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THE VOICE: THE SHAREHOLDERS' MOTIVES BEHIND CORPORATE DONATIONS DURING COVID-19

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The Voice: The Shareholders' Motives Behind Corporate Donations During COVID-19*

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Abstract

What motivates shareholders to become prosocial activists? We exploit the onset of the COVID-19 pandemic as a natural experiment to study activism at S&P500 corporations. Prominent individual and family shareholders supported covid-related corporate donations to bolster their reputations as, for the public, they are synonymous with the donating firms. Image gains, instead, do not pass through to institutional shareholders; also, due to the sinking stock market, these shareholders preferred to donate themselves rather than support donations at the firms in their portfolios. Our results point to media attention as a critical channel to incentivize institutional shareholders to support prosocial decisions.

JEL classifications: G32, G41, M14
Keywords: exit and voice, shareholder activism, social responsibility, charitable donations, COVID-19

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1 Introduction

Shareholders can influence a firm's decisions in several ways. The most direct way is to engage with a company's management to propose a preferred course of action. Alternatively, shareholders can transact a company's shares to show their concerns. These "voice" and "exit" strategies (Hirschman, 1970) are also pillars of shareholder activism over environmental, social, and governance (ESG) decisions, which are crucial in the current transition towards more responsible businesses by, for instance, incentivizing polluters to internalize their externalities (Hart and Zingales, 2017). Therefore, understanding the motives that lead shareholders to take action is essential to accelerate these positive changes. However, although a large body of evidence suggests that altruistic and image motives can lead investors to select prosocial portfolios (e.g., Riedl and Smeets, 2017, Hartzmark and Sussman, 2019, Barber *et al.*, 2021, Bonnefon *et al.*, 2022), we know neither what motivates shareholders to activism nor how motives vary across investors.

One of the main problems in identifying these motives is that although several tactics are available to activist shareholders, only a few of them can be observed. For example, shareholders can voice their concerns by emailing managers, requesting meetings with board members, or proposing non-binding resolutions to be voted on at the annual general meeting of the shareholders (AGM). The last option is the only publicly-observed action, but it generally follows the other types of engagement, which are less costly for shareholders (Gantchev, 2013). Since shareholder tactics ultimately depend on their preferences, focusing only on AGM votes substantially limits our understanding of activists' motives. Furthermore, to attribute a firm's social responsibility policies to shareholder preferences, shareholding must vary exogenously, which in practice may be elusive.

This paper fills this gap by studying the corporate decision to pledge charitable donations to help alleviate the fallout from the COVID-19 pandemic. Our main contribution is to uncover how shareholders influenced donation decisions and the underlying incentives they responded to. Taking advantage of the onset of the pandemic as a natural experiment, we find that image concerns drive major individual and family shareholders to pressure managers for donations. Instead, major institutional investors enjoy no such gains when the firms in their portfolios donate even though they still share the burden in terms of lower dividends.[1] As a result, we find that these shareholders restrained managers of firms in their portfolios from donating. We provide evidence that our results extend more

[1] Exploiting the 2003 Tax Reform Act, Masulis and Reza (2015) find that dividends increase as corporate giving decreases. Moreover, paying dividends is a way to signal a firm's solidity at times of market volatility (Jens, 2017), making corporate giving particularly costly during crises. For instance, corporate donations declined by 4.3% during the 2007-2009 financial crisis (The Center on Philantropy, 2010).

generally to sustainability issues using data on the reporting of ESG news over the 2012-2019 period. Overall, our results highlight the importance of shareholders' non-pecuniary motives for adopting sustainability practices at large corporations.

We focus on firms' charitable donations as a measure of corporate social responsibility during the pandemic because covid donations were large, varied over time even within a firm, and their measurement is easier than more encompassing ESG policies.[2] We use hand-collected data on the donations of S&P500 corporations between January and April 2020. We end our sample here to avoid contaminating our analysis with the effect of the Black Lives Matter movement that gathered considerable momentum in the late Spring, and may have also taken shareholders' attention away from the pandemic.

To confront the identification challenges mentioned above, we take advantage of the proxy voting rules establishing that shareholders can place proposals for the following AGM up until three months before the date of the past AGM. Thus, we exploit plausibly exogenous variation in AGM timing and define treated and control firms based on whether they have an AGM before April 15, 2020.[3] As covid rates advance, media attention for corporate donations increases and shareholders of treated firms need to engage more with managers over donations than similar shareholders of control firms as the former ones have one engagement tactic less available – i.e., AGM proposals. Thus, we compare the rate of covid-related donations of treatment and control firms to infer shareholder pressure.[4]

We employ this framework to learn about shareholders' motives for demanding donations. Since treated firms are under greater media scrutiny at the time of an AGM than control firms, the difference in donation rates across treatment and control groups effectively purges out pure altruism (e.g., Andreoni, 1990) and fiscal motives, as they are independent of the AGM date. We associate the remaining difference to reputation or image gains accruing to shareholders and investigate this channel by studying how shareholding composition – in terms of the share of equity held by individuals, families, and financial companies – affects donations.

[2]Donation decisions were economically important for large U.S. corporations – the average donation in our dataset is US$30 m. Because several donations are both in-kind and dollars, we mainly focus on the probability of observing a donation, as comparisons of in-kind donations across firms are hard to interpret.

[3]To ensure that the engagement tactics available for shareholders at treated firms are homogeneous across firms (i.e., they cannot place new proposals), we set the three-month period to start on January 15, the date when the first covid patient came to the U.S. from Wuhan, China (e.g., Holshue *et al.*, 2020).

[4]Our study differs from other studies on corporate donations in response to the COVID-19 pandemic (Palma-Ruiz *et al.*, 2020, García-Sánchez and García-Sánchez, 2020, Mahmood *et al.*, 2019, Chen *et al.*, 2021, Abbas *et al.*, 2020) because we focus on shareholder motives and account for endogeneity concerns. Several other studies use disasters for identification purposes. For instance, natural disasters are used by Barrot and Sauvagnat (2016) to study the propagation of shocks in production networks, and by Dessaint and Matray (2017) and Bernile *et al.* (2017) to study managers' risk taking behaviors and the way they perceive risks.

We find that treated firms are more likely to donate the more equity individuals hold. Blockholders, investors with more than 5% of a firm's equity and easily associated with a firm, drive this result. Influence percolates across the network of board members: board members at treated firms also pressure other firms they serve for donating. On the other hand, we show evidence that the share of institutional blockholders, especially banks, insurance companies, and mutual funds, negatively affects the donation rates of treated firms. Our interpretation is that sizable donations are expensive and potentially damaging for these investors during a crisis. Finally, older and better-paid CEOs are more likely to please the demand of blockholders, whether they are individuals or firms.

We consider several potential alternative mechanisms. First, small altruistic shareholders may have more gains from donations because a firm might be in a better position to procure or produce necessary products like face-masks or sanitizing gel than they could do themselves. We find little support for this hypothesis as companies with more dispersed individual ownership did not donate more, all else equal. Second, we consider whether managers decided to donate to signal prestige by proxying managerial freedom with the share of self-ownership (e.g., Masulis and Reza, 2015, Di Giuli and Kostovetsky, 2014). However, self-ownership negatively relates to the probability of donating as covid rates increase at treated firms compared to control ones. We also do not find any evidence of peer pressure: firms do not donate more if they see their competitors doing so. Thus, managers align with financial investors on average, favoring no donations. Finally, we exclude financial motives; cumulative abnormal returns are negative after a donation is made public, indicating that market participants view donations as a waste of resources.[5]

We then empirically relate our findings to image concerns and examine the implications for individual and institutional shareholders. We analyze how cumulative Google Trend scores of the names of the largest shareholders vary around the news date for individual and financial shareholders. We estimate that Google Trend scores are more than 50% greater for individual shareholders than for institutional shareholders in each of the ten days following a donation. Therefore, besides sharing the donation expense with the other shareholders, large individual investors also gain media exposure when the firm donates. Institutional investors do not receive this non-monetary payoff; as a result, we find that these firms donate themselves instead of having the firms in their portfolio donating. Thus, the estimated poor pass-through of image gains suggests that the social responsibility perimeter of large U.S. corporations appears to be smaller than their financial perimeter.[6]

[5] Negative stock market responses to CSR policies are not unheard of. Krüger (2015) finds a similar result when the CSR policy under scrutiny stems from agency problems and Serafeim and Yoon (2021) find that the relation between ESG news and returns is weak when ESG raters disagree on their ratings.

[6] Since we focus only on donations and image concerns, our results are not in direct contrast with a

We also investigate the external validity of our findings outside donations and the pandemic. Since every firm has an AGM each year, ESG measures must vary within a year to determine the implications of shareholder pressure around the AGM. Hence, we rely on a dataset of negative ESG news covering more than 600 of the largest U.S. corporations over the months between 2012 and 2019. The results from our event study approach, similar to that in Cengiz *et al.* (2019), shows that firms with a larger share of individual investors are less likely to observe negative news in the months following an AGM compared to firms with a larger share of institutional investors. However, the effect is transitory and spikes between two months before and two months after an AGM as, of course, image concerns are not the only determinants of firms' prosocial stances.

In sum, our approach allows us to establish that shareholders' images or reputations contribute to pro-social firms' decisions.[7] This channel matters for public policy because image gains to institutional investors like Blackrock and Vanguard may provide them with incentives to hire professional figures to pressure managers over sustainability concerns in an industry where Blackrock, for instance, had only 47 individuals in its investment stewardship teams to cover assets worth $7.4 tn in 2020.[8] Analogously, the New York City Pension System's Boardroom Accountability Project successfully influenced firms in its footprint to reduce their pollution (Naaraayanan *et al.*, 2021), and the Alliance for Bangladeshi Worker Safety, which includes several multinational apparel firms, successfully improved working conditions at firms in their supply chain after publicly committing to these goals (Boudreau, 2021). Therefore, facilitating the pass-through of reputation can be an effective way to ease the adoption of sustainability policies and, as a result, also improve the public perception of large corporations (Colonnelli and Gormsen, 2020).

The common views on corporate philanthropy see giving as either an efficient advertising tool for profit maximization through increased consumer demand and reduced consumer price sensitivity (e.g., Navarro, 1988, Brown *et al.*, 2006, Elfenbein *et al.*, 2012), as an insurance to reputational risks (e.g., Godfrey *et al.*, 2009), as a repair for sudden reputational issues (Akey *et al.*, 2021), as political capture (e.g., Bertrand *et al.*, 2021), or as an agency problem within the firm, where managers and insiders extract private benefits

literature showing that institutional investors drive corporate social responsibility (e.g., Dyck *et al.*, 2019), as these strategic decisions may depend on several other factors. For instance, Gibson and Krueger (2018) document a recent downward trend in the social stand of the investment portfolios of institutional investors but not in their environmental stand. To the extent that environmental policies are easier to measure and advertise, our results provide a mechanism for their finding. In a related paper, Mésonnier and Nguyen (2020) find that once investors are required to publicly report their financing of fossil energy, they divest from companies in that sector.

[7] A large theoretical and experimental literature points to image concerns and prestige as key drivers of donations for individuals and firms (e.g., Andreoni, 1990, Harbaugh, 1998, Bénabou and Tirole, 2010).

[8] Source: `https://www.ft.com/content/2714da14-c12d-46b2-8ecf-9aba3f665fdf`

from corporate donations to the detriment of shareholders (e.g., Jensen and Meckling, 1976, Masulis and Reza, 2015).[9] Our paper reverses this agency problem by showing both that shareholders can affect firms' prosocial decisions and the incentives different shareholders respond to.

While there is considerable empirical evidence investigating the foundations of impact investing (e.g., Flammer, 2013, Barber *et al.*, 2021), activist shareholders are more likely to employ a mixture of direct corporate governance interventions ("voice") and share sales ("exit") to affect a firm's social responsibility stance (e.g., Gollier and Pouget, 2014, Broccardo *et al.*, 2020). The main contribution of our paper is to refocus these theoretical analyses on shareholders' rewards and preferences, and to study the origin of prosocial shareholder activism empirically.[10] A growing literature suggests that managers and shareholders respond to various incentives (e.g., Di Giuli and Kostovetsky, 2014, Riedl and Smeets, 2017, Fioretti, 2021), and thus prosocial activism can spur from several motives (e.g., altruistic behaviors, reputational concerns, and political views). In light of recent results suggesting a negligible effect of "exit" strategies on ESG investments (Berk and van Binsbergen, 2021), we believe our contribution to be only a first step of a broader research agenda on the origins of prosocial activism and its governance implications.

The remainder of our paper is set out as follows. Section 2 provides a background on COVID-19, introduces the conceptual framework, and describes our dataset. Section 3 identifies the mechanism of shareholder pressure, while alternative mechanisms are discussed in Section 4. Section 5 considers the external validity of our findings. Section 6 analyzes differential image gains to various shareholder types, and Section 7 discusses the corporate governance implications of our findings. Section 8 concludes.

2 Background and Data

This paper leverages the COVID-19 pandemic as a quasi-natural experiment to elicit the motives that led shareholders to pressure managements and boards to donate towards covid relief. The COVID-19 virus, also known as the coronavirus, causes severe acute respiratory syndrome. The high fatality rates and quick spread of the disease has resulted in a global pandemic since the end of 2019. At the onset of the pandemic, governments and

[9] These views on the use of donations for profitability (e.g., Lev *et al.*, 2010), reputational risks (e.g., Vanhamme and Grobben, 2009, Lins *et al.*, 2017, Barrage *et al.*, 2020, Lending *et al.*, 2018) and agency problems (e.g., Ferrell *et al.*, 2016) naturally extend beyond corporate donations to include investments in corporate social responsibility (e.g., Bénabou and Tirole, 2010, Kitzmueller and Shimshack, 2012).

[10] Several empirical papers document shareholder activism related to board dissatisfaction (e.g., Del Guercio *et al.*, 2008), investors' value maximization (e.g., Del Guercio and Hawkins, 1999, Smith, 1996, Crane *et al.*, 2016), and executive pay (e.g., Cuñat *et al.*, 2016).

health organizations worldwide struggled to keep up with the sudden high requirements for specific medical devices, such as sanitizing gel, face masks and ventilators, that were needed to contain the spread of the infection and to heal patients.

In this scenario, legislators across various jurisdictions demanded the public to step up and to participate to the common effort against COVID-19. Individuals and corporations played important roles by donating to charities both in cash and in kind.[11] Our analysis focuses on the response of the largest U.S. corporations during the first months of the crisis. As shown in Figure 1, in the U.S., several large corporations redirected their donations toward COVID-19 relief as the pandemic advanced. The figure confront the evolution in covid rates (red) and deaths (green) across states with the number of donations (blue) over time. A clear path emerges: as the pandemic intensifies in a state (darker red and green colors), more S&P500 corporations headquartered in that state donate (darker blue). We exploit this variation to infer the role of shareholders on corporate donation decisions.

2.1 Conceptual Framework

Due to the media attention on firms at the time, also intensified by the social media usage of the then U.S. President Donald Trump, our central hypothesis is that image gains stimulated shareholders to pressure managers and board members to donate. In particular, blockholders – i.e., large or controlling shareholders – should have most gains from pressing management teams as they could reap large image gains from the donating firms. Moreover, these gains are not shared with other shareholders, while the cost of the donation, in terms of lower dividends, is shared based on equity holdings across shareholders (e.g., Masulis and Reza, 2015). Therefore, we conjecture that shareholders will demand covid-related donations if reputational gains exceed the portion of dividends they lose due to the inefficient use of resources during the crisis.

Since S&P500 corporations donated significant resources at the onset of the pandemics and due to the prominence of the pandemics in the media, donations by these corporations are likely to resonate across both local and national media outlets. As individual shareholders are often cited on popular media due to their associations with the companies mentioned in the media pieces, large individual and family shareholders (e.g., Elon Musk and Tesla) might have more reputational gains from covid-donations than similar institutional shareholders like mutual funds, insurance companies, or banks. Therefore, we further hypothesize that donations from companies with large individual blockholders

[11] For instance, in Europe the signatories of the "diversity charters," an institutional platform managed by the European Commission to help firms sharing good practices, responded to the crisis with donations, as reported in European Commission (2020), which lists some interventions of the signatories.

are more likely to happen.

An alternative view is that smaller altruistic shareholders might have more to gain than larger and wealthier shareholders if their goal is to help contain the disease's spread. The "exchange rate" between dollars and devices such as face mask and ventilators was, at the time, particularly low given that the world production of these items had reached a bottleneck. Therefore, a minority shareholder – whether individual or financial – might pressure its firms to donate (e.g., a chemical company might be in a better position to donate a mixture of gallons of sanitizing gel and cash compared to any of its shareholders). Under this efficiency gains hypothesis, shareholders in firms with more dispersed equity might have more incentives to pressure management, despite lower image motives.

2.2 Data

Our dataset comes from several sources. First, we manually recorded all covid-related pledges made by U.S. firms in the S&P500 between January 1 and April 15, 2020. We end our sample here to avoid contaminating our estimates with the Black Lives Matter movement's influence on U.S. media and public opinion beginning in the late Spring 2020. We scan each firm's investor relations website, Google news, and other mainstream media for information about donations, associating each piece of news with the oldest report available. The first row of Table 1 presents summary statistics of firm donations during our sample. Almost half of S&P500 firms placed at least one donation during our sample. For those firms that report the size of the donation, we report the cumulative donation by April 15, 2020, in the second row of the table. The average donation was US$ 36.5m. However, 58 firms do not report the US dollar amount of their donations, and several other firms donate both cash and in-kind (e.g., face masks), but indicate only the US dollar amount of their cash donations. We therefore focus most of the following analysis on the extensive margin of donations, rather than the intensive margin.[12]

We complement our donation data with cumulative covid cases and deaths data from Johns Hopkins University.[13] We present summary statistics of covid cases and deaths in the second panel of Table 1, where we compute cases and deaths either at the headquarter state, or at the state where a firm has its branches, using the number of branches as weights. To compute these variables we obtain firm level data for December 2019 from Orbis, which also includes accounting (third panel) and shareholding information (fourth panel).[14]

[12] Appendix Figure B1 shows an example of a data point in our dataset, with Google donating both cash and in-kind.

[13] Source: https://github.com/CSSEGISandData/COVID-19/tree/master/csse_covid_19_data/csse_covid_19_time_series.

[14] Shareholding information is based on shareholders with holdings of at least 0.01% of a company.

Turning to financial data, we approximate the risk-free rate with the 1-Month Treasury-bill rate from the St. Louis FRED, and obtain daily returns for the S&P index from Yahoo Finance. We also source data on stock prices, market capitalizations, trading volumes, broker recommendations, and Environmental, Social and Governance (ESG) scores from Refinitiv. Although ESG measures represent an important factor guiding investors, they have a limited value for explaining variation across both the intensive and extensive margins of covid-related charitable donations.[15]

Finally, we collect the dates of the Annual General Meeting of shareholders through the Securities and Exchange Commission's N-PX form. These forms are used by funds to disclose their proxy voting procedures. We gather the firm's ticker and meeting date from forms filed in compliance with voting that took place in the first two quarters of 2020. Our data show that 43 U.S. headquartered S&P500 firms had an AGM before April 15, which represents about 10% of all firms in our dataset. We do not include non-U.S. headquartered S&P500 members in our analyses, which leaves us with 420 firms in total.

3 Shareholder Pressure

This section considers the hypotheses listed in the previous section by testing whether shareholders influenced donation decisions. Identification issues arise because shareholding can be endogenous to whether or not a firm donates. For instance, major shareholders may influence the composition of the board, and the appointment of C-level officers. To solve this endogeneity problem, we exploit the exogeneity of the date of the annual general meeting (AGM) of shareholders and the evolution of the pandemic.

The AGM is the annual gathering of shareholders, at which the firm's directors present the annual report about the firm's performance and strategy. At the AGM, shareholders can directly question the managers and vote on various proposals such as the nomination of new directors, the adoption of social responsibility strategies, and future mergers. If shareholders satisfy certain criteria (see Rule 14a-8 SEA, 1934), they can also submit proposals to the management at least 120 days before the release of the proxy statement based on the date of last year's AGM (Glac, 2014).[16] As a result, the AGM's date is therefore

[15]The Spearman correlation between the 2019 ESG scores and whether a firm has donated by April 15, 2020 is 0.2462 (p-value < 0.01). Also, the Spearman correlation between the donation amount and ESG scores among those firms that report the donation amount is only 0.180 (p-value = 0.042).

[16]The rule establishes some eligibility criteria for shareholders' proposals to be admitted in a company's proxy statements. The criteria are either procedural or substantive requirements (i.e., the shareholders must hold at least US$2,000 in shares or 1% of the company's shares). The SEC amended these criteria on September 2020. The amdendment will be effective from January 2022. Source: https://www.sec.gov/corpfin/procedural-requirements-resubmission-thresholds-guide.

relatively constant across years. Although the SEC issued guidance on March 13 giving more flexibility to firms to postpone their AGMs,[17] we find little variation in the AGM dates for S&P500 firms when comparing the AGM month in 2020 and 2019 as shown in Appendix Figure B2.

