0.014	-0.016	-0.021	-0.016
5	(0.019)	(0.019)	(0.016)	(0.017)	(0.015)
POLCON III distance	0.082	0.128	0.101	0.204	0.169
	(0.530)	(0.501)	(0.419)	(0.450)	(0.379)
Geographic distance (kms/in	-53.682*	-93.121**	-35.955	-41.245	-56.570*
millions)	(28.978)	(38.512)	(23.582)	(25.830)	(29.439)
NATO member (indicator)	0.829	0.978	0.689	0.629	0.705
	(0.613)	(0.634)	(0.490)	(0.502)	(0.444)
Log total campaign contributions	. ,		0.945***		0.735***
			(0.052)		(0.058)
Total number of congressional				0.025***	0.014**
bills addressed (in thousands)				(0.007)	(0.007)
Total number of appropriations				0.512***	0.401***
issues addressed (in thousands)				(0.158)	(0.152)
Legal origin (U.K.)		0.792			0.152
		(0.748)			(0.648)
Legal origin (French)		0.244			-0.228
		(0.713)			(0.625)
Legal origin (German)		-0.486			-0.808
		(0.811)			(0.645)
Constant	-7.557***	-7.860***	-7.040***	-7.121***	-6.633***
	(1.480)	(1.742)	(1.271)	(1.285)	(1.415)
Year fixed effects	Included	Included	Included	Included	Included
Observations	41,260	41,260	41,260	41,260	41,260
Number of countries	145	145	145	145	145
R-squared	0.242	0.253	0.334	0.321	0.377

TABLE 6—TWO-STAGE LEAST SQUARES (2SLS) REGRESSION RESULTS: LOBBYING SPENDING AND HERITAGE FOUNDATION CORRUPTION INDEX WITH BOOTSTRAPPED STANDARD ERRORS (INDUSTRY-COUNTRY)

	`	Total lobbying	/	lustrv-countrv)
Dependent variable	(1)	(2)	(3)	(4)	(5)
Heritage Foundation Corruption	0.019***	0.018**	0.017***	0.020***	0.015**
Index (instrumented)	(0.007)	(0.009)	(0.006)	(0.006)	(0.007)
Log total trade amount with the	0.098*	0.069	0.060	0.071	0.037
U.S. (USD)	(0.058)	(0.055)	(0.047)	(0.051)	(0.045)
Log GDP (USD)	0.239***	0.278***	0.244***	0.237***	0.264***
	(0.064)	(0.067)	(0.055)	(0.060)	(0.057)
% of export amounts to the U.S.	0.085	-0.294	0.310	0.256	0.082
vs. total export amounts	(0.772)	(0.683)	(0.643)	(0.712)	(0.557)
Number of per capita patents	3.518***	3.953***	3.162***	3.013***	3.264***
granted in the U.S (in thousands)	(1.037)	(1.090)	(0.901)	(0.830)	(0.826)
Polity IV distance	-0.016	-0.014	-0.016	-0.021	-0.015
	(0.019)	(0.019)	(0.017)	(0.017)	(0.016)
POLCON III distance	0.082	0.128	0.100	0.196	0.166
	(0.523)	(0.491)	(0.415)	(0.450)	(0.378)
Geographic distance (kms/in	-53.682*	-93.121**	-36.959	-42.106	-58.602**
millions)	(28.646)	(37.275)	(23.729)	(25.970)	(29.749)
NATO member (indicator)	0.829	0.978*	0.697	0.643	0.721*
	(0.591)	(0.594)	(0.474)	(0.495)	(0.425)
Log total campaign contributions			0.892***		0.701***
			(0.045)		(0.057)
Total number of congressional				0.023***	0.013**
bills addressed (in thousands)				(0.005)	(0.005)
Total number of appropriations				0.477***	0.373***
issues addressed (in thousands)				(0.107)	(0.110)
Legal origin (U.K.)		0.792			0.186
		(0.687)			(0.602)
Legal origin (French)		0.244			-0.204
		(0.645)			(0.569)
Legal origin (German)		-0.486			-0.792
		(0.755)			(0.593)
Constant	-7.273***	-7.575***	-6.778***	-6.795***	-6.358***
	(1.116)	(1.431)	(0.973)	(1.012)	(1.215)
Year fixed effects	Included	Included	Included	Included	Included
Industry fixed effects	Included	Included	Included	Included	Included
Observations	41,260	41,260	41,260	41,260	41,260
Number of countries	145	145	145	145	145
R-squared	0.281	0.292	0.361	0.348	0.399

