Selfish Shareholders: Corporate Donations During COVID-19*

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Abstract

During the onset of the COVID-19 pandemic, conflicting incentives caused most shareholders to adverse corporate social responsibility (CSR) –measured by firms' charitable donations– since it would further burden firms' already strained finances. Those shareholders that favored donations, large individual investors, did so to bolster their own images as they are typically synonymous with the donating firms. Image gains do not pass through to institutional shareholders, who instead preferred to donate themselves rather than having the firms they invested in donate. Taken together, our results cast doubts on large corporations' willingness to demand costly CSR measures across firms in their portfolios.

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1 Introduction

In his 2020 letter to chief executives, the CEO of the largest asset management firm worldwide, Larry Fink, said that BlackRock will not pursue investments in companies that do not display social awareness.¹ This decision is part of the recent awakening of large American corporations on social and environmental matters and is visible in associations such as the Responsible Business Alliance or the Business Roundtable² that aim to change the way U.S. corporations do business to foster inclusion in the workplace and in the communities where these firms operate. However, is corporate America ready to take on the challenge or are these claims just marketing tools? Are CEOs of large corporations ready to take costly actions to pursue social goals? Will institutional investors ensure that firms meet these standards in order to hold their stocks?

In this paper, we examine these questions by taking advantage of the onset of the COVID-19 pandemic as a natural experiment and study the corporate decision to pledge charitable donations to help alleviate the fallout from the pandemic. Our main contribution is to uncover how different shareholders influenced the donation decision and the underlying incentives they responded to. We find that image concerns drive individual shareholders to pressure managers for donations. Instead, even though they still share the burden,³ institutional investors enjoy no image gains when the firms in their portfolio donate. As a result, institutional shareholders demanded these firms' management to refrain from donating. Our results cast doubts on the willingness of U.S. large corporations to fulfill their social responsibility promises.

Assessing the causal impact of shareholder preferences on firms' decisions is notoriously challenging for at least two reasons. First, social responsibility is a large concept –including aspects such as trust (e.g., Lins *et al.*, 2017), altruism (e.g., Bénabou and Tirole, 2010), and pro-social norms (e.g., Bartling *et al.*, 2015)– and is therefore hard to capture. Second, to attribute a firm's social responsibility policies to shareholders' preferences, shareholding must vary exogenously, which in practice may be elusive.

To confront the first difficulty (the definition of CSR), we focus on firms' charitable

¹Source: www.nytimes.com/2020/01/14/business/dealbook/larry-fink-blackrock-climatechange.html.

²Sources: www.responsiblebusiness.org and www.businessroundtable.org/business-roundtable-redefines-the-purpose-of-a-corporation-to-promote-an-economy-that-serves-all-americans.

³Paying dividends is a way to signal a firm's solidity at times of market volatility (Jens, 2017). Thus charitable donations, which account to negative cashflows, may be particularly costly during crisis. For instance, corporate donations declined by 4.3% during the 2007-2009 financial crisis (The Center on Philantropy, 2010). In the popular press, the New York Times reported cases of corporations that turned down recurring donations because of budget problems. Source: https://www.nytimes.com/2008/03/18/business/worldbusiness/18iht-charity.1.11210327.html.

donations as a measure of their corporate social responsibility (CSR) during the pandemic because covid donations were large, varied over time even within a firm, and their measurement is easier than more encompassing CSR policies.⁴ We use hand-collected data on the donations of S&P 500 corporations during January 1 - April 15, 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. We also control for the media salience of donations using covid rates, sourced from Johns Hopkins University.

To confront the second challenge (endogeneity), our identification strategy relies on comparing the covid-related donations of firms whose shareholders have an opportunity to voice their concerns to the management with the firms whose shareholders do not have this opportunity. To this end, we exploit the exogenous timing of the shareholder Annual General Meeting (AGM).⁵ Shareholders can voice their concerns not only *at* the AGM but also before and after it. Thus, our methodology simply compares the donations of firms with an AGM in our sample period with those of the other firms while exploiting exogenous geographical variation in covid cases and deaths.⁶

We find that the composition of shareholders matters. Firms with an AGM are more likely to donate the larger the equity held by individual investors. This result is driven by blockholders –i.e., investors with shares greater than 5%– who are synonymous with the firm (e.g., Jeff Bezos and Amazon). This effect increases with the covid rates suffered in the state where a firm has its headquarter, which points to image gains as the underlying mechanism because individual shareholders often live close to the headquarter and are particularly exposed to local news. 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 firms with an AGM. These opposing trends increase with the age and compensation of the CEO. Our interpretation is that sizable donations are expensive and may be particularly damaging to financial investors during a crisis when

⁴Donation 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 do not examine the intensive margin because in-kind donations are hard to compare across firms. Their best alternatives, Environmental, Social, and Governance indices, are available yearly, precluding spatial and time comparisons with covid rates, and may suffer from inconsistencies (Chatterji *et al.*, 2009, Kotsantonis and Serafeim, 2019).

⁵The SEC proxy voting system requires qualifying shareholders to post proposals at least three months before the last AGM date, effectively forcing the date of the shareholder meeting to fall at the same time each year. Firms that have an AGM in our sample period do not differ markedly from other firms.

⁶Our 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) as we focus on U.S. firms 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.

alternative investments are also unprofitable.

We run several robustness checks on our results. First, we exclude financial motives. Cumulative abnormal returns are negative around the donation news, indicating that market participants view donations as a waste of resources.⁷ Second, we ask whether institutional shareholders are more concerned about national covid rates or covid rates at the states where a firm's consumers are based. We rule out both mechanisms by considering how either national covid rates or average covid rates at firms' branches correlate with the difference in the probability of observing a donation between firms with and without an AGM. Finally, we consider whether managers decided to donate to signal prestige. We proxy managerial freedom with the share of self-ownership and show that self-ownership negatively relates to the probability of donating as covid rates increase for firms with an AGM compared to the others. Similarly, we do not find any evidence of peer pressure: managers do not donate more if they see their competitors doing so. Thus, CEOs seem to align with financial investors, favoring no donations.

We then relate our findings to image concerns empirically and examine the implications for individual and institutional shareholders. We derive the number of Google searches for the largest shareholders and analyze how cumulative searches vary around the newsdate for individual and financial shareholders. We estimate that individual shareholders receive about 65% more searches than institutional shareholders in the 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, and we find that they prefer to donate themselves rather than have the firms in their portfolio donating. Thus, our results suggest that the social responsibility perimeter of large U.S. corporations appears to be smaller than the financial perimeter.

In sum, our approach allows us to establish that a shareholder's image is a key driver of pro-social firms' decisions.⁸ This result relates to a handful of recent papers highlighting the contrast in the role of the firm as a maximizer of market value or shareholder wealth.⁹ We complement these papers in two ways. First, we characterize the non-monetary payoff

⁷Negative stock market responses to a firm's CSR policy are not unheard of. Krüger (2015) finds a similar result when the CSR policy under scrutiny results from agency problems within the firm.

⁸A 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).

⁹Hart and Zingales (2017) show that companies should pursue shareholder wealth if shareholders are prosocial and the firm's social externalities are not separable from production decisions. Under these conditions, Fioretti (2020) offers an empirical case-study where a firm's strategy reflects its shareholders' prosocial preferences and discusses the welfare implications of prosocial behavior. Green and Roth (2020) extends these analyses to examine the general equilibrium implications and the efficient social value creation in capital markets with both prosocial and selfish investors.

that investors receive using non-financial data. Second, we show that image concerns do not carry through the chain of investments and result in large institutional shareholders not supporting prosocial policies. Thus, image concerns may provide a mechanism for the downward trend observed in the social responsibility of the firms in the portfolio of institutional investors (Gibson and Krueger, 2018). Our findings are also consistent with the general discontent of survey participants with large U.S. corporations as shown by Colonnelli and Gormsen (2020), which is found to have implications for the popular acceptance of policies favoring large corporations (e.g., corporate bailouts).¹⁰

Stakeholders can influence corporate decision making through several channels (e.g., Hirschman, 1970), with buying and selling stocks being the most studied one (e.g., Campello and Graham, 2013). For instance, investor concerns about Environmental, Social, and Governance (ESG) issues lead them to invest in socially responsible stocks, even when they underperform sin stocks (e.g., Riedl and Smeets, 2017, Hartzmark and Sussman, 2019, Barber *et al.*, 2021).¹¹ Therefore, investors can influence both a firm's valuation and its management practices through the stock market (Oehmke and Opp, 2020). Our paper investigates a different channel, that of shareholders' "voice." Although the theoretical analyses in Broccardo *et al.* (2020) show voice to be more efficient than divestments and boycotts, this channel has received less empirical backing.¹² Thus, we contribute to this literature by showing not only that shareholders can influence firms' decisions, but also identifying what drives different categories of shareholders, and their consequences for firm strategy.

