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Kin in the game: How family ties help firms overcome campaign finance regulation

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Kin in the Game: How Family Ties Help Firms Overcome Campaign Finance Regulation

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Introduction

Can campaign finance regulation curb the political influence of economic actors? Business interests routinely affect policy outcomes across the developing and developed world (Fairfield, 2015; Szakonyi, 2020; Zingales, 2017). To counteract this influence, scholars and activists have increasingly advocated for the regulation of corporate campaign finance. These policies are typically justified on egalitarian or anti-corruption grounds (Cagé, 2020; Dawood, 2015; Dotan, 2003; Pasquale, 2008; Sunstein, 1994). Currently, forty-nine countries prohibit corporate campaign contributions (IDEA, 2022). Despite vocal advocacy in favor of such regulation,² evidence of its effectiveness is still mixed.

In this article, we identify a new factor that may hinder the effectiveness of campaign finance regulation—the internal structure of the organizations whose behavior it seeks to change. We contend that bans on corporate contributions present a collective action problem for shareholders. In many contexts, such as the one we study, campaign contributions are best understood as long-term investments in relationships with politicians (Samuels, 2001). These political investments are costly, but accrue benefits to all shareholders—such as subsidized loans, favorable regulation, or procurement contracts. Once the corporate contribution channel is ruled out, shareholders can still make private contributions and internalize these benefits to some extent, but cannot prevent other shareholders from free-riding on their contribution. By creating a cooperative dilemma that threatens the continuity of political donations, bans on corporate contributions constitute a negative shock with the potential to hurt the value of firms.

²For example, Cagé (2020, p.293) writes: “In many countries, for excellent reasons, private corporate donations to parties and election campaigns are prohibited. Recently, as we have seen, they have even been outlawed in Brazil, a country that cannot be said to be in the forefront of the struggle for democratic equality. I think that such bans should be introduced wherever they do not yet operate.”

We argue that family ties within firms help solve this collective action problem by facilitating cooperation. Research across disciplines shows that family ties can facilitate collective action in the face of cooperative dilemmas (Enke, 2019; McNamara and Henrich, 2017). We study this characteristic of family ties in a strategic setting where the need for cooperation is heightened by a negative shock affecting family members. We further propose that such events activate norms of familial cooperation, consistent with recent evidence that negative shocks can tighten norms (Gelfand et al., 2017; Gelfand, 2019; Harrington and Gelfand, 2014; Winkler, 2021).

We evaluate this argument by studying the effects of a ban on corporate campaign contributions in Brazil, where in 2015 the Supreme Court prohibited corporate donations in the aftermath of a major corruption scandal. In Brazil, campaign contributions are a primary instrument of business political strategy (Schneider, 2010a). Before the ban, the majority of campaign contributions were corporate contributions (Mancuso, 2015).

We study the effect of this policy on the political behavior of family firms, the most common firm type in the developing world (La Porta et al., 1999; Villalonga and Amit, 2020). Family firms are particularly prevalent in Latin America, where they have been characterized as an endemic feature of capitalism (Schneider, 2013). Previous research shows that family firms are less productive (Bennedsen et al., 2007) and more likely to engage in rent-seeking (Morck and Yeung, 2004; Morck et al., 2005). In Brazil, family firms are particularly active political actors and obtain substantial benefits from their political donations (Balán et al., 2022). Before they were ruled illegal, almost 53 percent of corporate contributions in our sample came from family firms.³

We test our argument using a three-pronged approach, employing firm- and individual-level analyses. Leveraging a newly collected dataset of listed companies responsible for roughly 16 percent of pre-ban total campaign contributions in Brazil and totaling over 50 percent of the country's GDP, we first show that family firms firms that were politically active before the ban are able to

³This includes contributions by the firm and by individuals in leadership positions.

substitute individual for corporate contributions. Specifically, a 1 percent increase in pre-ban corporate donations in a family firm is associated with a 0.21 percent increase in post-ban individual contributions. Second, at the individual level, we implement a difference-in-differences design and find that, following the ban, members of the controlling family in hitherto politically active family firms increase their probability of contributing as private citizens compared to non-family members by almost 4 percentage points—a 47 percent increase. Finally, we document the presence of peer effects among individuals linked by family ties within a firm, giving credence to the notion that such ties transmit influence and help overcome collective action problems. Together, our findings indicate that the ban created a wedge in political influence, empowering important economic actors who were able to circumvent regulation seeking to limit their power thanks to their collective action capacity. In doing so, they reveal a major unintended consequence of the reform.

This article contributes to the following lines of scholarly work. First, we add to the literature on business power (Culpepper, 2010; Epstein, 1969; Fairfield, 2015; Lindblom, 1977; Szakonyi, 2020) by identifying family firms as an actor that wields significant political influence.⁴ We uncover the organizational foundation of this advantage by tracking down the political behavior of such firms to the level of family ties. By identifying family ties as source of corporate power, our findings constitute a step towards a “political theory of the firm” (Zingales, 2017).

Second, our findings speak to the literature on campaign contributions and campaign finance regulation (Scarrow, 2007) by identifying a condition that can render some of these policies less effective. Recent work documents mostly salutary effects of campaign contribution limits—stricter limits have been found to increase political competition (Avis et al., 2022), while looser limits appear to increase public contracts assigned to top donors (Gulzar et al., 2021). Closer to our paper, there is evidence that bans on corporate contributions are effective, eroding the advantage

⁴Existing studies of family firms have mostly focused on economic outcomes (Bertrand and Schoar, 2006; Burkart et al., 2003).

of firms in obtaining procurement contracts (Baltrunaite, 2020).⁵ By contrast, we focus on the heterogeneous effects of the ban among firm types and study how internal features of organizations can allow firms to circumvent its effects.

Third, the paper adds to work on how corporate political activity is shaped by firms' internal dynamics. Most prominently, students of American politics have focused on the relationship between employers, workers, and political action committees (PACs). Recent studies show that employers influence employees' political participation (Hertel-Fernandez, 2017), that employees tend to contribute to PACs supported by their company (Stuckatz, 2022), and that ideological heterogeneity among employees limits their willingness to contribute when firms donate to PACs that seek access to ideologically opposing parties (Li, 2018). By contrast, we switch our focus to the behavior of board members and top executives and, building on the idea that certain types of ties may matter more than others (Kuchler and Stroebel, 2020), we refine the analysis by focusing on a specific type of social tie within firms and study its role in the transmission of political influence.⁶

We also contribute to a classic yet recently reinvigorated debate on whether kinship-based institutions foster or hinder economic and political development (Alesina and Giuliano, 2011; Bahrami-Rad et al., 2022; Banfield, 1958; Henrich, 2020; Fukuyama, 2011; Schulz, 2022; Schulz et al., 2019).⁷ An important point supported by both theory and empirical evidence is that family networks facilitate cooperation within the boundaries of the kin group (Alesina and Giuliano,

⁵In our context, contemporary work provides evidence that the ban hurt the electoral advantage of incumbents who were more reliant on corporate contributions Peveri (2021). There is also evidence that bans on corporate contributions can affect political rhetoric (Cagé et al., 2022).

⁶Closer to our paper is Larreguy and Teso (2018), who document the existence of peer effects in the contribution behavior of directors sitting on partially overlapping boards after the passage of legislation that increased contribution limits.

⁷In contrast with work documenting negative effects of kinship for political development, Wang (2022) shows that kinship networks can be conducive to state-building when they are geographically dispersed.

2010; Enke, 2019; McNamara and Henrich, 2017). That is, kin-related individuals have a comparative advantage in collective action. This can be politically consequential. For example, Naidu et al. (2021) show that families with higher network centrality were more likely to participate in the 1991 Haiti coup.⁸ We contribute to this body of work by studying the role of family ties in a novel, strategic context—business political behavior—thereby conceiving of firms as kinship-based *economic* institutions that can limit the effectiveness of reforms seeking to advance political equality.

Finally, we contribute to the literature on the sources of institutional weakness (Brinks et al., 2019, 2020; Levitsky and Murillo, 2009), defined as the difference between institutional goals and effective outcomes (Brinks et al., 2019). In this regard, our findings contain a paradox: while the reform was effective at achieving its immediate goal—prohibiting corporate contributions—it triggered an unintended, bifurcated response driven by organizational features of the actors whose behavior it sought to change. Our results thus provide evidence on a critical factor underpinning institutional weakness: organizational structure as an important yet overlooked source of *de facto* power.⁹

⁸The literature on family and politics has, for the most part, focused on political dynasties in the context of succession and electoral competition. See Van Coppenolle and Smith (2022) for a review.

⁹More generally, we join an expanding research agenda documenting that social structure—broadly understood—shapes political outcomes, such as conflict (Moscona et al., 2017, 2020), coups (Naidu et al., 2021), and public goods provision (Cruz et al., 2020). Our findings also speak to a growing literature that documents elite persistence after economic and political shocks (Alesina et al., 2022; Fresh, 2022).

How Family Ties Help Solve Collective Action Problems within Firms

We argue that family ties help individuals cooperate in the face of collective action problems. We study this property of family ties in a strategic setting featuring firms facing a policy change aiming to curtail their political advantage.

In our context, corporate campaign contributions secure substantial material benefits to corporate donors. Campaign donations are a collective good that increases the value of the firm, benefiting all shareholders. We argue that a ban on corporate contributions creates a collective action problem. By foreclosing the possibility of using the corporation as a vehicle for contributions and presenting executives and shareholders with the decision of whether to contribute individually, each individual confronts a dilemma. Whoever contributes can appropriate a fraction of the collective good proportional to her shares. Yet, since benefits accrue to all members, others can free-ride on her contribution. Thus, any single individual may prefer not to contribute if others do. In other words, the ban turns individual contributions into *strategic substitutes*.

We propose that family ties have the capacity to mitigate this problem. Individuals tend to restrict costlier forms of cooperation to close relatives (Lieberman et al., 2007; Hamilton, 1964; Henrich and Henrich, 2007; Smith, 1964).¹⁰ Kin-related individuals display higher levels of in-group cooperation (Enke, 2019), favoritism (Akbari et al., 2020), and coordination (McNamara and Henrich, 2017). Kin networks provide social insurance, facilitate exchange and resource pooling, and contribute to the provision of public goods (Cox and Fafchamps, 2007). Above and beyond genetic relatedness, cooperation among family members is afforded by kinship norms (McNamara

¹⁰In the seminal work of the economic analysis of the family, Becker (1974) proposed that families are characterized by altruism: the utility of each family member is affected by the utility of other family members, leading to the internalization of externalities.

and Henrich, 2017).¹¹ While cooperation in large-scale societies is sustained by impersonal enforcement mechanisms, cooperation within the family is furnished by “moral obligations and reputational incentives that discourage cheating and free riding” (Greif and Tabellini, 2010, p.136). Because of strong kinship norms among family members, we predict that the ban had a differential effect on individuals with kinship ties, inducing different political behavior.