TABLE 7—TWO-STAGE LEAST SQUARES (2SLS) REGRESSION RESULTS: LOBBYING SPENDING AND HERITAGE FOUNDATION CORRUPTION INDEX WITH INDUSTRY FIXED EFFECTS (INDUSTRY-COUNTRY)

Dener dent verichle		Total lobbying	· · · · · ·		<u>_</u>
Dependent variable	(1)	(2)	(3)	(4)	(5)
Heritage Foundation Corruption	0.019**	0.018**	0.017***	0.020***	0.015**
Index (instrumented)	(0.008)	(0.009)	(0.006)	(0.007)	(0.007)
Log total trade amount with the	0.098	0.069	0.060	0.071	0.037
U.S. (USD)	(0.070)	(0.068)	(0.057)	(0.061)	(0.054)
Log GDP (USD)	0.239***	0.278***	0.244***	0.237***	0.264***
	(0.079)	(0.084)	(0.068)	(0.072)	(0.069)
% of export amounts to the U.S.	0.085	-0.294	0.310	0.256	0.082
vs. total export amounts	(0.773)	(0.698)	(0.643)	(0.709)	(0.564)
Number of per capita patents	3.518	3.953	3.162	3.013	3.264
granted in the U.S (in thousands)	(6.497)	(6.298)	(5.436)	(5.406)	(4.703)
Polity IV distance	-0.016	-0.014	-0.016	-0.021	-0.015
	(0.019)	(0.019)	(0.016)	(0.017)	(0.016)
POLCON III distance	0.082	0.128	0.100	0.196	0.166
	(0.530)	(0.501)	(0.426)	(0.455)	(0.386)
Geographic distance (kms/in	-53.682*	-93.121**	-36.959	-42.106	-58.602*
millions)	(28.978)	(38.512)	(23.918)	(26.084)	(30.021)
NATO member (indicator)	0.829	0.978	0.697	0.643	0.721
	(0.613)	(0.634)	(0.497)	(0.510)	(0.456)
Log total campaign contributions			0.892***		0.701***
			(0.052)		(0.057)
Total number of congressional				0.023***	0.013**
bills addressed (in thousands)				(0.007)	(0.006)
Total number of appropriations				0.477***	0.373**
issues addressed (in thousands)				(0.155)	(0.149)
Legal origin (U.K.)		0.792			0.186
		(0.748)			(0.655)
Legal origin (French)		0.244			-0.204
		(0.713)			(0.630)
Legal origin (German)		-0.486			-0.792
		(0.811)			(0.653)
Constant	-7.273***	-7.575***	-6.778***	-6.795***	-6.358***
	(1.496)	(1.765)	(1.298)	(1.304)	(1.453)
Year fixed effects	Included	Included	Included	Included	Included
Industry fixed effects	Included	Included	Included	Included	Included
Observations	41,260	41,260	41,260	41,260	41,260
Number of countries	145	145	145	145	145
R-squared	0.281	0.292	0.361	0.348	0.399

TABLE 8—TWO-STAGE LEAST SQUARES (2SLS) REGRESSION RESULTS: LOBBYINGSPENDING AND HERITAGE FOUNDATION CORRUPTION INDEX WITH INDUSTRYFIXED EFFECTS AND BOOTSTRAPPED STANDARD ERRORS (INDUSTRY-COUNTRY)