Covid entered the U.S. on January 15, 2020 (Holshue *et al.*, 2020). Thus, as the pandemic heightened across the U.S., shareholders of firms with AGMs taking place before April 15 could only demand covid-related donations by "voicing" their concerns to the management. We use this constraint to elicit shareholder motives. Due to the increased public scrutiny on firms around AGMs, comparing firms with and without AGMs effectively purges pure forms of altruism (i.e., agents are motivated solely by their compassionate concern for others) from the analysis, even though shareholders have heterogeneous altruistic preferences. Similarly, the difference between treatment and control firms also account for fiscal motives for donating, which are plausibly uncorrelated with AGM dates. Thus, the underlying assumption is that the AGM date is independent of unobservables affecting corporate giving. Table 2 shows summary statistics of financial and operational variables for these two groups of firms. The last columns report the p-values from the t-test of difference in means: we find no significant differences on average. Furthermore, the share of donating firms within the two groups is approximately the same.

Therefore, we define all the firms with AGM dates before April 15, 2020, as treated and all the remaining S&P500 firms as control. Since shareholders can pressure for donations both before and after an AGM, we do not define a pre-AGM and a post-AGM periods, as in a standard difference-in-differences design. Instead, we leverage the intuition in Figure 1 that shows a temporal and spacial correlation between covid rates and firms' donations by comparing the donation rates of treated and control firms over time. As covid rates increase, the public pressure on firms to contribute increases, and especially so, for the shareholders in treated firms because they are already under greater public scrutiny.

3.1 Empirical Strategy

To estimate the effect of a specific class of shareholders (e.g., large or small) on the probability that firm f donates due to the occurrence of covid, we estimate the following linear probability model:

[17]Source: https://www.sec.gov/news/press-release/2020-62?elqTrackId=dde8414e01bd46f0b51c3989c036b04b&elq=57a905916441422ab1fcb252bc2e54c1&elqaid=2969&elqat=1&elqCampaignId=2231.

$$
\begin{aligned}
y_{ft} = {}& \beta_1 \text{Covid Rate}_{ft} \times \text{Ownership}_f + \beta_2 \text{Covid Rate}_{ft} \times \text{AGM Meeting}_f \\
& + \beta_{treat} \text{Covid Rate}_{ft} \times \text{Ownership}_f \times \text{AGM Meeting}_f + \alpha_f + \tau_t + \varepsilon_{ft},
\end{aligned} \tag{1}
$$

where the dependent variable, y_{ft}, is 1 if the firm f has publicly committed to a donation by day t, and 0 otherwise. We focus on donation intents and not on the actual amount donated because we cannot determine if the donation took place or not and because not all firms donate cash – some firms donate in-kind.

The main coefficient of interest is in the second line of Equation 1: β_{treat} captures the interaction between the cumulative covid rate at firm f's headquarter state, Covid Rate$_{ft}$, the fraction of equity owned by a certain shareholder type, Ownership$_f$, and a dummy variable that is 1 if the firm has an AGM in the sample period, AGM Meeting$_f$.

Among the variables in Equation 1, only Covid Rate$_{ft}$ varies by both firm and time, as the number of covid cases and deaths vary both in the time and in the cross-section dimensions. Changes to these variables indicate the severity of covid exposure at a firm's headquarters. In several instances, this is the place where large individual shareholders live (e.g., the Walton family for WalMart, or Jeff Bezos for Amazon). Thus, it is a good proxy for the covid-related media attention in the headquarter state that might pressure firms to donate. To avoid endogenous ownership changes due to the covid crisis, Ownership$_f$ is set at December 2020. Finally, α_f and τ_t are firm and day fixed effects, which captures unobserved variables that are either fixed characteristic of a firm in the time period (e.g., board composition) or that affect all firms simultaneously (e.g., macro policies).

3.2 Empirical Results

Table 3 reports the coefficients from the OLS estimation of Equation 1. The first three columns use cumulative covid cases for Covid Rate$_{ft}$, while covid deaths appear in columns four to six. Each columns present a different specification for the Ownership$_f$ variable. It represents the share of equity held by shareholders with at least 10% of the equity in Columns 1 and 4, at least 5% of the equity in Columns 2 and 5, and less than 2% in Columns 3 and 6. The variables Ownership$_f$ and Covid Rate$_{ft}$ are standardized to permit comparisons across columns.

Examining the results, the first row indicates a positive correlation between donation rates and cumlative covid rates across all columns, as suggested in Figure 1. The treatment effect estimates in the last row of Table 3 display sharply different coefficients for different levels of blockholding: one standard deviation increase in covid rates is associated with 1% to 7% decrease in covid-related donation rates for firms with major blockholders (Columns

1, 2, 4, and 5). Zooming in on minority shareholders instead (Columns 3 and 6), we find no differential effect between treatement and control firms.

Therefore, our results indicate that minority shareholders do not play a meaningful role in pressuring management for covid-related donations, which rules out the efficiency gain hypothesis in Section 2.1. We also find that blockholders pressured firms against donations, which contrasts with our first hypothesis in the same section. However, different shareholders may view donations differently depending on the pass-through of reputational gains and dividend losses. Since the largest shareholders of S&P500 companies are banks (holding on average 41% of a firm's equity), mutual funds (10%) and insurance companies (5%), the negative treatment effects estimated in Table 3 may depend on the fact that the balance of gains and losses from donating is perceived differently by financial and individual investors. As shareholders in the latter group only own 2% of shares of an S&P500 company, on average, the low image gains accruing to institutional shareholders may hide heterogeneous effects across shareholder types. We focus on these channels in the following sections.

3.3 Mechanism

This section explores the motives for different types of investors to pressure managers into making/avoiding donations. We will employ updated versions of Equation 1 to investigate the role of institutional investors and blockholders.

3.3.1 Shareholder Types

To study the influence of the four main institutional investor types – banks, insurance companies, mutual funds and private equity funds – and individual and family shareholders, we estimate separate regressions where we replace the variable Ownership_f in Equation 1 with a dummy variable that equals one if an investor type's ownership of firm f is larger than its corresponding median ownership across all S&P500 firms. The Covid Rate_{ft} variables are standardized to allow comparison across cases and deaths. Finally, the standard errors are clustered at the firm level.

Table 4 reports the results of these new OLS regressions.[18] Across columns, we vary the reference shareholder type of the Ownership_f variable in equation 1 as defined in the top panel. The bottom row shows the coefficients of the triple interaction between the AGM dummy, covid rates, and Ownership_f. These interaction terms are mostly negative for all investor types – and significantly different from zero when insurance companies are

[18] Appendix Table A1 adjusts these estimates with industry level standard errors.

the reference investor as shown in Column 7 – but individual investors, whose coefficient is positive, large and significant (Columns 5 and 10).

These results suggest that individual shareholders pressured managers to make charitable donations in response to the pandemic. This pressure was proportional to the covid rate perceived at the company's headquarter-state. On average, the effect is slightly larger for covid deaths than for covid cases, and it increases in the fraction of equity owned by individual and family investors. To the extent that image gains differ across shareholder types, this result suggests a role for image concerns in driving shareholders to demand donations, both because covid deaths may receive more media attention than cases,[19] and because large individual shareholders are more likely to be associated with a company than other shareholder types. On the other hand, during crises, firms' dwindling financial resources may be further strained by charitable donations. As a result, financial investors may instead prefer more conspicuous dividend payments.

National covid cases. National covid rates may be more salient than headquarter-state ones for large financial investors. To exclude this channel, we replicate the analysis, but now use cumulative national covid cases and deaths instead of headquarter-state level ones. The results are displayed in Appendix Table A2. The estimated triple-interaction coefficients are similar to those in Table 4 for all the financial shareholders but not for individual and family shareholders (columns five and ten). The coefficient estimates for the latter groups are now close to zero and not significant. Hence, individual investors seem to react to local covid rates rather than national ones, which is in line with the image concern mechanism we uncover.

3.3.2 Majority and Minority Shareholders

Individual shareholders. In Section 2.1, we hypothesized that the easier it is to associate an individual investor (or family) with a company, the greater should be the investor's image gain from any charitable donations made by the firm in response to the increased media coverage due to a spike in covid-related deaths and cases at the headquarters. To highlight this mechanism, we update the variable Ownership_f in equation 1 to be the share of equity owned by individual investors among all shareholders with at least x% of total shares. We vary x% to be greater than 10%, greater than 5%, and between 0.01% and 2%.We expect that the association between firms and investors is more straightforward the greater is the share of individual investors with a controlling position. Therefore, such a firm should be more likely to donate as covid rates rise, all else equal.

[19]For example, Sousa-Pinto *et al.* (2020) find stronger correlations between medical terms-related Google searches and covid deaths than covid cases for Spain, France, and also the U.S. concerning smell diseases.

Table 5 presents the results, with the variables Ownership_f and Covid Rate_{ft} standardized to permit comparisons across columns with different x-blockholding percentages, covid cases (Columns 1 to 3) and covid deaths (Column 4 to 6).[20] First, we compare the triple interaction coefficients across columns (bottom row). A one standard deviation increase in covid rates and in individual blockholding with a controlling share (columns one and four) increases the probability of donations by between 0.127 and 0.340 for firms that had a meeting compared to those that did not. The coefficient estimates are larger for deaths than for cases, and are different from zero at the 1% significance level. In comparison, a greater fraction of individual investors among non-controlling shares does not have the same impact on the probability of observing a donation. The triple interaction coefficients in columns three and six are both small in magnitude, and not statistically significant from zero.

Second, we compare the triple interaction with the direct effect of the variable Ownership_f (second row) within each column. Consider the controlling shares in Columns 1, 2, 4 and 5: a one standard deviation increase in Ownership_f affects the probability of donations through the triple interaction between two and seven times more than through its direct effect. This effect is larger for greater controlling shares and for covid deaths. Conversely, the direct effect in Columns 3 and 6 dominates the interaction effect. Thus, having a major individual shareholder increases the likelihood to observe a donation.

Institutional shareholders. We also ask whether large institutional shareholders behave like individual shareholders. Tables 6 and 7 perform the same analysis above for covid cases and covid deaths, respectively. In both tables, we vary the reference-blockholder across the three largest investors in Table 1, namely banks, mutual funds and insurers. All continuous variables are standardized to ease comparisons across columns and tables.

The treatment effect estimates (bottom row) are negative and significant for the largest blockholders in both tables. Among these agents, large mutual fund blockholders are the most active in restraining charitable donations. For mutual funds, a one standard deviation increase in both cumulative covid rates and blockholding implies a drop in the probability of donating between 0.10 and 0.65. On the other hand, small investors do not influence the probability of donating as already shown for individual investors.[21]

[20] The standard errors are clustered by firm. Appendix Table A3 reports similar results with clustered standard errors by industry.

[21] We replicate this analysis with national covid rates in Appendix Tables A4 and A5, respectively. The coefficient estimates are similar to but smaller than the estimates with headquarter-state covid rates.

3.3.3 Shareholder Influence Across Firms Through Shared Board Seats

Do board members who seats in multiple boards and who interacted with shareholders about donating at one firm also pressure for donations at other firms? We exploit the exogenous timing of an AGM meeting to the decisions of other firms to address this question. We draw data on board members at the beginning of our sample period from Capital IQ's People Intelligence. We run the following OLS regression:

$$y_{ft} = \beta_1 \text{Covid Rate}_{ft} + \beta_2 \text{Covid Rate}_{ft} \times \text{Board Pressure}_f + \alpha_f + \tau_t + \varepsilon_{ft}, \tag{2}$$

where we now interact cumulative covid rates at the firm-headquarter-state level with a measure of the overlap of board seats across firms, Board Pressure$_f$, which either reflects the number of board members of firm f that also seats on a board of a either (i) a treated firm, or (ii) a firm that pledges a covid-related donation before April 15, 2020.[22] In either case, Board Pressure$_f$ is one if the underlying variable is positive, and zero otherwise.[23] The first definition considers the mechanism described above explicitly – i.e., board members are influenced by treated firms. Firms share on average 0.7 board members with treated firms (median = 0, 75$^{\text{th}}$-percentile = 1). The second definition does a similar measurement but indirectly through the board members that are in firms persuaded to donate. On average, a firm shares 3.9 board members with donating firms (median = 3, 75$^{\text{th}}$-percentile = 6). Table 8 presents the main coefficient estimates from Equation 2 and finds that the likelihood of observing a donation increases by between 3% and 5.6% as pressure at other connected firms mounts.

3.3.4 Heterogeneous Effects by CEO Characteristics

We next examine how managerial characteristics mediate shareholder influence. Leveraging Orbis data, we focus on firm variation across CEO age and total compensation.[24] To this end, we modify Equation 1 by adding interactions for either the age of a firm's CEO or his compensation. Appendix E describes the methodology in more details and reports the results. Our findings indicate that older and better-paid CEOs are better disposed towards the desires of a firm's most influential shareholders. We thus contribute to previ-

[22] Considering the timing of the donation rather than only whether or not a firm has donated does not change the results substantially.

[23] We use dummy variables to ease comparison across columns. The results are robust to using the underlying continuous variable.

[24] The average CEO is 65.32 years old, with a total pay of USD 8.6 m. The correlation between these two variables is only 0.09. Only 10% of the CEOs in our dataset are women, which does not allow us to study a potential gender gap over covid-related donations.

ous research showing a negative correlation between CEO pay and a specific measure of CSR engagement – covid-related donations – by suggesting that the negative correlation in the literature could reflect the influence of financial shareholders on management (e.g., Fabrizi *et al.*, 2014, Jian and Lee, 2015).[25]

3.3.5 Discussion

The results in this section support the view that individual and financial shareholders responded to different incentives, causing the former to pressure managers to pledge charitable donations as covid-related cases and deaths rose at the firm's headquarters. Shareholder pressure is more effective with older and better-paid CEOs. Moreover, influence transmits firm-to-firm through the network of shareholders, providing a novel intuition about the origin of shareholder activism within a firm: activism can originate in other firms and reach a firm through persuaded connected individuals.

4 Alternative Mechanisms

This section investigates other reasons that could explain why firms donated: we consider abnormal financial returns in Section 4.1, consumer pressure in Section 4.2, and the role of managers in Section 4.3.

4.1 Financial Motives

Donations could be attractive if the stock market rewards them. We consider this channel by examining the abnormal returns around the day when the news became public. We predict daily stocks' returns using the Fama-French 3 factors, namely: daily market returns (proxied by the S&P500 Index), daily returns on a portfolio of "small minus big stocks" (SMB, from Kenneth French's website) and daily returns on a portfolio of "high minus low" book-to-market value ratio (HML, also from French's website). We retrieve the betas on those three portfolios for stocks in our sample from CRSP. Then a stock f's abnormal return (AR) on day t is given by the difference between the actual excess return of the stock over the risk-free rate (R_{ft}) and the prediction of the 3-factor model, as follows:

$$AR_{ft} = R_{ft} - \left(\beta_f^{MKT} * R_{ft}^{MKT} + \beta_f^{SMB} * R_{ft}^{SMB} + \beta_f^{HML} * R_{ft}^{HML}\right).$$

[25]The literature also highlights mixed results on how CEO career horizons, as proxied by CEO age, affect a firm's CSR policy (e.g., Oh *et al.*, 2016).

We then use the realized AR in the following event study regression:

$$y_{ft} = \sum_{-5 \le k \le 5} \theta_k \text{ News Day}_{f\,t+k} + \alpha_f + \tau_f + \varepsilon_{ft},$$

where the left-hand side refers to either firm f's abnormal return or cumulative abnormal return (CAR) on day t. In the regression we also include firm and date fixed effects.[26]

Figure 2 displays the estimates of $\hat{\theta}_k$. Panel (a) shows no abnormal returns before the news is broken. Immediately after the news is broken, the stock displays negative abnormal returns (although not significant), which suggests that market participants may be forming a negative view about the donation. Panel (b) reports the CAR over 5 days, which similarly shows a negative drop after the news date.[27] We obtain similar results for the CAR at 10 days.[28] In sum, we find a negative but transient effect of news on firms' financial returns. In particular, the negative effect seems concentrated around the news date but it is completely absorbed within a few days. Therefore, financial returns do not seem to drive donation decisions.

4.2 Consumer Pressure

Firms could donate to please their consumers. For instance, a firm with a large amount of its sales in California may donate in February given the high rates of covid cases in this state, despite being headquartered in, for example, Oregon, which had far lower rates, (cf. Figure 1). The need to donate may be stronger the more a firm engages with its final consumers. We now investigate this possibility.

Empirical approach. We exploit exogenous variation in a firm's exposure to covid rates through its branches to asses the consumer pressure channel. Using the Orbis database, we create two new variables: the weighted average of covid cases and deaths, with weights being calculated according to the number of branches a firm has in each state. We denote the standardized versions of these two new variables – one for deaths and one for cases –

[26] Appendix C shows similar results for returns over longer horizons.

[27] All regression coefficients are reported in Appendix Table C1. Table C2 report the coefficients from a similar regression considering a longer time period.

[28] We compute a stock's excess volumes in a similar way, taking the difference between its change in trading volume and the average change in trading volume among the S&P500 securities. Appendix Table C3 excludes a change in volatility around the news.

by Exposure at Branches$_{ft}$, and estimate the following linear probability model

$$y_{ft} = \beta_1 \text{Exposure at Branches}_{ft} + \beta_{treat} \text{Exposure at Branches}_{ft} \times \text{Number of Branches}_f + \alpha_i + \tau_t + \varepsilon_{ft}, \quad (3)$$

where Number of Branches$_f$ is the reported number of branches in the Orbis dataset as of December 2019. The distribution of the number of branches for S&P500 firms ranges from 0 to 13,582 with a median of 40 branches; since we do not observe the distinction between branches as shops or factories, it is fair to assume that firms with more branches are more exposed to final consumers than firms with less branches. Thus, this variable can proxy for how much a firm relies on consumer demand. We expect β_{treat} to be significantly larger than zero if consumer demand drives firm donations. α_f and τ_t are fixed effects.

Results. Table 9 presents OLS estimates of Equation 3. As for the previous tables, the first four columns define exposure at branches in terms of cumulative covid cases, and cumulative covid deaths in the last four columns. These variables are standardized.

Let's first consider Columns 1 and 5: the first row indicates a null impact of consumer covid exposure on average. The coefficients in the second line are very close to zero indicating that donations do not increase with the number of branches. The latter result is also evinced across the remaining columns where we substitute the term Number of Branches$_f$ in Equation 3 for a dummy variable that is 1 if the firm has more than either the 50$^{\text{th}}$ (Columns 2 and 6), 75$^{\text{th}}$ (Columns 3 and 7), or 90$^{\text{th}}$ percentile (Columns 4 and 8) of the distribution of the number of branches, and 0 otherwise. Across columns, there is no difference in donation rates between firms with many and few branches as the covid exposure rate increases. Thus, these results are not consistent with firms responding to consumer pressure.

4.3 Managerial Pressure

To study the will of managers about covid-related corporate donations, we start from the view that the strength of this channel is inversely proportional to the voice of the other stakeholders. We proxy this variable with the share of a firm's equity owned by the firm itself, and study the probability of observing a firm's donation at time t through Equation 1, where we take Ownership$_f$ to be one if firm f owns more than the median amount of its own shares, and zero otherwise.[29] Since the AGM period provides an opportunity for

[29] This value is zero in our dataset, which implies that the median value of self-ownership is smaller than 0.01% of a firm's equity as this is the smallest single equity share that we observe in the Orbis data.

managers to present their achievements, we use the difference between treated and control firms to estimate the causal impact of managerial will on donations.

Table 10 reports the coefficient estimates. Columns 1 and 2 measure covid rates at the headquarter-state, Columns 3 and 4 use national covid rates, whereas columns 5 and 6 measure covid rates at the branches. For each specification, cumulative case and death rates are in odd and even columns, respectively. The estimated coefficient of the triple interaction suggest that increases in covid rates lead managers to donate less, not more. As in the previous analyses, the coefficient estimates are more precise when covid rates are measured at the headquarter-state, indicating that donations respond more to the local evolution of the pandemic rather than the current national status.

In Appendix Section F, we extend the analysis to consider whether firms donated as a response of previous covid-related donations of competing firms within the same industry. Our results show a limited role for this "peer pressure" channel. Overall, these findings suggest that managers, like financial investors, dislike donations potentially becuase they may jeopardize a firm's financial position at a time of distress.

5 Shareholder Influence Beyond the Pandemic

This section studies whether the correlation between shareholding types and corporate giving can be generalized outside of the covid pandemic and using a more encompassing measure of prosociality than donations.

We measure prosocial outcomes over time using data from RepRisk. RepRisk screens more than 80,000 media, regulatory, and commercial documents a day in fifteen different languages for negative ESG issues (called "incidents"). We obtain firm-level raw data on the count of ESG incidents per month. We combine this CSR measure with the Refinitiv Ownership database, which we have available for the 2012 – 2019 time period. The advantage of the Refinitiv Owership database over, for instance, data from the 13F schedule is that it also includes non-institutional owners (large individual investors in particular). The differences between the Refinitiv and Orbis databases are at least twofold: the Orbis database contains the level of self-ownership, but only the current shareholders can be retrieved from WRDS. For these reasons, we use the Orbis database in the main analysis, and the Refinitiv database for the external validity exercise. This dataset includes monthly incident data for a balanced panel including 642 firms among the largest U.S. corporations over eight years. Appendix Section D describes the RepRisk data and the sample selection.

