Supporting Information:
Family Ties as Corporate Power

Pablo Balán [†] Juan Dodyk [‡] Ignacio Puente [§]

Contents

A Sample Characteristics 2
B Theoretical Framework 2
B.1 Setup 2
B.2 Two Assumptions 3
B.3 Results 4
B.4 Empirical Estimation 6
C Discussion of the Peer Effects Model 8
C.1 Estimation and Identification Assumptions 8
C.2 Peer Effects Robustness: Placebo Ties 9
C.3 Robustness to Different Instrument Combinations 10
D Leadership and Authority Structure within the Firm 11
E Family Identifiability 16
F Similarity of Contributions by Family Members 16
G Placebo Treatment: The *Mensalão* Corruption Scandal 17
H Differences-in-Differences Robustness 19
H.1 Binary Treatment 19
H.2 Robustness to Parallel Trends Violations 19
I Dataset on Brazilian Listed Companies 20
J Variable Definitions 20

[†] Department of Political Science, Tel Aviv University. Email: pbalan@tauex.tau.ac.il
[‡] Department Government, Harvard University. Email: juandodyk@g.harvard.edu
[§] Independent Researcher. Email: ignapuente@gmail.com

A. Sample Characteristics

Table A1: Percentage of total corporate contributions coming from firms in our sample

Year	Contributions (sample), USD	Contributions (total), USD	Share of contributions by firms in sample (%)	Number of firms (total)
2010	442,493,970	5,041,759,603	8.78	20,706
2014	281,254,029	1,843,254,426	15.26	16,092

Notes: Percentage of total contributions in national elections Brazilian national elections coming from firms in our sample. Total contributions only considers legal entities that are private companies, operationalized by taking those whose legal entity code (*codigo da natureza juridica*) starts with number 2, excluding NGOs and political candidates. See here for these codes and their meaning.

B. Theoretical Framework

B.1. Setup

We model the strategic decisions of individuals in a firm's leadership who choose their level of contributions to political campaigns, under the assumption that such contributions increase the firm's value. Let L denote the set of individuals in leadership. If the firm is a family firm, a nonempty subset $F \subset L$ consists of members of the controlling family; otherwise, $F = \varnothing$.

We denote by $y_i \geq 0$ the amount of the donation by individual $i \in L$ to the campaign, and by $y_f \geq 0$ the amount of the donation made by the firm. Before the ban on corporate contributions, y_f is chosen by the firm; after the ban, $y_f = 0$ is fixed. Let $y = \sum_{i \in L} y_i + y_f$ denote the total contribution by the firm and its leadership. The timing of actions is as follows:

1. Individuals in the leadership, $i \in L$, simultaneously choose their contribution levels y_i.
2. If allowed, the firm chooses the corporate contribution y_f.

This is a game of perfect information, so the equilibrium concept is sub-game perfect equilibrium.

Contributions generate a net value for the firm, given by $V(y) = \frac{1}{2}\bar{y}^2 - \frac{1}{2}(y - \bar{y})^2$, where $\bar{y} > 0$ is a parameter representing the optimal level of contributions. The functional form reflects the assumption that contributions have decreasing returns, and after a certain point, $\bar{y}$, they are wasteful. We assume that the firm maximizes $V(y)$.

Following Ballester, Calvó-Armengol and Zenou (2006), we model individuals' utility as a function of their own actions as well as the actions of peers in their network. Individuals' payoff is given by: *(i)* the share of the firms' value that they internalize, $s_i \geq 0$ (this may be among other reasons, because of stock ownership, performance-based compensation, or career concerns); *(ii)* the private benefit from their contributions (given, for example, by ideological motivations); and *(iii)* social incentives.

$$\tilde{u}_i = \underbrace{s_i V(y)}_{\text{share of value added to the firm}} + \underbrace{(\gamma^\top x_i + \epsilon_i) y_i}_{\text{private value}} + \underbrace{\zeta \sum_{j \in L_{-i}} y_j y_i}_{\text{social incentives}} - \underbrace{\frac{1}{2} c y_i^2}_{\text{private cost}} . \tag{1}$$

In Equation 1, individual incentives to contribute take the form of a marginal benefit $\gamma^\top x_i + \epsilon_i$, where $\gamma \in \mathbb{R}^k$ is a vector of parameters, $x_i \in \mathbb{R}^k$ is a vector of observable individual characteristics (for example, age and public sector experience), and $\epsilon_i \in \mathbb{R}$ is an "error term". Individuals also have have a social incentive to contribute, which yields a marginal benefit proportional to the aggregate level of donations by other individuals in L, leading to the term $\zeta \sum_{j \in L_{-i}} y_j y_i$, where $\zeta \geq 0$ is a parameter and $L_{-i} = L \setminus \{i\}$. Finally, individuals pay a convex cost $\frac{1}{2} c y_i^2$ for their donations, which captures the opportunity cost of spending.

Taking this utility function as a baseline, the payoffs of individuals inside and outside the controlling family differ in the following way. The payoff for individuals outside the controlling family, $i \in L \setminus F$, is $u_i = \tilde{u}_i$. By contrast, the payoff for individuals in the controlling family, $i \in F$, is given by

$$u_i = \underbrace{(1-\alpha)\tilde{u}_i}_{\text{ego welfare}} + \underbrace{\alpha \sum_{j \in F_{-i}} \tilde{u}_j}_{\text{family welfare}}, \tag{2}$$

where $\alpha \in (0, 1)$ captures the strength of altruistic preferences within the family. In other words, family members internalize the payoff of other members of the family to some extent, captured by the parameter α. This is consistent with Becker (1974). Alternatively, α can be thought of as the strength of kinship norms (Enke, 2019; McNamara and Henrich, 2017).

Substituting (1) into (2), we obtain the following payoff for family members

$$u_i = s_i^F V(y) + \alpha\zeta \sum_{j \in F_{-i}} y_j y_i + (1-\alpha)\left[(\gamma^\top x_i + \epsilon_i) y_i + \zeta \sum_{j \in L_{-i}} y_j y_i - \frac{1}{2} c y_i^2\right] + K_i, \tag{3}$$

where $s_i^F = (1-\alpha)s_i + \alpha \sum_{j \in F_{-i}} s_j$ and K_i collects the terms that do not depend on y_i and thus cannot be affected by i's behavior directly.

We let the parameter α change after the ban on corporate contributions, since restrictive campaign finance regulation poses a threat to the family, which risks losing the flow of rents it receives in return for campaign contributions. We argue that this is the type of negative shock that may strengthen cooperative norms (Gelfand, Harrington and Jackson, 2017; Gelfand, 2019; Harrington and Gelfand, 2014). Thus, α_{pre} denotes the value of the parameter before the ban, whereas α_{post} denotes its value following the ban. We assume that $\alpha_{\text{post}} > \alpha_{\text{pre}}$.

B.2. Two Assumptions

We make the following two technical assumptions for tractability.

Assumption 1. We assume that

$$c > \frac{1}{\bar{y}} \max_{S \subset L} \left(\sum_{i \in S} (\gamma^\top x_i + \epsilon_i) \right) + \zeta(|L| - 1) + \frac{\alpha\zeta}{1-\alpha}(|F| - 1)$$

for $\alpha \in \{\alpha_{\text{pre}}, \alpha_{\text{post}}\}$.

In other words, the marginal value of a dollar spent is sufficiently large relative to the marginal private value of contributions for individuals. The assumption entails that individual and social incentives to contribute do not induce individuals to donate a higher amount than the firm's optimal contribution. Thus, prior to the ban, individuals necessarily use the firm as a vehicle for contributions, as opposed to contributing individually to maximize the firm's value.

This assumption is plausible given the high rents at stake for firms, and the empirical observation that before the ban corporate contributions constituted the majority of donations.

Lemma 1. *Under Assumption 1, in any equilibrium we have* $\sum_{i \in L} y_i < \bar{y}$.

