# Tax-Exempt Lobbying: Corporate Philanthropy as a Tool for Political Influence

Online Appendix

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### A Data Appendix

### A.1 Matching

We start with the grants by Fortune 500 and S&P 500 companies as of 2014, a file that has 809,940 observations, covering grants issued between 1998 and 2015. In the initial file we have grants from 332 foundations to 76,321 unique recipients names. The first step is to match by name only when the name in the *FoundationSearch* file matches perfectly with the name in the BMF. For the remaining unmatched grants, we employed the matching algorithm -matchit- in Stata, which provides similarity scores for strings that may vary because of spelling and word order. We employed the option "token," which reduces computational burden because it splits a string only based on blanks, instead of generating all possible ngrams. Employing matches with a score above 0.85 we match 536,920 observations to the BMF (66.7 percent).

The number of grant-giving foundations with data that we employ is reduced slightly to 324 as a result of this matching process.

### A.2 Sample construction

In this appendix we provide details on how the final sample was constructed. The basic sample is composed of companies in the Fortune 500 or S&P 500 as of 2014. The unit of analysis is an EIN, which is the code identifying a foundation. There are two important crosswalks that we have constructed. The first one connects the EIN to the client name from the lobbying data, which we use to determine the issues that are of importance to the firm/foundation. We assigned for each EIN one or more client names based on a search performed on the OpenSecrets.org website. There are several cases in which one EIN corresponds to more than one client name in the lobbying records. We keep all the client names that correspond to an EIN and we determine the most lobbied issue (based on total expenditures) for each one of those clients for each congressional cycle. So for one EIN we potentially end up with several most lobbied issues, but we eliminate duplications (e.g., the top issue lobbied by different divisions of Lockheed Martin is still Defense) and keep the full set of top issues. The second crosswalk is the one between an EIN and a PACID. The PACID is the identifier in the PAC contribution data. If there are multiple PACs per EIN we sum the respective contribution amounts for the relevant period/recipient. If there are two foundations/EINs that correspond to the same PAC, we split the PAC contributions equally in two for the relevant period/recipient.

We take into account redistricting when constructing the panel and assign PACs only when a congressional district exists. Redistricting occurs on the basis of decennial censuses. We allow an additional election cycle of delay (e.g., we only begin using the districts based on the 2010 Census

in the 113th (2013-14) Congress to account for the fact that states generally take several years to design and implement redistricting plans).

Importantly, because foundations are not active for the entire period (or the data are not fully digitized for the earlier years in the sample), and in order to keep the same sample for both PAC and CSR regressions, we keep only observations in which both contributions are non-missing. This means that we drop some of the years in which PAC data for the firm are available and non-missing, but we do not have data for charitable giving by the corresponding foundation.

### B Appendix: Congressional district level aggregation of charitable grants

This appendix explores the issue of selection of specific grantees by firms with the purpose of providing electoral benefits to a local representative. Specifically, we show how aggregating across grantees within a congressional district and within a congressional cycle alleviates issues of grantee selection and substitution. We also shows through Monte Carlo simulations how regression specifications akin to those employed in Section IV.C of the paper, run at the firm-grantee-congressional cycle level, may suffer from substantial downward bias, as a result of failure to account for issues of grantee selection. The bias is shown to be proportional to the number of grantees in a district, so potentially very large in magnitude.

As in our analysis in Section III.B we employ the following notation. Let firm/foundation be f; grantee g; time t; congressional district d. For our main variables, we use the notation  $Y_{fgtd}$  for  $ln(1+Contributions_{fgtd})$  and for a political shock relevant to firm in year t stemming from certain congressional committee appointments  $ln(1+IssuesCovered_{fdt})$  we use the notation  $X_{fdt}$ .

### B.1 Selection problem and setup

The econometric problem we present is one in which a firm aims to cater to a politician of relevance to its business and decides to do so through the allocation of charitable grants within that politician's district (e.g. so the she can claim credit for it). We will assume that there is one set of G potential grant recipients located in d and that the firm decides to donate to a subset of G (with abuse of notation we use G for both the set of grantees and its cardinality). In our standard notation, we consider the problem in which a firm f perceives a political shock  $X_{fdt}$  and decides to influence the representative from d by donating funds  $Y_{fgtd}$  to grantee  $g \in G$  located in that congressional district at t.

Suppose that f's funds are limited or that only certain grantees are electorally valuable from the perspective of the political beneficiary (the representative from district d) at t. For the purpose of presenting the econometric problem, only one grantee per period is assumed to be chosen as the recipient of grant funds each period. The fact that there is only one grant recipient is not strictly necessary, and all results below will hold if a different (strict) subset of G is selected at each t. Let us use the indicator function I(f chooses to influence the representative from d through g at time t) to indicate the selection process.

The true underlying econometric specification is therefore:

$$Y_{fqtd} = \beta X_{ftd} * I(f \text{ chooses to go through } g \in G \text{ at time } t) + \epsilon_{fqtd}$$

Note that the econometrician does not observe the choice I(.). (To avoid needless additional notation, we do not report the multi-way fixed effects considered in Section III.B.) The econometrician's objective is to estimate the parameter  $\beta$ .