	(CC	DUNTRY)			
Dependent variable		Total lobb	ying spending	g (country)	
Dependent variable	(1)	(2)	(3)	(4)	(5)
Heritage Foundation Corruption	0.090***	0.093***	0.066***	0.088***	0.067***
Index (instrumented)	(0.019)	(0.024)	(0.018)	(0.018)	(0.022)
Log total trade amount with the	0.435**	0.405**	0.351**	0.401**	0.355**
U.S. (USD)	(0.202)	(0.189)	(0.155)	(0.194)	(0.158)
Log GDP (USD)	1.249***	1.278***	1.024***	1.217***	1.039***
C ()	(0.239)	(0.229)	(0.199)	(0.235)	(0.204)
% of export amounts to the U.S.	-0.110	-0.795	0.280	0.173	-0.020
vs. total export amounts	(1.921)	(1.919)	(1.397)	(1.884)	(1.415)
Number of per capita patents	1.145	2.298*	-1.084*	0.429	-0.333
granted in the U.S (in thousands)	(1.056)	(1.202)	(0.589)	(0.709)	(0.720)
Polity IV distance	-0.094*	-0.105**	-0.050	-0.099*	-0.058
·	(0.052)	(0.051)	(0.047)	(0.052)	(0.049)
POLCON III distance	1.420	1.380	-0.009	1.716	-0.039
	(1.629)	(1.585)	(1.388)	(1.621)	(1.449)
Geographic distance (kms/in	54.752	25.869	122.041	83.577	119.373
millions)	(94.521)	(102.932)	(84.166)	(94.804)	(92.060)
NATO member (indicator)	-1.027	-0.712	-1.267*	-1.415*	-1.094*
· · · · · · · · · · · · · · · · · · ·	(0.915)	(0.856)	(0.698)	(0.858)	(0.663)
Log total campaign contributions		× ,	0.440***	× ,	0.404***
0 10			(0.067)		(0.075)
Total number of congressional			× ,	-2.476*	0.667
bills addressed (in thousands)				(1.452)	(1.345)
Total number of appropriations				0.092***	-0.001
issues addressed (in thousands)				(0.027)	(0.022)
Legal origin (U.K.)		0.207		· · · ·	-1.101
		(1.029)			(1.412)
Legal origin (French)		0.114			-0.942
		(1.216)			(1.529)
Legal origin (German)		-2.355*			-2.335
8 8 9		(1.230)			(1.454)
Constant	-38.998***	-38.716***	-32.104***	-37.798***	-31.376***
	(3.887)	(3.688)	(3.576)	(3.854)	(3.916)
Year fixed effects	Included	Included	Included	Included	Included
Observations	2,065	2,065	2,065	2,065	2,065
Number of countries	145	145	145	145	145
R-squared	0.567	0.579	0.620	0.577	0.624

TABLE 9— TWO-STAGE LEAST SQUARES (2SLS) REGRESSION RESULTS: LOBBYING SPENDING WHERE AMOUNTS BELOW THE THRESHOLDS ARE TEMPORARILY CODED AS OF ZERO DOLLAR VALUE AND HERITAGE FOUNDATION CORRUPTION INDEX (COUNTRY)

R-squared0.5670.5790.620Notes. Clustered (home country) standard errors in parentheses; *p < 0.1, **p < 0.05, ***p < 0.01</td>

Duran last serviciti	Total lobbying spending (country)							
Dependent variable	(1)	(2)	(3)	(4)	(5)			
Heritage Foundation Corruption	0.090***	0.093***	0.066***	0.088***	0.067***			
Index (instrumented)	(0.020)	(0.025)	(0.019)	(0.020)	(0.024)			
Log total trade amount with the	0.435*	0.405*	0.351*	0.401*	0.355*			
U.Š. (USD)	(0.243)	(0.228)	(0.184)	(0.233)	(0.187)			
Log GDP (USD)	1.249***	1.278***	1.024***	1.217***	1.039***			
	(0.278)	(0.267)	(0.224)	(0.272)	(0.232)			
% of export amounts to the U.S.	-0.110	-0.795	0.280	0.173	-0.020			
vs. total export amounts	(2.084)	(2.078)	(1.536)	(2.044)	(1.553)			
Number of per capita patents	1.145	2.298	-1.084	0.429	-0.333			
granted in the U.S (in thousands)	(5.934)	(5.604)	(2.664)	(4.251)	(3.282)			
Polity IV distance	-0.094*	-0.105**	-0.050	-0.099*	-0.058			
<i>,</i>	(0.053)	(0.053)	(0.049)	(0.053)	(0.051)			
POLCON III distance	1.420	1.380	-0.009	1.716	-0.039			
	(1.663)	(1.621)	(1.427)	(1.651)	(1.485)			
Geographic distance (kms/in	54.752	25.869	122.041	83.577	119.373			
millions)	(97.729)	(107.613)	(87.048)	(97.731)	(96.795)			
NATO member (indicator)	-1.027	-0.712	-1.267*	-1.415	-1.094			
× ,	(0.961)	(0.926)	(0.738)	(0.902)	(0.737)			
Log total campaign contributions	()	()	0.440***	()	0.404***			
			(0.071)		(0.080)			
Total number of congressional			· · · ·	-2.476	0.667			
bills addressed (in thousands)				(1.993)	(1.860)			
Total number of appropriations				0.092**	-0.001			
issues addressed (in thousands)				(0.041)	(0.030)			
Legal origin (U.K.)		0.207		()	-1.101			
		(1.202)			(1.668)			
Legal origin (French)		0.114			-0.942			
		(1.377)			(1.777)			
Legal origin (German)		-2.355*			-2.335			
		(1.378)			(1.706)			
Constant	-38.998***	-38.716***	-32.104***	-37.798***	-31.376***			
	(4.150)	(4.078)	(3.715)	(4.061)	(4.188)			
Year fixed effects	Included	Included	Included	Included	Included			
Observations	2,065	2,065	2,065	2,065	2,065			
Number of countries	145	145	145	145	145			
R-squared	0.567	0.579	0.620	0.577	0.624			