Proof. See the Appendix. □

Assumption 2. We assume that $\gamma^\top x_i + \epsilon_i \geq 0$ for every $i \in L$. In other words, individuals do not have individual incentives *not* to contribute.[1]

B.3. Results

Analysis when the firm can make contributions. The firm chooses y_f to maximize $V\left(y_f + \sum_{i \in L} y_i\right)$, and $\sum_{i \in L} y_i < \bar{y}$ by Lemma 1. Therefore, the aggregate contribution level is $y = \bar{y}$ regardless of the contributions by individuals who, for this reason, do not internalize the effect of their contributions on the value added to the firm $V(y)$.

Given the contribution choices of other members, an individual $i \in L$ who is not in the family has payoff given by (1), which, using that $y = \bar{y}$, is maximized for

$$y_i = \underbrace{\frac{\zeta}{c} \sum_{j \in L_{-i}} y_j}_{\text{firm peer effects}} + \underbrace{\frac{\gamma^\top x_i}{c}}_{\substack{\text{effect of individual} \\ \text{characteristics}}} + \underbrace{\frac{\epsilon_i}{c}}_{\text{error term}}, \tag{4}$$

which is non-negative by Assumption 2. We can interpret $\frac{1}{c}\zeta$ as the endogenous peer effects (Manski, 1993). The expected baseline contribution amount, i.e., assuming $y_j = 0$ for every $j \in F_{-i}$, is $\frac{1}{c}\gamma^\top x_i$.

If i is in the controlling family, their payoff is given by (3) and, therefore, in equilibrium,

$$y_i = \underbrace{\frac{1}{c} \frac{\alpha_{\text{pre}}\zeta}{1 - \alpha_{\text{pre}}} \sum_{j \in F_{-i}} y_j}_{\text{family peer effects}} + \underbrace{\frac{\zeta}{c} \sum_{j \in L_{-i}} y_j}_{\text{firm peer effects}} + \underbrace{\frac{\gamma^\top x_i}{c}}_{\substack{\text{effect of individual} \\ \text{characteristics}}} + \underbrace{\frac{\epsilon_i}{c}}_{\text{error term}}, \tag{5}$$

which, again, is non-negative by Assumption 2. Note that the peer effect given by firm peers is $\frac{1}{c}\zeta$, the same as for non-family members, but family members have an extra intra-family peer effect $\frac{1}{c}\frac{\alpha_{\text{pre}}\zeta}{1-\alpha_{\text{pre}}}$, which increases with the strength of the familial bond α_{pre}. The expected baseline contribution amount is the same as for non-members of the family, viz, $\frac{1}{c}\gamma^\top x_i$.

Analysis when the firm cannot make contributions. Without corporate campaign contributions, $y_f = 0$. Therefore, individuals care about their contribution to the added value to the firm $V(y)$. By straightforward maximization we obtain the equilibrium contribution levels by

[1] This assumption is stronger than what we need for our results. It would be sufficient to assume that individual preferences do not overwhelm other incentives to contribute.

non-family members

$$y_i = \underbrace{\frac{s_i}{c+s_i}\bar{y}}_{\text{constant}} + \underbrace{\frac{\zeta - s_i}{c+s_i}\sum_{j\in L_{-i}} y_j}_{\text{firm peer effects}} + \underbrace{\frac{\gamma^\top x_i}{c+s_i}}_{\substack{\text{effect of individual}\\ \text{characteristics}}} + \underbrace{\frac{\epsilon_i}{c+s_i}}_{\text{error term}}, \tag{6}$$

and for family members

$$\begin{aligned} y_i = & \underbrace{\frac{s_i^F}{(1-\alpha_{\text{post}})c + s_i^F}\bar{y}}_{\text{constant}} + \underbrace{\frac{\alpha_{\text{post}}\zeta}{(1-\alpha_{\text{post}})c + s_i^F}\sum_{j\in F_{-i}} y_j}_{\text{family peer effects}} + \underbrace{\frac{(1-\alpha_{\text{post}})\zeta - s_i^F}{(1-\alpha_{\text{post}})c + s_i^F}\sum_{j\in L_{-i}} y_j}_{\text{firm peer effects}} \\ & + \underbrace{\frac{\gamma^\top x_i}{c + \frac{s_i^F}{1-\alpha_{\text{post}}}}}_{\substack{\text{effect of individual}\\ \text{characteristics}}} + \underbrace{\frac{\epsilon_i}{c + \frac{s_i^F}{1-\alpha_{\text{post}}}}}_{\text{error term}}. \end{aligned} \tag{7}$$

Comparing (4) and (6), note that the firm peer effect decreases from $\frac{1}{c}\zeta$ to $\frac{1}{c+s_i}(\zeta - s_i)$ if the firm cannot make contributions. This is because the social incentives create a strategic complementarity between contributions, but the incentive to donate in order to increase the value of the firm turns donations into strategic substitutes, since the value of the firm is a public good. We observe that private incentives to donate diminish after the ban from $\frac{1}{c}\gamma^\top x_i$ to $\frac{1}{c+s_i}\gamma^\top x_i$.

Comparing (5) and (7) we notice that the family peer effect changes from

$$\frac{\alpha_{\text{pre}}\zeta}{(1-\alpha_{\text{pre}})c} \quad \text{to} \quad \frac{\alpha_{\text{post}}\zeta}{(1-\alpha_{\text{post}})c + s_i^F}$$

when we compare before and after the ban. The family peer effect increases if and only if

$$\alpha_{\text{post}} > \left(1 + \frac{s_i^F}{c}\right)\alpha_{\text{pre}}.$$

The increase in α due to the ban will increase family peer effects as long as private incentives to contribute, given by s_i^F, are not too large relative to the social incentive induced by α.

Finally, the ban has a positive effect on contributions by creating the "constant" terms in (6) and (7), namely

$$\frac{s_i}{c+s_i}\bar{y} \quad \text{and} \quad \frac{s_i^F}{(1-\alpha_{\text{post}})c + s_i^F}\bar{y}.$$

Notice that these terms can be greater for family than for non-family members of the leadership for two reasons. First, since $\alpha_{\text{post}} > 0$, the denominator in the term for family members is smaller. Second, s_i^F is greater than s_i for members of the family that own fewer shares of the firm than the average member of the family, which increases this term.

Taking stock. In sum, we have the following proposition:

PROPOSITION 1. *Under Assumptions 1-2, there is a unique equilibrium, and individual cam-*

paign contributions are given by (4) *and* (5) *when corporate contributions are allowed, and* (6) *and* (7) *after the ban.*

The model shows that the ban has different effects on family and non-family members. For non-family members, the ban:

(i) reduces the firm peer effect due to social incentives,
(ii) reduces the effect of individual incentives to contribute, and
(iii) increases the baseline contribution amount for those members that internalize the value of the firm (for example, the owners and the CEO).

By contrast, for family members, the ban:

(i) reduces the firm peer effect,
(ii) increases the baseline contribution for every member of the family, regardless of stock ownership or position in the executive hierarchy, and
(iii) may amplify the family peer effect if kinship norms become stronger.

These effects are increasing in α, the strength of kinship norms.

The model illustrates how regulation targeted at corporate campaign contributions changes the behavior of individuals, and how this effect differs for individuals with strong versus weak kinship norms. The ban creates a collective action problem that weakens purely social incentives, but politically activates family members who internalize each other's welfare.

B.4. Empirical Estimation

The model yields the following testable predictions. Before the ban, we should observe

$$y_i = \rho_{\text{pre}} I_i \sum_{j \in F_{-i}} y_j + \delta_{\text{pre}} \sum_{j \in L_{-i}} y_j + \gamma_{\text{pre}}^\top x_i + \tilde{\epsilon}_{i,\text{pre}},$$

where $I_i = 1$ if $i \in F$ and 0 otherwise. The regression parameters to be estimated correspond to the following parameters in the theoretical model, which follows from (4) and (5).