We couple the notion of familial cooperation with insights from recent work showing that social norms can be tightened by negative shocks (Gelfand et al., 2017; Gelfand, 2019; Winkler, 2021). In our context, the ban on corporate contributions constituted a negative shock affecting the value of the firm and thus should strengthen norms of familial cooperation—which may not necessarily operate in the absence of a collective action problem. Therefore, we predict that contributions by family members should become *strategic complements* after this policy.¹² Importantly, strategic complementarity entails influence in the contribution behavior of individuals linked by family ties. Indeed, there is ample evidence that networks help diffuse social and political behavior (Abrams et

¹¹McNamara and Henrich (2017) document that kinship norms can support cooperation even in the absence of genetic relatedness. There is a strong correlation between strong ancestral kinship and social norms fostering parochial cooperation (Enke, 2019).

¹²In SI Section F, we formalize this argument with a theoretical framework in which contributions create value for the firm. The model illustrates how regulation banning corporate contributions changes the behavior of different types of individuals within firms. The payoff for an individual who is not a member of the controlling family is given by (i) the share of the firm’s value that they internalize, (ii) individual incentives (e.g., ideology), (iii) social incentives, and (iv) a cost term. The utility of family members is identical in everything except for the fact that they internalize the utility of other family members by a factor α , which captures the strength of the kinship bond. We argue that the ban on corporate contributions increases the value of this parameter. This change in α captures stronger kinship norms in the face of negative shocks (Gelfand et al., 2017; Gelfand, 2019; Winkler, 2021). The ban (i) it creates a free-riding incentive, lowering the magnitude of firm peer effects, but, due to an increase in α , (ii) it increases family members’ baseline level of contributions and family peer effects.

al., 2011; Alt et al., 2022; Christakis and Fowler, 2008; Fowler and Christakis, 2010), specifically in collective action settings (Arias et al., 2019; Bond et al., 2012; Nickerson, 2008; Steinert-Threlkeld, 2017).¹³

We thus contend that the ban on corporate contributions constituted a common shock that, while affecting all individuals in the same environment, should induce a differential strategic response by family and non-family members.¹⁴ Empirically, this entails that collective action should increase for those individuals affected by the ban. Specifically, the argument yields two testable implications:

- **Substitution:** After the ban, members of the controlling family in hitherto politically active firms become more likely to make campaign contributions as private citizens—compared to individuals who do not belong to the controlling family (**EI 1**).
- **Strategic complementarity:** Contributions by family members become strategic complements after the ban. That is, we should observe that the probability of contribution of any given family member increases as a response to the contributions of other family members (**EI 2**).

¹³Given the nature of our data, we are unable to pin down the exact mechanism behind correlated behavior—information diffusion, peer pressure, coordination.

¹⁴Note that our argument is about a specific type of tie—family ties—as opposed to network structure—e.g., (Siegel, 2009)—and does not rely on an information problem. See SI Section B.2, where we benchmark the effect of family ties against alternative networks in the firm.

Background

Electoral Competition and Campaign Finance

In Brazil—a federal, presidential, multi-party democracy—two institutional factors make campaigns particularly expensive. First, legislative candidates are elected through an open-list PR system, which allows citizens to vote for individual candidates. Second, candidates typically raise their own funds, since parties are organizationally weak and public financing of campaigns is low (Bourdoukan, 2010).¹⁵ As a result, elections in Brazil are among the costliest in the world.¹⁶

Campaign donations are an important instrument of business political strategy (Schneider, 2010b). Here, we describe their logic in Brazil before the Supreme Court ban on corporate contributions. Before the 2015 ban, corporate donations were legal and contribution limits were loose.¹⁷ An additional reason for the importance of campaign donations is the absence of an economy-wide peak association. As a consequence, corporate campaign contributions became an important instrument of political influence (Mancuso, 2015).

In Brazil, campaign donation accrue important benefits to donors. While in the United States campaign donations have been shown to yield no returns for the average firm (Fowler et al., 2020), campaign donations in the developing world typically buy legislation, regulation, or state bank loans (Szakonyi, 2020). Firms in Brazil are no exception: they are more likely to obtain government contracts (Boas et al., 2014), preferential access to finance (Claessens et al., 2008), state-subsidized credit (Lazzarini et al., 2015), and perform better in the stock market (Claessens et al., 2008).

¹⁵However, this changed after the ban on campaign contributions. Since the Car Wash scandal, the *Fundo Partidário* (Public Party Fund) has been a growing source of public financing of political parties (Paz, 2018).

¹⁶*Wall Street Journal*, 5/10/2017.

¹⁷See Law 9504/1997.

The Ban on Campaign Contributions

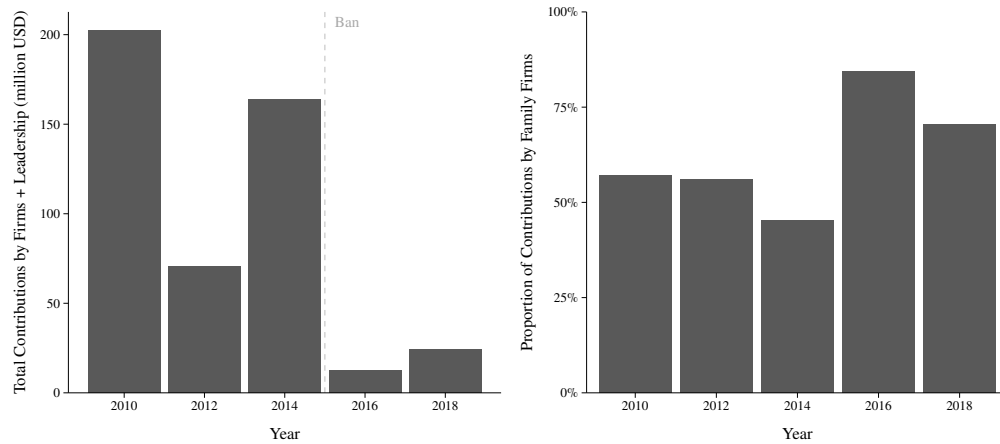
In 2011, the Brazilian Bar Association elevated a petition—a “Direct Action of Unconstitutionality”, known as ADI-4650—to the Brazilian Supreme Court challenging the legality of corporate contributions. The petition argued that Law 9.504 violated the principle of political equality, and gained popular support after operation Car Wash, the biggest corruption scandal in the country’s history.¹⁸ The Supreme Court ruled in favor of the petition in September 2015, banning corporate contributions.¹⁹ According to the Court’s leading opinion, corporate contributions were not a matter of freedom of expression, since they are not ideological but instead seek to establish connections with politicians, leading to the capture of politics by corporations.²⁰ As shown in Figure 1, the ban was effective at achieving its immediate goal of reducing the amount of money in politics—total contributions by firms and individuals in firms’ leadership plummeted almost by a factor of ten.

¹⁸The *Lava Jato* investigation revealed a major corruption scandal involving Petrobras and large construction companies in Brazil. The investigation revealed more than \$2 billion paid in bribes and convicted key figures of Brazil’s major political parties.

¹⁹While shortly after the final ruling Congress tried to legalize corporate contributions to parties, President Dilma Rousseff vetoed that provision. The new law imposed stricter limits on individual contributions. See [Law 13.165](#) and [Avis et al. \(2022\)](#).

²⁰[Brazilian Supreme Court, 09/17/2015](#).

Figure 1: Average contributions by firms and their leadership (2002-2018) and percentage of contributions by family firms



Notes: Left panel: Total contributions by firms and leadership (2002-2018). The vertical dotted lines denote the 2015 ban on corporate contributions. Right panel: Percentage of contributions by family firms (before the ban) and by individuals in family firms (after the ban).

The Import of Family Firms

Family firms are the most common corporate structure in the developing world and a staple of capitalism in Latin America (Schneider, 2013). They are long-lived, display lower productivity, and have a comparative advantage in rent-seeking (Balán et al., 2022; Bennedsen et al., 2007; Villalonga and Amit, 2020). In Brazil, they are relevant political actors: they display high levels of political activism and benefit handsomely from their contributions. Before the ban, roughly 53 percent of corporate contributions in our sample—described in the next section—came from family firms, including individuals in their leadership (Figure 1, right panel). Notably, following the ban, 78 percent of contributions came from individuals in family firms, suggesting that the policy increased political activism in such firms. Compared to non-family firms, the family firms in our sample are 20 percentage points (pp) more likely to make corporate donations, and contributing family firms are more likely to engage in financial rent-seeking—they are more likely to receive

subsidized credit from Brazil’s National Development Bank (Balán et al., 2022). Overall, family firms in Brazil wield significant political influence and profit from their political investments.²¹

Data

We use data on listed firms and on the entirety of campaign donations in Brazil.²²

Listed firms. We make use of a dataset of all the companies supervised by Brazil’s securities regulator, known as *Comissão de Valores Mobiliários* (CVM). The dataset builds on 6,219 structured reports and 6,424 forms containing additional information, totaling 593 firms between 2010 and 2018.²³ While the number of listed companies in the dataset may not seem particularly sizable, the firms in our sample are politically important in terms of their campaign contributions: in 2014—immediately before the ban—contributions by the companies in our sample amounted to 15.3 percent of total contributions by *all* companies in Brazil (both public and private).²⁴ They also represent a large part of Brazil’s economy—the market capitalization of public companies amounts to between 50 and 70 percent of Brazil’s GDP in our study period.²⁵

The data include firms’ financial information, ownership structure and, family ties among individuals in the firms’ leadership (board members and top management) and blockholders. The

²¹See Schneider (2013) for a qualitative account of family firms and family-controlled groups in Latin America.

²²This dataset was previously used in Balán et al. (2022). See SI Section I and Balán et al. (2022) for a more detailed description of the data.

²³This is the number of unique firms for which the data contain information about at least one year. It does not translate into the sample size of firm-level regression in this article since (i) every firm is not present in the sample every year, and (ii) all variables are not available for every firm every year.

²⁴The number of public and private companies in Brazil in 2014 was 16,092—this information comes from Brazil’s national registry of legal entities. See SI Table A.1 for more details.