Once again we aim to exploit the exogeneity of the date of the AGM to test whether individual blockholders are associated with less negative events. Panel (b) of Appendix

Figure B2 supports this assumption as it shows little variation in the AGM month across adjacent years for the firms in our dataset. Exploiting the fact that shareholders have time until 120 days before the date of the release of the proxy statement of the past AGM to make proposals for the current AGM, we distinguish two periods: a pre-period where formal proposals can be casted, and a post-period were shareholders can only engage informally with managers and board members. We also consider two groups of firms based on the level of individual and institutional blockholders. Hence, identification of shareholder influence on ESG coverage comes from a difference-in-differences estimator.

To operationalize this analysis we need to overcome two issues: (i) AGM dates vary across firms within a year and (ii) firms have AGMs every years. To solve the first concern, we modify the calendar time of each firm so that the 3 months before the AGM date coincides with month 0 for all firms. The pre-period starts in month -4 and ends in month 0, while the post-period ranges from period 0 to 7. Thus, a year still consists of 12 months and starts 7 months before the yearly AGM date instead of January.[30] To confront the second challenge, we stack all yearly difference-in-differences analysis over years as proposed in Cengiz *et al.* (2019). We focus on the following event study analysis:

$$\text{ESG news}_{fmy} = \sum_{k=-4}^{7} \lambda_k \text{Treat}_{fy} \times \mathbb{I}_{ym+k} + \beta_2 \text{ESG Score}_{fym} + \alpha_{fy} + \tau_{ym} + \varepsilon_{fmy}, \qquad (4)$$

where the dependent variable is an indicator that takes value 1 if firm f has a negative news in the rebased month m of the rebased year y, and 0 otherwise, and Treat_{fy} is 1 if firm f has individual shareholders and below median institutional blockholders at the beginning of the (rebased) AGM year y, and 0 otherwise. Thus we control for endogenous variation in stock ownership by setting this variable constant within each year. The variable $\mathbb{I}_{ym+\tau}$ is instead 1 in month $m+k$ of year y, and 0 otherwise. We also control for a firm's ESG score (ESG Score_{fym}), using Refinitiv ESG scores.[31] Since our approach stacks multiple yearly difference-in-difference estimators, we include firm-by-year fixed effects and month-by-year fixed effects. Standard errors are clustered at the firm level.

Figure 4 plots the λ_τ coefficents from estimating Equation 4 by OLS with blue dots. There is no evidence of a trend in the pre-period. In the post-period, instead, firms with individual shareholders and no institutional blockholder have less ESG incidents compared to the control group around the AGM month ($m = 1$ to $m = 5$). The difference

[30] Since the AGM month does not vary substantially over time (Appendix Figure B2) the distribution of calendar months is maintained in our analysis.

[31] Refinitiv updates firms' ESG scores on a weekly basis, using data from companies' annual reports and stock exchange filings. We transform this weekly variable to monthly by considering its monthly average.

is particularly large during the AGM month, where λ_3 implies a statistically significant drop in the coverage of negative ESG news by 7%. The red triangles, instead, update this analysis to consider as treated all firms having no individual shareholder above 5%, and at least one institutional investor above that threshold: we find no significant change in ESG incidents around an AGM date. Appendix Section D shows that these results are robust to different definition of treatment a control groups: when individual and family shareholders are synonymous with a firm, as proxied by their share ownership, we observe a drop in ESG incidents around the AGM date. We do not detect a similar trend for institutional ownership.

5.1 Discussion

This section extends the results in the previous sections to a non-covid period of eight years and substitutes donations for a composite ESG measure. Supporting previous evidence, we find that individual and institutional shareholders influence the management and board of their firms for different means. In addition, Appendix Section D opens up the ESG measure and shows that the result in Figure 4 strongly depends on the social category (S), which includes donations. Our interpretation is that social outcomes such as the impacts on local communities and social discrimination may be domains where a firm can effortlessly get advertising without long-term interventions, which are typical for environmental (E) or governance (G) measures like the management of waste issues, or supply chain issues. As a result, the effect of shareholder influence is transient and concentrated around the months of the AGM, which is consistent with image gains flowing to prominent individual investors, who are synonymous with the donating firm. On the other hand, probably due to the impersonal nature of institutional shareholdings, reputational gains may not flow along the investment footprints of financial institutions. The following section examines this possibility empirically.

6 The Pass-Through of Image Gains

The evidence presented so far points to shareholders having substantial influence in determining firms' social responsibility during the pandemics. Our results highlight that individual and financial investors may respond to different incentives as major individual investors sought to obtain covid-related donations from the firms they invested in (see Table 5); in contrast, major financial investors sought the opposite (see Tables 6 and 7).

A different pass-through of image gains may reconcile these results: corporate giving could yield prestige or image gains – in terms of increased positive media exposure – to the individual shareholders synonymous with the donating firm, but not to similarly large financial shareholders. There are two main benefits to individual blockholders from donating through the firm rather than doing it themselves. First, corporate giving from S&P500 firms receives substantial coverage thanks to appropriate media relations and marketing teams that would ensure adequate media exposure for the donation event. Second, shareholders only bear a fraction of the cost of donating, proportional to the shares they own, whereas they would bear the total cost of personal donations.[32]

The pass-through of reputational gains to financial investors may well be null. For instance, an article describing Microsoft's charitable donations is unlikely to discuss the firm's principal shareholders – Vanguard and Capital Group have about 8% and 5% ownership, respectively. Instead, we are more likely to read about other Microsoft's main individual shareholders like Bill Gates and Steve Ballmer, who have smaller shares in the company. In addition, the costs of corporate giving may impact financial investors for several reasons. First, they reduce dividends (e.g., Masulis and Reza, 2015). Second, the size of covid pledges we observe in the data (about 30 million US dollars on average) is substantial, especially at a time when firms lack liquidity due to a halt in production or sales. Finally, the sinking stock market might create further incentives for financial shareholders to pressure the management of the firms in their footprint to avoid wasting resources.

To provide empirical support for these arguments we first examine shareholders' media exposure around a donation event. We proxy media exposure with Google web searches, and run the following OLS regression,

$$y_{ift} = \left(\sum_{k=-10}^{10} \psi_k \text{ News Day}_{it+k} + \gamma_k \text{ News Day}_{it+k} \times \text{Individual}_i \right) + \alpha_i + \alpha_f + \tau_t + \varepsilon_{ift}, \tag{5}$$

where the dependent variable is the logarithm of the cumulative number of searches by investor i in firm f at time t. On the right-hand side, the vector $\{\text{News Day}_{it+k}\}_{k=-10}^{k=+10}$ is a set of time dummies around the date of the donation event. We further interact these dummies with an indicator that is 1 if shareholder i is an individual investor, and 0 otherwise. We also include firm, shareholder and time fixed effects. We interpret the coefficient vector ψ as the impact of the donation on Google searches for non-individual investors. Thus, γ describes the gap in visibility between an individual and a non-individual investor at each

[32] Notice that fiscal incentives concerning corporate donations apply to both treated and control firms. Our estimator compares the donations of firms with similar individual (or institutional) shareholders across treated and control groups, thus accounting for such incentives.

day $t+k$[33]

Figure 3 reports the estimated $\hat{\gamma}$ in equation 5, using cumulative Google searches over 10 days as the dependent variable and clustering the standard errors at the firm level and the shareholder category.[34] Panel (a) uses only shareholders with more than 1% holdings, whereas Panel (b) focuses on shareholders with more than 5% holdings.[35] Across both panels, cumulative Google searches are flat around zero before the news is broken. After the news is broken, the coefficient estimates jump to about 50% from day 3 to day 10 in Panel (a). In Panel b, instead, coefficient estimates are significantly different from zero already two days before the news is broken. Hence, the differential impact of cumulative Google searches is much stronger when the treated group considers only prominent individual shareholders.[36] Therefore, the Google search gains for individual investors is substantially higher, supporting our claim that image concerns create different incentives for individual and non-individual investors.

Next, we show that financial investors incur a cost from donating. We take a revealed preference argument and compare the donation decision of a S&P500 firm with the donation decisions of those S&P500 firms in the investment footprint of the focal firm.[37] More specifically, we analyze the correlation between two vectors: for each of the 37 financial firms, f, in our sample the first vector indicates whether it donated or not by April 15 (19 out of the 37 firms donated), and the second vector reports whether the firms in f's portfolio also donated. Table 11 reports the Spearman correlation coefficients for different definitions of the second vector. For each f, column two measures the donations of the firms in f's porfolio as a simple average of binary donation decisions. Column three computes a weighted average using shares as weights. The last column computes a similar weighted average but gives zero weight to firms that had no AGM. Across rows we

[33] For each day, Google Trend data return a value between 0 and 100 indicating the number of Google searches for a specific keyword. Therefore, to compare Google Trend data across different shareholders we need to account for shareholder fixed effects.

[34] We allow for the following shareholder types. The financial types are banks, hedge funds, insurance companies and mutual funds. All financial investors that do not belong to these types are categorized as financial companies. The remaining categories are individual investors, the government, self ownership and generic company.

[35] Our analysis indicates a limited role for minority investors, thus we only consider Google Trend data for shareholders with at least 1% holdings. Appendix Figure B3 plots similar results with cumulative Google searches over 14 days (the coefficients are reported in Appendix Table A9, which also shows robustness checks for cumulative Google searches over 7, 10 and 14 days).

[36] The coefficient estimates across the two panels cannot be compared because the average number of cumulative Google searches to non-individual shareholders are different (on the news date this value is 20.8 in Panel a and 52.4 in Panel b. The p-value of the difference is < 0.01).

[37] We focus only on S&P500 firms investing in other S&P500 firms because of data availability. However, we expect our result to hold more broadly because it should be harder to influence the management of an S&P500 corporation than that of a smaller one, other things equal.

progressively increase the minimum shareholding requirement for a firm to be considered in f's portfolio. p-values are reported in square brackets.

Focusing on Column 3 of Table 11, we find that the correlation coefficient between a firm's corporate giving and the giving on its footprint is positive and increases as we raise the minimum shareholding threshold from 0% to 5% (no coefficient is statistically significant). This trend may be driven by a few donating firms with greater shares receiving greater weights. Column 1 removes this effect by focusing on simple averages: we find smaller coefficients across all rows (except the first one), and the coefficients are negative when the minimum shareholding is set at 2%, 3%, and 4%. We then move to the last column where, by considering only firms with an AGM meeting, we effectively focus on those firms for which shareholders have more opportunity to exert influence, as they might be already actively engaging with the management over several corporate decisions due to the approaching AGM. We find that all correlation coefficients are negative. Moreover, as the minimum share threshold increases, the correlation coefficient approaches -1. The coefficients are also significant at the 5% level when the threshold is 4%, and at the 10% level when the threshold is 2% or 3%, indicating that accounting for the AGM cleanly exposes the effect of shareholder pressure.

These results provide evidence supporting the claim that the influence of large individual and family shareholders could be the result of large gains in terms of image, reputation and prestige. Institutional shareholders do not enjoy similar returns, which explains our finding that these firms pressured the firms in their portfolio against donating and that they preferred to donate themselves.

7 Discussion

The last section shows that financial shareholders that donated directly to charities were unwilling to donate indirectly through the firms in their footprint. Given how crucial and debated were covid-related donations in the first months of the pandemic (e.g., the U.S. President repeatedly called out firms by name to donate), our analysis suggests that a firm's social responsibility perimeter does not extend to its portfolio, as financial shareholders are unwilling to support costly actions to adopt prosocial behaviors without adequate returns – in this case, publicity. On the other hand, considerable image gains accrue to major individual shareholders whose visibility increases substantially as the firms where they own controlling shares donate for covid reasons (Figure 3). The size of these non-monetary rewards could be large enough to cover for the loss in earnings from donating.

As the different pass-through of image gains explains the opposite influence exerted by various shareholder types, this channel also offers policy remedies, which can be classified in two broad categories. First, if media outlets were to report (at least part of) the ownership structure of the firms they discuss in their media pieces as they often do with individual investors, financial investors would have more incentives to behave prosocially. Second, firms could appropriate themselves of the media attention by stating specific social responsibility and sustainability goals for the firms in their portfolios and welcome journalists and researchers to assess the outcomes of their efforts. For instance, Boudreau (2021) shows in a recent RCT experiment that multinational corporations within the Alliance for Bangladesh Worker Safety enacted policies to improve the well-being of garment workers in their supply chain after advertising their campaign. Similarly Naaraayanan *et al.* (2021) find that a large pension fund exerted pressure on the firms in its portfolio to reduce their pollution. The common denominator across the two categories is the measurability of the stated mission; without it, prosocial claims are void and can ruin the image of corporations in the public opinion, with potential negative impacts for the public support of policies favoring large corporations (Colonnelli and Gormsen, 2020).

An important finding of this paper is that the effect of the influence of shareholders due to image concerns is transient, which is further confirmed by the external validity exercise that we consider in Section 5. This result is reassuring as shareholder image concerns determine only a portion of firms' ESG stance. Although the transient nature of the mechanism that we uncover limits the policy implications that we can draw, our analysis opens up questions related to other behavioral factors that can impact the voice mechanism. For instance, Section 3.3.3 finds that the pressure that shareholders place on their board members to donate also leads the same board members to demand donations at the other firms that they also serve as board members. This result questions the origin and the spread of prosocial policies across large corporations, indicating that the beneficial role of shareholder activism extends beyond the direct influence on the focal firm.

In recent years, an extensive literature has developed investigating several aspects leading investors to prefer social impact to financial investors. While divesting can impact a firm's behavior – major shareholders transacting shares of firms may display appreciation for or disagreement with managements and boards – it is a measure of last resort (Hirschman, 1970), as shareholders first discuss their views with managers before taking costly actions (Gantchev, 2013). Thus, focusing on stock transactions fails to acknowledge the different phases of shareholder activism over socially responsible matters, thereby missing an opportunity to solve governance issues concerning shareholder engagement. As Berk and van Binsbergen (2021) indicate that "exit" strategies may be ineffective at incentivizing ESG investments, we believe that more research is needed to learn how shareholder preferences translate into activism and how they shape corporate decisions concerning ESG measures (e.g., Gollier and Pouget, 2014, Broccardo *et al.*, 2020).

Focusing only on donations is both a limitation and a strength of our study. Donations represent only a portion of corporate social responsibility strategies, which typically range from gender and racial themes to environmental and governance issues. However, among all ESG policies, donations are the most visible on popular media and, thus, they may provide the most image value to a firm and its shareholders. For instance, the survey conducted in Hartzmark and Sussman (2019) indicate that generous corporate giving is viewed as a central aspect of a corporate sustainability programs. Also thanks to several external validity exercises, we believe that the mechanism we uncover – i.e., heterogeneous pass-through of image gains – applies more broadly to other ESG policies.[38]

8 Conclusions

This paper exploits the onset of the COVID-19 pandemic as a natural experiment to learn how shareholder preferences shape corporate decisions on ESG measures. We take advantage of the exogenous changes in covid rates and on the predetermined nature of the date of the annual general meetings of the shareholders (AGM) to show that firms undergoing greater scrutiny due to an oncoming AGM were more likely to pledge a donation as the pandemic intensifies if they had prominent individual shareholders. Instead, significant financial shareholding has the opposite effect on corporate donations. We explain the different influences exerted by shareholders in terms of a heterogeneous pass-through of image gains to a firm's shareholders using Google Trend data. As a result of lacking image gains, financial shareholders preferred to donate themselves rather than support the corporate giving of the firms in their portfolios. We further show that this "voice" mechanism extends to non-covid times and ESG policies more broadly. Our results highlight the centrality of shareholder preferences to understand shareholder activism.

[38]Several other mechanisms may be important to understand the influence of shareholders on a firm's ESG. As an example, Dyck *et al.* (2019) provide evidence consistent with investors' social norms playing a critical role in explaining CSR outcomes, while Chen *et al.* (2020) show that shareholders' distraction from a firm's CSR leaves room for managers to decrease the firm's CSR efforts.

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Tables and Figures

Table 1: Summary statistics of main variables

	25% (1)	Median (2)	Mean (3)	75% (4)
i. *Covid-Related Charitable Contribution Data*				
Donating Firms (0/1)	0	0	0.42	1
Donation Amount (mln USD, if Available)	1.0	5.0	36.5	20.0
ii. *Covid Data*				
Cumulative Cases at the HQ State	7,282	15,088	40,866	25,465
Cumulative Deaths at the HQ State	327	599	2,416	844
Average Cumul. Cases at Branches	11,665	19,068	23,728	25,406
Average Cumul. Deaths at Branches	412	748	1,248	1,263
iii. *Operation Data*				
EBIT (mln USD)	754	1,419	3,044	2,868
ESG Score	50.71	63.35	61.14	73.37
Share of Revenues From the U.S. (%)	14.8	19.3	19.7	25.0
Workforce	9,323	19,991	57,544	60,910
Number of Branches Across U.S. States	9	40	327	180
iv. *Shareholding Data*				
Share of Equity Owned by (%):				
- Banks	36.44	42.06	41.27	46.72
- Government	2.96	3.60	3.86	4.32
- Hedge Funds	0	0	0.27	0.21
- Individuals and Families	0	0	1.60	0.12
- Insurance Company	3.31	4.55	5.69	6.82
- Mutual Funds	5.92	8.20	9.52	11.73
- Private Equity (P.E.)	0.38	0.75	1.17	1.42
- Venture Capital (V.C.)	0.09	0.19	0.51	0.33
Had an AGM Meeting in Sample Period (0/1)	0	0	0.11	0
v. *Financial Data*				
Market Cap (bln USD)				
- January	13.0	24.4	52.5	52.5
- February	11.5	21.8	50.7	50.0
- March	8.6	18.2	44.4	43.2
- April	10.0	21.1	50.6	49.8
Brokers' Recommendations [-2,2]	0.35	0.63	0.60	0.88

Note: Shares are computed over total equity, and includes only shareholders owning at least 0.01% of a company. Brokers' Rec is the average of Equity analysts' investment recommendation, where *Strong Buy*=2, *Buy* =1, *Hold/Neutral*=0, *Sell*=-1, *Strong Sell*=-2.

Table 2: Comparisons across groups of firms with and without the Annual General Meeting (AGM) from January 1st to April 15th.

	Firms with AGM (1)	Firms w/out AGM (2)	Difference and p-value (1) - (2)	
Avg. Market Cap (bln USD)	58.3	56.5	1.8	0.893
	(12.1)	(5.6)		
Avg. EBIT (mln USD)	3,984	2,941	1,043	0.342
	(1,840)	(304)		
Avg. Share of Revenues from the US (%)	19.9	19.7	0.2	0.901
	(1.9)	(0.6)		
Avg. Workforce (headcount)	65,322	56,700	8,622	0.710
	(13,389.5)	(7,127.4)		
Avg. Brokers' Recommendations [-2,2]	0.62	0.59	0.03	0.681
	(0.07)	(0.02)		
Avg. ESG Score	62.9	60.2	2.7	0.328
	(2.2)	(0.9)		
Share of Firms that Donated by April 15	48.8	42.2	6.6	0.404
	(7.7)	(2.5)		
Number of Firms	43	377	*Total* = 420	

Note: The accounting data refer to the year ended on December 31st, 2019. Market capitalization is measured at the last market day of 2019. Observed ESG scores range between 13.9 to 88.8. Not all variables are available for all firms. The last column shows the p-value for the two-sided t-test. Standard deviations are in parenthesis. Brokers' Rec is the average of Equity analysts' investment recommendation, where *Strong Buy*=2, *Buy* =1, *Hold/Neutral*=0, *Sell*=-1, *Strong Sell*=-2.

Table 3: The impact of blockholders on Covid donations.

	Whether Firm i has Donated by Time t (0/1)					
	(1)	(2)	(3)	(4)	(5)	(6)
Cum. Covid Rate is defined as:		Cases			Deaths	
% Blockholders is the shares of shareholders owning:	$> 10\%$	$> 5\%$	$(0\%, 2\%)$	$> 10\%$	$> 5\%$	$(0\%, 2\%)$
Cum. Covid Rate	0.021**	0.021*	0.018	0.018*	0.018*	0.014
	(0.011)	(0.011)	(0.011)	(0.009)	(0.009)	(0.009)
Cum. Covid Rate × *% Blockholders*	0.003	0.001	0.026***	0.003	0.001	0.021**
	(0.009)	(0.010)	(0.010)	(0.007)	(0.009)	(0.009)
Cum. Covid Rate × Meeting	0.049	−0.019	0.089	0.038**	−0.038***	0.005
	(0.035)	(0.032)	(0.090)	(0.019)	(0.014)	(0.118)
Cum. Covid Rate × *% Blockholders* × Meeting	−0.055***	−0.061*	0.047	−0.046***	−0.077***	−0.018
	(0.017)	(0.035)	(0.069)	(0.010)	(0.020)	(0.087)
Time fixed effects	✓	✓	✓	✓	✓	✓
Firm fixed effects	✓	✓	✓	✓	✓	✓
N	36,805	36,805	36,805	36,805	36,805	36,805
Adjusted R-squared	0.5016	0.5006	0.5040	0.5004	0.5003	0.5016

$* - p < 0.1$; $** - p < 0.05$; $*** - p < 0.01$.

Note: OLS regressions of whether firm i has donated by time t (dependent variable) on covariates. All columns include day and firm fixed effects. Columns 1 to 3 use cumulative covid cases (standardized) at the headquarter state of firm i at time t as a measure of covid rates. Similarly, Columns 4 to 6 use cumulative covid deaths (standardized), instead. The variable *% Blockholders* is the share of investors among all investors owning at least a share of total equity in the bracket defined in the top panel. The variables *% Blockholders* and *Cum. Covid Rate* are standardized. Standard errors are clustered by firm and presented in parenthesis.