Model Parameters	**Regression Parameters**
$\frac{1}{c}\frac{\alpha_{\text{pre}}\zeta}{1-\alpha_{\text{pre}}}$	ρ_{pre}
ζ/c	δ_{pre}
γ/c	γ_{pre}
ϵ_i/c	$\tilde{\epsilon}_{i,\text{pre}}$

After the ban, we should observe

$$y_i = \beta_i I_i + \rho_{i,\text{post}} I_i \sum_{j \in F_{-i}} y_j + \delta_{i,\text{post}} \sum_{j \in L_{-i}} y_j + \gamma_{i,\text{post}}^\top x_i + \frac{s_i}{c + s_i} y^* + \tilde{\epsilon}_{i,\text{post}},$$

where

Model Parameters	Regression Parameters
$\frac{s_i^F}{(1-\alpha_{\text{post}})c+s_i^F}y^* - \frac{s_i}{c+s_i}y^*$	β_i
$\frac{\alpha_{\text{post}}\zeta}{(1-\alpha_{\text{post}})c+s_i^F}$	$\rho_{i,\text{post}}$
$(1-I_i)\frac{\zeta-s_i}{c+s_i} + I_i\frac{(1-\alpha_{\text{post}})\zeta-s_i^F}{(1-\alpha_{\text{post}})c+s_i^F}$	$\delta_{i,\text{post}}$
$(1-I_i)\frac{\gamma}{c+s_i} + I_i\frac{\gamma}{c+\frac{s_i^F}{1-\alpha_{\text{post}}}}$	$\gamma_{i,\text{post}}$
$(1-I_i)\frac{\epsilon_i}{c+s_i} + I_i\frac{\epsilon_i}{c+\frac{s_i^F}{1-\alpha_{\text{post}}}}$	$\tilde{\epsilon}_i$

which follows from (6) and (7). Note that the only dependence of the coefficients β_i, $\rho_{i,\text{post}}$, $\delta_{i,\text{post}}$ and $\gamma_{i,\text{post}}$ on i is through I_i and s_i. These regression equations can be estimated from the data.

Proof of Lemma 1 and Proposition 1

Proof of Lemma 1. By contradiction. Assume that $\sum_{i\in L} y_i \geq \bar{y}$ in equilibrium. Each y_i maximizes u_i given y_j for every $j \in L_{-i}$ subject to the constraint $y_i \geq 0$. If $y_i = 0$ for every i then $\sum_{i\in L} y_i = 0$, so $\sum_{i\in L} y_i < \bar{y}$, contradiction. Hence there is at least one $i \in L$ such that $y_i > 0$. Let $P = \{i \in L : y_i > 0\}$. We have $\frac{\partial u_i}{\partial y_i} = 0$ for each $i \in P$ and $\sum_{i\in P} y_i = \sum_{i\in L} y_i$. Hence

$$\begin{aligned}
0 &= \sum_{i\in P\cap L\setminus F} \frac{\partial u_i}{\partial y_i} + \frac{1}{1-\alpha}\sum_{i\in P\cap F}\frac{\partial u_i}{\partial y_i} \\
&= \sum_{i\in P\cap L\setminus F}\left\{ s_i V'(y) + \gamma^\top x_i + \epsilon_i + \zeta\sum_{j\in L_{-i}} y_j - c y_i \right\} \\
&\quad + \sum_{i\in P\cap F}\left\{ \frac{s_i^F}{1-\alpha}V'(y) + \gamma^\top x_i + \epsilon_i + \zeta\sum_{j\in L_{-i}} y_j - c y_i + \frac{\alpha}{1-\alpha}\zeta\sum_{j\in F_{-i}} y_j \right\} \\
&\leq \sum_{i\in P}(\gamma^\top x_i + \epsilon_i) + \left(\zeta(|L|-1) + \frac{\alpha\zeta}{1-\alpha}(|F|-1) - c\right)\sum_{i\in L} y_i \\
&\leq \max_{S\subset L}\left\{\sum_{i\in S}(\gamma^\top x_i + \epsilon_i)\right\} + \left(\zeta(|L|-1) + \frac{\alpha\zeta}{1-\alpha}(|F|-1) - c\right)\bar{y} < 0
\end{aligned}$$

This contradicts Assumption 1, which we used in the previous step. □

Proof of Proposition 1. The best responses are uniquely given by $y_f = \bar{y} - \sum_{i\in L} y_i$, (4) and (5) when corporate contributions are allowed, and (6) and (7) when $y_f = 0$ is imposed. This linear system of equations can be written in vector form as $(I-A-B)y = z$, where $I, A, B \in \mathbb{R}^{L\times L}$, $y, z \in \mathbb{R}^L$, I is the identity matrix, $A_{ij} = 1_{i\neq j}\frac{1}{c}\zeta$ before the ban and $A_{ij} = 1_{i\neq j}\left[1_{i\notin F}\frac{\zeta-s_i}{c+s_i} + 1_{i\in F}\frac{(1-\alpha_{\text{post}})\zeta-s_i^F}{(1-\alpha_{\text{post}})c+s_i^F}\right]$ afterwards, $B_{ij} = 1_{i,j\in F, i\neq j}\frac{1}{c}\frac{\alpha_{\text{pre}}\zeta}{1-\alpha_{\text{pre}}}$ before the ban and $B_{ij} = 1_{i,j\in F,i\neq j}\frac{\alpha_{\text{post}}\zeta}{(1-\alpha_{\text{post}})c+s_i^F}$ after the ban. To show that there is a unique equilibrium it's enough to show that $I - A - B$ is invertible, and, for that, it's enough to show that $||A + B||_\infty < 1$, where $||\cdot||_\infty$ is the matrix norm. Now, $||A + B||_\infty \leq ||A||_\infty + ||B||_\infty \leq (|L| - 1)\frac{\zeta}{c} + (|F| - 1)\frac{\alpha_{\text{post}}\zeta}{(1-\alpha_{\text{post}})c}$. By Assumptions 1-2 we have $c > \zeta(|L| - 1) + \frac{\alpha_{\text{post}}\zeta}{1-\alpha_{\text{post}}}(|F| - 1)$, so dividing by c we obtain $||A + B||_\infty < 1$, as desired. □

C. Discussion of the Peer Effects Model

C.1. Estimation and Identification Assumptions

Estimating peer effects presents two challenges. The first is endogeneity: peers' actions (the independent variable) are affected by the individual's own actions (the dependent variable)—in Equation 4 both family contributions $\sum_{j\in N_i^{\text{family}}} y_{jft}$ and firm peers' contributions $\sum_{j\in N_i^{\text{firm}}} y_{jft}$ are correlated with the error term ϵ_{ift}, rendering the OLS estimator inconsistent. The second challenge is homophily—individuals in the same networks may share unmeasured characteristics, and thus ϵ_{ift} and ϵ_{jft} may be correlated for $j \neq i$ in i's family or firm. This creates and additional source of correlation between peer actions and the error term, which further invalidates the OLS estimator. This last problem could be assuaged by adding firm-year fixed effects to the OLS estimator. However, we do not do this, because it would mechanically introduce a downward bias on δ, since, keeping the mean probability of donating in a given firm constant (absorbed by u_{ft}), a higher contribution by peers necessarily implies a lower contribution by a given individual (thus, making $\delta < 0$). By contrast, the 2SLS is guaranteed to be consistent when including fixed effects (Wooldridge, 2010, p.354).

To address these two problems, we use a two-stage least squares (2SLS) estimator with firm-year fixed effects. We instrument the contributions of i's peers with their individual characteristics. Specifically, we use a vector of characteristics of i's neighbors in her family network, $\sum_{j\in N_i^{\text{family}}} x_{jft}$, and firm network, $\sum_{j\in N_i^{\text{firm}}} x_{jft}$, as instruments for their respective contributions, $\sum_{j\in N_i^{\text{family}}} y_{jft}$ and $\sum_{j\in N_i^{\text{firm}}} y_{jft}$. To construct these instruments, we use observable characteristics that are predictive of contributions: membership in top management, joint membership in both management and the board of directors, fraction of voting shares owned, public sector experience, experience in elected office, and age.