The remainder of our paper is set out as follows. Section 2 describes our dataset. Section 3 explores financial rationales for donating, while Section 4 explores shareholder pressure. Section 5 analyzes managerial pressure, while Section 6 presents a broader discussion on image concerns and its implications. Section 7 concludes.

¹⁰Yet, properly publicizing firms' CSR interventions in their supply chain may provide sufficient incentives for firms to improve working conditions of downstream workers (Boudreau, 2019). Alternatively, firms may push for more social responsibility in their supply chain to mitigate reputational risks (Bai *et al.*, 2019) or as part of fair trade programs (e.g., Dragusanu and Nunn, 2018, Macchiavello and Miquel-Florensa, 2019).

¹¹A recent experiment finds that investors are willing to pay 70 cents more for each share in a firm that donates one additional dollar per share to charity (Bonnefon *et al.*, 2019). Similarly, Noh and Oh (2020) show that institutional demand for greener stocks improves firms' environmental performances. Using administrative data from Sweden, Christiansen *et al.* (2020) show that socially responsible investments are negatively correlated with income, but positively correlated with wealth. Kitzmueller and Shimshack (2012) and Coqueret (2020) provide recent surveys on ESG investing.

¹²Most related to our paper, Marhfor *et al.* (2020) show that institutional investors use a mixture of direct corporate governance interventions and exits to affect a firm's social responsibility stance. There is instead a large body of empirical literature documenting shareholder activism in connection with board dissatisfaction (e.g., Del Guercio *et al.*, 2008), investors' value maximization (e.g., Del Guercio and Hawkins, 1999, Crane *et al.*, 2016), and executive pay (e.g., Cuñat *et al.*, 2016).

2 Data

Our dataset comes from several sources. First, we manually recorded all covid-related pledges made by firms in the S&P500 between January 1st and April 15th, 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 15th, 2020, in the second row of the table. The average donation was US\$ 36.5m. However, 58 firms do not report the US\$ amount of their donations, and several other firms donate both cash and in kind (e.g., face masks), but indicate only the US\$ amount of their cash donations. We therefore focus most of the following analysis on the extensive margin of donations, rather than the intensive margin.¹³

We complement our donation data with cumulative covid cases and deaths data from Johns Hopkins University.¹⁴ 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).¹⁵ We present snapshots of cumulative covid cases, deaths, and donations by states over time in Figure 1. The map shows that the the trend in donations follows that in cases and deaths, with California and New York being among the states with the worst covid rates and also most donations by April 2020.

Next, 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.¹⁶ We also source data on stock prices, market capitalizations, trading volumes, broker

¹³Appendix Figure B1 shows an example of a data point in our dataset, with Google donating both cash and in kind.

¹⁴Source: https://github.com/CSSEGISandData/COVID-19/tree/master/csse_covid_19_data/ csse_covid_19_time_series.

¹⁵Shareholding information is based on shareholders with holdings of at least 0.01% of a company. Bureau van Dijk's Orbis database is commonly used to draw ownership links across companies as it contains shareholding information for beyond 40 million public and private companies. For instance, Ginglinger *et al.* (2017) uses shareholding data from Orbis to study ownership connections.

¹⁶The FRED data is available from https://fred.stlouisfed.org/series/DGS1MO, while historical data for the S&P is downloadable from https://finance.yahoo.com/quote/%5EGSPC/history?p=%5EGSPC.

recommendations, and Environmental, Social and Governance (ESG) scores from Thomson Reuters Datastream. ESG measures represent an important factor guiding investors. The Spearman correlation between the 2019 ESG scores and donation rates by April 15th, 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). Therefore, ESG scores have a limited role in explaining variation across both the intensive and extensive margins of covid-related charitable donations at the onset of the pandemic.

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 15th, 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 Financial Rationale for Donating

One reason why donations could be attractive to large corporations is if the stock market favored them. To investigate the stock price effect of donations we study the cumulative abnormal returns (CAR) around the day when the news became public. We compute abnormal returns following previous studies (Campbell and Wesley, 1993): for each company we predict the stock return in excess of the risk-free rate at day *t* by regressing its daily excess returns on daily excess market returns (of the S&P500 composite index) for the previous 30 days. The abnormal return (AR) at day *t* is the difference between the realized and the predicted return. Then, we construct a firm's τ -days CAR at day *t* as the rolling sum of the firm's abnormal returns over the subsequent τ days.

We study both abnormal returns and cumulative abnormal returns at 7, 10, and 14 days with the following regression,

$$y_{it} = \beta_0 + \sum_{-10 \le k \le 10} \beta^k \text{ News Day}_{it+k} + \alpha_i + \tau_t + \varepsilon_{it}$$
(1)

where we index firms by *i* and days by *t*. The variable News Day_{it+k} is equal to 1 if day t + k is *k* days away from the day when the news is broken. We let *k* vary between -10 and +10 days. In the regression we also include firm and date fixed effects to account for potentially different time trends across industries. The standard errors are clustered by

firm.¹⁷

Figure 2 displays the estimates of $\hat{\beta}^k$. Panel a shows no abnormal return before the news is broken, besides a slightly positive abnormal return at t - 4. Immediately after the news is broken, the stock displays negative abnormal returns, which suggests that market participants may be forming a negative view about the donation. Panel b reports the CAR over 14 days, which similarly shows a negative and significant drop in the cumulative abnormal returns around the news date (from t - 3 to t + 3). Despite being insignificant, the CAR stays negative and flat for the most of the remaining seven days.¹⁸ Similarly, regressing the 14-day CAR on the single news dummy for the news day (k = 0) and fixed effects yields an overall negative and significant effect of donations on CARs (β : -1.695; S.E.: 0.723). We obtain similar results for the CAR at 10 days (β :-1.249; S.E.: 0.627) and 5 days (β : -1.052; S.E.: 0.677).¹⁹

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 is completely absorbed within a few days. Therefore, financial returns do not appear to be the main driver of the decision to donate.

4 Shareholder Pressure

Having ruled out short-term financial returns, we next investigate what other factors might drive the corporate donations phenomenon observed in Figure 1. This section explores whether, faced with rising covid cases and deaths, shareholders pressured firms to donate. In particular, we find that individual and family shareholders exerted the most pressure on managerial boards. We interpret this result as reflecting image concerns.

Individual shareholding may be endogenous to whether or not a firm donates. Several other variables could be correlated with the fraction of shareholders who are individuals or families, as well as with the firm's decision to donate. For instance, we know from companies like Microsoft, Amazon, and Apple that large individual shareholding 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

 $^{^{17}}$ The results do not change qualitatively if we forecast stock returns over a longer horizon (see Appendix C).

¹⁸All regression coefficients are reported in Appendix Table A1.

¹⁹We also examine a stock's cumulative excess return compared to the other S&P500 stocks around the news date. Appendix Table A2 shows that the news have no impact on different definitions of cumulative excess returns. 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 A3 excludes a change in volatility around the news.

meeting (AGM) of shareholders to covid cases. 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 nominating new directors, adopting new social responsibility strategies, and validating future mergers.

If a shareholder satisfies certain criteria (see Rule 14a-8 SEA, 1934), he can also submit a proposal to the management at an AGM. To do so, shareholders must submit their proposals at least 120 days before the release of the proxy statement based on the date of last year's AGM. The AGM's date is therefore relatively constant across years (Glac, 2014). Shareholders know if the AGM is approaching –by checking the dates of previous AGMs– even if no official information is available. Therefore, the AGM makes a shareholder's ability to exert influence on the firm's decisions more salient to the shareholder himself and gives a manager the ability to signals her skills by promoting the firm's performance. These are the two channels we next investigate.