Table 4: The impact of shareholder type on Covid donations.

	Whether Firm i has Donated by Time t (0/1)									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Cum. Covid Rate is defined as:	Cases					Deaths				
Above Median Ownership refers to:	Banks	Insur.	Mutual	P. E.s	Ind.	Banks	Insur.	Mutual	P. E.s	Ind.
Cum. Covid Rate	0.012	0.030**	0.033***	0.022*	0.027**	0.011	0.026**	0.028**	0.018	0.023**
	(0.015)	(0.015)	(0.013)	(0.013)	(0.012)	(0.013)	(0.013)	(0.011)	(0.011)	(0.010)
Cum. Covid Rate × *Above Median Ownership*	0.011	−0.023	−0.037**	−0.009	−0.029	0.009	−0.019	−0.032**	−0.006	−0.025
	(0.018)	(0.018)	(0.017)	(0.018)	(0.019)	(0.016)	(0.016)	(0.016)	(0.016)	(0.017)
Cum. Covid Rate × Meeting	0.016	0.020	0.012	0.059	−0.049	0.007	0.030	−0.062	−0.031	−0.061***
	(0.043)	(0.030)	(0.157)	(0.153)	(0.036)	(0.042)	(0.022)	(0.172)	(0.177)	(0.018)
Cum. Covid Rate × *Above Median Ownership* × Meeting	−0.029	−0.029	0.016	−0.051	0.131***	−0.064	−0.062*	0.084	0.036	0.135***
	(0.132)	(0.059)	(0.162)	(0.159)	(0.047)	(0.173)	(0.033)	(0.176)	(0.182)	(0.025)
Time fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Firm fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
N	38,845	38,845	38,845	38,845	38,845	38,845	38,845	38,845	38,845	38,845
Adjusted R-squared	0.4934	0.4944	0.4959	0.4934	0.4955	0.4929	0.4940	0.4948	0.4928	0.4949

* – $p < 0.1$; ** – $p < 0.05$; *** – $p < 0.01$.

Note: OLS regression of whether firm i has donated by time t (dependent variable) on covariates. All columns include day and firm fixed effects. Columns 1 to 5 use cumulative covid cases (standardized) at the headquarter state of firm i at time t as a measure of covid rates. Similarly, Columns 6 to 10 use cumulative covid deaths (standardized), instead. The variable *Above Median Ownership* varies across columns. This variable is 1 if the share of equity owned by banks (cols 1 and 6), or insurance (cols 2 and 7), or mutual funds (cols 3 and 8), or private equity (cols 4 and 9), or individual investors (cols 5 and 10) is greater than its median value across S&P500 firms, and 0 otherwise. All columns include day and firm fixed effects. Standard errors are clustered by firm and presented in parenthesis.

Table 5: The impact of individuals with large shares on Covid donations.

	Whether Firm i has Donated by Time t (0/1)					
	(1)	(2)	(3)	(4)	(5)	(6)
Cum. Covid Rate is defined as:	Cases			Deaths		
% Invidvidual Blockholders is the shares of individuals owning:	$> 10\%$	$> 5\%$	$(0\%, 2\%)$	$> 10\%$	$> 5\%$	$(0\%, 2\%)$
Cum. Covid Rate	0.018*	0.018*	0.020*	0.016*	0.016*	0.017*
	(0.011)	(0.011)	(0.011)	(0.009)	(0.009)	(0.009)
Cum. Covid Rate × *% Invidvidual Blockholders*	0.009**	0.008**	−0.015**	0.007*	0.007**	−0.013*
	(0.005)	(0.003)	(0.008)	(0.004)	(0.003)	(0.007)
Cum. Covid Rate × Meeting	0.033	0.037	0.011	0.060	0.068*	0.015
	(0.039)	(0.039)	(0.038)	(0.040)	(0.041)	(0.034)
Cum. Covid Rate × *% Invidvidual Blockholders* × Meeting	0.127***	0.143***	0.042	0.308***	0.340***	0.123
	(0.016)	(0.020)	(0.101)	(0.053)	(0.070)	(0.160)
Time fixed effects	✓	✓	✓	✓	✓	✓
Firm fixed effects	✓	✓	✓	✓	✓	✓
N	36,805	36,805	36,805	36,805	36,805	36,805
Adjusted R-squared	0.5017	0.5019	0.5008	0.5005	0.5005	0.5001

* – $p < 0.1$; ** – $p < 0.05$; *** – $p < 0.01$.

Note: OLS regressions of whether firm i has donated by time t (dependent variable) on covariates. All columns include day and firm fixed effects. Columns 1 to 3 use cumulative covid cases (standardized) at the headquarter state of firm i at time t as a measure of covid rates. Similarly, Columns 4 to 6 use cumulative covid deaths (standardized), instead. The variable *% Individual Blockholders* is the share of individual investors among all investors owning at least a share of total equity in the bracket defined in the top panel. The variables *% Individual Blockholders* and *Cum. Covid Rate* are standardized. Standard errors are clustered by firm and presented in parenthesis.

Table 6: The impact of large insitutional shareholders on Covid donations through Covid cases.

	Whether Firm i has Donated by Time t (0/1)								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Institutional Blockholders is defined as:	Banks			Mutual Funds			Insurance		
% Inst. Blockholders is the shares of firms owning:	>10%	>5%	(0%, 2%)	>10%	>5%	(0%, 2%)	>10%	>5%	(0%, 2%)
Cum. Covid Cases	0.019*	0.021*	0.016	0.018	0.015	0.018	0.021*	0.021*	0.020*
	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)
Cum. Covid Cases × *% Inst. Blockholders*	–0.008	–0.006	0.028***	–0.021*	–0.027**	–0.019*	0.002	–0.000	0.010
	(0.012)	(0.009)	(0.008)	(0.012)	(0.011)	(0.010)	(0.005)	(0.007)	(0.010)
Cum. Covid Cases × Meeting	–0.023	0.008	0.043	–0.055	–0.040	0.000	0.063*	0.042	0.137
	(0.040)	(0.062)	(0.083)	(0.038)	(0.041)	(0.066)	(0.037)	(0.030)	(0.115)
Cum. Covid Cases × *% Inst. Blockholders* × Meeting	–0.104***	0.007	0.002	–0.264***	–0.118***	0.034	–0.019***	–0.017	0.111
	(0.024)	(0.057)	(0.057)	(0.026)	(0.045)	(0.060)	(0.007)	(0.013)	(0.096)
Time fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
Firm fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
N	36,805	36,805	36,805	36,805	36,805	36,805	36,805	36,805	36,805
Adjusted R-squared	0.5011	0.4997	0.5051	0.5008	0.5025	0.5019	0.5011	0.5001	0.5014

* – $p < 0.1$; ** – $p < 0.05$; *** – $p < 0.01$.

Note: OLS regressions of whether firm i has donated by time t (dependent variable) on covariates. All columns include day and firm fixed effects. The variable *% Inst. Blockholders* is the share of institutional investors among all investors owning at least a share of total equity as defined in the top panel. The investor type is also defined in the top panel. The variables *% Invidvidual Blockholders* and Cum. Covid Cases are standardized. The interaction *% Inst. Blockholders* × Meeting is accounted for by the firm fixed effects. Standard errors are clustered by firm and presented in parenthesis.

Table 7: The impact of large insitutional shareholders on Covid donations through Covid deaths.

	Whether Firm i has Donated by Time t (0/1)								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Institutional Blockholders is defined as:	Banks			Mutual Funds			Insurance		
% Inst. Blockholders is the shares of firms owning:	>10%	>5%	(0%, 2%)	>10%	>5%	(0%, 2%)	>10%	>5%	(0%, 2%)
Cum. Covid Deaths	0.017*	0.018*	0.014	0.016*	0.014	0.015	0.018*	0.018**	0.017*
	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)
Cum. Covid Deaths × *% Inst. Blockholders*	−0.006	−0.004	0.023***	−0.013	−0.020*	−0.014	0.001	−0.002	0.008
	(0.010)	(0.008)	(0.007)	(0.013)	(0.012)	(0.009)	(0.004)	(0.006)	(0.009)
Cum. Covid Deaths × Meeting	−0.081**	0.028	−0.035	−0.154***	−0.128**	−0.052	0.053***	0.041**	0.095
	(0.040)	(0.080)	(0.074)	(0.038)	(0.051)	(0.048)	(0.020)	(0.018)	(0.179)
Cum. Covid Deaths × *% Inst. Blockholders* × Meeting	−0.234***	0.028	−0.055	−0.649***	−0.317***	0.086*	−0.015***	−0.018**	0.073
	(0.042)	(0.062)	(0.051)	(0.047)	(0.092)	(0.048)	(0.005)	(0.008)	(0.148)
Time fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
Firm fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
N	36,805	36,805	36,805	36,805	36,805	36,805	36,805	36,805	36,805
Adjusted R-squared	0.5003	0.4991	0.5028	0.4996	0.5008	0.5008	0.5001	0.4998	0.4996

* – $p < 0.1$; ** – $p < 0.05$; *** – $p < 0.01$.

Note: OLS regressions of whether firm i has donated by time t (dependent variable) on covariates. All columns include day and firm fixed effects. The variable *% Inst. Blockholders* is the share of institutional investors among all investors owning at least a share of total equity as defined in the top panel. The investor type is also defined in the top panel. The variables *% Individual Blockholders* and Cum. Covid Deaths are standardized. The interaction *% Inst. Blockholders* × Meeting is accounted for by the firm fixed effects. Standard errors are clustered by firm and presented in parenthesis.

Table 8: The impact of shareholder influence across firms through shared board seats

	Whether Firm i has Donated by Time t (0/1)			
	(1)	(2)	(3)	(4)
Board Pressure based on shared board seats with:	Firms with AGMs		Donating firms	
	Cases	Deaths	Cases	Deaths
Cum. Covid Rate	–0.000	–0.000	–0.034	–0.024
	(0.014)	(0.012)	(0.026)	(0.023)
Board Pressure × *Cum. Covid Rate*	0.036**	0.030*	0.056**	0.042*
	(0.018)	(0.016)	(0.026)	(0.024)
Time fixed effects	✓	✓	✓	✓
Firm fixed effects	✓	✓	✓	✓
N	31,705	31,705	35,445	35,445
Adjusted R-squared	0.4968	0.4955	0.4964	0.4949

* – $p < 0.1$; ** – $p < 0.05$; *** – $p < 0.01$.

Note: OLS regressions of whether firm i has donated by time t (dependent variable) on covariates. All columns include day and firm fixed effects. Columns 1 and 3 use cumulative covid cases (standardized) at the headquarter state of firm i at time t as a measure of covid rates. Similarly, Columns 2 to 4 use cumulative covid deaths (standardized), instead. In Columns 1 and 2 the variable *Board Pressure* is 1 if at least one board member at the focal firm is also a board member at a firm that has an AGM before April 15th, 2020, and 0 otherwise. The variable *Pressure* is instead 1 if at least one member of the board of the focal firm is also part of the board of a firm that donates. The variable *Cum. Covid Rate* is standardized. Standard errors are clustered by firm and presented in parenthesis. The first two columns include only firms without an AGM.

Table 9: The impact of Covid exposure at branches on donations across industries.

	Whether Firm i has Donated by Time t (0/1)							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Exposure at branches is defined as:	Cases				Deaths			
More than x branches (0/1) defined as:	all	50%	75%	90%	all	50%	75%	90%
Exposure at branches	0.009	0.009	0.012	0.014	0.009	0.008	0.010	0.011
	(0.015)	(0.013)	(0.012)	(0.012)	(0.013)	(0.011)	(0.010)	(0.010)
Exposure at branches × Number of branhces (ln)	0.002				0.000			
	(0.005)				(0.004)			
Exposure at branches × *More than x branches (0/1)*		0.024	0.039	0.020		0.018	0.039	0.016
		(0.024)	(0.028)	(0.045)		(0.024)	(0.029)	(0.050)
Time fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Firm fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
N	33,490	37,570	37,570	37,570	33,490	37,570	37,570	37,570
Adjusted R-squared	0.4979	0.4967	0.4969	0.4958	0.4978	0.4961	0.4965	0.4956

* – $p < 0.1$; ** – $p < 0.05$; *** – $p < 0.01$.

Note: OLS regressions of whether firm i has donated by time t (dependent variable) on covariates. All columns include day and firm fixed effects. Columns 1 to 4 use cumulative covid cases (standardized) at the headquarter state of firm i at time t as a measure of covid rates. Similarly, Columns 5 to 8 use cumulative covid deaths (standardized), instead. The variable Number of branches in Columns 1 and 5 is in log. The remaining column use a dummy variable for whether the focal firm has more than the x-percentile than the distribution of dummies: this value is 40 branches in Columns 2 and 6, 170 branhces in Columns 3 and 7, and 664 branhces in Columns 4 and 8. Orbis misses observations about branches for 15 firms. Standard errors are clustered by firm and presented in parenthesis.

Table 10: The impact of self-ownership on Covid donations.

	Whether Firm i has Donated by Time t (0/1)					
	(1)	(2)	(3)	(4)	(5)	(6)
Cum. Covid Rate is defined as:	At Headquarter		National Rates		At Branches	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Cum. Covid Rate	0.022**	0.019**	0.114***	0.100***	–0.003	–0.001
	(0.011)	(0.009)	(0.007)	(0.006)	(0.015)	(0.012)
Cum. Covid Rate × *Above Median Ownership*	–0.035	–0.034	–0.019	–0.016	0.010	–0.007
	(0.028)	(0.024)	(0.028)	(0.026)	(0.060)	(0.052)
Cum. Covid Rate × Meeting	0.067*	0.057***	0.028	0.025	0.068	0.084
	(0.038)	(0.021)	(0.028)	(0.025)	(0.055)	(0.070)
Cum. Covid Rate × *Above Median Ownership* × Meeting	–0.109**	–0.091***	–0.079	–0.075	–0.024	0.075
	(0.048)	(0.031)	(0.068)	(0.063)	(0.283)	(0.349)
Time fixed effects	✓	✓	✓	✓	✓	✓
Firm fixed effects	✓	✓	✓	✓	✓	✓
N	38,845	38,845	38,845	38,845	29,665	29,665
Adjusted R-squared	0.4958	0.4948	0.4927	0.4924	0.5007	0.5006

* – $p < 0.1$; ** – $p < 0.05$; *** – $p < 0.01$.

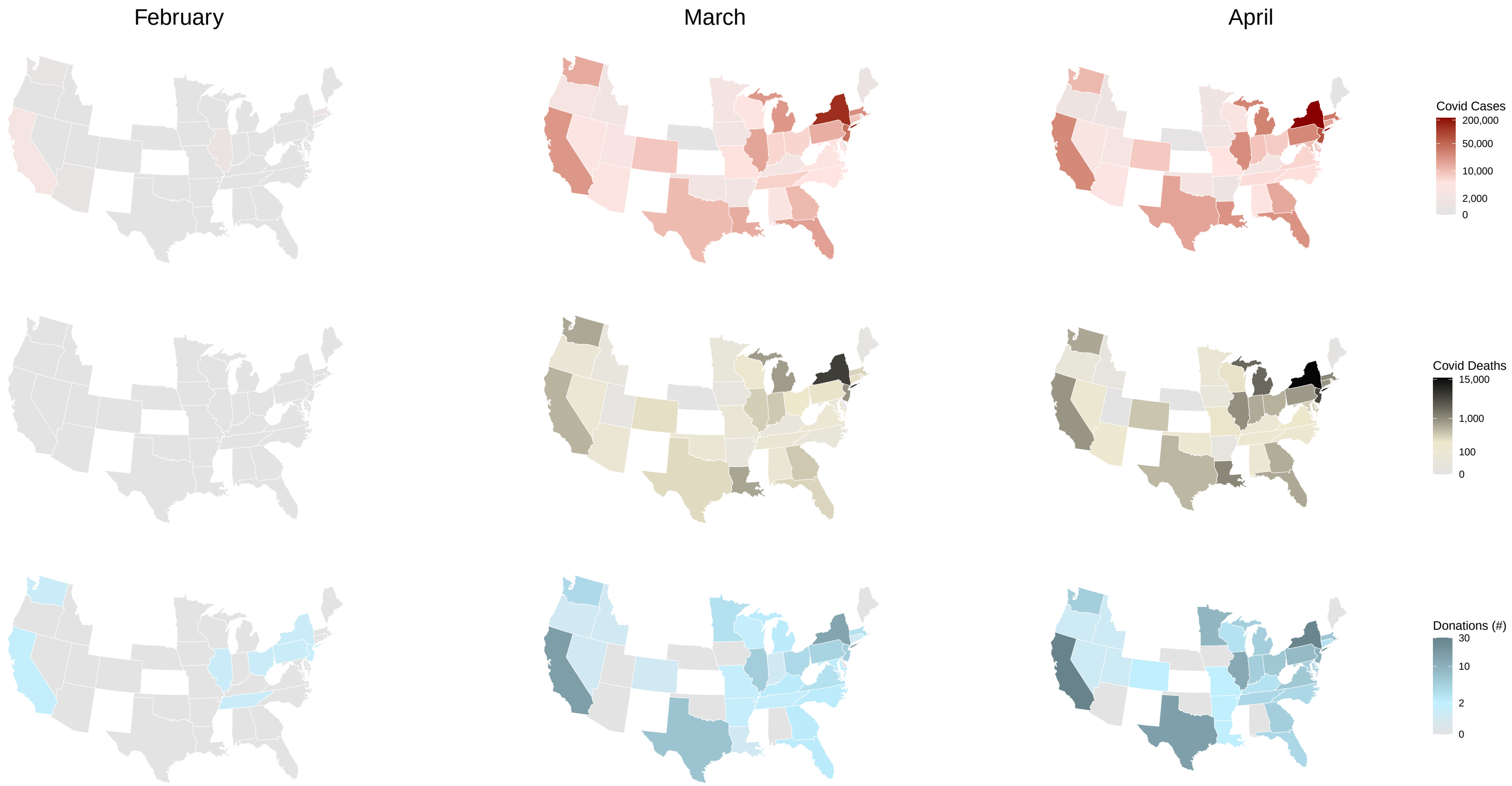
Note: OLS regressions of whether firm i has donated by time t (dependent variable) on covariates. All columns include day and firm fixed effects. The variable Above Median Self Ownership is 1 if the share of equity owned by the firm itself is greater than its median value in the dataset, and 0 otherwise. All columns include day and firm fixed effects. The variable Cases and Deaths are standardized. The interaction Above Median Self Ownership × Meeting is accounted for by the firm fixed effects. The last two columns restrict the data to firms with at least five branches. Standard errors are clustered by firm and presented in parenthesis.

Table 11: Correlation between financial investors' donations and their companies' donations

Mimimum Share (1)	Simple Average (2)	Weighted Average (3)	Weighted Average × Met (4)
0%	0.442	-0.062	-0.211
(Avg. N = 222)	[0.007]	[0.721]	[0.238]
1%	0.064	0.079	-0.093
(Avg. N = 100)	[0.751]	[0.696]	[0.705]
2%	-0.230	0.077	-0.439
(Avg. N = 57)	[0.280]	[0.721]	[0.089]
3%	-0.105	0.180	-0.617
(Avg. N = 48)	[0.643]	[0.423]	[0.077]
4%	-0.112	0.060	-0.878
(Avg. N = 42)	[0.630]	[0.795]	[0.021]
5%	0.124	0.275	-0.289
(Avg. N = 35)	[0.637]	[0.285]	[0.638]

Note: The table computes the Spearman correlation between whether a financial firm donates or not and whether the firms it invests in donates. In each row we vary the minimum share % that a firm must have in another firm in order to be considered an investment according to the percentages reported in the first column. The first column also reports the average number of S&P500 firms in the portfolio of a financial investor. Column 2 computes the total donations of the firms that financial firm i has invested in using simple averages (i.e., $N^{-1} \times \sum_j \mathbb{I}_{[\text{firm } j \text{ donated}]} \times \mathbb{I}_{[i\text{'s share in } j \text{ is greater than } x\%]}$, where N is the number of investments of firm i), column 3 computes weighted average with weights equal to the equity shares (i.e., $\sum_j share_{ij} \times \mathbb{I}_{[\text{firm } j \text{ donated}]} \times \mathbb{I}_{[i\text{'s share in } j \text{ is greater than } x\%]}$), and column 4 considers only investments that got an AGM in the period under consideration (i.e., $\sum_j share_{ij} \times \mathbb{I}_{[\text{firm } j \text{ donated}]} \times \mathbb{I}_{[i\text{'s share in } j \text{ is greater than } x\%]} \times \mathbb{I}_{[j \text{ has an AGM}]}$). We only consider financial investors. p-values are in square brackets.