### **B.2** Aggregate regression

As an illustration of how our district level aggregate regressions can address the selection issue presented above, consider the following system of equations:

 $\begin{aligned} Y_{fgtd} &= \beta X_{ftd} * I(f \text{ chooses to go through } g \text{ at time } t) + \epsilon_{fgtd} = \beta X_{ftd} + \epsilon_{fgtd} \\ Y_{fgt'd} &= \beta X_{ft'd} * I(f \text{ chooses to go through } g' \text{ at time } t') + \epsilon_{fgt'd} = \epsilon_{fgt'd} \\ Y_{fg'td} &= \beta X_{ftd} * I(f \text{ chooses to go through } g \text{ at time } t) + \epsilon_{fg'td} = \epsilon_{fg'td} \\ Y_{fg'td} &= \beta X_{ft'd} * I(f \text{ chooses to go through } g' \text{ at time } t') + \epsilon_{fg't'd} = \beta X_{ft'd} + \epsilon_{fg't'd} \\ Y_{fg''td} &= \beta X_{ft'd} * I(f \text{ chooses to go through } g \text{ at time } t) + \epsilon_{fg''td} = \epsilon_{fg''td} \\ Y_{fg''td} &= \beta X_{ft'd} * I(f \text{ chooses to go through } g \text{ at time } t) + \epsilon_{fg''td} = \epsilon_{fg''td} \\ Y_{fg''td} &= \beta X_{ft'd} * I(f \text{ chooses to go through } g \text{ at time } t') + \epsilon_{fg''td} = \epsilon_{fg''td} \\ \end{aligned}$ 

Let us indicate with  $\beta^{full}$ , the the estimator of the parameter  $\beta$  under full knowledge of each selection I(.).

Now observe that aggregating the information across all potential grantees k = g, g', g'', ... at time t in d produces an estimating equation of the form:

$$\sum_{k} Y_{fktd} = \beta X_{ftd} * \sum_{k} I(f \text{ chooses to go through } k \text{ at time } t) + \sum_{k} \epsilon_{fktd}$$

or, simplifying by noting that  $\sum_{k} I(f \text{ chooses to go through } k \text{ at time } t) = 1$ ,

$$\overline{Y}_{ftd} = \beta X_{ftd} + \overline{\epsilon}_{ftd}$$

where  $\overline{Y}_{ftd} = \sum_k Y_{fktd}$ . Let us indicate with  $\beta^{agg}$  the estimator of this regression.

We note that this aggregate approach provides a consistent estimate of  $\beta$  (in levels or with fixed effects within congressional district d and over time), because it integrates over the selection by f of which g to employ at every period t. In this case, the unobserved choice variables I(f chooses to go through k at time t) drop out of the estimating equation and therefore their omission is immaterial to the consistency of the estimator, that is plim  $\beta^{agg} = \beta$ .

### **B.3** Disaggregate regression

Consider a disaggregated approach to the analysis in which  $\beta$  is estimated directly from the system of equations presented in the previous section. This is done without information on which g is selected at each period as the focus of f's efforts. This implies a regression of the form:

$$Y_{fgtd} = \beta X_{ftd} + \epsilon_{fgtd}$$

Let us indicate with  $\beta^{dis}$  the estimator from this regression. This approach averages estimates across periods when I(f chooses to go through g at time t) = 1 and I(f chooses to go through g at time t) = 0. For each g this specification leads to inconsistent estimation of  $\beta$ . In the simplest possible case where f picks one grantee at random in each period, it is evident that the inconsistency of the estimator is determined by  $p \lim \beta^{dis} = \frac{\beta}{G}$ . If selection is not random (and thus I(.) is correlated with X) the inconsistency will be further amplified by the omission of the selection variable.

#### **B.4** Monte Carlo simulations

The following Monte Carlo simulations illustrate these results empirically. We simulate 100 samples generated using 50 firms, 50 grantees, 100 districts, and 10 time periods (2.5 million observations per sample). We also generate random  $X_{fdt}$  from a uniform distribution between [0, 1000] and  $\epsilon_{fgtd}$  i.i.d. normal with mean zero and standard deviation equal to 10 (i.e., a low noise to signal ratio) or 1000 (a high noise to signal ratio). We assume I(f chooses to go through k at time t) takes the form of a uniform random draw among all possible grantees in a district every period. We assume a true  $\beta$  equal to 1 (and an intercept 10). This allows us to generate  $Y_{fgtd}$ .

As can be seen in Appendix Table C.15, both the full information and the aggregate regression approaches deliver an unbiased estimate of  $\beta$ ,  $\beta^{full} \sim \beta^{agg} \sim 1$ . The disaggregate estimator  $\beta^{dis}$  delivers instead the expected  $\frac{\beta}{G}$ , where 1/G=1/50=0.02, due to selection, and

irrespective of the noise/signal ratio.

### C Proof of Claim 1

The first-order conditions of the firm maximization problem in (6) are:

(A.1) 
$$\begin{cases} Ag'f_C = q\\ Ag'f_P = 1 \end{cases}$$

We can take logarithms and differentiate each equation in (A.1):

(A.2) 
$$\begin{cases} \frac{dA}{A} + \frac{g''}{g'} \left( f_C dC + f_P dP \right) + \frac{f_{CP}}{f_C} dP + \frac{f_{CC}}{f_C} dC = 0\\ \frac{dA}{A} + \frac{g''}{g'} \left( f_C dC + f_P dP \right) + \frac{f_{PP}}{f_P} dP + \frac{f_{PC}}{f_P} dC = 0 \end{cases}$$

Now we can exploit the homogeneity of degree of one function f, which implies that the marginal products  $f_C$  and  $f_P$  are homogeneous of degree zero. We can apply Euler's Theorem to the first derivatives  $f_C$  and  $f_P$ :

$$Cf_{CC} + Pf_{CP} = 0$$
$$Cf_{PC} + Pf_{PP} = 0$$

Therefore, the following relationships between the second-order derivatives of f hold:

(A.3) 
$$\begin{cases} f_{CC} = -\frac{P}{C} f_{CP} \\ f_{PP} = -\frac{C}{P} f_{PC} \end{cases}$$

We can substitute the expressions for  $f_{CC}$  and  $f_{PP}$  from (A.3) into (A.2), collect terms, and manipulate the equations to obtain the following:

$$\begin{cases} \frac{dA}{A}\frac{1}{P} + \frac{dC}{C} \left[ \frac{g''}{g'} f_C \frac{P}{P} - \frac{f_{CP}}{f_C} \right] + \frac{dP}{P} \left[ \frac{g''}{g'} f_P + \frac{f_{CP}}{f_C} \right] = 0\\ \frac{dA}{A}\frac{1}{C} + \frac{dC}{C} \left[ \frac{g''}{g'} f_C + \frac{f_{PC}}{f_P} \right] + \frac{dP}{P} \left[ \frac{g''}{g'} f_P \frac{P}{C} - \frac{f_{PC}}{f_P} \right] = 0 \end{cases}$$

This system of equations can then be rewritten as:

$$\begin{cases} \frac{dA}{A}\alpha + \frac{dC}{C}\beta + \frac{dP}{P}\gamma = 0\\ \frac{dA}{A}\alpha' + \frac{dC}{C}\beta' + \frac{dP}{P}\gamma' = 0 \end{cases}$$

where  $\alpha = 1/P, \, \alpha' = 1/C, \, \beta = \frac{g''}{g'} f_C \frac{C}{P} - \frac{f_{CP}}{f_C}, \, \beta' = \frac{g''}{g'} f_C + \frac{f_{PC}}{f_P}, \, \gamma = \frac{g''}{g'} f_P + \frac{f_{CP}}{f_C}, \, \gamma' = \frac{g''}{g'} f_P \frac{P}{C} - \frac{f_{PC}}{f_P}.$ 

It is easy to show that  $\frac{dC}{C}/\frac{dA}{A} = \frac{dP}{P}/\frac{dA}{A}$  if and only if  $\alpha'\beta - \alpha\beta' = \alpha\gamma' - \alpha'\gamma$ . To complete the proof, it is easy to verify that this condition is satisfied in our system, as the following equality holds:

$$\frac{1}{C} \left[ \frac{g''}{g'} f_C \frac{C}{P} - \frac{f_{CP}}{f_C} \right] - \frac{1}{P} \left[ \frac{g''}{g'} f_C + \frac{f_{PC}}{f_P} \right] = \frac{1}{P} \left[ \frac{g''}{g'} f_P \frac{P}{C} - \frac{f_{PC}}{f_P} \right] - \frac{1}{C} \left[ \frac{g''}{g'} f_P + \frac{f_{CP}}{f_C} \right]$$

#### C.1 Committee assignment as an asymmetric shock

In this section we modify the exercise in section V to allow for an asymmetric shock caused by committee assignment. More specifically we introduce the possibility that committee assignment increases productivity of PAC expenditures more, or less, than CRS contributions. The policy production function is modified as follows:

$$\tau = A^{\gamma} P^{\sigma} + A C^{\sigma},$$

where  $\gamma > 0$  and  $\sigma < 1$ . This functional form is a simplified version of the commonly assumed CES function in the literature on skill-biased technical change (Acemoglu, 2002).<sup>1</sup> Notice how  $\gamma$ describes the bias of the committee assignment productivity shock. If  $\gamma > 1$  then the committee assignment shock is P-biased (it increases productivity of P more than it increases the productivity of C). If  $\gamma < 1$  then the reverse is true. If  $\gamma = 1$  then this collapses to a special case of section V.

We can solve the firm's first order conditions to find the following elasticities of P and C to committee assignment shock A:

$$\frac{dlogC}{dlogA} = \frac{1}{1 - \sigma}$$
$$\frac{dlogP}{dlogA} = \frac{\gamma}{1 - \sigma}$$

Therefore in this simple case:

$$\frac{dlogP}{dlogA} = \gamma \frac{dlogC}{dlogA}$$

Under the same assumption that non-political charitable contributions are unresponsive to A, we find the share of CSR contributions that is political:

$$\frac{C}{C+\widetilde{C}} = \gamma * 16.1\%$$

<sup>&</sup>lt;sup>1</sup>In particular this is  $\tau = (AP^{\sigma} + A^{\gamma}C^{\sigma})^{\frac{\alpha}{\sigma}}$  where  $\alpha = \sigma$ . We can solve the more general case, but because these parameters are hard to estimate, we would have to make a number of other assumptions to make progress.

Intuitively, when  $\gamma$  is larger we expect the elasticity of PAC to committee assignment to be larger than the elasticity of CSR, so we need to scale up the ratio of the two elasticities to obtain the ratio of political CSR to total CSR. For example, when  $\gamma = 2$ , i.e., committee assignment increases the productivity of PAC by twice as much as the productivity of CRS, the inferred share of political CSR is 32.2%.

### C.2 Additional Tables

In this section we report various robustness checks listed in the main text.