Shareholders' influence is not limited to the AGM, since shareholders may contact managers directly also before or after the AGM. Therefore, we distinguish our sample between firms that have an AGM within our sample period, January 1st and April 15th, and those that do not. Table 2 shows summary statistics of financial and operation variables for these two groups of firms. Across rows, 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.

4.1 **Empirical Strategy**

To estimate the effect of a specific class of shareholders (e.g., individuals and families) on the probability that firm i donates due to the occurrence of covid, we estimate the following linear probability model

$$y_{it} = \beta_0 + \beta_1 \text{Covid Rate}_{it} + \beta_2 \text{Ownership}_i + \beta_3 \text{AGM Meeting}_i + \beta_4 \text{Covid Rate}_{it} \times \text{Ownership}_i + \beta_5 \text{Covid Rate}_{it} \times \text{AGM Meeting}_i$$
(2)
+ $\beta_{int} \text{Covid Rate}_{it} \times \text{Ownership}_i \times \text{AGM Meeting}_i + \alpha_i + \tau_t + \varepsilon_{it},$

where the dependent variable, y_{it} , is 1 if the firm *i* has publicly committed to a donation by day *t*, and 0 otherwise. We focus on donation intent (just the news) not the actual amount donated because (i) we have no way to determine if the donation took place or not, (ii) not all firms donate cash –some firms donate in kind, or promise a costly transformation of their production to offer innovative solutions to the pandemic. We therefore only focus on

whether a firm has a news of a donation by time *t* or not.

The main coefficient, β_{int} , captures the interaction between the cumulative covid rate at firm *i*'s headquarter state, Covid Rate_{*it*}, the fraction of equity owned by a certain shareholder type, Ownership_{*i*}, and a dummy variable that is 1 if the firm has an AGM in the sample period, AGM Meeting_{*i*}. We control for all the marginal effects, as well as for day and industry fixed effects.²⁰

Among the variables in equation 2, only Covid Rate_{*it*} 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 changes in ownership due to the covid crisis, Ownership_{*i*} is instead set at December 2020. Finally, AGM Meeting_{*i*} is not designed to take positive values only after a firm has had its AGM like in a difference-in-differences design. This is because shareholders may influence managerial decisions also before the meeting, violating the crucial assumptions that treatment and control groups behave similarly before the treatment.

4.2 **Empirical Results**

Table 3 reports the coefficients from the OLS estimation of equation 2. The first three columns use cumulative covid cases for Covid Rate_{*it*}, while covid deaths appear in columns four to six. Both variables are standardized, so that a marginal increase is to be interpreted in terms of standard deviations of the underlying variable. Thus, coefficients are comparable across cases and deaths as they both refer to standard normal random variables. The standard errors are clustered by firm.²¹

Examining the results, columns (1) and (4) show no correlation between covid rates and donation probabilities. Columns (2) and (5) also include the share of individual and family ownership, and its interaction with covid rates. The covid rate coefficient does not vary substantially compared to the previous two columns, and even its interaction with individual ownership is not statistically significantly different from zero. Yet, consistent with our image concern hypothesis, we find that a greater probability of donating is associated with a larger fraction of individual ownership. This estimate is not causal because, even after controlling for fixed effects, there could be several omitted variables

²⁰The results do not vary substantially if we control for industry-by-day fixed effects instead.

²¹Appendix Table A4 shows similar results with standard errors clustered by industry.

correlated with shareholding and the error term. To address this problem, the last row of columns (3) and (6) report the difference of this interaction between firms that had their AGM by April 15th, and firms that did not. Since the average individual ownership is 1.56%, we find that the probability of donations rises by 2.48% after a one standard deviation increase in cases, and by as much as 6.14% for deaths, on average.

Importantly, the difference between the two groups is only substantially different from zero when we factor in individual ownership (last line). The meeting, either per se (fifth line), or in connection with covid rates (sixth line) does not differently affect the probability of donating across groups. We interpret this result as an indication that firms with and without an AGM are similar ex-ante, and that covid rates are exogenous to a firm's willingness to donate. Rather, it is the shareholder composition that affects donations through the management.

Therefore, this first result indicates 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 much larger for covid deaths than for covid cases, and it increases in the fraction of equity owned by individuals and families. This suggests that image concerns had a substantial role in driving shareholders to demand donations, both because covid deaths may receive more media attention than cases,²² and because large individual shareholders are more likely to be associated with a company than other shareholder types. Next, we examine this mechanism in more detail.

4.3 Mechanism

This section explores the motives for different types of investors to pressure managers into making donations. We will employ updated versions of equation 2 in all the analyses below to investigate the role of institutional investors and blockholders.

Institutional Shareholding. We first examine whether investors other than individuals and families displayed similar behavior. In particular, we focus on the four main institutional investor types –banks, insurance companies, mutual funds, and private equity funds. We replace the variable Ownership_i with four dummy variables, each of which equals one if the corresponding institutional investor type's ownership of firm *i* is larger than the corresponding median ownership across all S&P500 firms. The Covid Rate_{*it*} variables are

²²Sousa-Pinto *et al.* (2020) show a larger correlation between a sample of medical terms-related Google searches and covid deaths than covid cases for Spain and France, and also for the U.S. with respect to smell related diseases.

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.²³ Across columns, we vary the reference shareholder type of the Ownership_i variable in equation 2 as defined in the top panel. The bottom row shows the coefficients of the triple interaction between the AGM dummy, covid rates, and Ownership_i. These interaction terms are often negative while the interaction term for individual investors is positive and significant (column five and ten). The interaction coefficients is even significantly different from zero for insurance companies (columns seven). These findings suggest that financial investors do not enjoy covid-related charitable donations as much as individual investors. During crises, firms' dwindling financial resources may be further strained by charitable donations. These investors may instead prefer larger dividend payments.

Finally, 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. The results are displayed in Appendix Table A6. 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 cases rather than national ones, which is in line with the image concern mechanism we will uncover.

Large Individual Shareholders. We hypothesize 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*^{<i>i*} in equation 2 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 greater is the share of individual investors with a controlling position, the easier it is to connect a firm to an individual investor. A firm should therefore be more likely to donate as covid rates rise, all else equal.

Table 5 presents the results, with the variables $Ownership_i$ and $Covid Rate_{it}$ standardized to permit comparisons across columns with different *x*-blockholding percentages, covid cases (columns one to three) and covid deaths (column four to six).²⁴ First, we

²³Appendix Table A5 adjusts these estimates with industry level standard errors.

²⁴The standard errors are clustered by firm. Appendix Table A7 reports similar results with clustered standard errors by industry.

compare across columns. The bottom row of the table reports the triple interaction coefficients: 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 with 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, given a standard deviation increase in the covid rates we compare the triple interaction with the variable $Ownership_i$ within each column. Consider the controlling shares in columns one, two, four and five: a one standard deviation increase in $Ownership_i$ 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 three and six dominates the interaction effect. These observations indicate that firms with more diverse shareholding or with no large individual shareholder are unable or uninterested to pressure the management successfully.