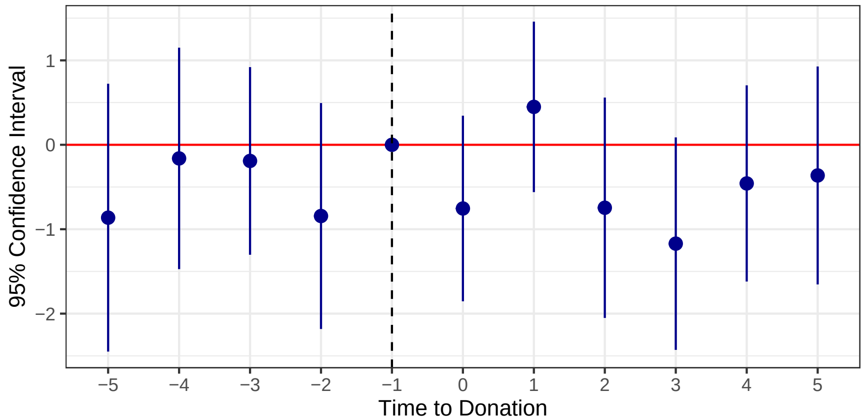
Figure 1: Covid cases, covid deaths and corporate donations



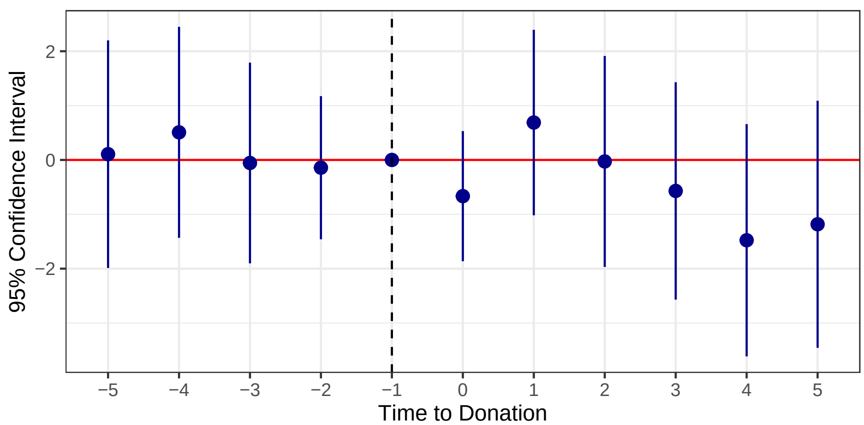
Notes: The figure reports snapshots of covid rates (number of deaths and cases) and the number of firms donating by U.S. states at February 29, March 31 and April 15. States in white do not house S&P500 firms.

Figure 2: Abnormal and cumulative abnormal returns, event study

(a) Abnormal Returns, AR



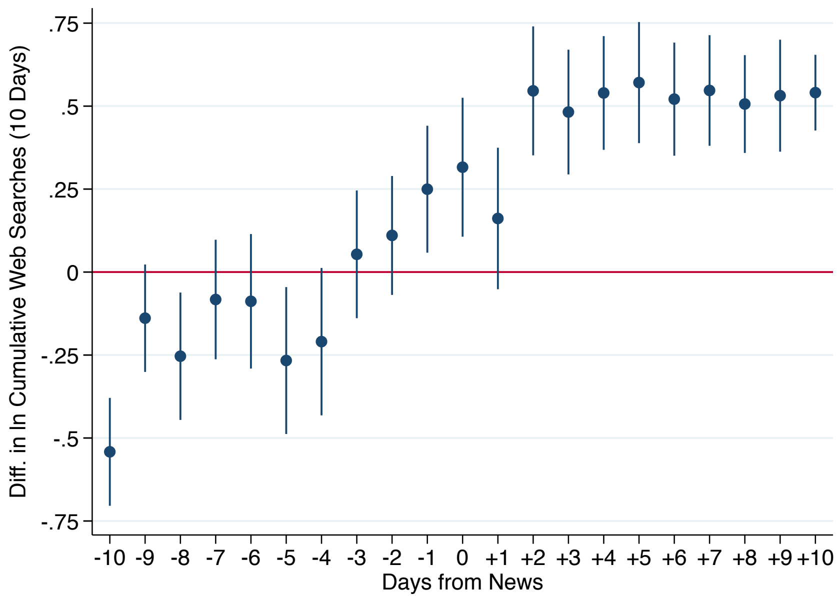
(b) Cumulative Abnormal Returns (5 days), CAR



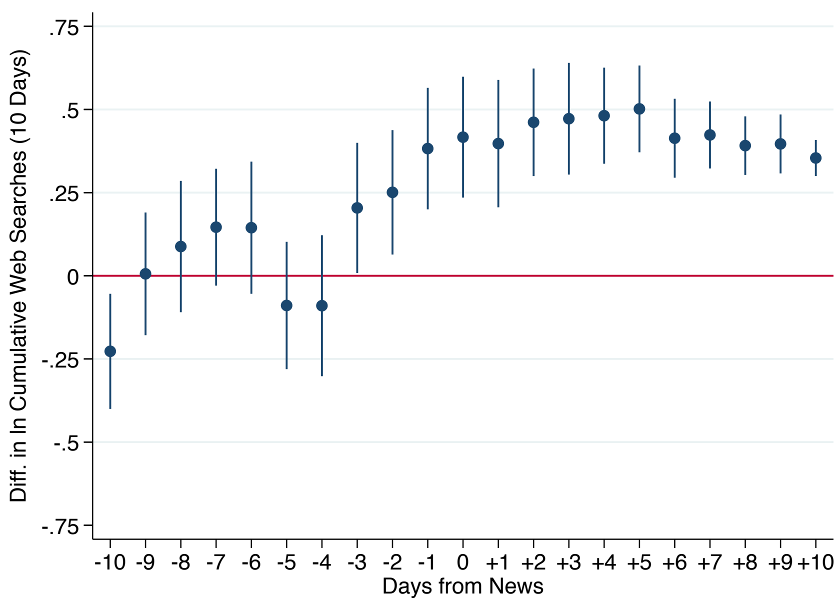
Notes: The figure shows event studies in a five-day window around the donation announcement. The coefficients are in Appendix Table C1.

Figure 3: Difference in the (log) cumulative Google trends to individual shareholders and institutional investors, event study

(a) Shareholders With > 1%

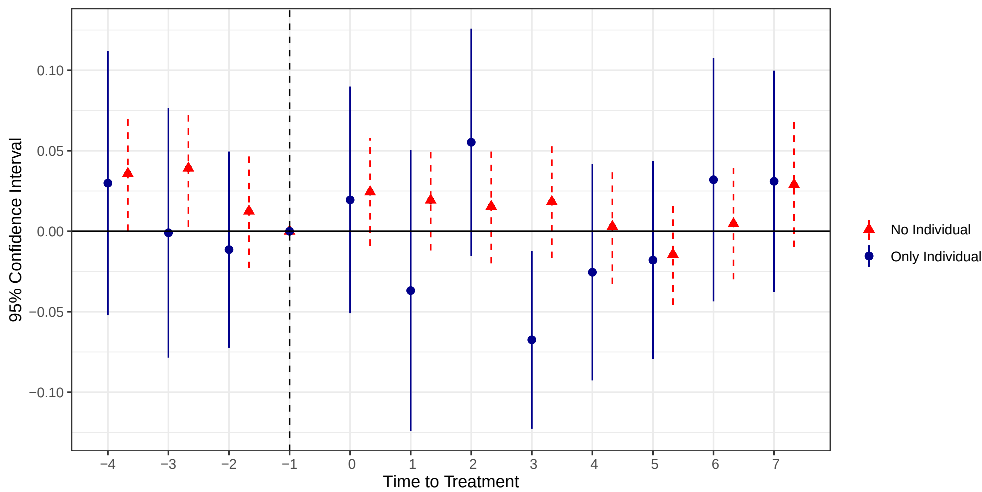


(b) Shareholders With > 5%



Notes: Both panels report coefficient estimates from regressing the (log) cumulative number of Google searches (ten-day window) of shareholder's names over dummy variables describing a 10 window around a firm's donation date and the interaction of these dummies with an indicator function that is one if the shareholder is an individual and zero otherwise. The panels show the coefficient for the interaction terms. The regression is explained in detail in Section 6. Panel a (Panel b) includes only shareholders with more than 1% (5%) shares. Appendix Table A9 reports the coefficient estimates.

Figure 4: Probability of having an ESG-incident around the AGM



Notes: The figure reports coefficient estimates from regressing the probability of observing a risk incident for a firm in a given month, on a dummy equal to one if the firm has above median institutional blockholding (5%) and no individual shareholder ("No individual"), and a dummy equal to one if a firm has at least one individual shareholder and below median institutional blockholding ("Only individual"). The specification is described in Equation 4 in Section 5. Both regressions include firm and time fixed effects, and standard errors are clustered at the firm level.

The Voice: the Shareholders' Motives Behind Corporate Donations During COVID-19

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Online Appendix

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Part

Online Appendix

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A Additional Tables

Table A1: The impact of shareholder type on Covid donations for financial investors, standard error clustered by industry.

	Whether Firm i has Donated by Time t (0/1)									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Cum. Covid Rate is defined as:			Cases					Deaths		
Above Median Ownership refers to:	Banks	Insur.	Mutual	P. E.s	Ind.	Banks	Insur.	Mutual	P. E.s	Ind.
Cum. Covid Rate	0.012	0.030**	0.033**	0.022*	0.027**	0.011	0.026**	0.028**	0.018*	0.023**
	(0.012)	(0.010)	(0.012)	(0.011)	(0.011)	(0.010)	(0.009)	(0.010)	(0.009)	(0.009)
Cum. Covid Rate × *Above Median Ownership*	0.011	−0.023	−0.037*	−0.009	−0.029	0.009	−0.019	−0.032*	−0.006	−0.025
	(0.018)	(0.020)	(0.018)	(0.013)	(0.022)	(0.014)	(0.017)	(0.016)	(0.013)	(0.019)
Cum. Covid Rate × Meeting	0.016	0.020	0.012	0.059	−0.049	0.007	0.030	−0.062	−0.031	−0.061**
	(0.046)	(0.032)	(0.131)	(0.161)	(0.044)	(0.045)	(0.024)	(0.153)	(0.197)	(0.020)
Cum. Covid Rate × *Above Median Ownership* × Meeting	−0.029	−0.029	0.016	−0.051	0.131**	−0.064	−0.062*	0.084	0.036	0.135***
	(0.140)	(0.062)	(0.119)	(0.134)	(0.045)	(0.196)	(0.033)	(0.147)	(0.183)	(0.022)
Time fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Firm fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
N	38,845	38,845	38,845	38,845	38,845	38,845	38,845	38,845	38,845	38,845
Adjusted R-squared	0.4934	0.4944	0.4959	0.4934	0.4955	0.4929	0.4940	0.4948	0.4928	0.4949

* – $p < 0.1$; ** – $p < 0.05$; *** – $p < 0.01$.

Note: OLS regressions of whether firm i has donated by time t (dependent variable) on covariates. All columns include day and firm fixed effects. The variable Cases and Deaths are standardized. The variable *Above Median Ownership* varies across columns. This variable is 1 if the share of equity owned by the banks (cols 1 and 6), or insurance (cols 2 and 7), or mutual funds (cols 3 and 8), or private equity (cols 4 and 9), or individual investors (cols 5 and 10) is greater than its median value in the dataset, and 0 otherwise. All columns include day and firm fixed effects. The interaction *Above Median Ownership* × Meeting is accounted for by the firm fixed effects. Standard errors are clustered by industry and presented in parenthesis.

Table A2: The impact of shareholder type on Covid donations through US national Covid rates.

	Whether Firm i has Donated by Time t (0/1)									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
U.S. Cum. Covid Rate is defined as:			Cases					Deaths		
Above Median Ownership refers to:	Banks	Insur.	Mutual	P. E.s	Ind.	Banks	Insur.	Mutual	P. E.s	Ind.
U.S. Cum. Covid Rate	0.097***	0.115***	0.122***	0.120***	0.128***	0.084***	0.099***	0.108***	0.106***	0.113***
	(0.011)	(0.011)	(0.011)	(0.011)	(0.009)	(0.010)	(0.010)	(0.010)	(0.010)	(0.008)
U.S. Cum. Covid Rate × *Above Median Ownership*	0.030*	–0.004	–0.019	–0.015	–0.049***	0.027*	–0.001	–0.018	–0.013	–0.046***
	(0.016)	(0.016)	(0.016)	(0.016)	(0.017)	(0.015)	(0.015)	(0.015)	(0.015)	(0.015)
U.S. Cum. Covid Rate × Meeting	0.048	0.008	–0.008	0.020	–0.000	0.042	0.005	–0.006	0.014	–0.001
	(0.035)	(0.035)	(0.045)	(0.044)	(0.032)	(0.032)	(0.031)	(0.043)	(0.039)	(0.029)
U.S. Cum. Covid Rate × *Above Median Ownership* × Meeting	–0.064	0.022	0.041	–0.002	0.056	–0.057	0.023	0.034	0.003	0.050
	(0.051)	(0.052)	(0.055)	(0.054)	(0.054)	(0.047)	(0.048)	(0.052)	(0.049)	(0.049)
Time fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Firm fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
N	38,845	38,845	38,845	38,845	38,845	38,845	38,845	38,845	38,845	38,845
Adjusted R-squared	0.4937	0.4915	0.4923	0.4919	0.4961	0.4932	0.4914	0.4921	0.4917	0.4953

* – $p < 0.1$; ** – $p < 0.05$; *** – $p < 0.01$.

Note: OLS regressions of whether firm i has donated by time t (dependent variable) on covariates. All columns include day and firm fixed effects. This table uses the national cumulative Covid cases and Covid deaths for the whole U.S.A., instead of the headquarter-state specic Covid rates. The variable *Above Median Ownership* varies across columns. This variable is 1 if the share of equity owned by the banks (cols 1 and 6), or insurance (cols 2 and 7), or mutual funds (cols 3 and 8), or private equity (cols 4 and 9), or individual investors (cols 5 and 10) is greater than its median value in the dataset, and 0 otherwise. All columns include day and firm fixed effects. The interaction *Above Median Ownership* × Meeting is accounted for by the firm fixed effects. Standard errors are clustered by firm and presented in parenthesis.

Table A3: The impact of individual shareholders on Covid donations, standard error clustered by industry.

	Whether Firm i has Donated by Time t (0/1)					
	(1)	(2)	(3)	(4)	(5)	(6)
Cum. Covid Rate is defined as:		Cases			Deaths	
% Invidvidual Blockholders is the shares of individuals owning:	$> 10\%$	$> 5\%$	$(0\%, 2\%)$	$> 10\%$	$> 5\%$	$(0\%, 2\%)$
Cum. Covid Rate	0.018	0.018	0.020**	0.016	0.016	0.017*
	(0.011)	(0.011)	(0.009)	(0.009)	(0.009)	(0.008)
Cum. Covid Rate × *% Invidvidual Blockholders*	0.009**	0.008**	–0.015*	0.007**	0.007**	–0.013*
	(0.004)	(0.003)	(0.007)	(0.003)	(0.003)	(0.006)
Cum. Covid Rate × Meeting	0.033	0.037	0.011	0.060	0.068	0.015
	(0.051)	(0.051)	(0.043)	(0.052)	(0.054)	(0.035)
Cum. Covid Rate × *% Invidvidual Blockholders* × Meeting	0.127***	0.143***	0.042	0.308***	0.340***	0.123
	(0.017)	(0.020)	(0.077)	(0.051)	(0.066)	(0.135)
Time fixed effects	✓	✓	✓	✓	✓	✓
Firm fixed effects	✓	✓	✓	✓	✓	✓
N	36,805	36,805	36,805	36,805	36,805	36,805
Adjusted R-squared	0.5017	0.5019	0.5008	0.5005	0.5005	0.5001

* – $p < 0.1$; ** – $p < 0.05$; *** – $p < 0.01$.

Note: OLS regressions of whether firm i has donated by time t (dependent variable) on covariates. All columns include day and firm fixed effects. The variable *% Invidvidual Blockholders* is the share of individual investors among all investors owning at least a share of total equity in the bracket defined in the bottom panel. The variables *% Invidvidual Blockholders*, Cases and Deaths are standardized. The interaction *% Invidvidual Blockholders* × Meeting is accounted for by the firm fixed effects. Standard errors are clustered by industry and presented in parenthesis.

Table A4: The impact of large insitutional shareholders on Covid donations through US national Covid cases.

	Whether Firm i has Donated by Time t (0/1)								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Institutional Blockholders is defined as:	Banks			Mutual Funds			Insurance		
% Inst. Blockholders is the shares of firms owning:	>10%	>5%	(0%, 2%)	>10%	>5%	(0%, 2%)	>10%	>5%	(0%, 2%)
U.S. Cum. Covid Cases	0.115***	0.115***	0.115***	0.115***	0.115***	0.114***	0.115***	0.115***	0.114***
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
U.S. Cum. Covid Cases × *% Inst. Blockholders*	−0.015*	−0.007	0.039***	−0.005	−0.009	−0.035***	0.012*	0.019**	0.009
	(0.008)	(0.009)	(0.008)	(0.008)	(0.008)	(0.008)	(0.007)	(0.008)	(0.008)
U.S. Cum. Covid Cases × Meeting	0.020	0.016	0.020	0.010	0.020	0.022	0.021	0.017	0.028
	(0.025)	(0.028)	(0.026)	(0.025)	(0.026)	(0.027)	(0.026)	(0.027)	(0.029)
U.S. Cum. Covid Cases × *% Inst. Blockholders* × Meeting	−0.027**	−0.002	−0.018	−0.054***	−0.021**	0.032	−0.032***	−0.007	0.012
	(0.011)	(0.023)	(0.028)	(0.013)	(0.010)	(0.023)	(0.007)	(0.016)	(0.028)
Time fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
Firm fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
N	36,805	36,805	36,805	36,805	36,805	36,805	36,805	36,805	36,805
Adjusted R-squared	0.5013	0.4978	0.5110	0.4980	0.4995	0.5074	0.4992	0.5006	0.4983

* – $p < 0.1$; ** – $p < 0.05$; *** – $p < 0.01$.

Note: OLS regressions of whether firm i has donated by time t (dependent variable) on covariates. All columns include day and firm fixed effects. The variable *% Inst. Blockholders* is the share of institutional investors among all investors owning at least a share of total equity as defined in the top panel. The investor type is also defined in the top panel. The variables *% Invidvidual Blockholders* and Cum. US national Covid Cases are standardized. The interaction *% Inst. Blockholders* × Meeting is accounted for by the firm fixed effects. Standard errors are clustered by firm and presented in parenthesis.

Table A5: The impact of large insitutional shareholders on Covid donations through US national Covid deaths.

	Whether Firm i has Donated by Time t (0/1)								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Institutional Blockholders is defined as:	Banks			Mutual Funds			Insurance		
% Inst. Blockholders is the shares of firms owning:	>10%	>5%	(0%, 2%)	>10%	>5%	(0%, 2%)	>10%	>5%	(0%, 2%)
U.S. Cum. Covid Deaths	0.101***	0.101***	0.101***	0.101***	0.101***	0.100***	0.101***	0.101***	0.101***
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
U.S. Cum. Covid Deaths × *% Inst. Blockholders*	−0.013	−0.005	0.034***	−0.005	−0.009	−0.032***	0.012*	0.019**	0.009
	(0.008)	(0.008)	(0.007)	(0.008)	(0.007)	(0.007)	(0.006)	(0.007)	(0.007)
U.S. Cum. Covid Deaths × Meeting	0.017	0.014	0.017	0.008	0.017	0.019	0.018	0.015	0.025
	(0.023)	(0.026)	(0.024)	(0.023)	(0.024)	(0.025)	(0.024)	(0.024)	(0.026)
U.S. Cum. Covid Deaths × *% Inst. Blockholders* × Meeting	−0.026**	−0.003	−0.016	−0.049***	−0.019**	0.029	−0.030***	−0.006	0.012
	(0.010)	(0.021)	(0.026)	(0.012)	(0.009)	(0.021)	(0.007)	(0.015)	(0.027)
Time fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
Firm fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
N	36,805	36,805	36,805	36,805	36,805	36,805	36,805	36,805	36,805
Adjusted R-squared	0.5004	0.4974	0.5080	0.4978	0.4991	0.5054	0.4987	0.5000	0.4981

* – $p < 0.1$; ** – $p < 0.05$; *** – $p < 0.01$.

Note: OLS regressions of whether firm i has donated by time t (dependent variable) on covariates. All columns include day and firm fixed effects. The variable *% Inst. Blockholders* is the share of institutional investors among all investors owning at least a share of total equity as defined in the top panel. The investor type is also defined in the top panel. The variables *% Individual Blockholders* and Cum. US national Covid deaths are standardized. The interaction *% Inst. Blockholders* × Meeting is accounted for by the firm fixed effects. Standard errors are clustered by firm and presented in parenthesis.

Table A6: The impact of Covid exposure at branches on Covid donations, standard error clustered by industry.