²⁵World Bank Open Data.

data thus capture family ties with high precision, instead of relying on proxies such as shared surnames. The reports also include individual-level data in the form of semi-structured biographical sketches. Specifically, they contain information on 12,554 unique individuals in leadership and management positions in family and non-family firms, including personal and professional details, such as educational background and public sector experience.²⁶

Campaign donations. We employ data on the entirety of campaign donations in Brazil, available from the country's Superior Electoral Court (TSE). In Brazil, contributions are made to a single bank account and candidates are mandated to report all transactions, which are made public by the TSE. We employ data for all elections between 2010 and 2018—including three national elections and two municipal elections. The data include firm- and individual-level campaign contributions. Firm-level donations comprise those made by firms and their controlled companies. Individual-level donations include those by board members and individuals in management. The data can be exactly matched with the firm data described above, as Brazil employs a system of unique identifiers for individuals and firms.

Results

Family Firms Substitute Individual for Corporate Contributions After the Ban

Firm-level analysis

We define a family firm as one in which: *(i)* the ultimate owner of a plurality of voting shares is an individual or a family and *(ii)* one or more family member holds a top executive position,

²⁶See SI Table J.2 for individual variables' definitions.

not simply one in the board of directors.²⁷ We refer to the family that owns the firm as the firm’s *controlling family* and to those individuals in that family as *family members*.

We test the substitution hypothesis by regressing the amount contributed by individuals within a firm in 2018 on the amount contributed by the firm in 2014, including an interaction term capturing family firm status.²⁸ We estimate the equation:

$$\begin{aligned} \text{Log(Individual Contributions}_{i,2018}) &= \delta \text{ Family Firm}_i + \eta \text{Log(Firm Contributions}_{i,2014}) \\ &+ \beta \text{ Family Firm}_i \times \text{Log(Firm Contributions}_{i,2014}) \\ &+ \theta \text{Log(Individual Contributions}_{i,2014}) + \gamma^\top \mathbf{X}_i + \mu_j + \epsilon_i, \end{aligned} \tag{1}$$

where i denotes firms, \mathbf{X}_i is a vector of firm-level characteristics, ϵ_i is the error term, μ_j are industry fixed effects, and $\text{Log}(x) = \log(x + 1)$. The coefficient β captures the difference in the elasticity of substitution of post-ban individual contributions with respect to pre-ban corporate contributions between family and non-family firms.

The coefficient on the interaction term is positive, indicating that top executives and board members in family firms were partly able to substitute individual for pre-ban corporate contributions (Table 1). Specifically, a 1 percent increase in pre-ban corporate donations in a family firm is associated with a 0.21 percent ($= 0.237 - 0.027$) increase in post-ban individual contributions, and a doubling of pre-ban corporate contributions implies a 15.6 percent increase in post-ban in-

²⁷If a firm satisfies the first condition but its owner is also the CEO, it is classified as a non-family firm (such firm has no family ties). This conceptualization supersedes those based on ownership (La Porta et al., 1999), stressing family involvement in the management—research shows that this is particularly relevant for firms’ economic performance (Bennedsen et al., 2007).

²⁸We compare 2014 to 2018 because these election cycles featured both national and state-level elections.

dividual contributions. By contrast, the elasticity of substitution is indistinguishable from zero in non-family firms.²⁹

Table 1: Substitution of contributions by the firm

	Contributions by the Leadership in 2018 (log)
Contributions by the Firm in 2014 (log)	-0.027 (0.060)
× Family Firm	0.237* (0.099)
Contributions by the Leadership in 2014 (log)	0.282*** (0.056)
Observations	292
Adjusted R ²	0.214
Industry FE	✓

Notes: Estimates from an OLS model with standard errors clustered at the firm level. The model includes firm- and corporate governance controls. The specification includes firm-level controls (whether the firm is a holding, foreign or state-owned, assets, income, and age), corporate governance controls (percent of ordinary shares owned by natural persons, concentration of ordinary shares in the hand of a firm’s ultimate owners, percent of shares in free float, and largest shareholder gap), and industry fixed effects (industries: agriculture, extractive, manufacturing, energy, utilities, construction, services, finance, and holding). Sample size ($N = 292$) is the result of the intersection of firms present in our sample in years 2014 and 2018 and the availability of controls. See SI Table J.1 for the exact variables definitions.

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

Individual-level difference-in-differences

We estimate the effect of the ban on the probability of contributions by members of the controlling family using a difference-in-differences design. Identification depends on the assumption that, absent the ban, the probability of contribution of these individuals would have followed the same trend as that of those in the same firm who do not belong to the controlling family, conditional on observables. We estimate the equation:

²⁹While the specification controls for ownership concentration, the results are robust to interactively controlling for ownership concentration (see SI Table C.1).

$$\text{Contribution}_{ijt} = (\beta \text{Family Ties}_{ijt} + \gamma^T \mathbf{X}_{ijt}) \times \text{Post Ban}_t + \theta \text{Family Ties}_{ijt} + \delta^T \mathbf{X}_{ijt} + u_i + v_{jt} + \epsilon_{ijt}, \quad (2)$$

where i indexes individuals, j are firms, t are electoral cycles, $\text{Contribution}_{ijt}$ is a binary indicator of whether individual i in a leadership position in firm j contributed in electoral cycle t , Family Ties_{ijt} counts the number of ties that i has in firm j in period t ,³⁰ Post Ban_t is an indicator marking the post-ban period, and \mathbf{X}_{ijt} is a vector of individual characteristics (whether the individual is a member of the controlling family, has an executive position in the firm, sits on the board of directors, is a shareholder, had worked in the public sector, or had been an elected official). Finally, u_i are individual-level fixed effects, v_{jt} are firm-year fixed effects, and ϵ_{ijt} are robust standard errors clustered at the individual level. Under these parametric assumptions, β estimates the marginal effect of a family tie on the probability of contribution of family members after the ban,³¹ controlling both for unobserved time-invariant individual-level and time-varying firm-level factors.

To provide evidence for the substitution hypothesis, we break down the estimate by whether a firm contributed before the ban. Specifically, we expect that members of the controlling family start contributing following the ban *only if* the firm contributed before.

³⁰We only count the number of ties for those individuals who are members of the controlling family. We ignore family ties of kin-related individuals within the firm who are not members of the family (e.g., a non-family CEO and her brother). We also ignore family ties that members of the controlling family have with individuals in other firms.

³¹Since we control for membership in the controlling family (extensive margin), β is an estimate of the intensive margin of family ties. Failing to control for membership in the family would not allow us to distinguish between the effect of the extensive and the intensive margins. In terms of the parameters of the model, the number of ties can be thought of as s_i^F , the share of the value added of the firm. It is more likely that in family firms s_i^F is increasing in the size of the controlling family, as the benefits of control are likely higher in larger, entrenched families.

Table 2: Difference-in-differences specification

	Probability of Contribution	
	(1)	(2)
Family Ties × Post 2015	0.034*** (0.010)	
× The Firm Contributed Before the Ban		0.039*** (0.011)
× The Firm Did Not Contribute Before the Ban		-0.007 (0.020)
Family Member × Post 2015	0.011 (0.028)	
× The Firm Contributed Before the Ban		0.003 (0.033)
× The Firm Did Not Contribute Before the Ban		0.062 (0.049)
Manager × Post 2015	0.008 (0.010)	0.005 (0.010)
Board of Directors × Post 2015	0.013 (0.010)	0.014 (0.011)
Manager and in Board of Directors × Post 2015	0.026 (0.017)	0.028 (0.021)
Politician × Post 2015	0.030 (0.050)	0.027 (0.050)
Worked in Public Sector × Post 2015	0.023 (0.025)	0.005 (0.023)
Fraction of Voting Shares Owned × Post 2015	0.153** (0.054)	0.192* (0.080)
Observations	38192	30621
Adjusted R ²	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 column 2 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. See SI Table J.2 for variables definitions.

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

Consistent with the expectations, each additional family tie increases the probability of con-

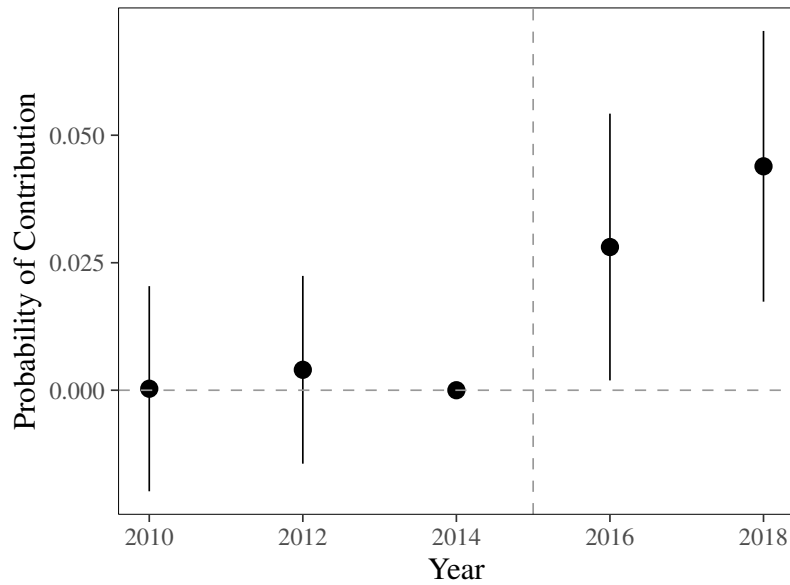
tribution of a family member, on average, by 3.4 pp—conditional on membership in the family (Table 2, column 1). The effect increases to shy of 4 pp when we repeat the analysis adding an interaction with an indicator of corporate contributions before the ban (Table 2, column 2).³² Since only 8.33 percent of family members contributed before the ban, the marginal effect represents a 40 percent increase (48 percent in politically active firms). We assess the plausibility of parallel trends with the following event-study specification:

$$\text{Contribution}_{ijt} = \sum_{\tau \neq 2014} \mathbb{1}(t = \tau) \times (\beta_{\tau} \text{Family Ties}_{ijt} + \gamma_{\tau}^{\top} \mathbf{X}_{ijt}) + u_i + v_{jt} + \epsilon_{ijt}, \quad (3)$$

where β_{τ} captures the dynamic marginal effect of a family tie on the contribution probability of family members after the ban (setting $\beta_{2014} = 0$), and the other parameters are as in Equation 2.

³²Using a binary measure, the effect of membership in the controlling family on the probability of contribution after the ban is 9.7 pp (SI Table H.1).