Large Institutional Shareholders. Finally, we investigate 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 allow for comparison across columns and tables. First, the coefficient of the interaction between the cumulative covid rate and the AGM is close to zero in all columns, indicating that covid did not affect donations per se. Second, the coefficient estimates on the triple interactions for both covid cases and covid deaths are negative and significant for the largest blockholders. Among these players, large mutual fund blockholders are the most active in discouraging charitable donations. For these players, 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.²⁵

Heterogeneous Effects. We next examine how managerial characteristics mediate shareholder influence. Leveraging Orbis data, we focus on firm variation across CEO age and

²⁵We replicate this analysis using national covid cases and deaths in Appendix Tables A8 and A9 respectively. These coefficient estimates are similar but smaller in magnitude compared to the estimates referring to headquarter-state covid rates.

total compensation.²⁶ To this end, we modify equation 2 by adding interactions for either the age of a firm's CEO or his compensation. Appendix D describes the methodology in more details. First, we focus on age in Appendix Table D1, which reports the differential effect across firms with and without an AGM on the probability of observing a donation both (i) by CEO age and covid rates, and (ii) by CEO age, covid rates and the share of ownership held by either individual, financial or bank shareholders. The results indicate that older CEOs are more welcoming towards individual shareholder's demands for donations. Zooming in on blockholders, Appendix Tables D2 and D3 update the methodology previously described and find that the CEO's age increases the frequency of donations when considered in association with the share of individual blockholders, but decreases it when associated with financial, and especially banking, blockholders. Second, we analyze CEO compensation across different blockholders in Appendix Tables D5 and D6. The analyses confirm the opposing trends just discussed for CEO age: as covid rates increase, donation rates increase substantially with CEO compensation for firms with large individual blockholders but decrease for firms with large financial blockholders. 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 previous research showing a negative correlation between CEO pay and CSR (e.g., Fabrizi et al., 2014, Jian and Lee, 2015), by suggesting that this negative correlation could result from the influence of financial shareholders.²⁷

In sum, the results in this section decisively 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. In the next section, we examine whether the heightening of the crisis at a firm's points of sales had any impact on the choice of a firm to donate.

4.4 The Role of Consumer Demand

One may speculate that firms donate to appease their consumers. For instance, a firm with a large amount of its sales in California may decide to donate in February given the high rates of covid cases in this state (cf Figure 1), despite being headquartered in Nebraska (which had far lower rates). We now investigate this possibility.

²⁶The 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.

²⁷The 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).

Empirical Approach. To understand whether consumer demand affects firm donations, we exploit exogenous variation in a firm's exposure to covid rates through its branches. 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– by Exposure at Branches_{*it*}, and estimate the following linear probability model

$$y_{it} = \tilde{\beta}_0 + \tilde{\beta}_1 \text{Exposure at Branches}_{it} + \tilde{\beta}_2 \text{Ownership}_i + \tilde{\beta}_3 \text{AGM Meeting}_i + \tilde{\beta}_4 \text{Exposure at Branches}_{it} \times \text{Ownership}_i + \tilde{\beta}_5 \text{Exposure at Branches}_{it} \times \text{AGM Meeting}_i$$

+ β_{int} Exposure at Branches_{it} × Ownership_i × AGM Meeting_i + α_i + τ_t + ε_{it} ,

(3)

where Ownership_i is a measure of shareholder ownership by a specific shareholder type, and AGM Meeting_i is defined as in equation 2. We expect $\tilde{\beta}_5$ and $\tilde{\beta}_{int}$ to be significantly larger than zero if consumer demand drives firm donations.

A potential drawback of this approach is that the branches variable does not distinguish between the type of branches. Therefore, it may include shops as well as factories and, in the latter case, our analysis will not capture consumer demand. To circumvent this problem, we restrict the analysis either to (i) firms within the same sector or (ii) firms that are above the median, 75th, or 90th percentile of the distribution of the number of branches.²⁸ While firms might differ even within the same sector, the second approach should be more reliable as progressively reducing the dataset according to the number of branches effectively singles out large chains.

Results. First, we focus on individual ownership across industries. Table 8 presents OLS estimates of equation $3.^{29}$ The variable Ownership_i is 1 if the firm has more than the median share of individual investor ownership. Across columns we either focus on all industries (columns one and five), consumer discretionary industries (columns two and six), healthcare (columns three and seven), or I.T. (columns four and eight). Across columns we see that the coefficient of $\tilde{\beta}_{int}$ is largest for firms in the consumer discretionary sector, but never significantly different from zero at standard levels. Healthcare companies that had an AGM engage less in charitable donations, though this result is not statistically significant. Finally, we take the I.T. sector to approximate corporations with large cash flows (e.g., Apple). In this sector, we find that firms with an AGM are more likely to donate as covid rates increase ($\hat{\beta}_5 > 0$) but not as a result of individual shareholder influence on

²⁸These threshold values are 41, 170 and 664 branches, respectively.

²⁹Appendix Table A10 reports standard errors clustered at the industry level.

managers ($\hat{\beta}_{int}$ is negative but close to zero).³⁰

We further investigate if other shareholder types influence decisions through this channel. We focus on the main four shareholder types –banks, insurance companies, mutual funds, and private equity funds– in Table 9.³¹ As before, we pay particular attention to the triple interaction in the bottom row of the Table. We find that across columns most coefficients are close to zero, with large standard errors. The regression for banks (columns one and six), private equity funds (four and eight) and all financial investors together (five and ten) even show negative coefficients, though insignificant.³² Therefore, we conclude that financial institutions did not pressure managers for donations due to consumer reactions.

Next, we replicate the analysis above by progressively restricting the dataset to include only firms above the 50th, 75th, and 90th percentile of the distribution of the number of branches. We focus on individual shareholders in Appendix Table A12, on banks in Appendix Table A13, on insurance companies in Appendix Table A14, on mutual funds in Appendix Table A15, and on private equity in Appendix Table A16. Across all tables we find a very limited role for consumer demand: considering only those firms with a large number of branches renders the coefficient of the triple interaction to become more negative or to drop from slightly positive to zero. Furthermore, we replicate the analysis by joining all the five categories of financial shareholders in Table A17. We find that the coefficient estimate is large, negative and significant when looking at the firms with the most branches. This indicates that, to the contrary of our hypothesis on consumer demand, a greater exposure to covid at a firm's branches made a firm less likely to donate as consumers reduce spending due to the covid crisis, hitting firms' cash flows.

Discussion. Our analysis indicates that firms with large shares of individual investors are more likely to donate after a spike in covid rates at the headquarter-state. This finding is particularly strong for individual shareholders with control shares, who are easily associated with a firm. We cannot confirm a similar trend for other shareholder types, who instead display the opposite behavior: a reduction in the probability of donations due to covid rates at their branches. These results are consistent with individual shareholders gaining from the publicity that the media offers when the firm they are associated with donates.

³⁰Note that the direct effect of holding an AGM meeting is negative for these firms. Given the smaller sample size, the results for I.T. firms may be affected by the fact that Google donated despite holding an AGM meeting in the Summer (i.e., the variable Meeting_i = 0 if *i* is Google).

³¹Appendix Table A11 reports standard errors clustered at the industry level.

³²We include the above mentioned financial firms, V.C.s and hedge funds in the all financial investors category.

5 Managerial Pressure

Another potential rationale for the donation patterns in Figure 1 is that donations are the sole choice of a firm's top management (e.g., Bach and Metzger, 2019). This channel should be larger the smaller the voice of the other stakeholders. We proxy this 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 2, where we take Ownership_{*i*} to be one if firm *i* owns more than the median amount of its own shares.³³ Since the AGM is the best opportunity for managers to show off their annual results, we use the difference between firms with and without an AGM during our sample period to estimate the causal impact of managerial will on firm donations.

Table 10 reports the coefficient estimates. The first two columns measure covid rates at the headquarter-state, columns three and four use national covid rates, whereas columns five and six measure covid rates at the branches. Case and death rates alternate across columns. The estimated coefficient of the interaction of covid rates, the indicator variable for self ownership and the AGM indicator 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. These findings suggest that managers, like financial investors, dislike donations as they may jeopardize a firm's financial position.

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

$$y_{it} = \dot{\beta}_0 + \dot{\beta}_1 \text{Competitors Donating}_{it} + \dot{\beta}_2 \text{AGM}_i + \dot{\beta}_3 \text{Competitors Donating}_{it} \times \text{AGM}_i + \alpha_i + \tau_t + \varepsilon_{it}$$
(4)

where we still denote by $AGM_i = 1$ all firms with an AGM in the sample period. The variable Competitors $Donating_{it}$ varies both over time and across firms and indicates the fraction of firms in the same sector as firm *i* that have already pledged a charitable donation by time *t*. We include firm and day fixed effects. We estimate equation 4 by OLS

³³This 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. Therefore, Ownership_i = 1 if the firm shows nonzero self ownership in December 2019.

and report the results in Table 11, where we cluster the standard errors at the firm level.