	Whether Firm i has Donated by Time t (0/1)									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Exposure at branches is defined as:			Cases					Deaths		
Above Median Ownership refers to:	Banks	Insur.	Mutual	P. E.s	All Fin.	Banks	Insur.	Mutual	P. E.s	All Fin.
Exposure at branches	–0.023	0.011	–0.000	0.000	–0.011	–0.013	0.009	0.001	–0.001	–0.005
	(0.023)	(0.024)	(0.022)	(0.025)	(0.027)	(0.018)	(0.021)	(0.017)	(0.019)	(0.023)
Exposure at branches × *Shareholding Type*	0.026	–0.026	–0.020	–0.008	0.012	0.015	–0.020	–0.012	–0.001	0.005
	(0.019)	(0.028)	(0.019)	(0.021)	(0.019)	(0.017)	(0.025)	(0.020)	(0.018)	(0.017)
Exposure at branches × Meeting	0.122	0.027	–0.011	0.099	0.074	0.138	0.042	0.007	0.141	0.073
	(0.078)	(0.066)	(0.097)	(0.085)	(0.105)	(0.094)	(0.081)	(0.113)	(0.098)	(0.132)
Exposure at branches × *Shareholding Type* × Meeting	–0.173	0.093	0.139	–0.048	–0.012	–0.216	0.128	0.172	–0.082	0.038
	(0.097)	(0.098)	(0.090)	(0.070)	(0.087)	(0.142)	(0.131)	(0.106)	(0.073)	(0.115)
Time fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Firm fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
N	29,665	29,665	29,665	29,665	29,665	29,665	29,665	29,665	29,665	29,665
Adjusted R-squared	0.5029	0.5021	0.5021	0.5010	0.5009	0.5020	0.5016	0.5017	0.5008	0.5007

* – $p < 0.1$; ** – $p < 0.05$; *** – $p < 0.01$.

Note: OLS regressions of whether firm i has donated by time t (dependent variable) on covariates. All columns include day and firm fixed effects. The variable *Above Median Ownership* varies across columns. This variable is 1 if the share of equity owned by the banks (cols 1 and 6), or insurance (cols 2 and 7), or mutual funds (cols 3 and 8), or private equity (cols 4 and 9), or all financial investors (cols 5 and 10) is greater than its median value in the dataset, and 0 otherwise. All columns include day and firm fixed effects. The interaction *Above Median Ownership* × Meeting is accounted for by the firm fixed effects. Standard errors are clustered by industry and presented in parenthesis.

Table A7: Effect of competitors on Covid donations, standard errors are clustered by industry.

	Whether Firm i has Donated by Time t (0/1)		
	(1)	(2)	(3)
% Competitors Already Donating	0.050	0.050	0.044
	(0.035)	(0.037)	(0.038)
% Competitors Already Donating × Meeting		0.003	0.004
		(0.041)	(0.043)
% Competitors Already Donating × % Owned by Individuals			0.356*
			(0.185)
% Competitors Already Donating × % Owned by Individuals × Meeting			0.008
			(0.383)
Time fixed effects	✓	✓	✓
Firm fixed effects	✓	✓	✓
N	48,442	48,442	45,898
Adjusted R-squared	0.4486	0.4486	0.4570

* – $p < 0.1$; ** – $p < 0.05$; *** – $p < 0.01$.

Note: OLS regressions of whether firm i has donated by time t (dependent variable) on covariates. All columns include day and firm fixed effects. The variables % Competitors Already Donating and % Owned by Individuals are in $[0,1]$. The interaction % Owned by Individuals × Meeting is accounted for by firm fixed effects. Standard errors are clustered by industry and presented in parenthesis.

Table A8: Effect of competitors on Covid donations by shareholder type, standard errors clustered by industry.

	Whether Firm *i* has Donated by Time *t* (0/1)					
	(1)	(2)	(3)	(4)	(5)	(6)
Above Median Ownership refers to :	Indiv.	Banks	Insur.	Mutual	P. E.s	Fin.
% Competitors Already Donating	0.064	0.026	0.057	0.076	0.076*	0.040
	(0.036)	(0.039)	(0.050)	(0.045)	(0.038)	(0.039)
% Competitors Already Donating × *Above Median Ownership*	–0.045	0.044	–0.014	–0.052**	–0.052*	0.018
	(0.025)	(0.029)	(0.030)	(0.021)	(0.025)	(0.030)
% Competitors Already Donating × Meeting	–0.028	0.043	0.020	–0.055	0.000	0.009
	(0.034)	(0.045)	(0.051)	(0.067)	(0.048)	(0.072)
% Competitors Already Donating × *Above Median Ownership* × Meeting	0.097	–0.085*	–0.045	0.095	0.014	–0.009
	(0.056)	(0.041)	(0.041)	(0.070)	(0.056)	(0.105)
Time fixed effects	✓	✓	✓	✓	✓	✓
Firm fixed effects	✓	✓	✓	✓	✓	✓
N	48,442	48,442	48,442	48,442	48,442	48,442
Adjusted R-squared	0.4497	0.4497	0.4489	0.4502	0.4501	0.4487

* – $p < 0.1$; ** – $p < 0.05$; *** – $p < 0.01$.

Note: OLS regressions of whether firm *i* has donated by time *t* (dependent variable) on covariates. All columns include day and firm fixed effects. Above Median Ownership is 1 for firms that have more than the median amount of individual (col 1), banks (2), insurance companies (3), mutual funds (4), private equity (5), or all financial institutions together (6), respectively and 0 otherwise. The interaction Above Median Ownership × Meeting is accounted for by firm fixed effects. Standard errors are clustered by industry and presented in parenthesis.

Table A9: Google searches to individual shareholders.

	# of Google Searches		(log) Comulative Google Web Searches Over					
	Daily		14 days		10 days		7 days	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Individual Shareholder × 10 Days Before	−8.701***	−11.095***	−0.259***	−0.102	−0.542***	−0.227**	−0.337***	−0.132
	(1.617)	(2.884)	(0.079)	(0.072)	(0.073)	(0.075)	(0.058)	(0.072)
Individual Shareholder × 9 Days Before	−11.347***	−14.754***	−0.195**	−0.018	−0.139*	0.006	−0.396***	−0.164*
	(0.910)	(1.781)	(0.084)	(0.074)	(0.073)	(0.080)	(0.064)	(0.077)
Individual Shareholder × 8 Days Before	−8.722***	−12.710***	−0.131	0.044	−0.254**	0.088	−0.414***	0.004
	(1.276)	(3.061)	(0.087)	(0.087)	(0.086)	(0.086)	(0.078)	(0.085)
Individual Shareholder × 7 Days Before	−11.431***	−16.198**	0.127	0.361***	−0.083	0.146*	−0.598***	0.033
	(1.755)	(4.901)	(0.080)	(0.080)	(0.081)	(0.076)	(0.081)	(0.081)
Individual Shareholder × 6 Days Before	−5.798**	−8.352	0.149	0.383***	−0.088	0.144	−0.053	0.271**
	(2.581)	(5.907)	(0.087)	(0.086)	(0.091)	(0.086)	(0.099)	(0.098)
Individual Shareholder × 5 Days Before	−2.846	−3.702	−0.033	0.171*	−0.267**	−0.089	−0.336***	−0.036
	(2.358)	(4.651)	(0.087)	(0.080)	(0.099)	(0.083)	(0.101)	(0.087)
Individual Shareholder × 4 Days Before	−4.770*	−5.242	0.030	0.212**	−0.210*	−0.090	−0.135	−0.026
	(2.373)	(5.523)	(0.094)	(0.084)	(0.100)	(0.092)	(0.096)	(0.086)
Individual Shareholder × 3 Days Before	−9.395***	−11.464**	0.091	0.231**	0.053	0.204**	−0.170	−0.056
	(1.975)	(4.360)	(0.096)	(0.090)	(0.086)	(0.085)	(0.099)	(0.083)
Individual Shareholder × 2 Days Before	−7.173***	−8.182	0.242**	0.308***	0.110	0.251**	−0.051	0.073
	(1.811)	(4.527)	(0.093)	(0.082)	(0.080)	(0.081)	(0.101)	(0.085)
Individual Shareholder × 1 Day Before	−5.140**	−5.507	0.289**	0.330***	0.250**	0.382***	0.085	0.152
	(2.220)	(5.913)	(0.092)	(0.074)	(0.086)	(0.079)	(0.099)	(0.086)
Individual Shareholder × News Day	6.610*	2.246	0.334***	0.324***	0.316***	0.417***	0.400***	0.431***
	(3.522)	(6.770)	(0.088)	(0.065)	(0.094)	(0.079)	(0.074)	(0.077)
Individual Shareholder × 1 Day After	−6.287**	−9.775*	0.306***	0.307***	0.161	0.397***	0.209**	0.388***
	(2.493)	(4.995)	(0.086)	(0.062)	(0.096)	(0.083)	(0.076)	(0.072)
Individual Shareholder × 2 Days After	0.480	−2.515	0.384***	0.298***	0.546***	0.461***	0.384***	0.499***
	(2.234)	(3.410)	(0.074)	(0.055)	(0.087)	(0.070)	(0.074)	(0.073)
Individual Shareholder × 3 Days After	−0.345	−0.037	0.385***	0.312***	0.482***	0.472***	0.220**	0.566***
	(1.806)	(2.785)	(0.076)	(0.046)	(0.084)	(0.073)	(0.087)	(0.082)
Individual Shareholder × 4 Days After	3.035	3.911	0.404***	0.330***	0.539***	0.481***	0.446***	0.619***
	(1.742)	(2.211)	(0.074)	(0.042)	(0.077)	(0.063)	(0.076)	(0.085)
Individual Shareholder × 5 Days After	0.739	−1.051	0.402***	0.290***	0.571***	0.502***	0.747***	0.630***
	(1.404)	(3.061)	(0.084)	(0.039)	(0.082)	(0.057)	(0.077)	(0.080)
Individual Shareholder × 6 Days After	2.055	−0.048	0.419***	0.264***	0.521***	0.413***	0.683***	0.595***
	(2.192)	(3.311)	(0.080)	(0.038)	(0.076)	(0.051)	(0.074)	(0.073)
Individual Shareholder × 7 Days After	−2.397	−4.423	0.404***	0.253***	0.547***	0.423***	0.693***	0.574***
	(1.735)	(2.759)	(0.074)	(0.034)	(0.075)	(0.044)	(0.069)	(0.059)
Individual Shareholder × 8 Days After	−1.216	−2.355	0.375***	0.212***	0.506***	0.391***	0.688***	0.608***
	(2.281)	(3.572)	(0.081)	(0.037)	(0.066)	(0.038)	(0.072)	(0.059)
Individual Shareholder × 9 Days After	6.062**	6.669**	0.498***	0.317***	0.531***	0.396***	0.689***	0.571***
	(2.062)	(2.536)	(0.069)	(0.031)	(0.076)	(0.038)	(0.062)	(0.052)
Individual Shareholder × 10 Days After	7.752***	7.812***	0.377***	0.142***	0.540***	0.354***	0.697***	0.529***
	(1.403)	(1.617)	(0.067)	(0.034)	(0.051)	(0.023)	(0.049)	(0.034)
Shareholders with:	> 1%	> 5%	> 1%	> 5%	> 1%	> 5%	> 1%	> 5%
Time fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Firm fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Shareholder fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
N	397,893	125,772	350,276	110,504	365,106	115,206	376,035	118,728
Adjusted R-squared	0.6328	0.6609	0.7695	0.8009	0.7728	0.7898	0.7801	0.7880

Note: The table reports the regression of either the number of daily Google searches (columns 1 and 2) or the (log) cumulative Google searches of a shareholder i's names who invested in firm f (columns 3 to 8) on time dummies in a 10 day windows around the date when firm f donated and the interaction of these dummy variables with an indicator that is 1 if shareholder i is an individual. All columns include firm, shareholder and day fixed effects. Only the interaction of the time dummies with the Individual Shareholder dummy are reported due to space constraints. Standard errors are clustered by firm and shareholder type (bank, company, individual, financial company, government, hedge fund, insurance, mutual fund, self control) and presented in parenthesis.

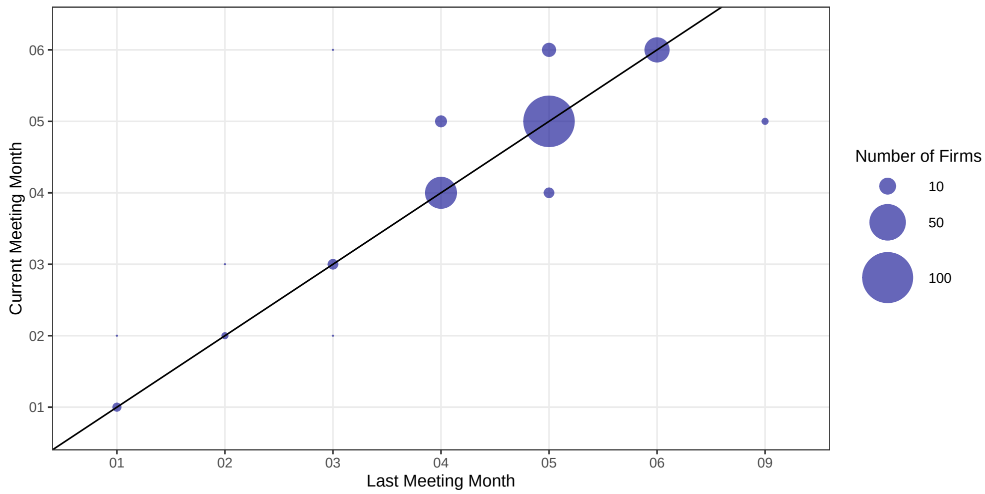
B Additional Figures

Figure B1: Screenshot of the news of a donation event

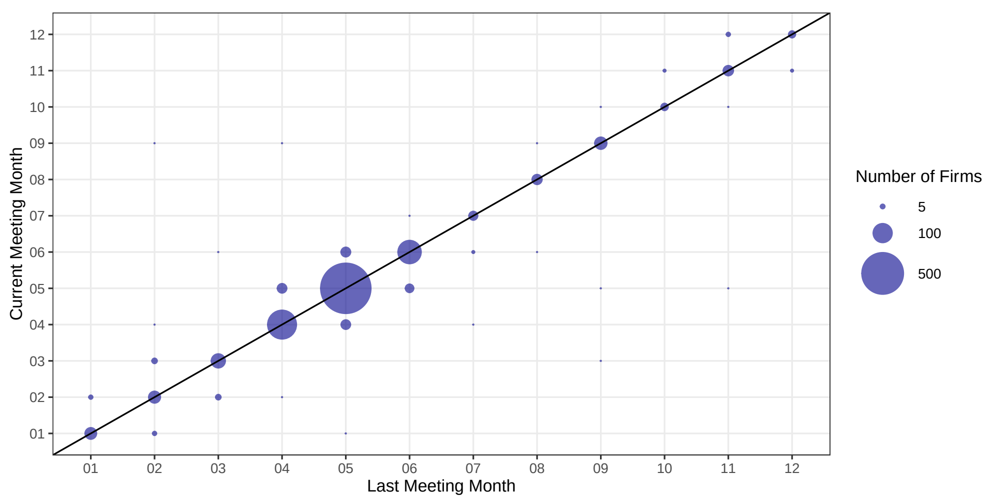
Notes: This is the example of a datapoint in our dataset. We record that Google pledged a donation on March 27, 2019. The news of Google's donation was taken from this Business Insider article: https://www.businessinsider.fr/us/coronavirus-Google-donates-800-million-fight-covid19-face-masks-2020-3.

Figure B2: Stability of the AGM month over time

(a) AGM Months in 2019 and 2020



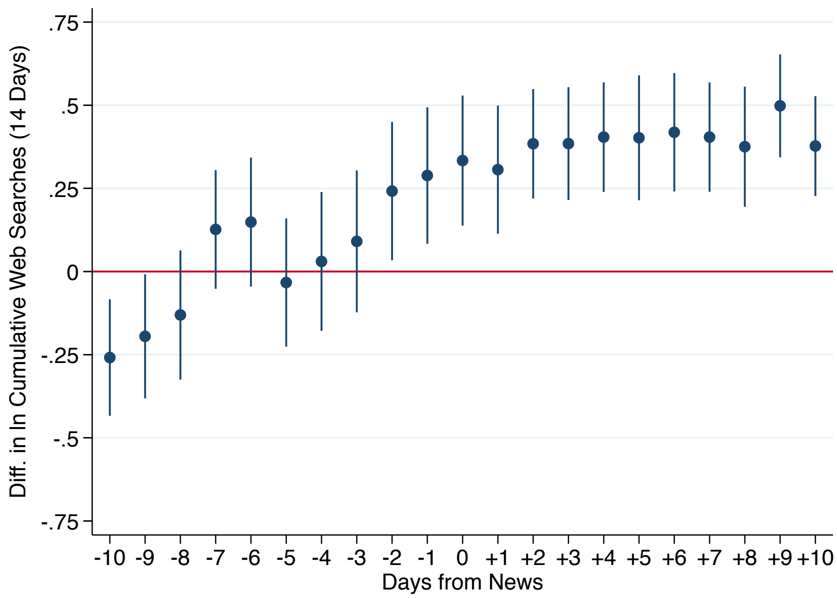
(b) AGM Months between 2012 and 2019



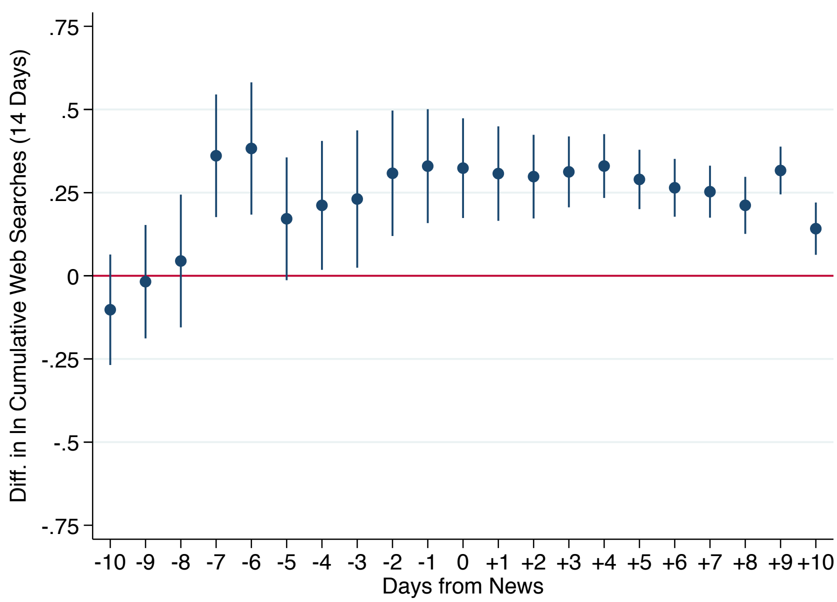
Notes: Both panels count the occurrences of the AGM month over two adjacent years. A dot in position (2,3) means that at least one firm with an AGM in March of year t had an AGM in February of year $t-1$. The size of the blue dot refers to the number of firms. Dots on the diagonal solid line indicate firms that did not change AGM month over time. Panel a focuses on the first six months of 2020, while Panel b focuses on all years between 2012 and 2019. In the last case observations are at the firm-by-year level as firms have more than one AGM.

Figure B3: Difference in the (log) Cumulative Google searches to Individual Shareholders and Other Investors (14 days), event study

(a) Shareholders With > 1%



(b) Shareholders With > 5%



Notes: Both panels report coefficient estimates from regressing the (log) cumulative number of Google searches (ten-day window) of shareholder's names over dummy variables describing a 10 window around a firm's donation date and the interaction of these dummies with an indicator function that is one if the shareholder is an individual and zero otherwise. The panels show the coefficient for the interaction terms. The regression is explained in detail in Section 6. Panel a (Panel b) includes only shareholders with more than 1% (5%) shares. Appendix Table A9 reports the coefficient estimates.

C Addendum on Abnormal Returns on Stock Prices

This section shows that the abnormal returns analysis in the main text is robust to the selection of different windows and methodologies. Table C1 reports the estimated coefficients of the model laid out in 4.1, with the Abnormal Returns as the dependent variable in Column 1 and the Cumulative Abnormal Returns in Column 2. That regression considers a time period of 5 days around the time of the donation and finds no statistically significant coefficient (at the 5% level). Table C2 reports the results for similar regressions over a longer period of time (10 days around the donation), which confirms that we do not observe any stock price reaction to the news. Figure C1 plots the coefficients.

We also consider a simpler model, in which the only factor predicting the cross section of stock returns is the return on the S&P500. We compute each stock's beta based on the 60 days before January 1, and study abnormal and cumulative abnormal returns over 7 to 14 days. We find that donation events lead to negative abnormal and cumulative abnormal returns two days after the news broke out (Table C4).

Finally, we study excess trading volumes (in comparison to the market average) over different horizons after the news broke out. We do not find evidence that the stock is more traded once a firm made a donation (Table C3). Taken together, those results point at the lack of reaction of investors to donation events, and exclude financial motives as an incentive to pledge charitable contributions.

Table C1: Event Study: Abnormal and Cumulative Abnormal Returns Around a Donation (5-day window)

Dependent Variable:	AR	CAR
5 Days Before	-0.8633	0.1064
	(0.8093)	(1.068)
4 Days Before	-0.1614	0.5080
	(0.6691)	(0.9903)
3 Days Before	-0.1911	-0.0556
	(0.5670)	(0.9419)
2 Days Before	-0.8436	-0.1423
	(0.6828)	(0.6718)
Day of the Donation	-0.7545	-0.6658
	(0.5608)	(0.6108)
1 Days After	0.4491	0.6883
	(0.5151)	(0.8704)
2 Days After	-0.7457	-0.0275
	(0.6660)	(0.9900)
3 Days After	-1.171*	-0.5699
	(0.6420)	(1.020)
4 Days After	-0.4577	-1.477
	(0.5929)	(1.090)
5 Days After	-0.3632	-1.183
	(0.6586)	(1.159)
Time fixed effects	✓	✓
Firm fixed effects	✓	✓
N	2,541	2,541
Adjusted R-squared	0.00564	0.00349

* – $p < 0.1$; ** – $p < 0.05$; *** – $p < 0.01$.