Depend. Variable: Sign(CSR Contr	ibutions f	rom $f$ to $q$	Congr. Dis	strict $d$ )		
	(1)	(2)	(3)	(4)	(5)	(6)
Log Issues of Interest to Found. $f$	0.009			0.009		
Covered by Representative in $d$	(0.001)			(0.002)		
Issues of Interest to Found. $f$		0.004			0.004	
Covered by Representative in $d$		(0.001)			(0.001)	
			0.00 <b>-</b>			0.007
Any Issue of Interest to Found. $f$			0.007			0.007
Covered by Representative in $d$			(0.001)			(0.001)
Fixed Effects						
Found. $f \times \text{State}$ , Congress	х	х	х			
Found. $f \times \text{Cong Dist } d$ , Congress				х	х	х
N	626,489	626,489	626,489	618,310	618,310	618,310
$R^2$	0.299	0.299	0.299	0.551	0.551	0.551

Table C.1: CSR Contributions and Issues Covered - Dummy Variable as Outcom	Table (	C.1:	CSR	Contributions	and	Issues	Covered ·	- Dummy	Variable as	Outcome
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Notes: The Issues of Interest variables capture whether issues of interest to foundation/firm f are covered by the representative in district d through her committee assignment in Congress t. See the text for further details on the definition and variable construction. Columns (1) and (4) employ log(1 + IssuesCovered)as the main explanatory variable, columns (2) and (5) employ the number of issues covered, and columns (3) and (6) use a dummy variable denoting at least 1 issue covered. The dependent variable is an indicator variable denoting non-zero CSR contributions. Standard errors are clustered at the foundation-state level.

Dep. Variable: Log Contributions f	rom Found	lation $f$ to	Cong Dist	d
	Charity	PAC	Charity	PAC
	(1)	(2)	(3)	(4)
Margin<5%*Log Issues			0.0826	0.1259
			(0.0492)	(0.0535)
Margin < 5%	-0.0680	0.1123		
	(0.0164)	(0.0160)		
Log Issues of Interest to Found. $f$	0.0946	0.7175	0.0898	0.5512
Covered by Representative in $d$	(0.0155)	(0.0207)	(0.0166)	(0.0196)
Fixed effects				
Found. $f \times \text{Cong Dist } d$	х	х	х	х
Congress $t$	х	х		
Cong Dist $d \times$ Congress $t$			Х	х
Observations	$576,\!978$	$576,\!978$	$576,\!978$	576,978
R-squared	0.5803	0.5554	0.5926	0.5964

Table C.2:	CSR and	PAC	Contributions,	and	Close	Elections
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Notes: The sample includes all district-Congress observations for the years 1996–2016. Issues of Interest is the number of issues of interest to foundation/firm f that are covered by the representative in district d through her committee assignment in Congress t. We use ln(1 + IssuesCovered) in all specifications. Margin is the winning vote margin in district d for Congress t. Columns (1) and (3) use CSR contributions as the outcome while columns (2) and (4) use PAC contributions. For both measures of contributions, we employ the functional form ln(1 + x) to construct the variables used in the analysis. See text for further details. Standard errors are clustered at the foundation-state level.

Depend. Variable: Log Contributio	ns from $f$	to Congr.	District $a$	ł
	(1)	(2)	(3)	(4)
	CSR	PAC	CSR	PAC
Log Issues of Interest to Found. $f$	0.178	1.777	0.161	0.971
Covered by Representative in $d$	(0.037)	(0.049)	(0.036)	(0.041)
$(\mathbf{r} \cdot \mathbf{r})^2$	0.004	0.077		0.400
$(\text{Log Issues})^2$	-0.094	-0.677	-0.075	-0.429
	(0.034)	(0.042)	(0.034)	(0.036)
Fixed Effects				
Found. $f \times \text{State}$ , Congress	х	х		
Found. $f \times \text{Cong Dist } d$ , Congress			х	х
N	626,489	626,489	618,310	618,310
$R^2$	0.323	0.322	0.592	0.597

### Table C.3: Robustness: Non-Linear Terms

Notes: Issues of Interest is the number of issues of interest to foundation/firm f that are covered by the representative in district d through her committee assignment in Congress t. Columns (1) and (3) use CSR contributions as the outcome while columns (2) and (4) use PAC contributions. For both measures of contributions, we employ the functional form ln(1+x) to construct the variables used in the analysis. Standard errors are clustered at the foundation-state level.

Depend. Variable: Winsorized Con	tributions fr	f to C	ongr. Distri	ct $d$
	(1)	(2)	(3)	(4)
	$\operatorname{CSR}$	PAC	$\operatorname{CSR}$	PAC
Log Issues of Interest to Found. $f$	877.997	520.809	807.752	244.287
Covered by Representative in $d$	(239.758)	(14.090)	(210.443)	(11.026)
Fixed Effects				
Found. $f \times \text{State}$	х	х		
Found. $f \times \text{Cong Dist } d$			х	х
$State \times Congress$	х	х		
Cong Dist $d \times$ Congress			х	х
N	$626,\!489$	626,489	618,310	618,310
$R^2$	0.266	0.315	0.644	0.609

Table C.4: Robustness: Winsorized Contributions (Top 1%)

Notes: Notes: Issues of Interest is the number of issues of interest to foundation/firm f that are covered by the representative in district d through her committee assignment in Congress t. We use ln(1 + IssuesCovered) in all specifications. Columns (1) and (3) use CSR contributions as the outcome while columns (2) and (4) use PAC contributions. For both measures of contributions, we employ the functional form ln(1 + x) to construct the variables used in the analysis, winsorizing the highest 1% of donations. Standard errors are clustered at the foundation-state level.