TABLE 10— TWO-STAGE LEAST SQUARES (2SLS) REGRESSION RESULTS: LOBBYING SPENDING WHERE AMOUNTS BELOW THE THRESHOLDS ARE TEMPORARILY CODED AS OF ZERO DOLLAR VALUE AND HERITAGE FOUNDATION CORRUPTION INDEX WITH BOOTSTRAPPED STANDARD ERRORS (COUNTRY)

Domondont vorights			Total lob	bying spending	·		
Dependent variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Heritage Foundation Corruption Index	0.095***	0.087***	0.149***	0.090***	0.098***	0.086**	0.075***
(instrumented)	(0.019)	(0.021)	(0.036)	(0.023)	(0.023)	(0.037)	(0.018)
Log total trade amount with the U.S.	0.401**	0.422**	0.434*	0.395**	0.682*	1.575***	0.886***
(USD)	(0.188)	(0.200)	(0.260)	(0.197)	(0.362)	(0.610)	(0.225)
Log GDP (USD)	1.232***	1.275***	0.949***	1.288***	1.250***	0.637	1.346***
	(0.224)	(0.227)	(0.269)	(0.219)	(0.398)	(0.629)	(0.242)
% of export amounts to the U.S. vs.	0.060	0.507	-0.604	0.420	1.295	-6.960	-1.598
total export amounts	(1.922)	(1.955)	(2.198)	(1.935)	(2.193)	(4.324)	(2.139)
Number of per capita patents granted	0.653	0.549	1.270	0.564	-0.465	-0.114	0.571
in the U.S (in thousands)	(0.811)	(0.823)	(0.812)	(0.904)	(0.655)	(0.805)	(0.849)
Polity IV distance	-0.108**	-0.084	-0.125**	-0.094*	-0.054	-0.116*	-0.111*
	(0.052)	(0.055)	(0.053)	(0.053)	(0.076)	(0.067)	(0.065)
POLCON III distance	1.401	1.307	1.270	1.166	1.133	1.936	1.905
	(1.685)	(1.682)	(1.752)	(1.641)	(2.045)	(2.671)	(2.512)
Geographic distance (kms/in millions)	66.768	88.534	16.964	76.929	146.057	105.815	105.391
	(94.743)	(97.433)	(101.547)	(96.405)	(102.489)	(138.815)	(99.150)
NATO member (indicator)	-0.801	-1.062	-0.333	-0.915	-1.182	-1.326	-1.132
	(0.881)	(0.849)	(0.876)	(0.842)	(0.879)	(1.054)	(0.827)
GDELT Goldstein scale	-0.341**						
	(0.173)						
UNGA voting similarity to the U.S.		2.200					
(%)		(2.669)					
Human rights index			-1.023**				
			(0.456)				
Number of scientists and technicians				42.067			
(in thousands)				(199.296)			
Higher education expenditure (% of					-0.017		
GDP)					(0.035)		
Total R&D expenditure (% of GDP)						-0.286	
						(0.741)	
Total cumulative international patents							-6.831
granted (in thousands)							(4.567)