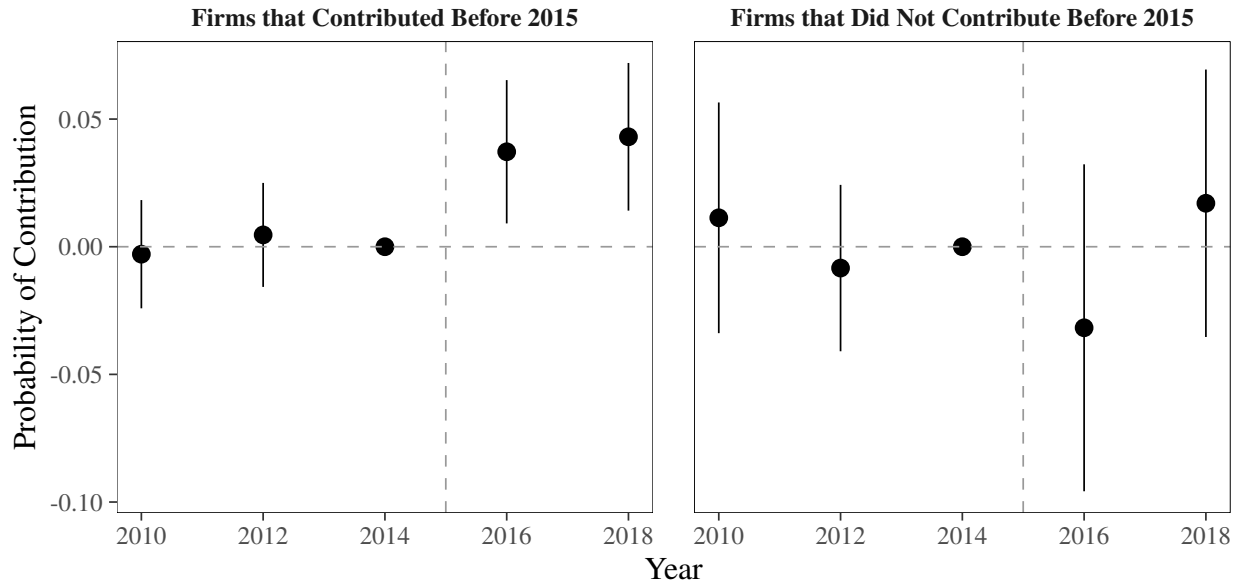
Figure 2: Dynamic effects plot



Notes: Coefficients from Equation 3. Bars are 95 percent confidence intervals. 2014 is the omitted year. The β_t represent departures from firm-specific parallel trends for individuals who are members of the controlling family.

As required by the parallel trends assumption, the pre-ban estimates of β_t are indistinguishable from zero (Figure 2). The post-ban estimates are consistent with the ones reported in Table 2. Breaking down the analysis by whether firms contributed before the ban, the positive effects are concentrated in hitherto politically active firms (Figure 3).

Figure 3: Dynamic effects, by previous contributions



Notes: Point estimates are coefficients from Equation 3, interacting with an indicator of whether the firm in the pre-ban period. Bars are 95 percent confidence intervals. 2014 is the omitted year. The β_t represent departures from firm-specific parallel trends for individuals who are members of the controlling family.

Family Members Influence Each Others' Contribution Decisions

Here, we study whether individual contribution decisions are interrelated. Specifically, we test the second empirical implication of our theory, namely, that (i) the collective action problem posed by the ban should turn contributions by non-family related individuals into strategic substitutes—since they can free-ride on each other's contributions—and (ii) contributions by family members into strategic complements—thanks to family ties' advantage in overcoming cooperative dilemmas.

We estimate the effect of the behavior of an individual's peers on her contribution decision. We focus on two types of peers: those in the network induced by family ties and those in the network induced by membership in a firm's leadership. We estimate the following linear model:

$$y_{ift} = \beta I_{ift}^{\text{family}} + \rho \sum_{j \in N_i^{\text{family}}} y_{jft} + \delta \sum_{j \in N_i^{\text{firm}}} y_{jft} + \gamma^\top \mathbf{X}_{it} + u_{ft} + \epsilon_{ift}, \quad (4)$$

where y_{ift} indicates a contribution by individual i in firm f in year t , I_{ift}^{family} indicates whether individual i belongs to the family that controls firm f in year t (if f is a family firm), N_i^{family} is the set of members of i 's family that are in the leadership of the firm (and is empty if i is not in the controlling family), N_i^{firm} is the set of individuals j in the leadership of firm f excluding i , \mathbf{X}_{it} is a vector of individual characteristics in year t , u_{ft} is a firm-year fixed effect, and ϵ_{ift} is an error term.

We seek to estimate ρ and δ , which measure the marginal effect of a contribution by a member of the family network and a member of the firm network, respectively, on the probability that individual i makes a contribution.³³ A positive marginal effect indicates that a contribution by peer j increases the likelihood of a contribution by individual i —that is, their contributions are complements. Conversely, a negative marginal effect is evidence that contributions are strategic substitutes. As per our theory, the ban on corporate contributions should increase ρ —it makes contributions complements among family peers—but decrease δ —it makes contributions substitutes among firm peers.

Estimating peer effects presents two challenges. The first one is endogeneity: peers' actions (the independent variable) are affected by the individual's own actions (the dependent variable)—in Equation 4 both family contributions and firm peers' contributions are correlated with the error term, making the OLS estimator inconsistent. The second challenge is homophily—individuals in the same network may share unmeasured characteristics—which may have induced selection into such networks—and their error terms might be correlated, further invalidating the OLS estimator.³⁴

³³This implies that if individual i has six family members, but only three start contributing, the family peer effect is 3ρ .

³⁴This last problem could be assuaged by adding firm-year fixed effects to the OLS estimator. However, we do not do this, since it would mechanically introduce a downward bias on δ —keeping the mean probability of donating in

To address these two problems, we use a two-stage least squares (2SLS) estimator with firm-year fixed effects (Wooldridge, 2010, p.354). We instrument the contributions of i 's neighbors with their individual characteristics. Specifically, we use a vector of characteristics of a i 's neighbors in her family and firm networks as instruments for their respective contributions.³⁵ To construct these instruments, we use observable characteristics of individuals that are predictive of contributions: membership in the top management, membership both in management and in the board of directors, fraction of voting shares owned, public sector experience, experience in elected office, and age.³⁶

The validity of this estimator requires an 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,³⁷ 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. This assumption is plausible since we flexibly account for any unobserved effects within firms by including firm-level fixed effects. Such fixed effects also assuage homophily concerns, since they absorb the common effects of shared characteristics that could be causally related to membership in the same firm.

a given firm constant (absorbed by u_{ft}), a higher contribution by peers necessarily implies a lower contribution by a given individual (making $\delta < 0$). By contrast, the 2SLS is guaranteed to be consistent when including fixed effects (Wooldridge, 2010, p.354).

³⁵F-statistics in Table 3 are significantly higher than conventional and more conservative thresholds (Lee et al., 2021).

³⁶Results do not depend on the particular choice of instruments (see SI Section B.3).

³⁷More precisely, conditional on the common firm-year fixed effect, u_{ft} , and the family-membership indicator,

I_{ift}^{family} .

Table 3: Peer effects estimates

	OLS		2SLS	
	Before 2015	After 2015	Before 2015	After 2015
	(1)	(2)	(3)	(4)
Contributions by Family Peers	0.011 (0.014)	0.094*** (0.014)	0.045 (0.038)	0.080** (0.025)
Contributions by Firm Peers	0.002** (0.001)	0.005*** (0.001)	0.004* (0.002)	-0.001 (0.001)
Family Member	0.025* (0.012)	0.052* (0.023)	0.009 (0.014)	0.059* (0.026)
Observations	23380	10955	23380	10955
Year FE	✓	✓		
Firm × Year FE			✓	✓
First Stage F-stat for Contributions by Family Peers			334.856	234.443
First Stage F-stat for Contributions by Firm Peers			2774.715	1188.633

Notes: Estimates from Equation 4. “Contributions by Family Peers” is $\sum_{j \in N_i^{\text{family}}} y_{jft}$, the number of members of the individual’s family who make campaign contributions in an election cycle. It can only be positive for members of the controlling family of a firm. “Contributions by Firm Peers” is $\sum_{j \in N_i^{\text{firm}}} y_{jft}$, the number of 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, employing the sum of the exogenous characteristics of peers as instruments. Controls include membership in the top management, membership both in management and in the board of directors, fraction of voting shares owned, having worked in the public sector, having served in elected office, and age. All specifications include year fixed effects, and Columns 3 and 4 include firm-year fixed effects. Standard errors clustered at the individual level. Total sample size is lower ($N = 34,335$) than in the estimation of Equation 2 ($N = 38,192$) because of missing data in the age variable.

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

We estimate Equation 4 using OLS and 2SLS, breaking down the data into pre- and post-ban periods. Consistent with our expectations, the results in Table 3 indicate the existence of positive peer effects in the family network following the ban. The 2SLS estimate that the probability of contribution by a member of the controlling family increases by 8 pp³⁸ if another family member starts contributing.³⁹ We find no evidence of positive peer effects in the family before the ban. The opposite pattern holds for the firm network: peer effects are positive before the ban but are muted

³⁸The fact that these effects are larger than the difference-in-differences estimates—about 3.4 pp—makes intuitive sense. The latter captures the effect of simply *having* an additional family member, while the former reflects the contribution *decision* of an additional family member.

³⁹A comparison between the OLS and the 2SLS shows that OLS is biased upward. This would be consistent with the presence of homophily—positive selection into the family network—if this estimate were affected exclusively by

afterward, consistent with the prediction that non-kin-related individuals are unable to overcome the cooperative dilemma.⁴⁰ Overall, the results suggest that the ban altered the social logic of contributions, creating strategic complementarities in family members' decisions, while depressing those of firm members unrelated by family ties.

Alternative Mechanisms

Reputational Effects of Corruption Scandals

Here, we discuss the possibility that the effects might be driven by the fact that the ban was enacted after a major corruption scandal rather than by the ban itself. Corruption scandals might affect campaign contributions through a reputational, “scare-off” effect, making campaign donations more subject to public scrutiny or less legitimate, and depressing the overall amount of money in politics. Note, however, that this would only explain our results if scandals affected family and non-family firms differentially—with family firms still being able to substitute individual for corporate contributions. We address this possibility in SI Section E using a previous major corruption scandal—popularly known as *Mensalão*—as a placebo. Considering national elections, this scandal did not increase the probability of contributions by family members. For municipal elections, the probability of contribution increased by about 1 pp, an effect much smaller—and estimated

an homophily bias.