Depend. Variable: Log PAC Contri	butions fi	f to $f$	Congr. Dis	trict $d$								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Log Issues of Interest to Found. $\boldsymbol{f}$	1.120			1.109			0.964			0.810		
Covered by Representative in $d$	(0.024)			(0.025)			(0.026)			(0.025)		
Issues of Interest to Found. $f$		0.597			0.592			0.508			0.423	
Covered by Representative in $d$		(0.015)			(0.015)			(0.016)			(0.015)	
Any Issue of Interest to Found. $\boldsymbol{f}$			0.910			0.901			0.780			0.640
Covered by Representative in $d$			(0.019)			(0.019)			(0.020)			(0.020)
Fixed Effects												
Congress	х	х	х				х	х	х			
Found. $f \times \text{State}$	х	х	х	х	х	х						
Congress×State				х	х	х						
Found. $f \times \text{Cong Dist } d$							х	х	х	х	х	х
Congress $\times$ Cong Dist $d$										х	х	х
Ν	$673,\!593$	$673,\!593$	$673,\!593$	$673,\!593$	$673,\!593$	$673,\!593$	$665,\!373$	$665,\!373$	$665,\!373$	$665,\!373$	665,373	665,373
$R^2$	0.320	0.318	0.319	0.324	0.322	0.323	0.554	0.554	0.554	0.593	0.592	0.592

#### Table C.5: PAC Contributions and Issues Covered - Time-Invariant Issues

Notes: The Issues of Interest variables capture whether issues of interest to foundation/firm f are covered by the representative in district d through her committee assignment in Congress t. In this table, we calculate Issues of Interest based on lobbying expenditures over our entire sample period. The dependent variable is  $log(1+PAC \ Contributions)$  in all specifications. See text for further details on variable definitions and construction. Columns (1), (4), (7), and (10) employ ln(1+IssuesCovered) as the main explanatory variable, columns (2), (5), (8), and (11) employ the number of issues covered, and columns (3), (6), (9), and (12) use a dummy variable denoting at least 1 issue covered. Standard errors are clustered at the foundation-state level.

Depend. Variable: Log CSR Contri	butions fr	f to C	Congr. Dis	trict $d$								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Log Issues of Interest to Found. $\boldsymbol{f}$	0.056			0.055			0.035			0.031		
Covered by Representative in $d$	(0.017)			(0.017)			(0.017)			(0.018)		
Issues of Interest to Found. $f$		0.029			0.028			0.022			0.018	
Covered by Representative in $d$		(0.010)			(0.010)			(0.009)			(0.010)	
Any Issue of Interest to Found. $f$			0.047			0.046			0.025			0.023
Covered by Representative in $d$			(0.014)			(0.014)			(0.014)			(0.015)
Fixed Effects												
Congress	х	х	х				х	х	х			
Found. $f \times \text{State}$	х	х	х	х	х	х						
Congress×State				х	х	х						
Found. $f \times \text{Cong Dist } d$							х	х	х	х	х	х
Congress $\times$ Cong Dist $d$										х	х	х
Ν	$673,\!593$	$673,\!593$	$673,\!593$	$673,\!593$	$673,\!593$	$673,\!593$	$665,\!373$	$665,\!373$	$665,\!373$	$665,\!373$	665,373	$665,\!373$
$R^2$	0.320	0.320	0.320	0.321	0.321	0.321	0.574	0.574	0.574	0.586	0.586	0.586

#### Table C.6: CSR Contributions and Issues Covered - Time-Invariant Issues

Notes: The Issues of Interest variables capture whether issues of interest to foundation/firm f are covered by the representative in district d through her committee assignment in Congress t. In this table, we calculate Issues of Interest based on lobbying expenditures over our entire sample period. The dependent variable is  $log(1+CSR \ Contributions)$  in all specifications. See text for further details on variable definitions and construction. Columns (1), (4), (7), and (10) employ ln(1+IssuesCovered) as the main explanatory variable, columns (2), (5), (8), and (11) employ the number of issues covered, and columns (3), (6), (9), and (12) use a dummy variable denoting at least 1 issue covered. Standard errors are clustered at the foundation-state level.

Depend. Variable: Log Contributio	ons from $f$	to Congr.	District $a$	d
	(1)	(2)	(3)	(4)
	CSR	PAC	$\operatorname{CSR}$	PAC
Log Issues of Interest to Found. $f$	0.103	1.649	0.110	0.707
Covered by Representative in $d$	(0.045)	(0.057)	(0.045)	(0.053)
Fixed Effects				
Found. $f \times \text{State}$	х	х		
Found. $f \times \text{Cong Dist } d$			Х	х
$State \times Congress$	Х	Х		
Cong Dist $d \times$ Congress			х	х
N	626,489	626,489	618,310	618,310
$R^2$	0.323	0.310	0.591	0.595

## Table C.7: Robustness: Committee Chairs and Ranking Minority Members Only

Notes: Issues of Interest is the number of issues of interest to foundation/firm f that are covered by the representative in district d through her committee assignments in Congress t in which she serves as committee chair or ranking minority member. We use ln(1 + IssuesCovered) in all specifications. Columns (1) and (3) use CSR contributions as the outcome while columns (2) and (4) use PAC contributions. For both measures of contributions, we employ the functional form ln(1+x) to construct the variables used in the analysis. Standard errors are clustered at the foundation-state level.