The validity of this estimator requires the exclusion restriction both for the family and the firm networks. That is, conditional on membership in the same firm and/or in the controlling family[2] individual j only affects individual i's contribution decision through her own *contribution decision*—and not, for example, through her individual characteristics or *membership* in the controlling family.

The formal statement of the identification assumption in the main text is:

> Assumption. $\mathbb{E}(\epsilon_{itf}|I_{ift}^{\text{family}}, \{X_{jt}\}_{j\in f}, u_{ft}) = 0$ and, given any two individuals $i \neq j$ from firms f, f' in times t, t', $\epsilon_{itf}, \epsilon_{jt'f'}$ are conditionally independent given $I_{ift}^{\text{family}}, \{X_{kt}\}_{k\in f}, u_{ft}$, $I_{jf't'}^{\text{family}}, \{X_{kt'}\}_{k\in f'}, u_{f't'}$.

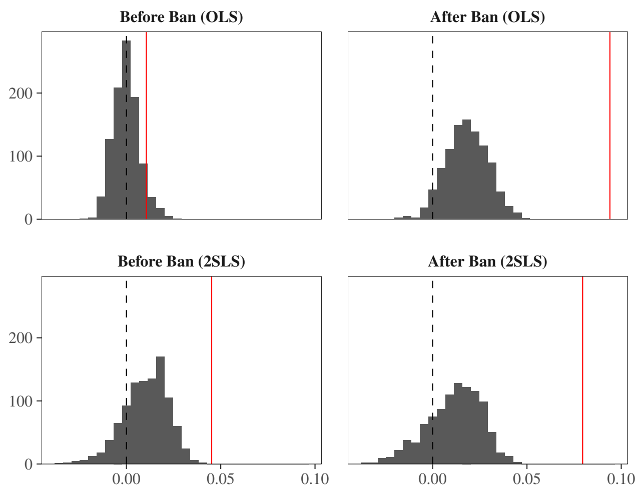
This assumption is plausible because we flexibly account for unobserved effects within firms by including firm-year fixed effects. These fixed effects also help mitigate concerns about homophily, as they absorb the common effects of characteristics that may be causally related to membership in a given firm.

[2]More precisely, conditional on the common firm-year fixed effect u_{ft} and the family-membership indicator I_{ift}^{family}.

C.2. Peer Effects Robustness: Placebo Ties

In this section, we address the possibility that the estimated peer effects could be mechanically generated by *any* ties—not just family ties. As a placebo test, for each firm and year, we generate random ties among a random subset of individuals (of roughly the same size as families) in leadership positions in family firms—thus holding constant between-firm variation. We re-estimate Equation 4 using these random ties and report the estimates from 1,000 simulated networks (Figure C1) along with the associated p-values (Table C1). The results reject the null hypothesis that the effect of family ties is indistinguishable from that of random ties (in networks of similar size) after the ban. This is evidence that our findings do not arise mechanically.

Figure C1: Peer effects placebo: random peers



Notes: Histograms show the distribution of estimates obtained from 1,000 random networks. The red line indicates the estimate from the family network reported in Table 3. The top row displays OLS estimates before and after the ban. The bottom row displays 2SLS estimates for the same periods.

Table C1: Random peer effects placebo: hypothesis tests

Column	Estimator	Period	p-value
1	OLS	Before Ban	0.119
2	OLS	After Ban	0.000
3	IV	Before Ban	0.001
4	IV	After Ban	0.000

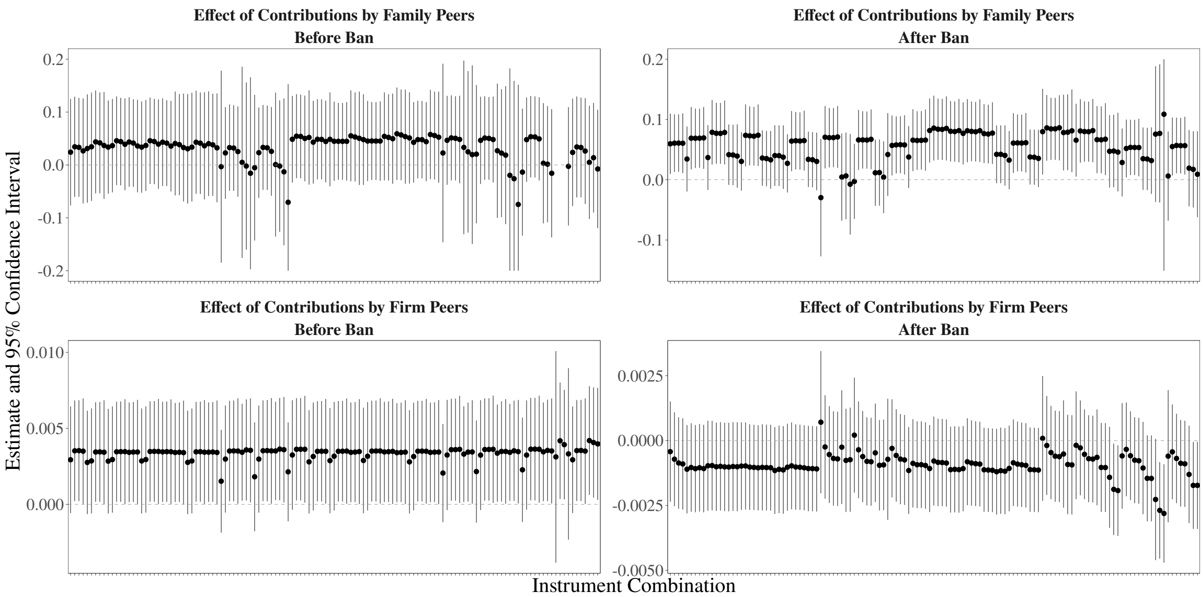
Notes: The p-values correspond to two-sided hypothesis tests, where the null hypothesis states that the effect of contributions by family peers is no larger in absolute value than the effect of contributions by random peers. The test statistic is the peer effect estimate from Equation 4.

Since individuals may belong to multiple networks, we re-estimate Equation 4 using alternative networks that can be reconstructed from the data. Specifically, we consider the network of public sector peers—defined as individuals who were employed in the public sector at some point, based on biographical information in the CVM data—and the network of higher education peers—individuals who obtained a degree from the same university. In the 2SLS specification, we find no evidence of peer effects after the ban for either network (Table 4).

C.3. Robustness to Different Instrument Combinations

Figure C2 presents 2SLS estimates from Equation 4 using all possible non-empty subsets ($2^7 - 1$) of the seven instruments: $\sum_{j \in N_i} x_{jft}$, where x denotes membership in top management, membership on the board of directors, membership in both management and the board, fraction of voting shares owned, prior public sector experience, prior elected office, and age. For family peer effects, the top-left panel shows that none of the estimates are statistically significant at the 95 percent level before the ban. In contrast, the top-right panel shows that 97.6 percent of the post-ban estimates are positive, and 63 percent are statistically significant. For firm peer effects, a comparison between the bottom-left and bottom-right panels reveals that the coefficient is muted after the ban—consistent with our theoretical expectations.

Figure C2: 2SLS estimates from Equation 4 with all possible instrument combinations



Notes: Each vertical bar plots a second-stage 2SLS estimate from Equation 4 and its associated 95% confidence interval, using one of the non-empty subsets ($2^7 - 1$) of the seven instruments. The instruments are defined as $\sum_{j \in N_i} x_{jft}$, where x indicates: membership in top management; membership on the board of directors; membership in both management and the board; fraction of voting shares owned; public sector experience; elected office experience; and age.