The first column of Table 11 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).³⁴ The second column of the table includes the AGM_{*i*} 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 4, namely the fraction of equity owned by individual shareholders. This variable was found to substantially explain donations in Section 4. 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 12, where we interact the variables in equation 4 with a dummy variable that is 1 if a firm's equity is owned by more than the median value of a shareholder type.³⁵ 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.

6 Discussion

The evidence presented so far points to shareholders having substantial influence in determining firms' social responsibility during a crisis. In particular, we found that individual and financial investors respond to different incentives. On the one hand, large individual investors sought to obtain covid-related donations from the firms they invested in (see Table 5), while large financial investors sought the opposite (see Tables 6 and 7).

One way to reconcile these findings is as follows. A firm's charitable donations yields

³⁴This coefficient is not statistically different form zero if the standard errors are clustered by industry as in Appendix Table A18.

³⁵Appendix Table A19 shows similar results when standard errors are clustered at the industry level.

prestige or image payoff –in terms of increased positive media exposure –to the individual shareholders synonymous with the donating firm. There are two benefits to the individual investor from donating through the firm, rather than donating themselves. First, a S&P500 firm's donation may receive more media coverage than an individual investor's personal donation.³⁶ Second, the individual investor only bears a fraction of the firm's donation cost, proportional to the share she owns in the firm, whereas she would bear the full cost of a personal donation.

Financial investors may not receive such an image payoff. For instance, an article describing Microsoft's charitable donations is unlikely to discuss the firm's main share-holders: Vanguard and Capital Group, that have about 8% and 5% ownership. Rather, we are more likely to read that Microsoft was founded by Bill Gates, who still owns more than 1% of the company. Meanwhile, the costs of the firm's donation may impact financial investors for several reasons. First, they may reduce dividends. 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 may lack liquidity due to a halt in production or sales. Finally, the costs may have been compounded by the sinking stock market.

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,

$$y_{ift} = \beta_0 + \sum_{\substack{-10 \le k \le 10}} \psi^k \text{ News Day}_{it+k} + \sum_{\substack{-10 \le k \le 10}} \gamma^k (\text{News Day}_{it+k} \cdot \text{Individual}_i) + \alpha_i + \alpha_f + \tau_t + \varepsilon_{it},$$
(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 {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 one if shareholder *i* is an individual investor, and is zero 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 day t + k.

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

³⁶A firm of this size has an appropriate media relation and marketing team that would ensure adequate media exposure for the donation event.

the shareholder category.³⁷ Panel a uses only shareholders with more than 1% holdings, whereas Panel b focuses on shareholders with more than 5% holdings.³⁸ Across both panels, cumulative Google searches are flat before the news is broken. After the news is broken, the coefficient estimates jump to about 50% in Panel a, indicating that individual shareholders enjoy about 65% more searches than other shareholders. Moving to Panel b we find that the coefficient estimates are significantly different from zero already two days before the news is broken. This indicates that the differential impact of cumulative Google searches is much stronger for individual shareholders when we restrict our investigation to large investors (more than 5% holdings).³⁹ Therefore, the Google search gain 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. Ideally, one would compare the dividends paid by two identical firms, with only one of them donating. However, such a comparison is infeasible. Therefore, 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 that the firm has invested in.⁴⁰ More specifically, we analyze the correlation between two vectors: for each of the 37 financial firm, f, in our sample the first vector indicates whether it donates or not by April 15th (19 our of the 37 firms donated), and the second vector reports whether the firms in f's portfolio also donated. Table 13 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 portfolio 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 progressively increase the minimum shareholding requirement for a firm to be considered in f's portfolio. p-values are reported in square brackets.

³⁷We 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.

³⁸Our analysis indicates that non-blockholder investors play no role, thus we only scraped Google trend data for shareholders with at least 1% holdings. Appendix Figure B2 plots similar results with cumulative Google searches over 14 days. Appendix Table A20 reports the coefficient estimates for daily Google searches, and cumulative Google searches over 14, 10 and 7 days.

³⁹The 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).

⁴⁰We 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.

Focusing on column three of Table 13, we find that the correlation coefficient 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 one 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. 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.

In sum, we find that firms that donate do not support that firms in their investment portfolio also donate. Together with Tables 6 and 7, our identification suggests that "voice" is an effective mechanism for large shareholders to influence managers (Broccardo et al., 2020). This result is causal because the AGM date is pre-determined. Our interpretation is that image payoffs accruing to a financial shareholder that donates does not follow through the chain of investments. More broadly, given how important and debated were firms' contributions to the economy -either in terms of medical equipment, face masks, or cash- in the first months of the pandemic (e.g., the U.S. President repeatedly called out firms by name to do their part), our analysis suggests that the perimeter of a firm's social responsibility may terminate at its headquarter's exit door. That is, firms may not be willing to take costly actions for their subordinates to adopt prosocial behaviors in the absence of adequate returns, in this case publicity.⁴¹ Our results clash with the good intentions claimed by the Business Roundtable,⁴² the association of CEOs of large American corporations, which aims to "promote an economy that serves all Americans" and that received widespread media coverage. Rather, our interpretation nests well within the broad discontent against large U.S. corporations that Colonnelli and Gormsen (2020) recently found among the survey participants in their experiment, which they show has implications for the popular support of policies favorable for corporations.

⁴¹Boudreau (2019) shows in a recent RCT experiment that large corporations are willing to enact policies to improve the well-being of garment workers in their supply chain. Her results are not in contrast with ours as these actions belong to well advertised policies by the Alliance for Bangladesh Worker Safety. The Alliance members would face major a backlash if they fail to promote worker safety after advertising it.

⁴²Source: https://www.businessroundtable.org/business-roundtable-redefines-the-purposeof-a-corporation-to-promote-an-economy-that-serves-all-americans

Focusing on only donations is both a limitation and a strength of our study. Donations are clearly only a small portion of a firm's overall corporate social responsibility effort, which spans from gender and racial themes to environmental issues and the sustainability of a firm's supply chain. However, among all CSR policies donations are the most visible on the media and, thus, those that may provide the most image value to a firm and its shareholders. For instance, the survey conducted in Hartzmark and Sussman (2019) indicate that survey participants view a strong generous giving and support for housing as central aspects of a firm's sustainability programs. The management of the COVID-19 pandemic by the U.S. President Donald Trump further heightened the importance of charitable giving and collaboration by large corporations through his usage of social media platforms like Twitter to name-call firms. Thus, while more evidence is needed to clearly understand the perimeter of a firm's social responsibility programs, we believe that the mechanism we uncover –i.e., the lack of pass-through of image gains for institutional investors– may apply more broadly to other CSR policies.⁴³

Finally, we believe our results to be valuable because to show the influence of shareholders on a firm's decision, a researcher would need to simultaneously (i) observe a "cause", (ii) connect the "cause" to the shareholders and not to the managers, and (iii) have an exogenous way for shareholders to influence managerial decisions, which defines treatment and control groups. These conditions are not often available in practice. Consider for example some news that consumers had renewed interest in certain goods. First, the news may not interest shareholders across firms equally, depending on the firms' current products or target markets. Second, we may lack an exogenous way for shareholders to influence managerial decisions. Third, we may not be able to distinguish between how managers and shareholders respond to the news, or to ascertain how salient the news is to them. The exogenous timing of the covid pandemic together with that of shareholder meetings solves these concerns. Moreover, it allows us to perform this analysis on the largest U.S. corporations.

7 Conclusions

In this paper, we exploit the onset of the COVID-19 pandemic as a natural experiment to investigate shareholders' influence on firms' prosocial strategies. Motivated by the media coverage that corporate donations received at the start of the pandemic, we focus

⁴³Several 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 an investors' social norms playing an important 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.

on S&P500 corporations' charitable donations, which we hand-collected from the internet. Exploiting the exogenous timing of firms' shareholders Annual General Meetings (AGM), we show that the probability of observing a donation as covid rates increased is greater for firms who had an AGM in the first months of 2020 and had large shareholdings held by a small set of individuals who are synonymous with the firm (e.g., Jeff Bezos and Amazon). Large institutional shareholdings lead instead to a drop in donations. Our interpretation is that the AGM allowed shareholders to influence the firm's decisions and that different categories of shareholders responded to different incentives. In particular, image concerns may be driving this trend, as Google trend data show substantially greater media interests for individual investors after a firm's donation than for other investors. On the other hand, we find no pass-through of image gains to institutional investors. As a result, we show that these investors preferred to donate themselves rather than having the firms in their portfolios donate. In sum, our results point to "voice" driven by image concerns as an effective way for large investors to influence managers to adopt prosocial actions, but cast doubts on financial investors' genuine willingness to take costly actions to enforce higher social responsibility standards for firms in their portfolios.