Dependent Va	riable: Log	g Issues of	Interest to	Found. $f$	in Congre	ss $t$		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$ln CSR_{t-1}$	0.0006	0.0002	-0.0000	-0.0004				
	(0.0002)	(0.0002)	(0.0002)	(0.0003)				
$ln CSR_{t-2}$	· · · ·	0.0001	-0.0003	-0.0006				
		(0.0002)	(0.0002)	(0.0003)				
$ln CSR_{t-3}$			-0.0001	-0.0003				
			(0.0002)	(0.0003)				
$ln CSR_{t-4}$				-0.0005				
				(0.0003)				
$ln PAC_{t-1}$					0.0022	0.0018	0.0008	-0.0005
					(0.0002)	(0.0003)	(0.0003)	(0.0004)
$ln PAC_{t-2}$						-0.0009	-0.0014	-0.0022
						(0.0003)	(0.0003)	(0.0004)
$ln PAC_{t-3}$							-0.0016	-0.0017
							(0.0003)	(0.0004)
$ln PAC_{t-4}$								-0.0013
								(0.0004)
Observations	$504,\!586$	402,635	$307,\!352$	224,076	$504,\!586$	402,635	$307,\!352$	$224,\!076$
$R^2$	0.5372	0.5666	0.5893	0.6289	0.5374	0.5667	0.5895	0.6291

Table C.8: Robustness: Past Contributions and Future Issues Covered

Notes: All regressions include Foundation×Congressional District fixed effects. Issues of Interest is the number of issues of interest to foundation/firm f that are covered by the representative in district d through her committee assignments in Congress t in which she serves as committee chair or ranking minority member. We use ln(1 + IssuesCovered) as the dependent variable in all specifications.  $lnCSR_{t-1}$  is  $log(1 + CSR \ Contributions)$  from foundation/firm f to charities in district d during Congress t - 1. The other independent variables are similarly defined. Standard errors are clustered at the foundation-state level.

Dependent variable: Log(total contribu	utions receiv	ed from cor	porate found	lations)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Any connections to Congress?	5.813		5.263		5.193		5.115		4.666	
	(0.062)		(0.061)		(0.061)		(0.061)		(0.060)	
Number of connections to Congress		3.878		3.525		3.474		3.423		3.150
		(0.044)		(0.043)		(0.044)		(0.044)		(0.043)
Log Income			54.705	54.704	53.618	53.620	35.957	35.946	25.045	25.023
			(1.058)	(1.058)	(1.069)	(1.069)	(1.084)	(1.085)	(1.084)	(1.084)
Log Assets			12.510	12.619	12.088	12.192	32.181	32.293	40.936	41.041
			(1.067)	(1.067)	(1.081)	(1.081)	(1.106)	(1.106)	(1.108)	(1.109)
Fixed Effects										
City, State					х	х	х	x	х	х
Coarse non-profit sector (A-Z)							х	x		
Detailed non-profit sector (NTEECC)									х	х
Observations	$2,\!179,\!096$	$2,\!179,\!096$	$2,\!179,\!096$	$2,\!179,\!096$	$2,\!177,\!907$	$2,\!177,\!907$	$2,\!177,\!907$	$2,\!177,\!907$	$2,\!177,\!907$	2,177,907
R-squared	0.017	0.016	0.052	0.052	0.068	0.067	0.075	0.074	0.107	0.107

Table C.9: CSR to Connected Charities - Robustness 1

*Notes:* The sample in this table is a cross-section that includes all non-profits that appear at least once in the IRS Business Master Files for 1998, 2004, and 2015. The connections to Congress variables capture whether a non-profit is connected to a legislator via information on their Personal Financial Disclosure forms. The outcome variable is the log of 1 plus contributions received from all the corporate foundations in our data during our sample period. Log Income is reported income and Log Assets is the book value of assets for the non-profit in the most recent year available. See text for additional details. All specifications control for whether the organization is a 501(c)(3) charity.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Any connections to Congress?	0.464		0.414		0.408		0.401		0.362	
	(0.006)		(0.006)		(0.006)		(0.006)		(0.006)	
Number of connections to Congress		0.301		0.269		0.264		0.260		0.237
		(0.004)		(0.004)		(0.004)		(0.004)		(0.004)
Log Income/1000			5.407	5.407	5.297	5.298	3.610	3.609	2.604	2.602
			(0.101)	(0.101)	(0.102)	(0.102)	(0.104)	(0.104)	(0.104)	(0.104)
Log Assets/1000			0.785	0.794	0.767	0.776	2.680	2.690	3.466	3.476
			(0.102)	(0.102)	(0.103)	(0.104)	(0.106)	(0.106)	(0.106)	(0.106)
Fixed Effects										
501(c)(3)	x	х	х	х	х	х	х	х	х	х
City, State					х	х	х	х	х	х
Coarse non-profit sector (A-Z)							x	x		
Detailed non-profit sector (NTEECC)									х	х
Observations	$2,\!179,\!096$	$2,\!179,\!096$	$2,\!179,\!096$	$2,\!179,\!096$	$2,\!177,\!907$	$2,\!177,\!907$	$2,\!177,\!907$	$2,\!177,\!907$	$2,\!177,\!907$	$2,\!177,\!90'$
R-squared	0.016	0.015	0.049	0.048	0.064	0.064	0.071	0.071	0.101	0.100

Table C.10: CSR to Connected Charities - Robustness 2

*Notes:* The sample in this table is a cross-section that includes all non-profits that appear at least once in the IRS Business Master Files for 1998, 2004, and 2015. The connections to Congress variables capture whether a non-profit is connected to a legislator via information on their Personal Financial Disclosure forms. The outcome is an indicator variable denoting whether the non-profit received a donation from any of the corporate foundations in our data during our sample period. Log Income is reported income and Log Assets is the book value of assets for the non-profit in the most recent year available. Robust standard errors in parentheses.