D. Leadership and Authority Structure within the Firm

Table D1: Ownership concentration as a potential confounder

	Contributions by the Leadership in 2018 (log)
Contributions by the Firm in 2014 (log)	−0.011
	(0.070)
× Family Firm	0.234*
	(0.099)
× Ownership Concentration	−0.082
	(0.149)
Family Firm	0.288
	(0.968)
Ownership Concentration	1.608
	(1.216)
Observations	292
Adjusted R^2	0.212
Industry FE	✓

Notes: OLS estimates. Covariates include: whether the firm is foreign- or state-owned; total assets; income; firm age; percentage of ordinary shares owned by natural persons; the Herfindahl index of ordinary shares held by ultimate owners; percentage of shares in free float; and the largest shareholder gap. The specification also includes industry fixed effects (industries: agriculture, extractive, manufacturing, energy, utilities, construction, services, finance, and holding). Standard errors are clustered at the firm level. See Table J1 for exact variable definitions.
$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Table D2: Firm-level substitution: Blockholder number and concentration

	Contributions by the Leadership in 2018 (log)	
	(1)	(2)
Contributions by the Firm in 2014 (log)	−0.031	−0.047
	(0.068)	(0.064)
× Family Firm	0.224*	0.223*
	(0.099)	(0.102)
× 1 / Number of Blockholders	0.024	
	(0.115)	
× Blockholders Concentration		0.251
		(0.231)
Contributions by the Leadership in 2014 (log)	0.293***	0.282***
	(0.057)	(0.056)
Observations	292	292
Adjusted R^2	0.232	0.211
Industry FE	✓	✓

Notes: Estimates from an OLS model with standard errors clustered at the firm level. The model includes firm- and corporate governance controls. Firm-level controls include indicators for whether the firm is foreign- or state-owned, as well as total assets, income, and age. Corporate governance controls include the percentage of ordinary shares owned by natural persons, the concentration of ordinary shares held by the firm's ultimate owners, the percentage of shares in free float, and the largest shareholder gap. The specification also includes industry fixed effects (industries: agriculture, extractive, manufacturing, energy, utilities, construction, services, finance, and holding). The sample size (N = 292) reflects the intersection of firms present in our sample in both 2014 and 2018 and the availability of all control variables. See SI Table J1 for exact variable definitions.
$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Table D3: Difference in differences: augmented set of blockholders

	Probability of Contribution	
	(1)	(2)
Family Ties × Post 2015	0.032**	
	(0.010)	
× The Firm Contributed Before the Ban		0.038***
		(0.011)
× The Firm Did Not Contribute Before the Ban		−0.004
		(0.019)
Family Member × Post 2015	0.019	
	(0.027)	
× The Firm Contributed Before the Ban		0.014
		(0.031)
× The Firm Did Not Contribute Before the Ban		0.070
		(0.044)
Manager × Post 2015	0.008	0.007
	(0.009)	(0.009)
Board of Directors × Post 2015	0.015	0.016
	(0.009)	(0.009)
Manager and in Board of Directors × Post 2015	0.026	0.025
	(0.016)	(0.016)
Fraction of Voting Shares Owned × Post 2015	0.102***	0.100***
	(0.029)	(0.029)
Observations	66383	66383
Adjusted R^2	0.363	0.363
Firm × Year FE	✓	✓
Individual FE	✓	✓

Notes: Estimates from Equation 2 using OLS. The unit of analysis is individuals in leadership positions within firms in the sample. All models include firm-year and individual fixed effects. Standard errors are clustered at the individual level. See SI Table J2 for variable definitions.
$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Table D4: Peer effects: latent groups

	OLS		2SLS	
	Before 2015	After 2015	Before 2015	After 2015
Family Ties	0.007	0.058***	0.058	0.061*
	(0.014)	(0.016)	(0.038)	(0.026)
Owners → Owners Ties	−0.004	0.037**	−0.024	0.034*
	(0.009)	(0.014)	(0.015)	(0.017)
Management → Management Ties	0.010**	0.014*	0.017**	0.007
	(0.004)	(0.007)	(0.006)	(0.011)
Board → Board Ties	0.000	0.007*	0.006*	0.007
	(0.001)	(0.003)	(0.003)	(0.005)
Owners → Management Ties	−0.009	0.002	−0.035**	−0.005
	(0.006)	(0.007)	(0.013)	(0.012)
Owners → Board Ties	0.002	0.003	0.017	0.003
	(0.006)	(0.009)	(0.013)	(0.011)
Management → Board Ties	−0.000	0.006	−0.003	−0.015*
	(0.002)	(0.006)	(0.004)	(0.006)
Board → Management Ties	0.001	−0.000	0.003	0.000
	(0.002)	(0.003)	(0.004)	(0.004)
Family Member	0.018	0.051*	0.006	0.052*
	(0.013)	(0.023)	(0.014)	(0.024)
Observations	23380	10955	23380	10955
Year FE	✓	✓		
Firm × Year FE			✓	✓
First Stage F-stat for Family Ties			98.014	65.111
First Stage F-stat for Management → Management Ties			536.387	71.896
First Stage F-stat for Board → Board Ties			506.406	189.704
First Stage F-stat for Owners → Owners Ties			166.979	121.541
First Stage F-stat for Management → Board Ties			690.183	131.147
First Stage F-stat for Board → Management Ties			412.736	96.784
First Stage F-stat for Owners → Board Ties			233.689	184.461
First Stage F-stat for Owners → Management Ties			273.265	88.469

Notes: Estimates from Equation 4. Contributions by Family Peers" refers to $\sum_{j\in N_i^{\text{family}}} y_{jft}$, the number of members of the individual's family who make campaign contributions in a given election cycle. This variable is positive only for members of a firm's controlling family. Contributions by Firm Peers" refers to $\sum_{j\in N_i^{\text{firm}}} y_{jft}$, the number of other members of the firm's leadership who made a campaign contribution. Columns 1 and 2 are estimated using OLS. Columns 3 and 4 are estimated using 2SLS, instrumenting peer contributions with the sum of peers' exogenous characteristics. Controls include membership in top management; dual membership in both management and the board of directors; fraction of voting shares owned; prior public sector experience; elected office experience; and age. All specifications include year fixed effects, and Columns 3 and 4 additionally include firm-year fixed effects. Standard errors are clustered at the individual level. The total sample size (N = 34,335) is lower than in the estimation of Equation 2 (N = 38,192) due to missing data in the age variable.
$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

When more than one generation is present within a family, we can disaggregate between the oldest generation and younger members. In Table D5 (left panel), we report the effect of the ban on the probability of making a contribution, separately by generation. We also re-estimate Equation 4 by partitioning families into generations defined by levels in the family tree. We classify family ties as downward (from higher to lower generations, e.g., from father to son), upward (from lower to higher generations), and horizontal (between members of the same generation). We then estimate the effect of each type of family tie separately (Table D5, right panel).