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Tables and Figures

| | 25% (1) | Median (2) | Mean (3) | 75% (4) |
|---|------------|---------------|--------------|------------|
| i. Covid-Related Charitable Contribution Data | | | | |
| Donating Firms (0/1) Donation Amount (mln USD, if Available) | 0 1.0 | 0 5.0 | 0.42 36.5 | 1 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 | 21.1 | 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 |
| [-,-] | | | | |

Table 1: Summary statistics of main variables

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

| | | Whether F | irm <i>i</i> has D | onated by | Time <i>t</i> (0/1 | .) |
|---|------------------------|---------------------------------|---------------------------------|------------------------|---------------------------------|---------------------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Cum. Covid Rate is defined as: | | Cases | | | Deaths | |
| Cum. Covid Rate | 0.018^{*} (0.010) | 0.016 (0.011) | 0.016 (0.011) | 0.015^{*} (0.009) | 0.014 (0.009) | 0.015 (0.010) |
| % Owned by Individuals | (0.010) | (0.671) 87.752*** (0.679) | (0.691) 87.751*** (0.691) | (0.00)) | (0.007) 87.059*** (0.224) | (0.010) 87.064*** (0.228) |
| <i>Cum. Covid Rate</i> × % Owned by Individuals | | 0.100^{**} (0.041) | 0.098** (0.041) | | 0.077** | 0.076** |
| Meeting | | () | 0.003 | | () | 0.000 (0.006) |
| Cum. Covid Rate × Meeting | | | 0.008 | | | -0.001 (0.039) |
| <i>Cum. Covid Rate</i> × % Owned by Individuals × Meeting | | | 1.591*** (0.219) | | | 3.934*** (0.687) |
| N | 38,845 | 36,805 | 36,805 | 38,845 | 36,805 | 36,805 |
| Adjusted R-squared | 0.4932 | 0.5010 | 0.5018 | 0.4927 | 0.4999 | 0.5006 |

Table 3: The impact of individual shareholders on Covid donations.

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

Note: All columns include day and firm fixed effects. The variable Cases and Deaths are standardized. The variable % Owned by Individuals is between [0,1]. The interaction % Owned by Individuals × Meeting is accounted for by the firm fixed effects. Standard errors are clustered by firm and presented in parenthesis.

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

| | | | | Whether Fi | rm <i>i</i> has Do | nated by | Time <i>t</i> (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) |
| Above Median Ownership | -0.004^{*} | -0.006^{*} | -0.003 | -0.204^{***} | 0.197*** | -0.002 | -0.004 | -0.003^{**} | -0.202*** | 0.197*** |
| | (0.002) | (0.003) | (0.002) | (0.003) | (0.004) | (0.002) | (0.003) | (0.002) | (0.002) | (0.003) |
| 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) |
| Meeting | 0.005 | 0.002 | 0.003 | 0.002 | -0.006 | -0.004 | 0.003 | 0.002 | 0.001 | -0.008^{***} |
| | (0.022) | (0.005) | (0.007) | (0.007) | (0.006) | (0.024) | (0.003) | (0.006) | (0.006) | (0.002) |
| 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) |
| 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 |

 $\frac{1}{p^* - p < 0.1; ** - p < 0.05; *** - p < 0.01.}$

Note: 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.

| | | Whether F | irm <i>i</i> has D | onated by T | ime t (0/1) | |
|--|----------|-----------|--------------------|-------------|-------------|----------|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| <i>Cum. Covid Rate</i> 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) |
| % Invidvidual Blockholders | 0.062*** | 0.050*** | 0.259*** | 0.061*** | 0.049*** | 0.257*** |
| | (0.001) | (0.001) | (0.002) | (0.001) | (0.001) | (0.001) |
| 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) |
| Meeting | 0.003 | 0.003 | 0.002 | 0.000 | 0.000 | -0.003 |
| 0 | (0.007) | (0.007) | (0.008) | (0.006) | (0.006) | (0.006) |
| <i>Cum. Covid Rate</i> × Meeting | 0.033 | 0.037 | 0.011 | 0.060 | 0.068* | 0.015 |
| 0 | (0.039) | (0.039) | (0.038) | (0.040) | (0.041) | (0.034) |
| Cum. Covid Rate \times % Invidvidual Blockholders \times Meeting | 0.127*** | 0.143*** | 0.042 | 0.308*** | 0.340*** | 0.123 |
| 0 | (0.016) | (0.020) | (0.101) | (0.053) | (0.070) | (0.160) |
| Ν | 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 |

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

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

Note: 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 firm and presented in parenthesis.

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

cases.

| | | | Whe | ther Firm <i>i</i> | has Donate | ed by Time t | (0/1) | | |
|---|-----------|---------|----------|--------------------|--------------|--------------|-----------|-----------|----------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| Institutional Blockholders is defined as: | | Banks | | Ν | Autual Fun | ds | | 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) |
| % Inst. Blockholders | -0.001 | 0.001 | -0.002 | -0.004 | -0.004^{*} | -0.002 | 0.063*** | 0.043*** | 0.006** |
| | (0.003) | (0.002) | (0.002) | (0.003) | (0.002) | (0.002) | (0.001) | (0.001) | (0.003) |
| 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) |
| Meeting | 0.004 | 0.010 | 0.013 | 0.003 | 0.003 | -0.001 | 0.013** | 0.010* | 0.022* |
| ũ (là chí | (0.007) | (0.012) | (0.014) | (0.007) | (0.007) | (0.017) | (0.006) | (0.005) | (0.013) |
| Cum. Covid Cases × Meeting | -0.023 | 0.008 | 0.043 | -0.055 | -0.040 | 0.000 | 0.063* | 0.042 | 0.137 |
| 0 | (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 | (0.024) | (0.057) | (0.057) | (0.026) | (0.045) | (0.060) | (0.007) | (0.013) | (0.096) |
| Ν | 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 |

 $\frac{1}{p^{*}-p^{*}<0.1; **-p^{*}<0.05; ***-p^{*}<0.01.}$

Note: 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.

| | | | Whe | ther Firm <i>i</i> | has Donate | ed by Time t | (0/1) | | |
|--|-----------|---------|----------|--------------------|--------------|--------------|----------------|---------------|-------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| Institutional Blockholders is defined as: | | Banks | | N | Mutual Fun | ds | | 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) |
| % Inst. Blockholders | -0.001 | 0.001 | -0.000 | -0.002 | -0.003 | -0.002 | 0.062*** | 0.042*** | 0.004^{*} |
| | (0.002) | (0.002) | (0.001) | (0.002) | (0.002) | (0.002) | (0.001) | (0.001) | (0.002) |
| 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) |
| Meeting | 0.000 | 0.004 | -0.002 | 0.000 | -0.000 | -0.014 | 0.008*** | 0.007*** | 0.013 |
| , and the second s | (0.006) | (0.008) | (0.010) | (0.006) | (0.006) | (0.011) | (0.003) | (0.003) | (0.015) |
| 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) |
| Ν | 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: Note: 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 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 Covid exposure at branches on donations across industries.