Dependent Variable: Log(1	+Charitable (1)	e Contributi (2)	ons) (3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Relevance/1000	8.277	(-)	(*)	(-)	5.042	(*)	(.)	(0)	1.547	()	()	()	()	()
(Issue-Congressmen pairs)	(0.851)				(0.794)				(0.545)					
Relevance/1000	· · · ·	32.760			· /	15.250			· /	2.177				
(Congressmen)		(2.354)				(1.965)				(1.416)				
Relevance/1000			8.208				4.951				1.487			
(Issues)			(0.845)				(0.785)				(0.543)			
Any relevance?/1000				23.038 (1.769)				7.446 (1.526)				2.292 (1.313)	2.867 (1.379)	0.237 (0.145)
Fixed Effects:														
Found. f	x	x	x	x	x	x	x	x						
Charity c					х	х	х	x						
Year t	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Found. $f \times \text{Charity } c$									x	х	x	х	х	х
Charity $c \times \text{Congress}$													x	х
Found. $f \times \text{Congress}$														x
Observations	4,054,160	4,054,160	4,054,160	4,054,160	4,054,160	4,054,160	4,054,160	4,054,160	4,054,160	4,054,160	4,054,160	4,054,160	4,054,160	4,054,160
R-squared	0.013	0.014	0.013	0.013	0.061	0.061	0.061	0.061	0.463	0.463	0.463	0.463	0.468	0.451

#### Table C.11: CSR Contributions to Relevant Charities

Notes: The sample includes all non-profits that appear in the Personal Financial Disclosure (PFD) forms. The outcome in each regression is the log of 1 plus the value of grants that non-profit g received from firm/foundation f in Congress t. Relevance variables capture whether a legislator with personal ties (as documented in PFD forms) to a grantee g is on a committee that is relevant to firm/foundation f in Congress t. We control in all specifications for the logarithm of total CSR contributions by corporation f in year t. See text for further details on variable construction. Standard errors are clustered at the foundation-charity level.

Dependent variable: Does the non-profi	t receive any	corporate cha	arity?		
	(1)	(2)	(3)	(4)	(5)
Log Issues of Interest to Found. $f$	0.0690	0.0107	0.0129	0.0114	0.0899
Covered by Repres. linked to charity $g$	(0.0056)	(0.0051)	(0.0058)	(0.0058)	(0.0070)
Log Issues of Interest to Found. $f$	0.0037	0.0016	0.0021	0.0004	0.0034
Covered by Representative in $d$	(0.0012)	(0.0005)	(0.0006)	(0.0006)	(0.0014)
Fixed Effects					
Foundation $f$	х				
Grantee $g$	х				
Congress	х	х			
Found $f \times \text{Grantee } g$		х	х	х	
Found $f \times \text{Congress}$			х	х	х
Grantee $g \times \text{Congress}$				х	х
Observations	73,107,477	71,195,937	71,195,937	71,195,937	73,107,477
R-squared	0.0277	0.4780	0.4829	0.4854	0.0352

#### Table C.12: Pair-Level Analysis

Notes: The sample includes all foundation-nonprofit-Congress combinations for non-profits that receive at least one donation from a foundation/firm in our dataset during our sample period. The dependent variable is an indicator variable denoting whether non-profit g received a donation from foundation/firm f in Congress t. The Issues of Interest variables capture whether issues of interest to foundation/firm f are covered by a representative through her committee assignment in Congress t. The first measure is based on personal ties listed on legislators' Personal Financial Disclosures. The second is based on whether the non-profit is located in the legislator's district. In both cases we use ln(1+IssuesCovered). See text for further details on the sample, estimation methodology, and variable construction. Standard errors are clustered at the foundation  $f \times congressional district level.$ 

Dependent variable: Does the non-profi	t receive any	corporate cha	arity?		
	(1)	(2)	(3)	(4)	(5)
Log Issues of Interest to Found. $f$	0.0690	0.0107	0.0129	0.0114	0.0899
Covered by Repres. linked to charity $\boldsymbol{g}$	(0.0105)	(0.0063)	(0.0054)	(0.0054)	(0.0125)
Log Issues of Interest to Found. $f$	0.0037	0.0016	0.0021	0.0004	0.0034
Covered by Representative in $d$	(0.0015)	(0.0006)	(0.0007)	(0.0007)	(0.0018)
Fixed Effects					
Foundation $f$	х				
Grantee $g$	х				
Congress	х	х			
Found $f \times \text{Grantee } g$		х	х	х	
Found $f \times \text{Congress}$			х	х	х
Grantee $g \times \text{Congress}$				х	Х
Observations	$73,\!107,\!477$	$71,\!195,\!937$	$71,\!195,\!937$	$71,\!195,\!937$	$73,\!107,\!477$
R-squared	0.0277	0.4780	0.4829	0.4854	0.0352

Table C.13: Pair-Level Analysis - Congressional District Clustering

Notes: The sample includes all foundation-nonprofit-Congress combinations for non-profits that receive at least one donation from a foundation/firm in our dataset during our sample period. The dependent variable is an indicator variable denoting whether non-profit g received a donation from foundation/firm f in Congress t. The Issues of Interest variables capture whether issues of interest to foundation/firm f are covered by a representative through her committee assignment in Congress t. The first measure is based on personal ties listed on legislators' Personal Financial Disclosures. The second is based on whether the non-profit is located in the legislator's district. In both cases we use ln(1+IssuesCovered). See text for further details on the sample, estimation methodology, and variable construction. Standard errors are clustered at the congressional district level.