⁴⁰To account for the possibility that this effect could be generated by *any* ties, we generate random ties among individuals in leadership positions. The ties induced by one thousand random networks do not achieve an effect comparable to that of family ties. Similarly, we re-estimate Equation 4 using alternative networks defined by (i) public sector peers and (ii) higher education peers. These networks do not yield the peer effects induced by the family network, especially after the ban and in the 2SLS specification. See SI Section B.2.

noisily—than the one induced by the 2015 ban.⁴¹ Importantly, the *Mensalão* scandal did not decrease the amounts contributed by firms and their leadership (SI Figure E.1, right panel). Overall, our results do not appear to be driven by the reputational effect of corruption scandals.

Substitution Towards Illegal Contributions

In Brazil, a small literature and journalistic accounts revolve around the issue of illegal campaign donations, known as *Caixa dois*. Indeed, shortly after the Supreme Court ruling, some experts were skeptical, fearing that it would increase off-the-books donations.⁴² While this conjecture is plausible, we can study legal contributions only. However, our findings suggest that substitution to illegal donations is unlikely to be the main story. First, if firms could make illegal donations easily as legal ones, we would likely not observe substitution in legal contributions—the existence of substitution as a behavioral response is strongly suggestive that the ban was binding. Second, if family firms were particularly prone to or capable of illegal donations, we would expect lower, not higher, substitution in legal donations by such firms. Furthermore, even if it were true that some firms have greater capacity to donate illegally, Equation 2 includes Firm \times Year fixed effects, which absorb this variation.

Preference Homogeneity

Non-family firms' failure to counteract the ban on corporate contributions could potentially stem from frictions among board members if, for example, they have more heterogeneous preferences compared to family members. Preference homogeneity could, thus, be an alternative mechanism behind our results. Note that if preferences differed systematically between family and non-family

⁴¹This small estimate, however, should be taken with a grain of salt since the parallel trends assumption does not appear to hold before this event (SI Figure E.1, left panel).

⁴²See, for example: *Oxford Human Rights Lab*, 12/16/2015.

firms, we would expect such differences to exert a relatively constant effect on political behavior. Instead, our theory posits the activation of cooperative behavior within family firms in the presence of a collective action problem. We present two pieces of evidence against this interpretation. First, the estimates in Table 3 show that peer effects arise only after the ban, but not before, as a preference-based explanation would predict. Second, preference homogeneity may result in a greater similarity of contributions in family firms. We study whether the contributions of family members are more similar to each other compared to those of non-family members. Using a measure of the degree of similarity between contribution portfolios, we document that contributions by family members are not more similar in general, nor do they become more similar after the ban, which would be the case if the policy promoted some kind of coordination on the same parties or candidates (SI Table D.1). In sum, the evidence suggests that family ties help solve the collective action problem by increasing the probability of contributions, not by changing their target.⁴³

Authority Structure within the Controlling Family

Families are based on authority, with older generations wielding authority over younger generations (Todd, 1985; Bau and Fernández, 2021). Thus, influence among family members could be directional, with older generations issuing commands followed by younger ones—in contrast to our theory, which does not entail directional influence. An alternative mechanism consistent with our results would posit that families can simply solve the collective action problem by command. To study this possibility, we first examine whether the substitution effect is mainly driven by the older or the younger generation, when more than one generation is present in the firm. After the ban, older and younger generations seem to contribute in roughly equal proportions in hitherto politically active firms (SI Table G.1, left panel). Second, we replicate the peer effects analysis by partitioning the family into different generations defined by the levels of the family

⁴³See SI D for more details.

tree, thus classifying ties as upward (from lower to higher generations), downward (from higher to lower generations), and horizontal (between members of the same generation). We re-estimate Equation 4, separately estimating the effect of each type of family tie. Post-ban peer effects in the 2SLS specification appear to be driven by upward ties—i.e., flowing from the younger to the older generation—consistent with substitution from higher generations being slightly larger (SI Table G.1, right panel). These results provide evidence against the idea that family firms solve the collective action problem by command.

Conclusion

How to reduce business political influence has long been a vexing question for scholars and policymakers. This article analyzed the effects of campaign finance regulation seeking to curtail the political influence of business. Our results reveal that, while the ban on corporate contributions in Brazil was effective at reducing the total amount of money in politics, it created a bifurcation in political behavior across firm types. Specifically, we showed that family firms are more capable of circumventing its intended effect. Leveraging a recent reform in Brazilian electoral law and employing a dataset on family ties within firms, we provided evidence consistent with the hypothesis that family firms are more capable of substituting individual for corporate contributions. Following the ban, members of controlling families in leadership positions in hitherto politically active firms increased their probability of contributing to politics.⁴⁴ We also provided evidence that contribution decisions are influenced by relatives in the same family network.

⁴⁴Importantly, in this paper we document substitution by an important firm type within the same policy instrument—campaign contributions—a key channel of political influence in this context (Schneider, 2004). It is possible that non-family firms attempted to counteract the effect of the ban by employing other policy instruments or strategies, such as worker mobilization. Substitution across policy instruments could be a fruitful avenue for further research.

Should countries ban corporate campaign contributions? The ban drastically reduced the amount of (legal) money in politics. However, the evidence in this article contains an important caveat. Despite its intention to curtail the political influence of business, the ban on corporate contributions effectively empowered family firms—an economically and politically relevant actor in Latin America and across the developing world. The adaptation capacity conferred by families might help explain the persistence of family firms in Latin America—and of what has been dubbed “hierarchical capitalism” (Schneider, 2013). By revealing an unexpected obstacle to campaign finance reform, our results contribute to understanding the persistence of political power in a region with high levels of political inequality (Carnes and Lupu, 2015). Our findings thus suggest a complementarity between less efficient forms of corporate governance and political inequality.

More broadly, we shed light on the mechanisms behind institutional weakness (Brinks et al., 2019), underscoring its *pre-institutional* sources. Specifically, we provide micro-level evidence showing how the internal features of organizations enable them to bypass the intended goal of regulation. By expounding a case of how informal structures can interfere with formal regulation, our findings support a relational view of state capacity (Migdal, 1988; Wang, 2022).

Finally, we speak to a broader debate about whether policy interventions can change underlying social institutions. While recent work documents that policy can, in fact, affect cultural norms—see Ashraf et al. (2020); Bau (2021)—our findings offer a cautionary tale about the capacity of programmatic policy to alter underlying structures.

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Supporting Information

Kin in the Game: How Family Ties Help Firms Overcome Campaign

Finance Regulation

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A. Sample Characteristics

Table A.1: 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 (see [here](#) for these codes and their meaning), excluding NGOs and political candidates.

B. Discussion of the Peer Effects Model

B.1. Estimation and identification assumptions

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

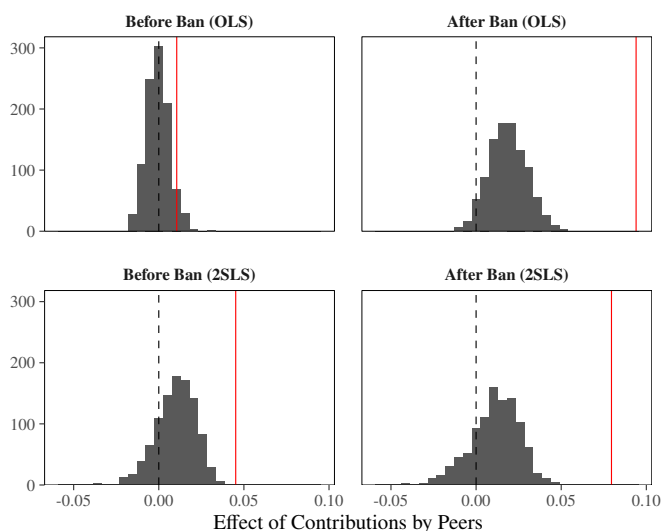
ASSUMPTION 1. We assume that $\mathbb{E}(\epsilon_{itf} | I_{ift}^{\text{family}}, \{x_{jt}\}_{j \in f}, f, t) = 0$ and, given any two individuals $i \neq j$ from firms f, f' in times t, t' , $\epsilon_{itf}, \epsilon_{j't'f'}$ are conditionally independent given $I_{ift}^{\text{family}}, \{x_{kt}\}_{k \in f}, f, t, I_{j't't'}^{\text{family}}, \{x_{kt'}\}_{k \in f'}, f', t'$.

This assumption is plausible since we flexibly account for any unobserved effects within firms by including firm-level fixed effects. Such fixed effects also assuage concerns about homophily, since they absorb the common effects of shared characteristics that could be causally related to membership in the same firm.

B.2. Peer Effects Robustness: Placebo Ties

In this section we address the possibility that the peer effect estimates 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 of families) in leadership positions in family firms (thus controlling for between-firm variation). We reestimate Equation 4 using these random ties and report the estimates of 1,000 random networks (Figure B.1) and the associated p-values (Table B.1). The results reject the null hypothesis that the effect of the family ties is indistinguishable from that of random ties (in a network of roughly the same size) after the ban. This is evidence that our results do not arise mechanically.

Figure B.1: 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 estimators before and after the ban. The bottom row displays the 2SLS estimators before and after the ban.

Table B.1: 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 show the results of two-sided hypotheses tests, where the null hypothesis is that the effect of the contributions by family peers is as small (in absolute value) as the effect of contributions by random peers, and the test statistic is the estimator of peer effects from Equation 4.

Since individuals belong to multiple networks, we reestimate Equation 4 using other networks that we can reconstruct with the data. We consider the network of public sector peers—defined by individuals who were employed in the public sector at some point according to the biographical sketches in the CVM data—and the network of higher education peers—individuals who obtained a degree from the same university. In the 2SLS specification there are no peer effects after the ban for either network (Table B.2).