| | | V | Vhether F | irm <i>i</i> has D | onated by T | "ime t (0/1) | | |
|--|----------|-----------|-----------|--------------------|-------------|--------------|---------|-----------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Exposure at branches is defined as: | | Deaths | | | | | | |
| Exposure at branches | 0.005 | -0.010 | 0.004 | 0.020 | 0.005 | -0.012 | 0.052 | 0.025 |
| | (0.018) | (0.073) | (0.116) | (0.037) | (0.015) | (0.062) | (0.099) | (0.031) |
| Above Median Indiv. Ownership | 0.195*** | 0.201*** | -0.000 | -0.073*** | 0.196*** | 0.202*** | -0.000 | -0.076*** |
| - | (0.004) | (0.008) | (0.007) | (0.006) | (0.004) | (0.008) | (0.004) | (0.006) |
| Exposure at branches × Above Median Indiv. Ownership | -0.040 | 0.016 | -0.044 | -0.133*** | -0.034 | 0.024 | -0.146 | -0.141*** |
| | (0.026) | (0.068) | (0.143) | (0.046) | (0.026) | (0.066) | (0.113) | (0.046) |
| Meeting | 0.005 | -0.122*** | 0.000 | -0.120^{***} | 0.007 | -0.121*** | 0.013 | -0.115*** |
| Ŭ, | (0.010) | (0.022) | (0.008) | (0.008) | (0.013) | (0.015) | (0.027) | (0.008) |
| <i>Exposure at branches</i> × Meeting | 0.027 | 0.018 | -0.008 | 0.301*** | 0.044 | 0.050 | 0.084 | 0.371*** |
| | (0.072) | (0.160) | (0.150) | (0.066) | (0.093) | (0.189) | (0.268) | (0.087) |
| Exposure at branches × Above Median Indiv. Ownership × Meeting | 0.111 | 0.169 | -0.147 | -0.007 | 0.114 | 0.159 | -0.197 | -0.051 |
| | (0.102) | (0.176) | (0.198) | (0.124) | (0.123) | (0.198) | (0.280) | (0.137) |
| Subset Industry: | All | Consumer | Health | I.T. | All | Consumer | Health | I.T. |
| N | 29,665 | 4,590 | 3,230 | 4,250 | 29,665 | 4,590 | 3,230 | 4,250 |
| Adjusted R-squared | 0.5029 | 0.4762 | 0.5272 | 0.6126 | 0.5020 | 0.4753 | 0.5325 | 0.6000 |

 $\frac{1}{p^{*} - p < 0.1; ** - p < 0.05; *** - p < 0.01.}$

Note: The variable *Exposure at branches* is the weighted average of the Covid rate, where the weights is the number of branches a firm has in a state. The industry "Consumer" refers to consumer discretionary. The variables Cases and Deaths are standardized. The interaction Above Median Indiv. Ownership \times Meeting is accounted for by the firm fixed effects. Only firms with at more than 5 branches. Standard errors are clustered at the firm level and presented in parenthesis.

Table 9: The impact of Covid exposure at branches on Covid donations for financial investors.

| | | | | Whether F | irm <i>i</i> has D | onated by T | ime t (0/ | 1) | | |
|--|-----------|---------|-----------|-----------|--------------------|-------------|-----------|-----------|-----------|----------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| <i>Exposure at branches</i> 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 |
| | (0.024) | (0.023) | (0.016) | (0.018) | (0.024) | (0.022) | (0.020) | (0.013) | (0.015) | (0.022) |
| Shareholding Type | 0.199*** | -0.000 | 0.152*** | -0.200*** | 0.199*** | 0.200*** | -0.001 | 0.152*** | -0.200*** | 0.200*** |
| 0 77 | (0.003) | (0.002) | (0.002) | (0.003) | (0.003) | (0.002) | (0.002) | (0.001) | (0.002) | (0.002) |
| 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 |
| | (0.024) | (0.022) | (0.026) | (0.021) | (0.023) | (0.023) | (0.021) | (0.027) | (0.020) | (0.023) |
| Meeting | -0.207*** | 0.004 | -0.138*** | 0.005 | 0.008 | -0.210*** | 0.006 | -0.130*** | 0.008 | 0.009 |
| ő | (0.013) | (0.009) | (0.009) | (0.009) | (0.010) | (0.019) | (0.011) | (0.011) | (0.011) | (0.013) |
| Exposure at branches × Meeting | 0.122* | 0.027 | -0.011 | 0.099 | 0.074 | 0.138* | 0.042 | 0.007 | 0.141 | 0.073 |
| | (0.065) | (0.068) | (0.085) | (0.085) | (0.072) | (0.081) | (0.081) | (0.094) | (0.098) | (0.092) |
| <i>Exposure at branches</i> × <i>Shareholding Type</i> × Meeting | -0.173 | 0.093 | 0.139 | -0.048 | -0.012 | -0.216 | 0.128 | 0.172 | -0.082 | 0.038 |
| | (0.117) | (0.107) | (0.108) | (0.107) | (0.107) | (0.164) | (0.135) | (0.124) | (0.128) | (0.125) |
| Ν | 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: 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 firm and presented in parenthesis.

| | | Whether F | Firm <i>i</i> has D | onated by T | Time t (0/1) | |
|---|----------------|-----------|---------------------|-------------|--------------|----------|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| <i>Cum. Covid Rate</i> is defined as: | At Headquarter | | Nation | al 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) |
| Above Median Ownership | -0.004 | -0.004 | 0.000 | -0.000 | 0.283*** | 0.282*** |
| · | (0.005) | (0.003) | (0.000) | (0.000) | (0.007) | (0.005) |
| 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) |
| Meeting | 0.013** | 0.009*** | -0.000 | 0.000 | 0.009 | 0.011 |
| Ŭ | (0.006) | (0.003) | (0.000) | (0.000) | (0.008) | (0.010) |
| <i>Cum. Covid Rate</i> × Meeting | 0.067* | 0.057*** | 0.028 | 0.025 | 0.068 | 0.084 |
| 0 | (0.038) | (0.021) | (0.028) | (0.025) | (0.055) | (0.070) |
| <i>Cum. Covid Rate × Above Median Ownership × Meeting</i> | -0.109** | -0.091*** | -0.079 | -0.075 | -0.024 | 0.075 |
| 1 0 | (0.048) | (0.031) | (0.068) | (0.063) | (0.283) | (0.349) |
| 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 |

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

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

Note: 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.

| | | : Firm <i>i</i> has y Time <i>t</i> (0/ | |
|---|---------------------|--|----------------------|
| | (1) | (2) | (3) |
| % Competitors Already Donating | 0.050*** (0.013) | 0.050*** (0.014) | 0.044*** (0.015) |
| Meeting | (0.010) | 0.008 (0.017) | 0.006 |
| % Competitors Already Donating × Meeting | | 0.003 (0.031) | 0.004 (0.033) |
| % Owned by Individuals | | () | 70.552*** (0.452) |
| $\%$ Competitors Already Donating \times % Owned by Individuals | | | 0.356*** (0.137) |
| % Competitors Already Donating × % Owned by Individuals × Meeting | | | 0.008 (0.293) |
| N Adjusted R-squared | 48,442 0.4486 | 48,442 0.4486 | 45,898 0.4570 |

Table 11: Effect of competitors on Covid donations.

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

Note: 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.

Table 12: Effect of competitors on Covid donations by shareholder type.

| | | Whether F | 'irm <i>i</i> has D | onated by T | 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) |
| Above Median Ownership | 0.192*** | -0.030** | 0.010 | 0.035** | -0.130*** | 0.152*** |
| | (0.015) | (0.015) | (0.015) | (0.015) | (0.015) | (0.014) |
| % 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) |
| Meeting | 0.026 | 0.034 | 0.001 | -0.015 | -0.002 | 0.003 |
| 0 | (0.019) | (0.024) | (0.025) | (0.021) | (0.020) | (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) |
| | | | | | | |
| 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: 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.

Table 13: Correlation between financial investors' donations and their companies' donations

| Mimimum Share | Simple Average | Weighted Average | Weighted Average × Met |
|-------------------|----------------|------------------|---------------------------|
| (1) | (2) | (3) | (4) |
| 00/ | 0.440 | 0.042 | 0.011 |
| 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., $N^{-1} \times \sum_{j} \mathbb{I}_{[firm j donated & i's share in j is greater than x%]}$, where *N* is the number of investments of firm *i*), column 3 computes weighted average with weights equal to the equity shares (i.e., $\sum_{j} share_{ij} \times \mathbb{I}_{[firm j donated & i's share in j is greater than x%]}$), and column 4 considers only investments that got an AGM in the period under consideration (i.e., $\sum_{j} share_{ij} \times \mathbb{I}_{[firm j donated & i's share in j is greater than x%]}$. We only consider financial investors. p-values are in square brackets.