Dependent variable: Does the non-	profit receiv	e any corpo	rate charity	?	
1	(1)	(2)	(3)	(4)	(5)
Log Issues of Interest to Found. $f$ Covered by Representative in $d$	0.0064 (0.0022)	$0.0036 \\ (0.0012)$	0.0043 (0.0014)	$0.0024 \\ (0.0013)$	$0.0050 \\ (0.0025)$
Fixed Effects					
Foundation $f$	х				
Grantee $g$	x				
Congress	x	х			
Found $f \times \text{Grantee } g$		х	x	х	
Found $f \times \text{Congress}$			х	х	х
Grantee $g \times \text{Congress}$				х	х
Observations	8,711,875	7,989,086	7,989,086	7,989,086	8,711,875
R-squared	0.0380	0.6936	0.6958	0.6980	0.0444

### Table C.14: Pair-Level Analysis - Redistricting

Notes: The sample includes all non-profits that experience a shift in congressional district. We include the Congresses immediately pre- and post-redistricting (i.e., Congresses 107, 108, 112 and 113). The data are at the level of foundation-nonprofit-Congress, and includes non-profits that receive at least one donation from a foundation/firm in our dataset. The dependent variable is an indicator variable denoting whether non-profit g received a donation from foundation/firm f in Congress t. The Issues of Interest variables capture whether issues of interest to foundation/firm f are covered by the representative of district d through her committee assignment in Congress t. Standard errors are clustered at the foundation  $f \times \text{congressional district level}$ .

Specification	Number of Simulations	Mean	Std Dev	Min	Max
Panel A. Beta $=1$ , high noise	e/signal ratio				
Disaggregate And Selection	100	0.9995	0.0073	0.9831	1.0167
Disaggregate	100	0.0204	0.0025	0.0151	0.0270
Aggregate	100	1.0179	0.1229	0.7544	1.3508
Panel B. Beta =1, low noise, Disaggregate And Selection Disaggregate Aggregate	/signal ratio 100 100 100	0.9999 0.0200 1.0002	0.0001 0.0000 0.0012	0.9998 0.0200 0.9975	1.0002 0.0201 1.0035

Table C.15: Monte Carlo Simulations for Disaggregate Regression

Notes: This table reports regression coefficients (elasticities) from models estimated with 50 firms, 50 grantees, 100 districts, and 10 time periods. The true elasticity equal to 1. The variance of regression error to independent variable variance is equal to 1 in Panel A and 1/10 in Panel B. We assume uniform random selection of grantee recipient in each period. See the text for further details.

### C.3 Lobbying Issues

ACC	Accounting	HOM	Homeland Security
ADV	Advertising	HOU	Housing
AER	Aerospace	IMM	Immigration
AGR	Agriculture	IND	Indian/Native American Affairs
ALC	Alcohol & Drug Abuse	INS	Insurance
ANI	Animals	INT	Intelligence and Surveillance
APP	Apparel/Clothing Industry/Textiles	LBR	Labor Issues/Antitrust/Workplace
ART	Arts/Entertainment	LAW	Law Enforcement/Crime/Criminal Justice
AUT	Automotive Industry	MAN	Manufacturing
AVI	Aviation/Aircraft/Airlines	MAR	Marine/Maritime/Boating/Fisheries
BAN	Banking	MIA	Media (Information/Publishing)
BNK	Bankruptcy	MED	Medical/Disease Research/Clinical Labs
BEV	Beverage Industry	MMM	Medicare/Medicaid
BUD	Budget/Appropriations	MON	Minting/Money/Gold Standard
CHM	Chemicals/Chemical Industry	NAT	Natural Resources
CIV	Civil Rights/Civil Liberties	PHA	Pharmacy
CAW	Clean Air & Water (Quality)	POS	Postal
CDT	Commodities (Big Ticket)	RRR	Railroads
COM	Communications/Broadcasting/Radio/TV	RES	Real Estate/Land Use/Conservation
CPI	Computer Industry	REL	Religion
CSP	Consumer Issues/Safety/Protection	RET	Retirement
CON	Constitution	ROD	Roads/Highway
CPT	Copyright/Patent/Trademark	SCI	Science/Technology
DEF	Defense	SMB	Small Business
DOC	District of Columbia	SPO	Sports/Athletics
DIS	Disaster Planning/Emergencies	TAR	Miscellaneous Tariff Bills
ECN	Economics/Economic Development	TAX	Taxation/Internal Revenue Code
EDU	Education	TEC	Telecommunications
ENG	Energy/Nuclear	TOB	Tobacco
ENV	Environmental/Superfund	TOR	Torts
FAM	Family Issues/Abortion/Adoption	TRD	Trade (Domestic & Foreign)
FIR	Firearms/Guns/Ammunition	TRA	Transportation
FIN	Financial Institutions/Investments/Securities	TOU	Travel/Tourism
FOO	Food Industry (Safety, Labeling, etc.)	TRU	Trucking/Shipping
FOR	Foreign Relations	URB	Urban Development/Municipalities
FUE	Fuel/Gas/Oil	UNM	Unemployment
GAM	Gaming/Gambling/Casino	UTI	Utilities
GOV	Government Issues	VET	Veterans
HCR	Health Issues	WAS	Waste (hazardous/solid/interstate/nuclear
		WEL	Welfare

### Table C.16: Lobbying Issues