Note: This table reports the coefficients from an event-study using the Abnormal Returns (AR) and Cumulative Abnormal Returns (CAR) around the day of the donation. All columns include firm and day fixed effects. Standard errors are clustered by firm and presented in parenthesis.

Table C2: Event Study: Abnormal and Cumulative Abnormal Returns Around a Donation (10-day window)

Dependent Variable:	AR	CAR
10 Days Before	0.4439	0.9366
	(0.6188)	(0.9565)
9 Days Before	0.0367	0.6701
	(0.7297)	(1.083)
8 Days Before	0.6767	1.866
	(0.6412)	(1.171)
7 Days Before	0.4142	1.839
	(0.6557)	(1.228)
6 Days Before	0.0987	1.887*
	(0.6680)	(1.123)
5 Days Before	-0.6704	0.5565
	(0.7849)	(1.190)
4 Days Before	0.0480	0.2965
	(0.6446)	(1.185)
3 Days Before	0.0030	0.1980
	(0.5649)	(0.9102)
2 Days Before	-0.8236	0.0840
	(0.6572)	(0.6414)
Day of the Donation	-0.6972	-0.6936
	(0.5475)	(0.5931)
1 Day After	0.4552	0.6310
	(0.5084)	(0.8580)
2 Days After	-0.6754	-0.0334
	(0.6552)	(0.9598)
3 Days After	-1.175*	-0.5158
	(0.6215)	(0.9900)
4 Days After	-0.4851	-1.468
	(0.5643)	(1.046)
5 Days After	-0.4217	-1.239
	(0.6174)	(1.098)
6 Days After	-0.2117	-0.2183
	(0.4920)	(0.9841)
7 Days After	-0.5986	-0.3564
	(0.5193)	(0.9368)
8 Days After	-0.4382	-0.3910
	(0.4874)	(0.9238)
9 Days After	-0.8514	-1.066
	(0.5362)	(0.9172)
10 Days After	-0.6679	-1.104
	(0.4955)	(0.9204)
Time fixed effects	✓	✓
Firm fixed effects	✓	✓
N	4,847	4,847
Adjusted R-squared	0.00504	0.00535

* – $p < 0.1$; ** – $p < 0.05$; *** – $p < 0.01$.

Note: This table reports the coefficients from an event-study using the Abnormal Returns (AR) and Cumulative Abnormal Returns (CAR) around the day of the donation. All columns include firm and day fixed effects. Standard errors are clustered by firm and presented in parenthesis.

Table C3: Cumulative excess volumes after a donation

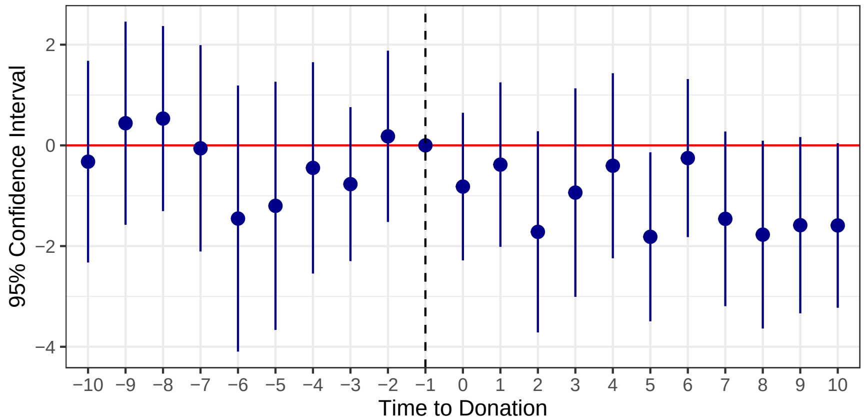
	Cumulative Excess Volumes Over		
	Last 2 Days	Last 7 Days	Last 14 Days
	(1)	(2)	(3)
News last 2 days	0.048		
	(0.043)		
News last 7 days		0.030	
		(0.026)	
News last 14 days			−0.005
			(0.036)
Time fixed effects	✓	✓	✓
Firm fixed effects	✓	✓	✓
N	36,065	36,065	36,065
Adjuster R-squared	0.0436	0.1385	0.3042

* – $p < 0.1$; ** – $p < 0.05$; *** – $p < 0.01$.

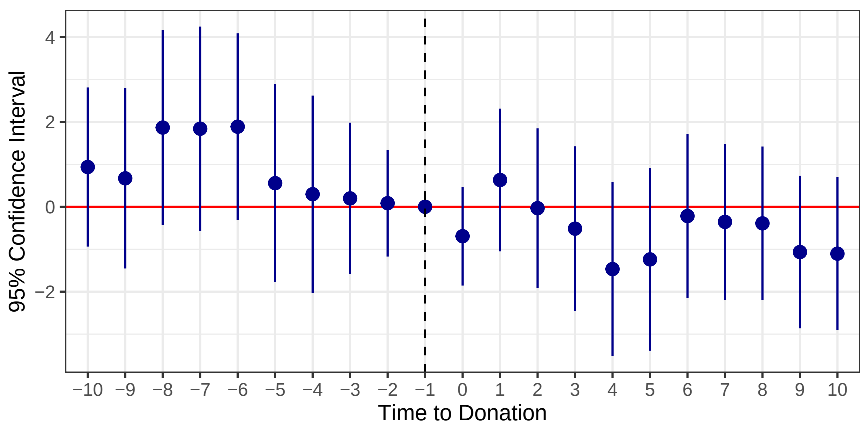
Note: This table reports the coefficients from regressing the Cumulative Excess Volume around the day of the donation on different time dummies. All columns include firm and day fixed effects. Standard errors are clustered by firm and presented in parenthesis. All columns include day and firm fixed effects. Standard errors are clustered by firm and presented in parenthesis.

Figure C1: Abnormal and cumulative abnormal returns, event study

(a) Abnormal Returns



(b) Cumulative Abnormal Returns (10 days)



Notes: The figure shows event studies in a ten-day window around the donation announcement. The coefficients are in Appendix Table C4.

Table C4: Abnormal and cumulative abnormal returns, stock return forecasts based on past 60 days, event study.

	Abnormal Returns	Comulative Abnormal Returns		
		7 days	10 days	14 days
	(1)	(2)	(3)	(4)
10 Days Before	−0.136	0.543	0.216	−0.771
	(0.302)	(0.789)	(0.806)	(0.768)
9 Days Before	−0.172	1.197	0.106	−0.734
	(0.365)	(0.889)	(0.868)	(0.837)
8 Days Before	0.168	1.219	0.879	−0.255
	(0.333)	(0.997)	(0.946)	(0.892)
7 Days Before	0.524	0.267	0.228	−0.568
	(0.352)	(1.078)	(0.982)	(0.981)
6 Days Before	−0.204	−0.208	−1.166	−1.555
	(0.478)	(1.070)	(1.010)	(1.070)
5 Days Before	−0.418	0.747	−0.944	−1.242
	(0.432)	(0.977)	(0.970)	(1.017)
4 Days Before	0.961**	0.786	−0.436	−1.138
	(0.407)	(0.951)	(0.972)	(1.036)
3 Days Before	0.761	−1.396	−1.149	−2.140*
	(0.464)	(1.051)	(1.045)	(1.129)
2 Days Before	−0.426	−2.204**	−2.674**	−3.544***
	(0.539)	(1.116)	(1.100)	(1.239)
1 Day Before	−0.702	−1.571	−2.381**	−3.226**
	(0.559)	(1.202)	(1.140)	(1.343)
News Day	−0.334	−1.054	−1.944*	−2.777*
	(0.544)	(1.286)	(1.110)	(1.485)
1 Day After	0.929	−1.453	−1.866*	−2.536*
	(0.598)	(1.113)	(1.042)	(1.414)
2 Days After	−1.036*	−2.201**	−3.404***	−3.799***
	(0.540)	(1.077)	(1.102)	(1.403)
3 Days After	−1.337**	−1.043	−2.046*	−2.444
	(0.547)	(1.055)	(1.117)	(1.488)
4 Days After	0.827	0.144	−0.108	−0.346
	(0.523)	(1.293)	(1.280)	(1.630)
5 Days After	0.046	−1.144	−1.132	−1.588
	(0.769)	(1.507)	(1.420)	(1.867)
6 Days After	0.606	0.171	−1.353	−1.470
	(0.755)	(1.345)	(1.418)	(1.670)
7 Days After	−0.717	−0.288	−1.733	−1.240
	(0.555)	(1.046)	(1.250)	(1.338)
8 Days After	−0.366	0.940	0.106	0.312
	(0.641)	(1.110)	(1.411)	(1.274)
9 Days After	0.063	0.790	1.578	1.540
	(0.525)	(0.979)	(1.134)	(1.112)
10 Days After	1.214	0.969	1.689	1.985
	(0.764)	(1.403)	(1.331)	(1.456)
Time fixed effects	✓	✓	✓	✓
Firm fixed effects	✓	✓	✓	✓
N	22,246	22,246	22,246	22,246
Adjusted R-squared	0.0331	0.1039	0.1401	0.1880

Note: Compared to the main text analyses the stock return is forecasted using the previous 60 days. All columns include firm and day fixed effects. Standard errors are clustered by firm and presented in parenthesis.

D Addendum on ESG Incidents

This appendix section describes the sample selection (Section D.1) and events classification processes (Section D.2) for the external validity analysis presented in Section 5. Section D.3 presents that the mechanism we identify is robust to several confounds.

D.1 Sample Selection

We started from the whole universe of firms in Compustat covered by RepRisk during the whole sample period (2,722 firms). We kept firms listed on the NYSE or the Nasdaq and headquartered in the US, with no missing data in Compustat (share price, number of shares oustanding), in the N-PX forms (at least one Annual General Meeting in our sample), Refinitiv ESG scores and the Refinitiv Ownership Database. This narrows down the sample to 642 firms, accounting for 90% of the market capitalization of the original sample.

Table D1 provides summary statistics on the market capitalization, number of ESG risk incidents, ownership data and ESG scores for the companies in the sample. The average market capitalization is 53 billion dollars, ranging from 3 million to 1.5 trillion. Firms have on average 772 reported negative ESG news during the period. Equivalently, a firm has a 30% chance of observing a news on a given month. Most news are "S" related. The summary statistics emphasize the holdings of individual and financial ("institutional") investors, which include Banks, Mutual Funds, Pension Funds, Hedge Funds, Investment Advisors, Insurance Companies, Private Equity and Venture Capital firms. The remaining shares are held by investors such as Governments, other Corporations or Research Foundations. ESG scores are expressed as a percentage and are scaled by industry. While the ESG scores can be revised anytime, they typically change only once a year.

D.2 Classification of News Events

RepRisk classifies the incidents it collects from media outlets as related to *Environmental* (E), *Social* (S), and *Governance* (G) matters using the "Related Issues" and "Related UNCG Principles" variables in RepRisk. The breakdown of each category is as follows:

- The "E" category includes the following issues: "Climate change, GHG emissions, and global pollution", "Local pollution", "Impacts on landscapes, ecosystems and biodiversity", "Waste issues", "Animal mistreatment", "Other environmental issues", "Overuse and wasting of resources";

- The “S” category covers: ”Impacts on communities”, “Human rights abuses and corporate complicity”, “Social discrimination”, “Discrimination in employment”, “Occupational health and safety issues”, “Violation of national legislation”, “Products issues”, “Forced labor”, “Local participation issues”, “Controversial products and services”, “Corruption, bribery, extortion and money laundering”, “Violation of international standards”, “Poor employment conditions”, “Child labor”, “Fraud”, “Anti-competitive practices”, “Misleading communication”, “Other social issues”, “Tax optimization”, “Tax evasion”;
- The “G” category covers: ”Executive compensation issues”, “Supply chain issues”, “Freedom of association and collective bargaining”.

Finally, any incident can be reported by multiple outlets. We avoid double counting the same incident by considering the probability of having one incident in a month in the main analysis.

D.3 Robustness Checks

We start by showing that the drop in negative news around a firm’s AGM in Figure 4 of the main text is driven by social matters affecting a firm. Figure D1 reports results from an event study equation similar to 4 but that employs only data from the “S” category in the RepRisk database. The blue line, which reports the differences between firms with and without individual blockholders, shows a marked drop around the AGM date. The same is not true for the difference in news coverage between a treatment group, composed by firms with institutional blockholders larger than the median size and no individual blockholders, and a control group, composed by the remaining firms: the red triangles that depict these differences over time are never statistically different from zero. Thus, the social news category drives the effect presented in the main text. This result is internally valid with the mechanism we uncover in the main text as the social category also includes corporate donations.

In addition to our analysis in Section 5, we test the impact of individual and institutional shareholders on firms’ behavior using different measures of ownership. We run an event study similar to equation 4, around a firm’s AGM, with different treatment variables. The results are presented in Figure D2. In line with the results in the main analysis, we find that individual shareholding decreases the probability that a firm observes an ESG risk incident around the time of an AGM.

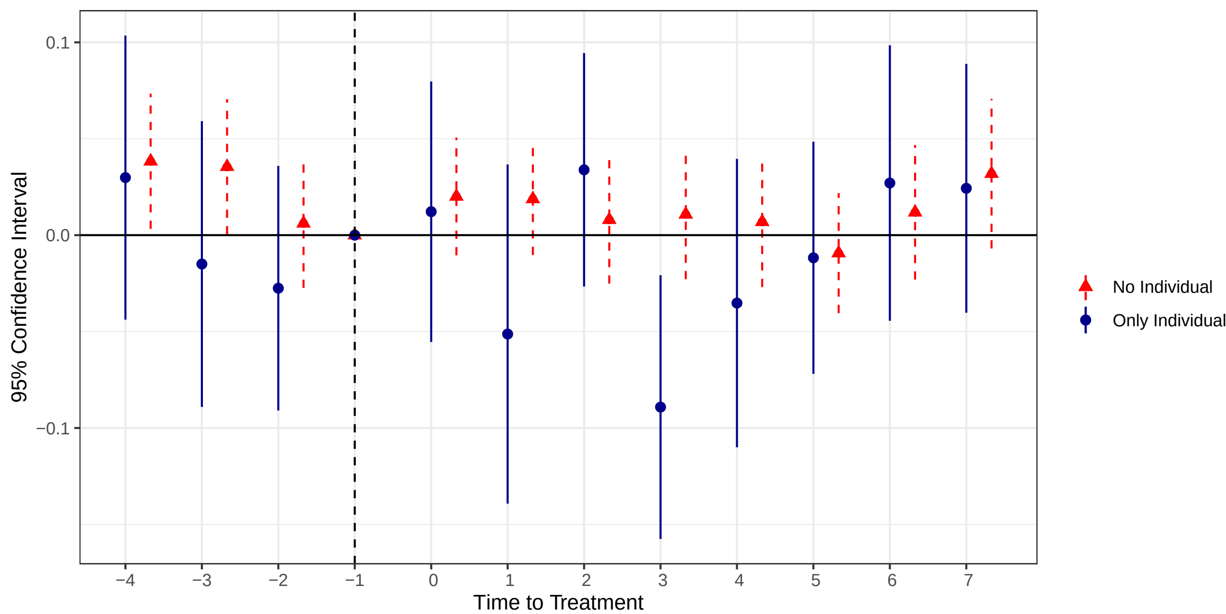
In particular, Panel (a) uses as treatment variable a dummy equal to one if the focal firm has at least one individual shareholder with a share of at least 0.01%, irrespective of its blockholding. The coefficient estimates are strikingly similar to the blue dots in Figure 4, which also condition treatment group firms not to have institutional blockholders. Panels (b), (c) and (d) test the influence of having at least one institutional shareholder owning more than, respectively, 1%, 5% and 10% of a company's shares. We find that smaller blockholdings (1% and 5%) do not impact a firm's behavior around the time of the AGM. However, large financial blockholdings (greater than 10%) increase significantly the probability of observing a risk incident, pointing at a negative effect of institutional shareholders on firms' corporate social responsibility at the time when they most interact with the management. These results are robust to different definition of blockholdings. For instance, subsetting the dataset to consider only firms with with large blockholders (i.e., firms with shareholders owning either at least 5% or 10% of the firm's equity), Panels (e) and (f) find that more negative news accrue to firms with a share of blockholders greater than the sample median. Finally, we define the treatment variable as being equal to one if a firm has at least one individual shareholder and no institutional blockholder above 5% (Panel (g)) and find a negative and statistically significant effect.

Table D1: Summary Statistics: External Validity Sample.

	Mean (1)	Median (2)	25% (3)	75% (4)	SD (5)
Market Capitalization (M USD)	53,130	18,961	6,047	56,598	99,360
RepRisk Incidents Data					
Number of Incidents	772.4	96	0	594	1,889.2
Number of E-Incidents	188.7	12	0	96	611.3
Number of S-Incidents	651.4	84	0	498	1,616.6
Number of G-Incidents	129.9	6	0	60	448.9
Ownership Data					
Individual Investor Ownership (%)	2.7	0	0	0.7	9.9
Institutional Ownership (%)	43.8	35.6	16.0	55.1	70.3
ESG Scores Data					
Environmental Score (%)	52.6	55.8	34.0	74.0	25.9
Social Score (%)	42.7	45.4	9.4	71.0	31.2
Governance Score (%)	54.4	58.1	37.8	75.1	25.7

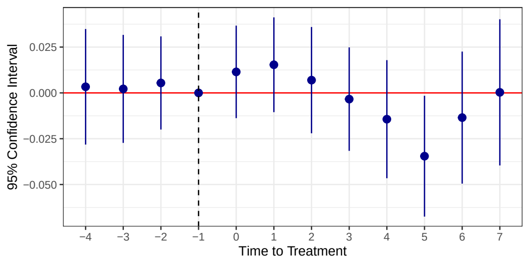
Note: Shares are computed over total equity, and includes only shareholders owning at least 0.01% of a company. "Institutional Owernship" is the sum of the shares owned by Banks, Hedge Funds, Insurance Companues, Investment Advisors, Mutual Funds, Pension Funds, Private Equity and Venture Capital firms. Risk Incidents data report the number of incidents observed by firm during the whole sample period.

Figure D1: Probability of having an S-incident around the AGM

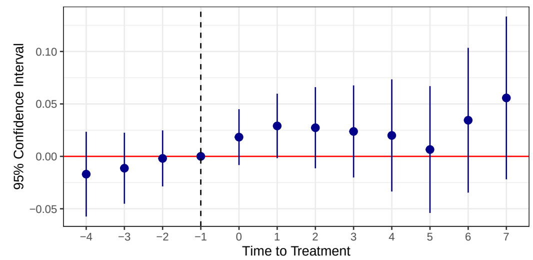


Notes: The figure reports coefficient estimates from regressing the probability of observing an "S" risk incident for a firm in a given month, on a dummy equal to one if the firm has above median institutional blockholding (5%) and no individual shareholder ("No individual"), and a dummy equal to one if a firm has at least one individual shareholder and below median institutional blockholding ("Only individual"). The specification is described in Equation 4 in Section 5. Both regressions include firm and time fixed effects, and standard errors are clustered at the firm level.

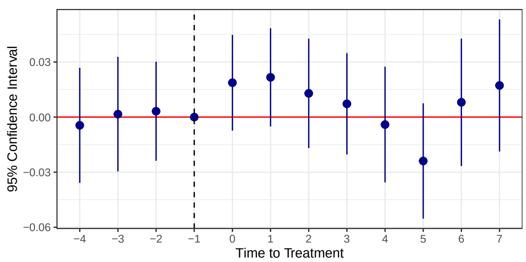
Figure D2: Probability of having a risk incident around the AGM



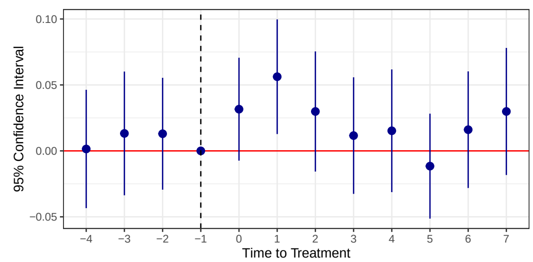
(a) At least 1 individual investor



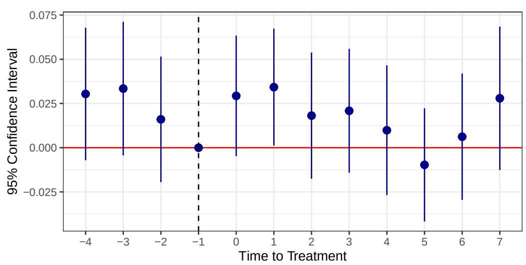
(b) At least 1 institution with more than 1%



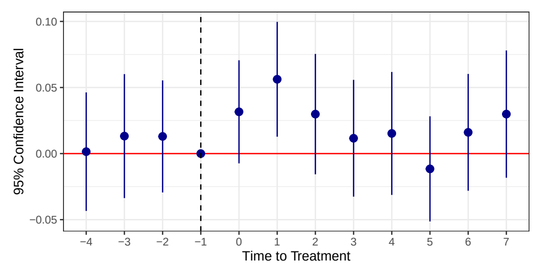
(c) At least 1 institution with more than 5%



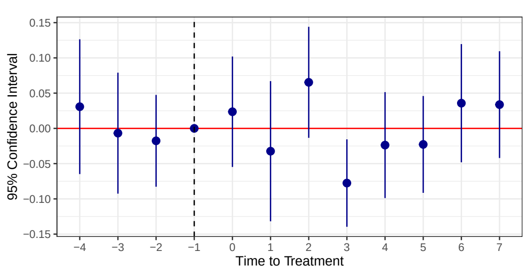
(d) At least 1 institution with more than 10%



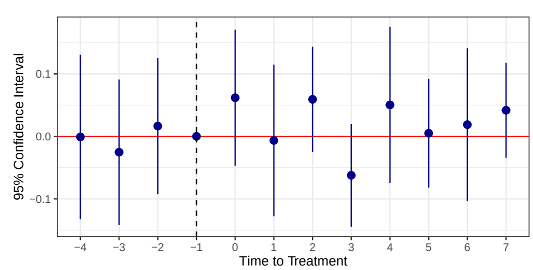
(e) Institutional blockholding above median (5%)



(f) Institutional blockholding above median (10%)



(g) At least 1 individual and no institution above 5%



(h) At least 1 individual and no institution above 10%

Notes: The figure reports coefficient estimates from regressing the probability of observing an ESG incident for a firm in a given month, on a treatment defined in the caption of each panel. The specification is described in Equation 4 in Section 5. All regressions include firm and time fixed effects, and standard errors are clustered at the firm level.