Table D5: Left panel: Difference-in-differences specification, different generations. Right panel: Peer effects from upward and downward ties

	Probability of Contribution	
	(1)	(2)
Family (Old Generation) × Post 2015	0.122*	
	(0.050)	
× The Firm Contributed Before the Ban		0.162**
		(0.060)
× The Firm Did Not Contribute Before the Ban		−0.051
		(0.045)
Family (Young Generation) × Post 2015	0.114***	
	(0.027)	
× The Firm Contributed Before the Ban		0.129***
		(0.030)
× The Firm Did Not Contribute Before the Ban		0.067
		(0.046)
Family (Only Generation) × Post 2015	0.057	
	(0.031)	
× The Firm Contributed Before the Ban		0.047
		(0.039)
× The Firm Did Not Contribute Before the Ban		0.058
		(0.043)
Observations	38192	30621
Adjusted R^2	0.420	0.394
Firm × Year FE	✓	✓
Individual FE	✓	✓

Notes: Estimates from Equation 2 using OLS. The unit of analysis is individuals in leadership positions within firms in the sample. All models include firm-year and individual fixed effects. Standard errors are clustered at the individual level. The reduction in sample size in column 2 is due to the interaction with pre-ban contributions, which requires firms to be present before the ban—a condition not met by all firms included in column 1. See Table J2 for variable definitions.
$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

	OLS		2SLS	
	Before 2015	After 2015	Before 2015	After 2015
	(1)	(2)	(3)	(4)
Contributions by Family Peers From Higher Generations	−0.114**	−0.091*	−0.093	−0.021
	(0.035)	(0.041)	(0.088)	(0.077)
Contributions by Family Peers From Lower Generations	−0.034	−0.029	0.066	0.133***
	(0.025)	(0.031)	(0.048)	(0.038)
Contributions by Family Peers From The Same Generation	0.123***	0.175***	0.073	0.023
	(0.032)	(0.030)	(0.084)	(0.066)
Contributions by Firm Peers	0.002**	0.005***	0.004*	−0.001
	(0.001)	(0.001)	(0.002)	(0.001)
Family Member	0.019	0.061**	0.012	0.052
	(0.013)	(0.023)	(0.015)	(0.027)
Manager	0.028***	0.018*	0.030***	0.012
	(0.007)	(0.008)	(0.007)	(0.008)
Observations	23380	10955	23380	10955
Year FE	✓	✓		
Firm × Year FE			✓	✓
First Stage F-stat for Contributions by Family Peers From Higher Generations			368.520	240.796
First Stage F-stat for Contributions by Family Peers From Lower Generations			299.025	248.252
First Stage F-stat for Contributions by Family Peers From The Same Generation			257.647	205.971
First Stage F-stat for Contributions by Firm Peers			1389.632	620.040

Notes: Estimates from Equation 4. Contributions by Family Peers" refers to $\sum_{j\in N_i^{\text{family}}} y_{jft}$, the number of members of the individual's family who contributed to campaigns in the current election cycle. This variable is positive only for members of a firm's controlling family. Contributions by Firm Peers" refers to $\sum_{j\in N_i^{\text{firm}}} y_{jft}$, the number of members of the firm's leadership who contributed to campaigns. Columns 1 and 2 are estimated using OLS, which is inconsistent. Columns 3 and 4 are estimated using 2SLS, with $\sum_{j\in N_i^{\text{family}}} x_{jft}$ and $\sum_{j\in N_i^{\text{firm}}} x_{jft}$—the sum of exogenous characteristics of peers—as instruments for $\sum_{j\in N_i^{\text{family}}} y_{jft}$ and $\sum_{j\in N_i^{\text{firm}}} y_{jft}$, respectively. Controls include indicators for membership in top management; joint membership in management and the board of directors; fraction of voting shares owned; public sector experience; elected office experience; and age. All specifications include year fixed effects, and Columns 3 and 4 additionally include firm fixed effects. Standard errors are clustered at the individual level.
$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

E. Family Identifiability

Table E1: Differences in differences: eponymous members

	Probability of Contribution			
	(1)	(2)	(3)	(4)
Family Member × Post	0.011		0.011	
	(0.028)		(0.029)	
× Firm Contributed Before		0.003		0.000
		(0.033)		(0.033)
× Firm Did Not Contribute Before		0.062		0.065
		(0.049)		(0.049)
Number of Ties × Post	0.034^{***}		0.033^{***}	
	(0.010)		(0.010)	
× Firm Contributed Before		0.039^{***}		0.038^{***}
		(0.011)		(0.011)
× Firm Did Not Contribute Before		−0.007		−0.008
		(0.020)		(0.020)
Eponymous Member × Post			0.021	
			(0.034)	
× Firm Contributed Before				0.026
				(0.041)
× Firm Did Not Contribute Before				-0.057^{*}
				(0.023)
Observations	38192	30621	38192	30621
Adjusted R^2	0.421	0.395	0.421	0.395
Firm × Year FE	✓	✓	✓	✓
Individual FE	✓	✓	✓	✓

Notes: Estimates from Equation 2 using OLS. Units are individuals in leadership positions in one of the firms in the sample. Models include fixed effects at the firm-year and the individual level. Standard errors are clustered at the individual level. The drop in sample size in columns 2 and 4 is due to the fact that the interaction with pre-ban contributions required firms to exist before the ban, which is not the case for all firms included in column 1 and 3. See SI Table J2 for variable definitions.
$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

F. Similarity of Contributions by Family Members

We examine whether contributions by family members are more similar than those by individuals unrelated by family ties, which could indicate higher preference homogeneity among family members. To test this, we compute the cosine similarity between contribution portfolios—a measure recently used by Bertrand et al. (2024) to study convergence in contribution patterns following acquisitions. For each firm and year, we consider two groups: family members (if the firm is classified as a family firm) and all other individuals in leadership positions. Within each group, we focus on individuals who made contributions in a given year and compute the cosine similarity between their contribution portfolios. Specifically, if individual i contributed x_{ij} dollars to party j, for $j = 1, \dots, P$, and we define $y_{ij} = \log(x_{ij} + 1)$, then the cosine similarity between individuals u and v is given by:

$$\text{Cosine Similarity}_{uv} = \frac{\sum_{j=1}^{P} y_{uj} y_{vj}}{\sqrt{\sum_{j=1}^{P} y_{uj}^2 \sum_{j=1}^{P} y_{vj}^2}}.$$

This measure captures the degree of similarity between contribution portfolios. It takes a value of 0 if individuals contributed to disjoint sets of parties, and 1 if they contributed to the same parties in the same proportions (in log scale). To quantify degree of the similarity of contributions within each group, we compute the average of the cosine similarities for each pair of members of the group. We refer to this measure as the group's *mean cosine similarity*. Table F1 (left panel) shows no evidence that family members' contributions are more similar, nor that similarity increased after the ban. Table F1 (right panel) reports the average mean cosine similarity by type of tie and year. While family members' contributions are generally slightly more similar than those of unrelated firm members, the difference is small and, as noted above, statistically insignificant.

Table F1: Similarity of contributions within firms, by type of tie (left panel), and by type of tie and year (right panel)

	Mean Cosine Similarity	
	(1)	(2)
Family Members × Post 2015	−0.034	−0.087
	(0.091)	(0.079)
Family Members	0.057	0.099
	(0.074)	(0.081)
Post 2015	−0.038	
	(0.035)	
Observations	518	518
Adjusted R^2	−0.002	0.181
Firm FE		✓
Year FE		✓

Notes: Estimates from a regression of mean cosine similarity—computed separately for family and non-family members for each firm and year in the sample—on an indicator for group type (defined by the presence or absence of family ties) and an indicator for the post-ban period. Column 1 reports estimates from a pooled OLS model. Column 2 includes firm and year fixed effects. Standard errors are clustered at the firm level.
$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

	Mean Cosine Similarity	
Year	Family Members	Other Individuals
2010	0.54	0.46
2012	0.47	0.37
2014	0.36	0.35
2016	0.32	0.37
2018	0.49	0.36

Notes: Average of the mean cosine similarity by type of tie and year.