Table B.2: Peer effects placebo: alternative networks

	OLS		2SLS	
	Before 2015	After 2015	Before 2015	After 2015
	(1)	(2)	(3)	(4)
<i>First Placebo: Public Sector Peers</i>				
Contributions by Public Sector Peers	0.018*** (0.005)	0.019* (0.008)	0.004 (0.005)	0.008 (0.009)
Contributions by Firm Peers	0.002** (0.001)	0.006*** (0.001)	0.003 (0.002)	-0.001 (0.001)
Public Sector	0.077** (0.028)	0.040 (0.029)	0.047 (0.028)	0.041 (0.027)
Observations	23380	10955	23380	10955
Year FE	✓	✓		
Firm × Year FE			✓	✓
First Stage F-stat for Contributions by Public Sector Peers			3691.841	726.934
First Stage F-stat for Contributions by Firm Peers			2793.656	1192.117
<i>Second Placebo: Higher Education Peers</i>				
Contributions by Higher Education Peers	0.001 (0.002)	0.009* (0.003)	0.001 (0.003)	0.001 (0.003)
Contributions by Firm Peers	0.002* (0.001)	0.005*** (0.001)	0.003 (0.002)	-0.001 (0.001)
Higher Education	0.015** (0.006)	0.015* (0.007)	0.013* (0.006)	0.014 (0.007)
Observations	23380	10955	23380	10955
Year FE	✓	✓		
Firm × Year FE			✓	✓
First Stage F-stat for Contributions by Higher Education Peers			1751.192	593.216
First Stage F-stat for Contributions by Firm Peers			2746.177	1207.548

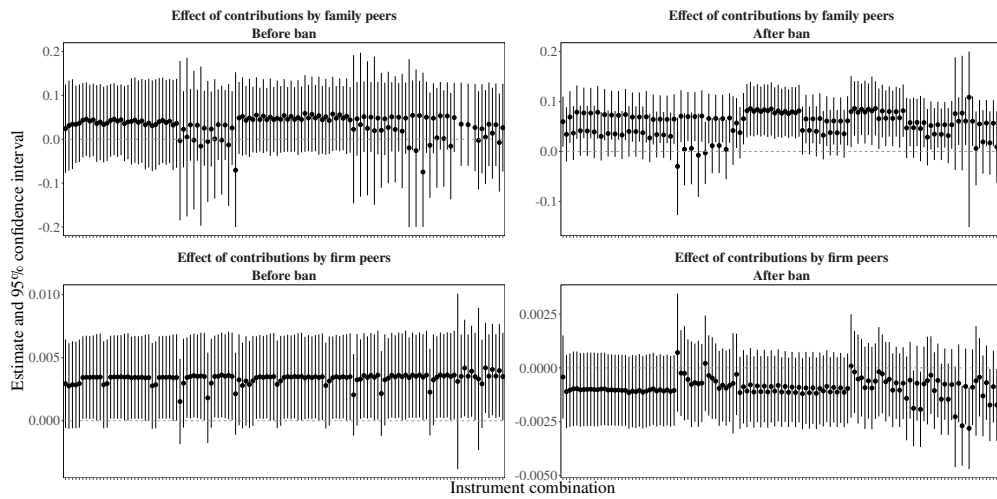
Notes: Estimates from Equation 4. Notes as in Table 3. All specifications include year fixed effects and Columns 3 and 4 include firm-year fixed effects. Standard errors clustered at the individual level.

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

B.3. Robustness to Different Instrument Combinations

Figure B.2 shows 2SLS estimates from Equation 4 with all possible non-empty subsets ($2^7 - 1$) of the 7 instruments ($\sum_{j \in N_i} x_{jft}$ with x being membership in the top management, membership in the board of directors, membership both in management and in the board of directors, fraction of voting shares owned, having worked in the public sector, having served in elected office, and age). Looking at family peer effects, the top-left panel shows that none of the estimates are significant at the 95 percent level before the ban. The top-right panel, in contrast, shows that 97.6 percent of the estimates are positive and 63 percent are significant. Looking at firm peer effects, a comparison of the bottom-left and the bottom-right panels, the coefficient for firm peer effects is muted after the ban, consistent with our theory.

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



Notes: Each vertical bar plots a second stage 2SLS estimate from Equation 4 and the associated 95% confidence interval using one of the non-empty subsets ($2^7 - 1$) of the 7 instruments ($\sum_{j \in N_i} x_{jft}$ with x being membership in the top management, membership in the board of directors, membership both in management and in the board of directors, fraction of voting shares owned, having worked in the public sector, having served in elected office, and age).

C. Ownership Concentration as a Potential Confounder

Table C.1: 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 a holding, foreign or state-owned, assets, income, age, percentage of ordinary shares owned by natural persons, Herfindahl index of ordinary shares in the hands of the ultimate owners, percentage of shares in free float, and largest shareholder gap. Standard errors are clustered at the firm level. See Table J.1 for the exact variables definitions.

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

D. Similarity of Contributions by Family Members

We study whether contributions by family members are more similar compared to those by individuals unrelated by family ties, which could be evidence of higher preference homogeneity among family members. To do so, we compute the cosine similarity between contribution portfolios, a measure recently used by [Bertrand et al. \(2020\)](#) to study convergence in contribution patterns after acquisitions. For each firm and each year, we consider two groups: family members (if the firm is a family firm) and the rest of the individuals in leadership positions. For each of these groups, we consider those individuals who made contributions in a given year, and compute the cosine similarity between their contribution portfolios: if individual i contributed x_{ij} dollars to party j , for $j = 1, \dots, P$, and we let $y_{ij} = \log(x_{ij} + 1)$, then the cosine similarity between the contributions by individuals u and v is defined as:

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

This measure captures the degree of similarity between contribution portfolios. It takes the value 0 if the individuals contributed to disjoint sets of parties, and 1 if they contributed to the same parties in the same proportion (in log scale). To measure the degree of similarity in the contributions by each group's members, we compute the average of the cosine similarities for each

pair of members of the group. We call this magnitude the *mean cosine similarity* of the group. Table D.1 (left panel) shows that there is no evidence that family members’ contributions are more similar nor that similarity increased after the ban. Table D.1 (right panel) reports the average of the mean cosine similarity by type of tie and year. While in general family members’ contributions are slightly more similar than those of unrelated firm members, the difference is small and, as reported above, statistically insignificant.

Table D.1: Similarity of contributions within firms, by type of tie (left panel), and by type of tie and year (right panel)

	Mean Cosine Similarity		Mean Cosine Similarity		
	(1)	(2)	Year	Family Members	Other Individuals
Family Members × Post 2015	-0.034 (0.091)	-0.087 (0.079)	2010	0.54	0.46
Family Members	0.057 (0.074)	0.099 (0.081)	2012	0.47	0.37
Post 2015	-0.038 (0.035)		2014	0.36	0.35
			2016	0.32	0.37
			2018	0.49	0.36
Observations	518	518			
Adjusted R ²	-0.002	0.181			
Firm FE		✓			
Year FE		✓			

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

Notes: Estimates of a regression of the mean cosine similarity, computed separately for family and non-family members, for each firm and year in our sample on an indicator of the type of group (defined by family ties or not) and an indicator of the post-ban period. Column 1 reports estimates from a pooled OLS model. Column 2 includes firm and year fixed effects. Standard errors clustered at the firm level.

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

E. Placebo Treatment: The Mensalão Corruption Scandal

We consider the possibility that the effects might be driven by the fact corruption scandals could affect campaign contributions through a “scare-off” effect, depressing the amount of money in politics. We discuss these results in the alternative explanations section of the article.

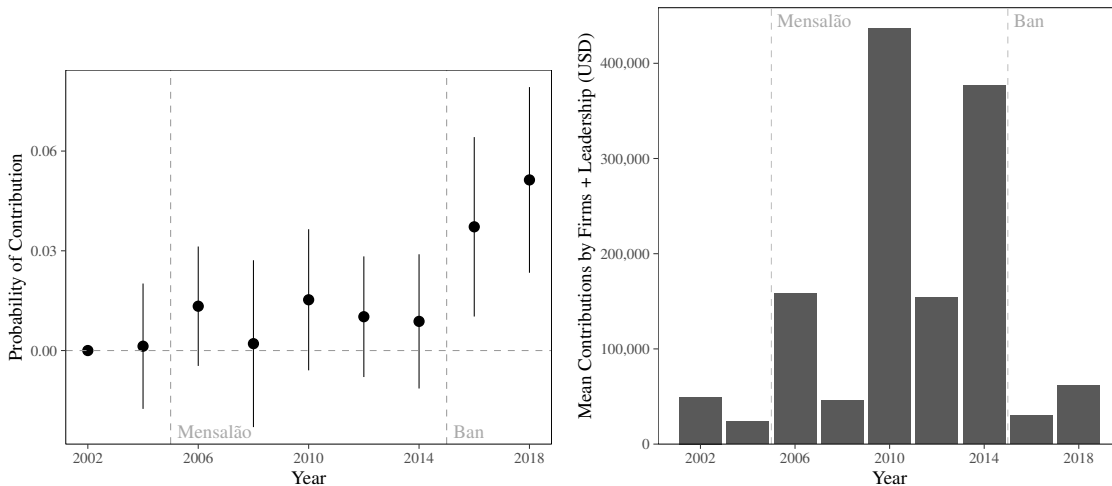
Table E.1: Difference-in-differences specification using the *Mensalão* scandal as a placebo treatment

	Including Municipal		Excluding Municipal	
	Mensalão	Ban	Mensalão	Ban
	(1)	(2)	(3)	(4)
Family Ties × Post Shock	0.010 (0.006)	0.035*** (0.010)	0.013 (0.008)	0.044*** (0.013)
Family Member × Post Shock	-0.006 (0.021)	0.014 (0.027)	-0.013 (0.029)	-0.007 (0.041)
Manager × Post Shock	0.009 (0.007)	0.006 (0.009)	-0.005 (0.009)	0.009 (0.014)
Manager and in Board of Directors × Post Shock	-0.016 (0.013)	0.027 (0.017)	-0.015 (0.019)	0.029 (0.023)
Politician × Post Shock	-0.012 (0.039)	0.041 (0.047)	-0.034 (0.048)	0.058 (0.085)
Worked in Public Sector × Post Shock	-0.007 (0.018)	0.020 (0.025)	-0.014 (0.022)	0.051 (0.040)
Fraction of Voting Shares Owned × Post Shock	-0.000 (0.035)	0.125* (0.054)	-0.064 (0.057)	0.119 (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) comprise years 2006-2018. *Mensalão* regressions (columns 1 and 3) comprise years 2002-2014. While we use data on contributions going back to 2002, since data on firms and their leadership only go back to year 2010, we use the earliest data period available for this analysis.

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

Figure E.1: *Mensalão* scandal. Left panel: dynamic effects plot. Right panel: Average contributions by firms and leadership



Notes: Left panel: Estimates from Equation 3, taking 2002 as base year. Bars are 95 percent confidence intervals. The β_t represent departures from firm-specific parallel trends for family members. Right panel: Average Contributions by firms and leadership (2002-2018). The vertical dotted lines denote the *Mensalão* scandal and the 2015 ban on corporate contributions.