E CEO Characteristics

This section studies heterogeneous effects of how CEO characteristics mediate the way shareholder influence affects the frequency of observing covid-related donations. As described in the main text, we focus on two CEO characteristics available in the Orbis data: CEO age and CEO total compensation. The median (mean) CEO age across S&P500 corporation is 65 (65.32), and the third quartile of its distribution is 71 years old. The same metrics for total compensation are USD 6.7m (USD 8.6 m) and USD 15m. Notably, the two variables are not correlated (the correlation coefficient is 0.09).

Our specification updates the linear probability model in equation 1 as follows,

$$
\begin{aligned}
y_{ft} = \beta_0 &+ \beta_1 \text{Covid Rate}_{ft} \\
&+ \beta_2 \text{Covid Rate}_{ft} \times \text{Ownership}_f + \beta_3 \text{Covid Rate}_{ft} \times \text{AGM Meeting}_f \\
&+ \beta_{treat} \text{Covid Rate}_{ft} \times \text{Ownership}_f \times \text{AGM Meeting}_f \\
&+ \beta_4 \text{CEO}_f \times \text{Covid Rate}_{ft} + \beta_5 \text{CEO}_f \times \text{Covid Rate}_{ft} \times \text{Ownership}_f \\
&+ \beta_6 \text{CEO}_f \times \text{Covid Rate}_{ft} \times \text{AGM Meeting}_f \\
&+ \beta_{int2} \text{CEO}_f \times \text{Covid Rate}_{ft} \times \text{Ownership}_f \times \text{AGM Meeting}_f \\
&+ \alpha_i + \tau_t + \varepsilon_{ft}.
\end{aligned} \tag{6}
$$

The equation includes the same terms as equation 1 while adding lines four to six, which account for the indirect effect of firm f's CEO characteristics (either age or compensation measured as of December 2019) through its interaction with the other time-varying variables.[4] The coefficients of interest are β_6 and β_{int2} that respectively describe the differential effect across firms with and without an AGM on the probability of donating due to the interaction of a specific CEO characteristic with the exogenous covid rate, and due to a CEO characteristics interacted with covid rates and the share of equity help by a specific shareholder type, Ownership_f. As in the main text, we account for firm and day fixed effects and cluster the standard errors by firms. We let Ownership_f vary across individual, bank, and financial shareholders. All continuous variables are standardized.

First, we focus on CEO age, and we let CEO_f be a dummy variable that is one if firm f's CEO is older than the median age, 65. We present estimates of $\hat{\beta}_6$ and $\hat{\beta}_{int2}$ in Appendix Table E1: the first coefficient is close to zero across all columns, while the second coefficient is positive and significant for individual shareholders. We then extend our analyses to blockholders by modifying the Ownership_f to indicate the share of equity held by a certain

[4] Variables that do not vary over time are captured in the fixed effect.

shareholder type with at least 10% of equity or with less than 2%. Appendix Table E2 measures covid rates using cumulative cases at the headquarter while E3 uses cumulative deaths. Across columns, we confirm that older CEOs who are associated with firms with greater individual blockholders are more likely to donate for covid relief. At the same time, we now find that $\hat{\beta}_{int2}$ is negative and significant for financial investors (though much smaller in magnitude compared to that for individual shareholders). Unreported results suggest that bank blockholders are driving this negative result. Also, $\hat{\beta}_6$ differs markedly across individual and financial blockholders, especially with respect to cumulative covid deaths, indicating that certain CEO characteristics may be associated with a greater inclination of a CEO to react to an imminent AGM meeting by donating to charity.

We then move to CEO compensation – the variable is standardized. Appendix Table E4 indicates no differential effect of CEO compensation on donation through different ownership categories, on average. Moving to blockholders instead, Appendix Tables E5 and E6 find, once again, that different categories of blockholders affect the probabilities of donating differently. As covid rates increase, better-paid CEOs are significantly more (less) likely to donate when the firm's shareholders include large individual (financial) blockholders.

Table E1: Heterogenous effect by CEO age.

	(1)	(2)	(3)	(4)	(5)	(6)
	Whether Firm i has Donated by Time t (0/1)					
Cum. Covid Rate is defined as:	Cases			Deaths		
Ownership % is defined as	Indiv.	Fin.	Banks	Indiv.	Fin.	Banks
Cum. Covid Rate × Meeting × Age	0.017	−0.098	−0.169	−0.026	−0.254	−0.382
	(0.172)	(0.183)	(0.186)	(0.346)	(0.376)	(0.365)
Cum. Covid Rate × *Ownership %* × Meeting × Age	0.888***	0.044	0.048	1.686***	−0.008	0.079
	(0.107)	(0.179)	(0.191)	(0.155)	(0.362)	(0.291)
Time fixed effects	✓	✓	✓	✓	✓	✓
Firm fixed effects	✓	✓	✓	✓	✓	✓
N	24,225	24,225	24,225	24,225	24,225	24,225
Adjusted R-squared	0.4918	0.4904	0.4876	0.4895	0.4881	0.4866

Note: OLS regressions of whether firm i has donated by time t (dependent variable) on covariates. All columns include day and firm fixed effects. The variable Cases and Deaths are standardized. The first three columns refer to covid cases and the second three columns refer to covid deaths. Across columns, we vary the reference shareholder type defined by the variable *% Ownership* in the top panel by individuals and family shareholders, general financial investors and banks. *Age* is a dummy indicating whether the firm's Chairman is older than the median among the CEO of S&P500 firms. We only report selected coefficients for space constraints. Standard errors are clustered by firm and presented in parenthesis.

Table E2: Heterogenous effect of covid cases by CEO age and blockholders.

	Whether Firm i has Donated by Time t (0/1)					
	(1)	(2)	(3)	(4)	(5)	(6)
Blockholders is defined as:	Indiv.		Fin.		Banks	
% Blockholders is the shares of *Blockholders* owning:	>10%	(0%, 2%)	>10%	(0%, 2%)	>10%	(0%, 2%)
Cum. Covid Cases × Meeting × Age	0.080	–0.237	–0.230	–0.120	–0.221	–0.221
	(0.170)	(0.187)	(0.155)	(0.196)	(0.167)	(0.178)
Cum. Covid Cases × *% Blockholders* × Meeting × Age	1.196***	0.117	0.100	–0.106	0.096	–0.269
	(0.092)	(0.757)	(0.069)	(0.169)	(0.084)	(0.196)
Time fixed effects	✓	✓	✓	✓	✓	✓
Firm fixed effects	✓	✓	✓	✓	✓	✓
N	24,225	24,225	24,225	24,225	24,225	24,225
Adjusted R-squared	0.4917	0.4890	0.4917	0.4888	0.4924	0.4926

Note: OLS regressions of whether firm i has donated by time t (dependent variable) on covariates. All columns include day and firm fixed effects. The variable Cases is standardized. Across columns, we vary the reference shareholder type defined by the variable *% Ownership* in the top panel by individuals and family shareholders, general financial investors and banks. The variable *% Blockholders* is the share of investors among all investors owning at least a share of total equity as defined in the top panel. The investor type is also defined in the top panel. The variables *% Blockholders* and Cum. Covid Cases are standardized. *Age* is a dummy indicating whether the firm's Chairman is older than the median among the CEO of S&P500 firms. We only report selected coefficients for space constraints. Standard errors are clustered by firm and presented in parenthesis.

Table E3: Heterogenous effect of covid deaths by CEO age and blockholders.

	Whether Firm *i* has Donated by Time *t* (0/1)					
	(1)	(2)	(3)	(4)	(5)	(6)
Blockholders is defined as:	Indiv.		Fin.		Banks	
% Blockholders is the shares of *Blockholders* owning:	>10%	(0%, 2%)	>10%	(0%, 2%)	>10%	(0%, 2%)
Cum. Covid Deaths × Meeting × Age	0.073	−0.340	−0.533	−0.380	−0.469	−0.572*
	(0.341)	(0.388)	(0.324)	(0.364)	(0.348)	(0.322)
Cum. Covid Deaths × *% Inst. Blockholders* × Meeting × Age	2.165***	0.910	0.187	−0.404	0.269*	−0.640*
	(0.160)	(1.331)	(0.140)	(0.318)	(0.162)	(0.381)
Time fixed effects	✓	✓	✓	✓	✓	✓
Firm fixed effects	✓	✓	✓	✓	✓	✓
N	24,225	24,225	24,225	24,225	24,225	24,225
Adjusted R-squared	0.4897	0.4872	0.4899	0.4880	0.4910	0.4912

Note: OLS regressions of whether firm *i* has donated by time *t* (dependent variable) on covariates. All columns include day and firm fixed effects. The variable Deaths is standardized. Across columns, we vary the reference shareholder type defined by the variable *% Ownership* in the top panel by individuals and family shareholders, general financial investors and banks. The variable *% Blockholders* is the share of investors among all investors owning at least a share of total equity as defined in the top panel. The investor type is also defined in the top panel. The variables *% Blockholders* and Cum. Covid Cases are standardized. *Age* is a dummy indicating whether the firm's Chairman is older than the median among the CEO of S&P500 firms. We only report selected coefficients for space constraints. Standard errors are clustered by firm and presented in parenthesis.

Table E4: Heterogenous effect by CEO compensation.

	Whether Firm i has Donated by Time t (0/1)					
	(1)	(2)	(3)	(4)	(5)	(6)
Cum. Covid Rate is defined as:	Cases			Deaths		
Ownership % is defined as	Indiv.	Fin.	Banks	Indiv.	Fin.	Banks
Cum. Covid Rate × Meeting × Compensation	–0.438	0.092	0.171**	–0.816	0.282*	0.385***
	(0.632)	(0.081)	(0.066)	(1.473)	(0.165)	(0.123)
Cum. Covid Rate × % *Ownership* × Meeting × Compensation	–2.572	–0.181	0.077	–4.986	–0.232	0.176
	(2.931)	(0.122)	(0.065)	(6.841)	(0.293)	(0.128)
Time fixed effects	✓	✓	✓	✓	✓	✓
Firm fixed effects	✓	✓	✓	✓	✓	✓
N	24,310	24,310	24,310	24,310	24,310	24,310
Adjusted R-squared	0.5108	0.5102	0.5088	0.5075	0.5074	0.5072

Note: OLS regressions of whether firm i has donated by time t (dependent variable) on covariates. All columns include day and firm fixed effects. The first three columns refer to covid cases and the second three columns refer to covid deaths. The variable Cases and Deaths are standardized. Across columns, we vary the reference shareholder type defined by the variable % *Ownership* in the top panel by individuals and family shareholders, general financial investors and banks. The variables % *Ownership* and Cum. Covid rates are standardized. *Compensation* is Orbis's record of the total compensation of a firm's CEO, and is standardized. We only report selected coefficients for space constraints. Standard errors are clustered by firm and presented in parenthesis.

Table E5: Heterogenous effect of covid cases by CEO compensation and blockholders.

	Whether Firm i has Donated by Time t (0/1)					
	(1)	(2)	(3)	(4)	(5)	(6)
Blockholders is defined as:	Indiv.		Fin.		Banks	
% *Blockholders* is the shares of *Blockholders* owning:	>10%	(0%, 2%)	>10%	(0%, 2%)	>10%	(0%, 2%)
Cum. Covid Cases × Meeting × Compensation	2.303***	–0.117	–0.195**	0.099	–0.001	0.084
	(0.156)	(0.072)	(0.079)	(0.142)	(0.062)	(0.073)
Cum. Covid Cases × % *Blockholders* × Meeting × Compensation	10.355***	–0.766***	–0.575***	–0.003	–0.336***	0.133
	(0.749)	(0.130)	(0.055)	(0.178)	(0.050)	(0.092)
Time fixed effects	✓	✓	✓	✓	✓	✓
Firm fixed effects	✓	✓	✓	✓	✓	✓
N	24,310	24,310	24,310	24,310	24,310	24,310
Adjusted R-squared	0.5113	0.5134	0.5168	0.5113	0.5135	0.5121

Note: OLS regressions of whether firm i has donated by time t (dependent variable) on covariates. All columns include day and firm fixed effects. The variable Cases is standardized. Across columns, we vary the reference shareholder type defined by the variable % *Ownership* in the top panel by individuals and family shareholders, general financial investors and banks. The variable % *Blockholders* is the share of investors among all investors owning at least a share of total equity as defined in the top panel. The investor type is also defined in the top panel. The variables % *Blockholders* and Cum. Covid Cases are standardized. *Compensation* is Orbis's record of the total compensation of a firm's CEO, and is standardized. We only report selected coefficients for space constraints. Standard errors are clustered by firm and presented in parenthesis.

Table E6: Heterogenous effect of covid deaths by CEO compensation and blockholders.

	Whether Firm i has Donated by Time t (0/1)					
	(1)	(2)	(3)	(4)	(5)	(6)
Blockholders is defined as:	Indiv.		Fin.		Banks	
% *Blockholders* is the shares of *Blockholders* owning:	>10%	(0%, 2%)	>10%	(0%, 2%)	>10%	(0%, 2%)
Cum. Covid Deaths × Meeting × Compensation	4.204***	−0.235	−0.004	0.162	0.169	0.183
	(0.247)	(0.145)	(0.132)	(0.306)	(0.120)	(0.146)
Cum. Covid Deaths × % *Blockholders* × Meeting × Compensation	18.691***	−1.578***	−0.626***	0.198	−0.272***	0.352**
	(1.156)	(0.273)	(0.061)	(0.375)	(0.102)	(0.159)
Time fixed effects	✓	✓	✓	✓	✓	✓
Firm fixed effects	✓	✓	✓	✓	✓	✓
N	24,310	24,310	24,310	24,310	24,310	24,310
Adjusted R-squared	0.5081	0.5098	0.5109	0.5084	0.5087	0.5094

Note: OLS regressions of whether firm i has donated by time t (dependent variable) on covariates. All columns include day and firm fixed effects. The variable *Deaths* is standardized. Across columns, we vary the reference shareholder type defined by the variable % *Ownership* in the top panel by individuals and family shareholders, general financial investors and banks. The variable % *Blockholders* is the share of investors among all investors owning at least a share of total equity as defined in the top panel. The investor type is also defined in the top panel. The variables % *Blockholders* and Cum. Covid Deaths are standardized. *Compensation* is Orbis's record of the total compensation of a firm's CEO, and is standardized. We only report selected coefficients for space constraints. Standard errors are clustered by firm and presented in parenthesis.

F Peer Pressure

To dig deeper into the motives of managers to engage in charitable donations we investigate the role of peer pressure. We hypothesize that managers may feel compelled to donate if other firms in their industry already do so. This effect should be larger for managers undergoing shareholder scrutiny due to a nearby, past, or future AGM. Therefore, we empirically analyze the role of peer pressure through the following linear probability model

$$\begin{aligned} y_{ft} = \beta_0 + \beta_1 \text{Competitors Donating}_{ft} + \beta_2 \text{AGM}_f \\ + \beta_3 \text{Competitors Donating}_{ft} \times \text{AGM}_f + \alpha_i + \tau_t + \varepsilon_{ft} \end{aligned} \tag{7}$$

where we still denote by $\text{AGM}_f = 1$ all firms with an AGM in the sample period. The variable Competitors Donating_{ft} varies both over time and across firms and indicates the fraction of firms in the same sector as firm f that have already pledged a charitable donation by time t. We include firm and day fixed effects. We estimate equation 7 by OLS and report the results in Table G1, where we cluster the standard errors at the firm level.

The first column of Table G1 shows a positive and significant correlation between the donations of a firm's competitors and the probability that the firm also donates. This result comes as no surprise since similar firms may share similar incentives for donations (e.g., the government may have requested some in-kind donations from all firms producing certain goods or services to confront the pandemic).[5] The second column of the table includes the AGM_f dummy and its interaction with its competitors' donations. We find that the coefficient estimates of the interaction terms is close to zero, with large standard errors. Also, the direct effect of the AGM is approximately zero. We interpret this result as no evidence of managerial peer pressure to donate.

Finally, the third column adds another interaction term to equation 7, namely the fraction of equity owned by individual shareholders. This variable was found to substantially explain donations in Section 3. We include this interaction to further examine whether the null result we found in column two is due to shareholders' insistence after competitors donate, rather than managerial reaction to competitors. As the estimated interaction coefficient is close to zero, we do not find evidence for this alternative channel. We further investigate the same channel in connection with other shareholder types in Table G2, where we interact the variables in equation 7 with a dummy variable that is 1 if a firm's

[5]This coefficient is not statistically different form zero if the standard errors are clustered by industry as in Appendix Table A7.

equity is owned by more than the median value of a shareholder type.[6] Across columns, we examine the influence of individual shareholders, banks, insurance companies, mutual funds, private equity funds, and all financial investors together in the last column. We find that none of these shareholder types has a substantial effect on a firm's covid-related donations through the peer effect channel. We conclude that our analysis finds a small role for managers to drive covid donations.

Table G1: Effect of competitors on Covid donations.

	Whether Firm i has Donated by Time t (0/1)		
	(1)	(2)	(3)
% Competitors Already Donating	0.050***	0.050***	0.044***
	(0.013)	(0.014)	(0.015)
% Competitors Already Donating × Meeting		0.003	0.004
		(0.031)	(0.033)
% Competitors Already Donating × % Owned by Individuals			0.356***
			(0.137)
% Competitors Already Donating × % Owned by Individuals × Meeting			0.008
			(0.293)
Time fixed effects	✓	✓	✓
Firm fixed effects	✓	✓	✓
N	48,442	48,442	45,898
Adjusted R-squared	0.4486	0.4486	0.4570

$* - p < 0.1$; $** - p < 0.05$; $*** - p < 0.01$.

Note: OLS regressions of whether firm i has donated by time t (dependent variable) on covariates. All columns include day and firm fixed effects. All columns include day and firm fixed effects. The variables % Competitors Already Donating and % Owned by Individuals are in $[0,1]$. The interaction % Owned by Individuals × Meeting is accounted for by firm fixed effects. Standard errors are clustered by firm and presented in parenthesis.

[6] Appendix Table A8 shows similar results when standard errors are clustered at the industry level.

Table G2: Effect of competitors on Covid donations by shareholder type.

	Whether Firm i has Donated by Time t (0/1)					
	(1)	(2)	(3)	(4)	(5)	(6)
Above Median Ownership refers to :	Indiv.	Banks	Insur.	Mutual	P. E.s	Fin.
% Competitors Already Donating	0.064***	0.026	0.057***	0.076***	0.076***	0.040**
	(0.016)	(0.018)	(0.020)	(0.019)	(0.020)	(0.018)
% Competitors Already Donating × *Above Median Ownership*	−0.045*	0.044**	−0.014	−0.052**	−0.052**	0.018
	(0.024)	(0.022)	(0.023)	(0.023)	(0.023)	(0.022)
% Competitors Already Donating × Meeting	−0.028	0.043	0.020	−0.055	0.000	0.009
	(0.036)	(0.042)	(0.047)	(0.045)	(0.054)	(0.042)
% Competitors Already Donating × *Above Median Ownership* × Meeting	0.097	−0.085	−0.045	0.095	0.014	−0.009
	(0.069)	(0.062)	(0.059)	(0.060)	(0.066)	(0.063)
Time fixed effects	✓	✓	✓	✓	✓	✓
Firm fixed effects	✓	✓	✓	✓	✓	✓
N	48,442	48,442	48,442	48,442	48,442	48,442
Adjusted R-squared	0.4497	0.4497	0.4489	0.4502	0.4501	0.4487

* – $p < 0.1$; ** – $p < 0.05$; *** – $p < 0.01$.

Note: OLS regressions of whether firm i has donated by time t (dependent variable) on covariates. All columns include day and firm fixed effects. All columns include day and firm fixed effects. Above Median Ownership is 1 for firms that have more than the median amount of individual (col 1), banks (2), insurance companies (3), mutual funds (4), private equity (5), or all financial institutions together (6), respectively and 0 otherwise. The interaction Above Median Ownership × Meeting is accounted for by firm fixed effects. Standard errors are clustered by firm and presented in parenthesis.