G. Placebo Treatment: The *Mensalão* Corruption Scandal

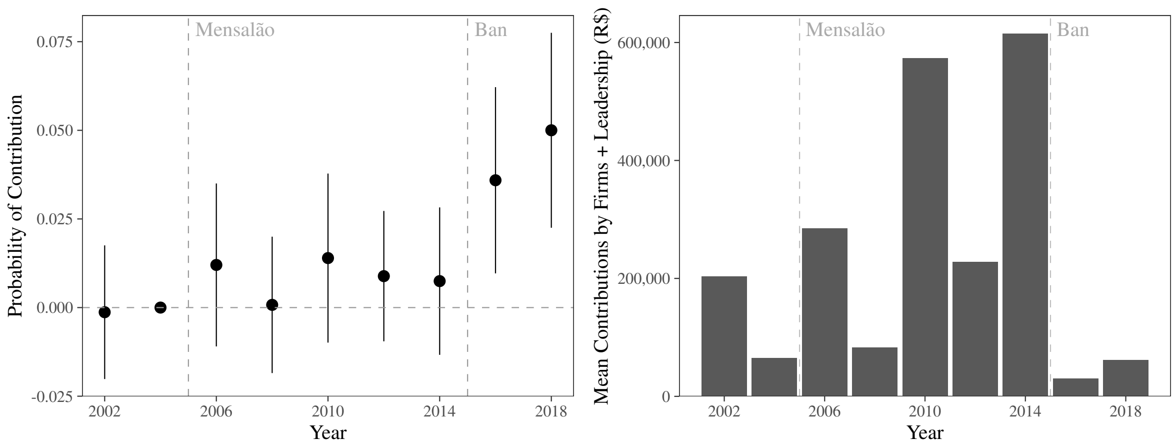
We consider the possibility that our results might be driven by the fact that corruption scandals can affect campaign contributions through a "scare-off" effect, thereby depressing the overall amount of money in politics. We discuss these results in the alternative mechanisms section of the article.

Table G1: Difference-in-differences specification using the *Mensalão* scandal as a placebo treatment

	Including Municipal		Excluding Municipal	
	Mensalão	Ban	Mensalão	Ban
	(1)	(2)	(3)	(4)
Family Ties × Post Shock	0.010	0.035***	0.013	0.044***
	(0.006)	(0.010)	(0.008)	(0.013)
Family Member × Post Shock	−0.006	0.014	−0.013	−0.007
	(0.021)	(0.027)	(0.029)	(0.041)
Manager × Post Shock	0.009	0.006	−0.005	0.009
	(0.007)	(0.009)	(0.009)	(0.014)
Manager and in Board of Directors × Post Shock	−0.016	0.027	−0.015	0.029
	(0.013)	(0.017)	(0.019)	(0.023)
Politician × Post Shock	−0.012	0.041	−0.034	0.058
	(0.039)	(0.047)	(0.048)	(0.085)
Worked in Public Sector × Post Shock	−0.007	0.020	−0.014	0.051
	(0.018)	(0.025)	(0.022)	(0.040)
Fraction of Voting Shares Owned × Post Shock	−0.000	0.125*	−0.064	0.119
	(0.035)	(0.054)	(0.057)	(0.072)
Observations	53952	53396	30703	30510
Adjusted R^2	0.345	0.371	0.395	0.438
Firm × Year FE	✓	✓	✓	✓
Individual FE	✓	✓	✓	✓

Notes: Ban regressions (columns 2 and 4) cover the years 2006–2018. *Mensal ao* regressions (columns 1 and 3) cover 2002–2014. While we use contribution data going back to 2002, data on firms and their leadership are only available from 2010 onward. We therefore use the earliest period available for this analysis.
$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Figure G1: *Mensalão* scandal. Left panel: dynamic effects plot. Right panel: Average contributions by firms and leadership.



Notes: Left panel: Estimates from Equation 3, using 2002 as the base year. Bars represent 95% confidence intervals. The β_t coefficients capture departures from firm-specific parallel trends for family members. Right panel: Average contributions by firms and their leadership (2002–2018). Vertical dotted lines indicate the *Mensalão* scandal and the 2015 ban on corporate contributions.

H. Differences-in-Differences Robustness

H.1. Binary Treatment

Table H1: Difference-in-differences specification (binary treatment)

	Probability of Contribution	
	(1)	(2)
Family Member × Post 2015	0.097***	
	(0.020)	
× The Firm Contributed Before the Ban		0.108***
		(0.024)
× The Firm Did Not Contribute Before the Ban		0.050
		(0.030)
Manager × Post 2015	0.010	0.006
	(0.010)	(0.010)
Board of Directors × Post 2015	0.015	0.015
	(0.011)	(0.011)
Manager and in Board of Directors × Post 2015	0.026	0.030
	(0.017)	(0.021)
Politician × Post 2015	0.030	0.027
	(0.050)	(0.050)
Worked in Public Sector × Post 2015	0.022	0.005
	(0.025)	(0.023)
Fraction of Voting Shares Owned × Post 2015	0.150**	0.186*
	(0.055)	(0.082)
Observations	38192	30621
Adjusted R^2	0.420	0.394
Firm × Year FE	✓	✓
Individual FE	✓	✓

Notes: Estimates from Equation 2 using OLS. The unit of analysis is individuals in leadership positions within firms in the sample. Models include firm-year and individual fixed effects. Standard errors are clustered at the individual level. The reduction in sample size in column 2 is due to the interaction with pre-ban contributions, which requires firms to have existed before the ban—a condition not met by all firms included in column 1. See SI Table J2 for variable definitions.
$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

H.2. Robustness to Parallel Trends Violations

Rambachan and Roth (2023) propose a method to assess the robustness of results to potential violations of the parallel trends assumption. The approach tests whether results remain valid under small but non-zero violations, using information from the pre-treatment period. Given a parameter M, which can be specified by the researcher, the method provides an "honest" confidence interval around the point estimate of the ATT. This interval is robust to a violation of parallel trends equal to M times the maximum deviation observed in the pre-treatment period.Importantly, the method incorporates uncertainty about the estimation from the pre-treatment data. While such uncertainty can help in visual tests of “no pre-trends”—since greater uncertainty makes it harder to reject the null of no violation—it also makes the robustness test more stringent, as it increases the size of the maximum deviation consistent with the data. Reassuringly, we find that our estimate is robust for values of M close to 1. That is, even allowing for a violation of parallel trends equal to the maximum deviation consistent with the pre-treatment data, we can reject the hypothesis that the ATT is zero at the 5% level.

Table H2: Rambachan and Roth (2023) test of robustness to violation of parallel trends

M	Lower Bound	Upper Bound
0.5	0.0097947794	0.05704019
1.0	-0.0009602725	0.06856346

I. Dataset on Brazilian Listed Companies

Brazilian public firms are required to submit detailed reports to the country’s securities regulator, the *Comissão de Valores Mobiliários* (CVM). This information is available on the CVM website and can be accessed at the following link: http://sistemas.cvm.gov.br/. Among the disclosed documents are structured reports (*Formulários de Referência*) and registration forms (*Formulários Cadastrais*), which contain additional company information. The data reported include, but are not limited to: *(i)* basic accounting information, such as main sector of activity, assets, profits, and debt; *(ii)* ownership structure, including the proportion of shares traded in public markets, the identity of individuals and legal entities holding blocks of voting shares, and—recursively—the ownership structure of those entities; *(iii)* biographical and professional information on board members and top executives, including their names, positions, and professional background (e.g., prior elected office or bureaucratic service); *(iv)* family ties among individuals in leadership positions (directors, top executives, and blockholders). See Balán, Dodyk and Puente (2022) for more details.