F. Theoretical Framework

Let L be the leadership of a firm, i.e., the set of members of the top management and the board of directors. Let F be the set of members of the controlling family. Individuals $i \in L$ can contribute money $y_i \geq 0$ to political campaigns. Before the ban, the firm can donate $y_f \geq 0$. Let $y = y_f + \sum_{i \in L} y_i$ be the total amount of contributions. We assume that contributions create value $f(y) = \frac{1}{2}y^{*2} - \frac{1}{2}(y - y^*)^2$ for the firm, where $y^* > 0$ is the optimal amount of contributions.¹ The function f satisfies $f(0) = 0$, $f' > 0$ for $y < y^*$, and $f'' < 0$, and it is maximized at $y = y^*$. In other words, we assume that the rents obtained from campaign contributions have decreasing marginal returns, and, after reaching their peak, the opportunity cost of the use of money dominates.²

The timing of the interaction is as follows: (i) Each individual $i \in L$ simultaneously decides the sum of money they will donate to political campaigns, $y_i \geq 0$. (ii) If allowed, the firm chooses the size of the corporate contribution, $y_f \geq 0$. Otherwise, $y_f = 0$.

The payoff for an individual i who is not a member of the controlling family is

$$u_i = \underbrace{s_i f(y)}_{\text{share of value added to the firm}} + \underbrace{(\gamma^\top x_i + \epsilon_i)y_i}_{\text{individual incentives}} + \underbrace{\zeta \sum_{j \in L-i} y_j y_i}_{\text{social incentives}} - \underbrace{\frac{1}{2} c y_i^2}_{\text{cost}},$$

where $s_i \in (0, 1]$ is the share of the firm's value that the individual internalizes (because of, e.g., stock ownership, performance-based compensation, or career concerns), $(\gamma^\top x_i + \epsilon_i)y_i$ measures a individual preference for contributions (driven by, e.g., ideology), $\zeta \sum_{j \in L-i} y_j y_i$ (with $\zeta \geq 0$ and $L-i = L \setminus \{i\}$) measures a social incentive to donate (i.e., the more others donate, the more each individual wants to donate), and $-\frac{1}{2} c y_i^2$ (with $c > 0$) measures the opportunity cost of spending. We assume that individual incentives to contribute can be explained by a vector of observable individual characteristics x_i , with coefficients γ , and an unobservable (stochastic) term ϵ_i . The payoff for the firm is simply $u_f = f(y)$.

The payoff for a family member $i \in F$ is

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

where $\alpha \in [0, 1)$ measures the extent to which the individual internalizes the welfare of the rest of the family members, $F-i = F \setminus \{i\}$ is the set of family members excluding i , and \tilde{u}_i is defined the same way as for $i \in L \setminus F$:

$$\tilde{u}_i = s_i f(y) + (\gamma^\top x_i + \epsilon_i)y_i + \zeta \sum_{j \in L-i} y_j y_i - \frac{1}{2} c y_i^2.$$

¹In our context, contributions add value to the firm by facilitating access to, for example, subsidized loans from the development bank, procurement contracts, among other benefits. See Section .

²The specific functional form is chosen for tractability.

Replacing, we obtain

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

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 et al., 2017; Gelfand, 2019; Harrington and Gelfand, 2014; Winkler, 2021). Let α_{pre} be the baseline value of the parameter before the ban, and let α_{post} be the new value.

ASSUMPTION 1. We assume that

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

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 above is needed to ensure that the individual and social incentives to donate do not induce individuals to contribute more than what the firm would donate optimally. 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 $\sum_{i \in L} y_i < y^*$.

Proof. By contradiction. Assume that $\sum_{i \in L} y_i \geq y^*$ 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 $\sum_{i \in L} y_i < y^*$, 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

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

$$\leq \max_{S \subset L} \left\{ \sum_{i \in S} (\gamma^\top x_i + \epsilon_i) \right\} + \left(\zeta(|L| - 1) + \frac{\alpha \zeta}{1 - \alpha} (|F| - 1) - c \right) y^* < 0,$$

contradiction (we used Assumption 1 in the last step). \square

ASSUMPTION 2. We assume that $\gamma^\top x_i + \epsilon_i \geq 0$ for every $i \in L$. In other words, the individuals don't have individual incentives not to contribute.³

F.1. Analysis when the Firm Can Make Contributions

Under Assumption 1 the firm chooses $y_f = y^* - \sum_{i \in L} y_i$, since it chooses y_f to maximize $f(y_f + \sum_{i \in L} y_i)$ and $\sum_{i \in L} y_i < y^*$ by Lemma 1. Given the contribution choices of other members, an individual $i \in L \setminus F$ who is not in the family has payoff

$$u_i = s_i f(y^*) + (\gamma^\top x_i + \epsilon_i) y_i + \zeta \sum_{j \in L-i} y_j y_i - \frac{1}{2} c y_i^2,$$

and therefore she chooses

$$y_i = \underbrace{\frac{\zeta}{c} \sum_{j \in L-i} y_j}_{\text{firm peer effects}} + \underbrace{\frac{\gamma^\top x_i}{c}}_{\text{effect of individual characteristics}} + \underbrace{\frac{\epsilon_i}{c}}_{\text{error term}}, \quad (5)$$

which is non-negative by Assumption 2. We can interpret $\frac{\zeta}{c}$ 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 $\frac{\gamma^\top x_i}{c}$.

If $i \in F$ is in the controlling family,

$$u_i = s_i^F f(y^*) + \alpha_{\text{pre}} \zeta \sum_{j \in F-i} y_j y_i + (1 - \alpha_{\text{pre}}) \left[(\gamma^\top x_i + \epsilon_i) y_i + \zeta \sum_{j \in L-i} y_j y_i - \frac{1}{2} c y_i^2 \right] + C_i,$$

where C_i doesn't depend on y_i . Therefore she chooses

$$y_i = \underbrace{\frac{1}{c} \frac{\alpha_{\text{pre}} \zeta}{1 - \alpha_{\text{pre}}} \sum_{j \in F-i} y_j}_{\text{family peer effects}} + \underbrace{\frac{\zeta}{c} \sum_{j \in L-i} y_j}_{\text{firm peer effects}} + \underbrace{\frac{\gamma^\top x_i}{c}}_{\text{effect of individual characteristics}} + \underbrace{\frac{\epsilon_i}{c}}_{\text{error term}}, \quad (6)$$

which, again, is non-negative by Assumption 2. Note that the peer effect given by firm peers is $\frac{\zeta}{c}$, the same as for non-family members, but family members have an extra intra-family peer

³This 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.

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, $\frac{\gamma^\top x_i}{c}$.

F.2. Analysis when the Firm Cannot Make Contributions

The firm chooses $y_f = 0$, hence individuals have an incentive to contribute to obtain the rents that the firm would obtain if it was allowed to donate, since they internalize the firm's value to some extent. In this case, if $i \notin F$,

$$\frac{\partial u_i}{\partial y_i} = -s_i \left(y_i + \sum_{j \in L-i} y_j - y^* \right) + \gamma^\top x_i + \epsilon_i + \zeta \sum_{j \in L-i} y_j - c y_i,$$

so

$$y_i = \underbrace{\frac{s_i}{c + s_i} y^*}_{\text{constant}} + \underbrace{\frac{\zeta - s_i}{c + s_i} \sum_{j \in L-i} y_j}_{\text{firm peer effects}} + \underbrace{\frac{\gamma^\top x_i}{c + s_i}}_{\text{effect of individual characteristics}} + \underbrace{\frac{\epsilon_i}{c + s_i}}_{\text{error term}}. \quad (7)$$

Note that the new peer effect $\frac{\zeta - s_i}{c + s_i}$ is smaller after the ban, since $s_i > 0$. This is because the ban creates a free-riding incentive: the more the others contribute, the fewer incentives each individual has to contribute herself. The expected baseline contribution amount is $\frac{s_i}{c + s_i} y^* + \frac{\gamma^\top x_i}{c + s_i}$. The ban has two effects. It reduces the strength of individual incentives to contribute, $\frac{\gamma^\top x_i}{c + s_i}$, by adding s_i to the denominator. However, it creates an incentive to contribute due to the partial internalization of the value of the contributions to the firm $\frac{s_i}{c + s_i} y^*$.

If $i \in F$, i.e., i is a member of the family,

$$\frac{1}{1 - \alpha_{\text{post}}} \frac{\partial u_i}{\partial y_i} = -\frac{s_i^F}{1 - \alpha_{\text{post}}} \left(y_i + \sum_{j \in L-i} y_j - y^* \right) + \gamma^\top x_i + \epsilon_i + \zeta \sum_{j \in L-i} y_j - c y_i + \frac{\alpha_{\text{post}}}{1 - \alpha_{\text{post}}} \zeta \sum_{j \in F-i} y_j,$$

so

$$y_i = \underbrace{\frac{s_i^F}{(1 - \alpha_{\text{post}})c + s_i^F} y^*}_{\text{constant}} + \underbrace{\frac{\alpha_{\text{post}} \zeta}{(1 - \alpha_{\text{post}})c + s_i^F} \sum_{j \in F-i} y_j}_{\text{family peer effects}} + \underbrace{\frac{(1 - \alpha_{\text{post}})\zeta - s_i^F}{(1 - \alpha_{\text{post}})c + s_i^F} \sum_{j \in L-i} y_j}_{\text{firm peer effects}} + \underbrace{\frac{\gamma^\top x_i}{c + \frac{s_i^F}{1 - \alpha_{\text{post}}}}}_{\text{effect of individual characteristics}} + \underbrace{\frac{\epsilon_i}{c + \frac{s_i^F}{1 - \alpha_{\text{post}}}}}_{\text{error term}}. \quad (8)$$

As is the case for non-family members, the firm peer effect $\frac{(1-\alpha_{\text{post}})\zeta - s_i^F}{(1-\alpha_{\text{post}})c + s_i^F}$ decreases relative to its value before the ban, $\frac{\zeta}{c}$. The family peer effect, however, becomes $\frac{\alpha_{\text{post}}\zeta}{(1-\alpha_{\text{post}})c + s_i^F}$, which increases relative to its value before the ban, $\frac{\alpha_{\text{pre}}\zeta}{(1-\alpha_{\text{pre}})c}$, if and only if $\alpha_{\text{post}} > \left(1 + \frac{s_i^F}{c}\right)\alpha_{\text{pre}}$. In other words, an increased family peer effect indicates that the ban strengthened social incentives within the family. Finally, we observe that the expected baseline contribution amount is

$$\frac{s_i^F}{(1-\alpha_{\text{post}})c + s_i^F}y^* + \frac{\gamma^\top x_i}{c + \frac{s_i^F}{1-\alpha_{\text{post}}}}.$$

The ban dilutes individual incentives to donate (the second term), relative to the pre-ban level, $\frac{\gamma^\top x_i}{c}$, as is the case for non-family members. Family members, however, increase their baseline contribution amount by more than non-family members, for two reasons. First, they internalize a greater share of the value of the contributions to the firm, s_i^F , than non-family members, who only perceive their individual share, s_i . Second, their individual cost of donations is diluted from c to $(1-\alpha_{\text{post}})c$, since these costs are private but bring about a collective benefit.