TABLE 11—TWO-STAGE LEAST SQUARES (2SLS) REGRESSION RESULTS: LOBBYING SPENDING AND HERITAGE FOUNDATION CORRUPTION INDEX (COUNTRY)

Constant	-36.951*** (3.857)	-39.471*** (3.754)	-32.460*** (4.542)	-38.762*** (3.591)	-44.723*** (4.554)	-47.085*** (5.595)	-50.310*** (4.407)
Year fixed effects	Included						
Observations	2,038	2,032	2,048	2,065	1,081	1,059	1,227
Number of countries	144	144	144	145	130	111	108
R-squared	0.571	0.564	0.557	0.566	0.652	0.624	0.624

Dependent variable	Total lobbying spending (country)								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)		
Heritage Foundation Corruption Index	0.095***	0.087***	0.149***	0.090***	0.098***	0.086**	0.075***		
(instrumented)	(0.021)	(0.023)	(0.040)	(0.025)	(0.025)	(0.041)	(0.020)		
Log total trade amount with the U.S.	0.401*	0.422*	0.434	0.395*	0.682	1.575**	0.886***		
(USD)	(0.231)	(0.244)	(0.304)	(0.238)	(0.415)	(0.652)	(0.331)		
Log GDP (USD)	1.232***	1.275***	0.949***	1.288***	1.250***	0.637	1.346***		
	(0.263)	(0.266)	(0.312)	(0.258)	(0.438)	(0.679)	(0.350)		
% of export amounts to the U.S. vs.	0.060	0.507	-0.604	0.420	1.295	-6.960	-1.598		
total export amounts	(2.112)	(2.137)	(2.397)	(2.103)	(2.654)	(4.674)	(2.641)		
Number of per capita patents granted	0.653	0.549	1.270	0.564	-0.465	-0.114	0.571		
in the U.S (in thousands)	(4.368)	(4.696)	(4.137)	(4.942)	(4.017)	(4.198)	(4.490)		
Polity IV distance	-0.108**	-0.084	-0.125**	-0.094*	-0.054	-0.116	-0.111		
	(0.054)	(0.057)	(0.055)	(0.055)	(0.080)	(0.074)	(0.069)		
POLCON III distance	1.401	1.307	1.270	1.166	1.133	1.936	1.905		
	(1.724)	(1.729)	(1.790)	(1.681)	(2.163)	(2.887)	(2.568)		
Geographic distance (kms/in millions)	66.768	88.534	16.964	76.929	146.057	105.815	105.391		
	(97.397)	(99.866)	(104.973)	(100.502)	(110.049)	(147.497)	(106.993)		
NATO member (indicator)	-0.801	-1.062	-0.333	-0.915	-1.182	-1.326	-1.132		
	(0.921)	(0.898)	(0.919)	(0.888)	(0.938)	(1.134)	(0.895)		
GDELT Goldstein scale	-0.341**								
	(0.174)								
UNGA voting similarity to the U.S.		2.200							
(%)		(3.011)							
Human rights index			-1.023**						
			(0.495)						
Number of scientists and technicians				42.067					
(in thousands)				(217.842)					
Higher education expenditure (% of					-0.017				
GDP)					(0.037)				
Total R&D expenditure (% of GDP)						-0.286			
						(0.874)			
Total cumulative international patents							-6.831		
granted (in thousands)							(32.384)		

TABLE 12—TWO-STAGE LEAST SQUARES (2SLS) REGRESSION RESULTS: LOBBYING SPENDING AND HERITAGE FOUNDATION CORRUPTION INDEX WITH BOOTSTRAPPED STANDARD ERRORS (COUNTRY)

Constant	-36.951*** (4.118)	-39.471*** (4.045)	-32.460*** (4.954)	-38.762*** (3.817)	-44.723*** (4.864)	-47.085*** (6.184)	-50.310*** (4.911)
Year fixed effects	Included						
Observations	2,038	2,032	2,048	2,065	1,081	1,059	1,227
Number of countries	144	144	144	145	130	111	108
R-squared	0.571	0.564	0.557	0.566	0.652	0.624	0.624