J. Variable Definitions

Table J1: Firm-level variable definitions

Variable	Description	Support	Source	Observations	Minimum	Maximum	Median	Mean	Std Dev
Family Firm	An individual or family is the ultimate owner of a plurality of voting shares and at least one family member who is not the only owner has a top executive position.	$\{0,1\}$	CVM	2,155	0	1	0	0.3	0.5
Contributions	Total value (in 2020 US dollars) of all donations by the firm.	$\mathbb{R}_+$	TSE	1,360	0	75,660,952	0	260,928.9	2,563,135
Contributions by Firm + Leadership	Same as above, but including donations by individuals in the firm's top management or board of directors.	$\mathbb{R}_+$	TSE	2,160	0	86,541,811	545.7	447,921.6	3,222,365
BNDES Loan (Indicator)	Whether the firm received loans from the BNDES in the period between two election years.	$\{0,1\}$	BNDES	2,160	0	1	0	0.1	0.3
Assets	Assets (book value) in million 2020 US dollars.	$\mathbb{R}_+$	CVM	2,025	0	410,471.8	271.9	3,950.4	23,788.5
Income	Gross income (net of sales taxes) in million 2020 US dollars.	$\mathbb{R}_+$	CVM	1,783	0	86,529.5	148	1,191.3	4,524.4
Age	Number of years since the firm was founded.	$\mathbb{R}_+$	CVM	2,160	1	210	30	37	29.4
Foreign	A firm defined as foreign in the CVM data.	$\{0,1\}$	CVM	2,160	0	1	0	0	0.2
State Owned	A firm defined as state-owned in the CVM data.	$\{0,1\}$	CVM	2,160	0	1	0	0.1	0.3
Industry	Industries are grouped according to the highest aggregation level in the National Classification of Economic Activities (CNAE), with two exceptions: (1) *Services*, an indicator combining all industries in non-financial services, and (2) *Holdings*, an indicator for multi-industry holdings (considered separately from the CNAE financial services category).	Categorical	CNPJ	2,160					
Ownership Concentration	If the ultimate owners $i = 1, \ldots, n$ hold (perhaps indirectly) a fraction $x_i \in [0,1]$ of the voting shares, the Herfindahl index of concentration is $\sum_{i=1}^{n} x_i^2$.	$[0,1]$	CVM	2,155	0	1	0.1	0.2	0.3
Ordinary Shares Owned by Natural Person (%)	Fraction of shares owned by natural persons (the rest are owned by institutional investors or traded in public markets).	$[0,1]$	CVM	2,155	0	1	0.3	0.4	0.4
Shares in Free Float	Fraction of the voting shares that are traded in the public market.	$[0,1]$	CVM	2,155	0	1	0.1	0.2	0.2
Preferential Shares (Indicator)	Whether the firm has issued a class of shares without full voting rights.	$\{0,1\}$	CVM	2,159	0	1	0	0.5	0.5
Largest Shareholder Gap	Difference between the fraction of shares with full voting rights owned by the largest shareholder minus the fraction of all shares owned by her. If there are no dual-class shares, this number is 0. Otherwise it measures the gap between control rights and cash-flow rights by the largest shareholder.	$[-1,1]$	CVM	2,155	-0.8	0.7	0	0.1	0.2
Management $\cap$ Board $\neq \emptyset$	Whether the set of top managers and the board of directors intersect.	$\{0,1\}$	CVM	2,160	0	1	1	0.6	0.5
Fraction in Management $\cap$ Board	The fraction of members of the leadership of the firm that are top managers and in the board of directors.	$[0,1]$	CVM	2,160	0	1	0.1	0.1	0.1
1 / Leadership Size	Inverse of the number of members in the top leadership.	$(0,1]$	CVM	2,159	0	1	0.1	0.1	0.1
Ownership $\cap$ Management $\neq \emptyset$	Whether the set of ultimate owners of blocks of ordinary shares and the board of directors intersect.	$\{0,1\}$	CVM	2,160	0	1	0	0.4	0.5
Number of Blockholders	Number of ultimate owners of blocks of shares.	$\mathbb{N}$	CVM	2,160	0	421	2	5.5	14.7
Eponymous Firm	Whether the firm is named after the family that controls it.	$\{0,1\}$	CVM	2,160	0	1	0	0.1	0.3
Number of Members with the Family Surname	Number of members of the leadership of the firm that share the most common surname among family members if the firm is a family firm, and 0 otherwise.	$\mathbb{N}$	CVM	2,155	0	10	0	0.8	1.5

Table J2: Individual-level variable definitions

Variable	Description	Support	Source	Observations	Minimum	Maximum	Median	Mean	Std Dev
Family Member	Indicator of membership in the family that controls the firm.	$\{0, 1\}$	CVM	38,192	0	1	0	0.06	0.24
Number of Family Ties	Number of family ties to individuals in leadership positions.	$\mathbb{N}$	CVM	38,192	0	13	0	0.18	0.81
Campaign Contributions	Value (in 2020 US dollars) of all contributions by the individual.	$\mathbb{R}_+$	TSE	38,192	0	10,414,802	0	3,390.2	87,590.36
Manager	Indicator of top management position (e.g., CEO or COO).	$\{0, 1\}$	CVM	38,192	0	1	0	0.36	0.48
Board of Directors	Indicator of membership in the board of directors of the firm.	$\{0, 1\}$	CVM	38,192	0	1	1	0.51	0.5
Manager and in Board of Directors	Indicator of top management position and membership in the firm's board of directors.	$\{0, 1\}$	CVM	38,192	0	1	0	0.07	0.25
Fraction of Voting Shares Owned	Fraction of the firm's voting shares owned by an individual. We have data on ultimate ownership of shares, so we capture ownership through, for example, societies.	$[0, 1]$	CVM	38,192	0	1	0	0.02	0.09
Politician	Whether an individual held elected office according to her biography.	$\{0, 1\}$	CVM	38,192	0	1	0	0.02	0.14
Worked in Public Sector	Whether an individual worked in the government according to her biography.	$\{0, 1\}$	CVM	38,192	0	1	0	0.08	0.28
Age (log)	Natural logarithm of age.	$\mathbb{R}_+$	CVM	34,335	2.89	4.5	3.95	3.93	0.24
Higher Education	List of universities in the individual's biography.	List	CVM	38,192	0	8	1	1.29	1.3
Family Surname	Indicator variable equal to 1 if the individual carries the most common surname among family members if the firm is a family firm, and 0 otherwise.	$\{0, 1\}$	CVM	38,192	0	1	0	0.05	0.22
Number of Members with the Family Surname	If the individual belongs to the leadership of a family firm and shares the family surname, this variable counts the number of other members that share the family surname; otherwise, it is 0.	$\mathbb{N}$	CVM	38,192	0	10	0	0.18	0.85
Eponymous Member	variable equal to 1 if the firm is eponymous and the individual carries the name of the firm as a surname, and 0 otherwise.	$\{0, 1\}$	CVM	38,192	0	1	0	0.02	0.13

References

Balán, Pablo, Juan Dodyk and Ignacio Puente. 2022. "The Political Behavior of Family Firms: Evidence From Brazil." *World Development* 151.

Ballester, Coralio, Antoni Calvó-Armengol and Yves Zenou. 2006. "Who's Who in Networks. Wanted: The Key Player." *Econometrica* 74(5):1403–1417.

Becker, Gary S. 1974. "A Theory of Social Interactions." *Journal of Political Economy* 82(6):1063–1093.

Bertrand, Marianne, Matilde Bombardini, Raymond Fisman, Francesco Trebbi and Eyub Yegen. 2024. Investing in Influence: Investors, Portfolio Firms, and Political Giving. Working paper.

Enke, Benjamin. 2019. "Kinship, Cooperation, and the Evolution of Moral Systems." *The Quarterly Journal of Economics* 134(2):953–1019.

Gelfand, Michele. 2019. *Rule Makers, Rule Breakers: Tight and Loose Cultures and the Secret Signals that Direct our Lives*. Scribner.

Gelfand, Michele J, Jesse R Harrington and Joshua Conrad Jackson. 2017. "The Strength of Social Norms Across Human Groups." *Perspectives on Psychological Science* 12(5):800–809.

Harrington, Jesse R and Michele J Gelfand. 2014. "Tightness–Looseness Across the 50 United States." *Proceedings of the National Academy of Sciences* 111(22):7990–7995.

Manski, Charles F. 1993. "Identification of Endogenous Social Effects: The Reflection Problem." *The Review of Economic Studies* 60(3):531–542.

McNamara, Rita Anne and Joseph Henrich. 2017. "Kin and Kinship Psychology both Influence Cooperative Coordination in Yasawa, Fiji." *Evolution and Human Behavior* 38(2):197–207.

Rambachan, Ashesh and Jonathan Roth. 2023. "A More Credible Approach to Parallel Trends." *Review of Economic Studies* 90(5):2555–2591.

Wooldridge, Jeffrey M. 2010. *Econometric Analysis of Cross Section and Panel Data*. MIT Press.