F.3. Taking Stock

In sum, 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 purely social incentives, *(ii)* reduces the effect of individual incentives to donate, 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 (like for non-family members), *(ii)* increases the baseline contribution for every member of the family, regardless of stock ownership or position in the executive hierarchy, and *(iii)* increases norms of reciprocity, amplifying the family peer effect. All these effects are stronger the stronger the norms of reciprocity within the family. The model illustrates *(i)* how regulation targeted at corporate campaign contributions changes the behavior of individuals, and *(ii)* how this effect differs for individuals with strong versus weak norms of reciprocity. The ban creates a collective action problem that weakens purely social incentives, but politically activates members who internalize each other's welfare, as is the case of family members.

F.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 Equation 5 and Equation 6.

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

which follows from Equation 7 and Equation 8. 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.

G. Disaggregating the Family

When more than one generation is present in the family we can disaggregate between the oldest generation and the younger members. In Table G.1 (left panel) we report the effect of the ban on the probability of making a contribution for different generations. We also re-estimate Equation 4 by partitioning families into generations given 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 (among two members of the same generation). We separately estimate the effect of each type of family tie (Table G.1, right panel).

Table G.1: Left panel: Difference-in-differences specification, different generations, downward ties. Right panel: Peer effects from upward and downward ties.

	Probability of Contribution		OLS		2SLS	
	(1)	(2)	Before 2015	After 2015	Before 2015	After 2015
	(1)	(2)	(1)	(2)	(3)	(4)
Family (Old Generation) \times Post 2015	0.122* (0.050)		-0.114** (0.035)	-0.091* (0.041)	-0.093 (0.088)	-0.021 (0.077)
\times The Firm Contributed Before the Ban		0.162** (0.060)		(0.041)	(0.088)	(0.077)
\times The Firm Did Not Contribute Before the Ban		-0.051 (0.045)		-0.029 (0.031)	0.066 (0.048)	0.133*** (0.038)
Family (Young Generation) \times Post 2015	0.114*** (0.027)		0.123*** (0.032)	0.175*** (0.030)	0.073 (0.084)	0.023 (0.066)
\times The Firm Contributed Before the Ban		0.129*** (0.030)		0.005*** (0.001)	0.004* (0.002)	-0.001 (0.001)
\times The Firm Did Not Contribute Before the Ban		0.067 (0.046)		0.061** (0.013)	0.012 (0.015)	0.052 (0.027)
Family (Only Generation) \times Post 2015	0.057 (0.031)		0.028*** (0.007)	0.018* (0.008)	0.030*** (0.007)	0.012 (0.008)
\times The Firm Contributed Before the Ban		0.047 (0.039)		10955 \checkmark	23380	10955
\times The Firm Did Not Contribute Before the Ban		0.058 (0.043)		\checkmark	\checkmark	\checkmark
Observations	38192	30621	23380	10955	23380	10955
Adjusted R ²	0.420	0.394	\checkmark	\checkmark	\checkmark	\checkmark
Firm \times Year FE	\checkmark	\checkmark				
Individual FE	\checkmark	\checkmark				
First Stage F-stat for Contributions by Family Peers					368.520	240.796
From Higher Generations						
From Lower Generations					299.025	248.252
First Stage F-stat for Contributions by Family Peers					257.647	205.971
From The Same Generation						
First Stage F-stat for Contributions by Firm Peers					1389.632	620.040

Notes: Estimates from Equation 4. "Contributions by Family Peers" is $\sum_{j \in N_i^{\text{family}}} y_{jft}$, the number of members of the individual's family who contributed to campaigns in the current election cycle. It can only be positive for members of the controlling family of a firm. "Contributions by Firm Peers" is $\sum_{j \in N_i^{\text{firm}}} y_{jft}$, 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 $\sum_{j \in N_i^{\text{family}}} x_{jft}$ and $\sum_{j \in N_i^{\text{firm}}} x_{jft}$, i.e., the sum of the exogenous characteristics of peers, as instruments for $\sum_{j \in N_i^{\text{family}}} y_{jft}$ and $\sum_{j \in N_i^{\text{firm}}} y_{jft}$. Controls include membership in the top management, membership both in management and in the board of directors, fraction of voting shares owned, having worked in the public sector, having served in elected office, and age. All specifications include year fixed effects and Columns 3 and 4 include firm fixed effects. Standard errors clustered at the individual level.
*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

H. Differences-in-Differences with Binary Treatment

Table H.1: Difference-in-differences specification (binary treatment)

	Probability of Contribution	
	(1)	(2)
Family Member \times Post 2015	0.097*** (0.020)	
\times The Firm Contributed Before the Ban		0.108*** (0.024)
\times The Firm Did Not Contribute Before the Ban		0.050 (0.030)
Manager \times Post 2015	0.010 (0.010)	0.006 (0.010)
Board of Directors \times Post 2015	0.015 (0.011)	0.015 (0.011)
Manager and in Board of Directors \times Post 2015	0.026 (0.017)	0.030 (0.021)
Politician \times Post 2015	0.030 (0.050)	0.027 (0.050)
Worked in Public Sector \times Post 2015	0.022 (0.025)	0.005 (0.023)
Fraction of Voting Shares Owned \times Post 2015	0.150** (0.055)	0.186* (0.082)
Observations	38192	30621
Adjusted R ²	0.420	0.394
Firm \times 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 column 2 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. See SI Table J.2 for variables definitions.

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

I. Dataset on Brazilian Listed Companies

Brazilian public firms are required to issue detailed reports to the country's securities regulator, known as *Comissão de Valores Mobiliários* (CVM). This information is available on the CVM website and can be queried under the following link: <http://sistemas.cvm.gov.br/>. Among the information firms disclose are structured reports (*Formulários de Referência*). Additional information

is contained in *Formulários Cadastrais*, which contain additional company data. The information in these reports includes, but is not limited to (i) basic accounting data: main sector of activity, assets, profits, and debt; (ii) ownership structure (proportion of shares traded in public markets, individuals and legal entities who own a block of voting shares, and, for legal entities, recursively, their ownership structure); (iii) data on members of the board of directors and top management (their names, position, professional experience—for example, whether they served in elected office or worked in the bureaucracy—; and (iv) family ties among individuals in leadership positions (directors, top executives, blockholders). See [Balán et al. \(2022\)](#) for more details.

J. Variables Definitions

Table J.1: Firm-level variables 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
Number of Individuals with Ties	Number of individuals in the top management and the board of directors who have family ties to members of the controlling family.	\mathbb{N}	CVM	2,148	0	21	0	1.7	2.5
Contributions by the Firm	We add the 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 the Firm + Subsidiaries	Same as above, but including donations by firms controlled by the firm.	\mathbb{R}_+	TSE	1,360	0	86,455,935	0	623,889.2	4,014,461
Contributions by the 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
Number of Parties to which the Firm Contributes	Number of parties to which the firm, its subsidiaries or the members of its leadership contributed.	\mathbb{N}	TSE	2,160	0	23	1	2	3.4
Effective Number of Parties to which the Firm Contributes	If the firm donated x_i US dollars to party $i = 1, \dots, n$, the effective number of parties is $(\sum_{i=1}^n x_i)^2 / \sum_{i=1}^n x_i^2$, or 0 if the firm did not make any contribution.	\mathbb{R}_+	TSE	2,160	0	10.3	1	1.2	1.5
BNDES Loans (dummy)	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
BNDES Loans / Assets	The combined value of all loans received in the period between two elections (or 0 if no loans were received) divided by the book value of the firm's assets (both in 2020 US dollars).	[0, 1]	BNDES	2,019	0	0.5	0	0	0
Assets (log)	Assets (book value).	\mathbb{R}_+	CVM	2,025	3.9	27.2	20.2	19.4	3.6
Income (log)	Gross income (net of sales taxes).	\mathbb{R}_+	CVM	1,783	0	25.8	19.7	18.9	3.7
Age (log)	Number of years since the firm was founded.	\mathbb{R}_+	CVM	2,160	0	5.3	3.4	3.2	1
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) <i>Services</i> , an indicator combining all industries in non-financial services, and (2) <i>Holdings</i> , an indicator for multi-industry holdings (considered separately from the CNAE financial services category).	Categorical	CNPJ	2,160					
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
Concentration of Ordinary Shares (Herfindahl)	If the ultimate owners $i = 1, \dots, n$ 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 in Free Float Preferential Shares (dummy)	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 (dummy)	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
Preferential Shares (dummy)	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 and the total fraction of shares she owns. 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
Institutional Ownership	Fraction of voting shares owned by legal persons or traded freely in the stock market.	[0, 1]	CVM	2,155	0	1	0.7	0.6	0.4

Table J.2: Individual-level variables 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	0.1	0.2
Number of Family Ties	Number of family ties to individuals in leadership positions in firms in the sample.	\mathbb{N}	CVM	38,192	0	13	0	0.2	0.8
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	87,590.4
Manager	Indicator of top management position (e.g., CEO or COO).	$\{0, 1\}$	CVM	38,192	0	1	0	0.4	0.5
Manager and in Board of Directors	Indicator of top management position and seat in the firm's board of directors.	$\{0, 1\}$	CVM	38,192	0	1	0	0.1	0.3
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	0.1
Politician	Whether an individual held elected office according to her biography.	$\{0, 1\}$	CVM	38,192	0	1	0	0	0.1
Worked in Public Sector	Whether an individual worked in the government according to her biography.	$\{0, 1\}$	CVM	38,192	0	1	0	0.1	0.3
Age (log)	Natural logarithm of age.	\mathbb{R}_+	CVM	34,335	2.9	4.5	4	3.9	0.2
Higher Education	List of Universities in the individual's biography.	List	CVM	38,192	0	8	1	1.3	1.3