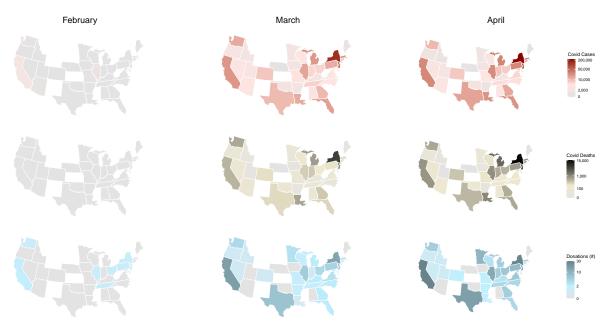
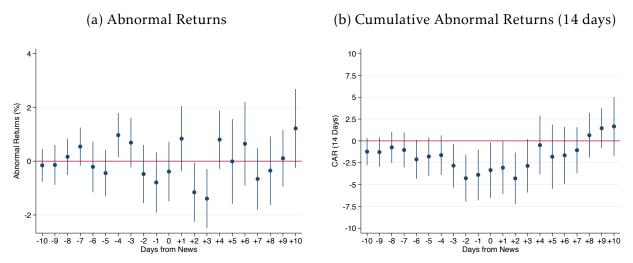


Figure 1: Covid cases, covid deaths and corporate donations

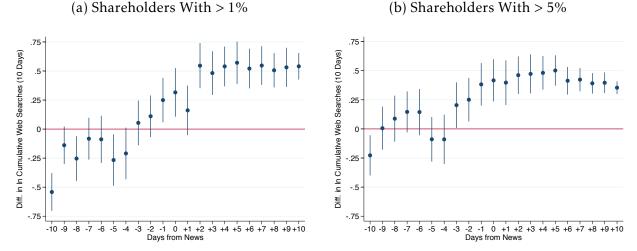
Notes: The figure reports snapshots of covid rates (number of deaths and cases) and the number of firms donating by U.S. states at February 29th, March 31st and April 15th. States in white do not house S&P500 firms.

Figure 2: Abnormal and cumulative abnormal returns, event study



Notes: The figure shows event studies in a ten-day window around the donation announcement. The coefficients are in Appendix Table A1.

Figure 3: Difference in the (log) Cumulative Google searches to Individual Shareholders and Other Investors, event study



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 A20 reports the coefficient estimates.

Online Appendix

A Additional Tables

Table A1: Abnormal and cumulative abnormal returns, stock return forecasts based on past 30 days, event study.

| | Abnormal | Comulati | ve Abnorm | al Returns |
|---------------------------|----------|----------|-------------------|-------------------|
| | Returns | 7 days | 10 days | 14 days |
| | | • | | (4) |
| | (1) | (2) | (3) | (4) |
| 10 Days Before | -0.157 | 0.458 | -0.040 | -1.231 |
| | (0.310) | (0.803) | (0.812) | (0.791) |
| 9 Days Before | -0.140 | 1.041 | -0.221 | -1.288 |
| y Duys Derore | (0.377) | (0.900) | (0.874) | (0.859) |
| 8 Days Before | 0.161 | 1.024 | 0.535 | (0.037) -0.741 |
| o Days Delore | (0.344) | (0.996) | (0.959) | (0.907) |
| 7 Dave Before | 0.543 | 0.047 | (0.939) -0.166 | (0.907) -1.044 |
| 7 Days Before | (0.343) | | | |
| (Davis Rafana | () | (1.082) | (1.004) | (1.016) |
| 6 Days Before | -0.212 | -0.492 | -1.659 | -2.120^{*} |
| 5 D D (| (0.482) | (1.083) | (1.050) | (1.131) |
| 5 Days Before | -0.443 | 0.400 | -1.455 | -1.790 |
| | (0.439) | (1.020) | (1.039) | (1.113) |
| 4 Days Before | 0.968** | 0.368 | -0.938 | -1.636 |
| | (0.419) | (1.017) | (1.054) | (1.151) |
| 3 Days Before | 0.689 | -1.927* | -1.741 | -2.842** |
| | (0.471) | (1.126) | (1.162) | (1.270) |
| 2 Days Before | -0.478 | -2.704** | -3.278*** | -4.279*** |
| | (0.550) | (1.186) | (1.221) | (1.374) |
| 1 Day Before | -0.791 | -2.068 | -2.932** | -3.892*** |
| | (0.571) | (1.281) | (1.279) | (1.478) |
| News Day | -0.386 | -1.478 | -2.435^{*} | -3.351** |
| | (0.563) | (1.376) | (1.246) | (1.618) |
| 1 Day After | 0.836 | -1.877 | -2.429** | -3.071** |
| | (0.617) | (1.209) | (1.179) | (1.542) |
| 2 Days After | -1.156** | -2.613** | -3.970*** | -4.297*** |
| | (0.559) | (1.171) | (1.211) | (1.505) |
| 3 Days After | -1.393** | -1.403 | -2.573** | -2.859* |
| | (0.559) | (1.134) | (1.194) | (1.562) |
| 4 Days After | 0.801 | -0.088 | -0.372 | -0.485 |
| | (0.551) | (1.367) | (1.378) | (1.703) |
| 5 Days After | -0.009 | -1.377 | -1.465 | -1.819 |
| - | (0.800) | (1.528) | (1.464) | (1.867) |
| 6 Days After | 0.647 | -0.114 | -1.643 | -1.659 |
| | (0.789) | (1.335) | (1.465) | (1.667) |
| 7 Days After | -0.661 | -0.352 | -1.718 | -1.068 |
| / | (0.583) | (0.999) | (1.308) | (1.344) |
| 8 Days After | -0.352 | 0.904 | 0.255 | 0.647 |
| | (0.647) | (1.022) | (1.469) | (1.307) |
| 9 Days After | 0.105 | 0.706 | 1.390 | 1.445 |
| | (0.534) | (1.047) | (1.222) | (1.158) |
| 10 Days After | 1.219 | 0.738 | 1.337 | 1.654 |
| 10 Dayo miter | (0.747) | (1.550) | (1.421) | (1.708) |
| | (0.717) | (1.550) | (1.721) | (1.700) |
| Ν | 22,246 | 22,246 | 22,246 | 22,246 |
| Adjusted R-squared | 0.0336 | 0.0845 | 0.1082 | 0.1418 |
| * - p < 0.1; ** - p < 0.1 | | | | |

 $\frac{1}{(1 - p < 0.1; ** - p < 0.05; *** - p < 0.01.}$ Note: All columns include firm and day fixed effects Standard errors are clustered by firm and presented in parenthesis.

| | Cumulat | ive Excess Ret | urns Over |
|--------------------|-------------|----------------|--------------|
| | Last 2 Days | Last 7 Days | Last 14 Days |
| | (1) | (2) | (3) |
| News last 2 days | 0.002 | | |
| | (0.005) | 0.000 | |
| News last 7 days | | 0.002 | |
| | | (0.006) | |
| News last 14 days | | | 0.003 |
| | | | (0.007) |
| Ν | 35,907 | 35,917 | 35,931 |
| Adjusted R-squared | 0.1064 | 0.1488 | 0.2206 |

Table A2: Cumulative excess returns after a donation

(-p < 0.1; ** - p < 0.05; *** - p < 0.01.Note: All columns include day and firm fixed effects. Standard errors are clustered by firm and presented in parenthesis.

| | Cumulati | ive Excess Vol | umes 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) |
| N | 36,065 | 36,065 | 36,065 |
| Adjuster R-squared | 0.0436 | 0.1385 | 0.3042 |

Table A3: Cumulative excess volumes after a donation

(p < 0.1; (p < 0.05; (p < 0.05; (p < 0.01))))

Note: All columns include day and firm fixed effects. Standard errors are clustered by firm and presented in parenthesis.

Table A4: The impact of individual shareholders on Covid donations across industries, standard error clustered by industry.

| | | Whether F | irm <i>i</i> has D | onated by | Time <i>t</i> (0/1 |) |
|---|---------|-------------------------|--------------------------------|-----------|-------------------------|--------------------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Cum. Covid Rate | 0.018* | 0.016 | 0.016 | 0.015* | 0.014 | 0.015 |
| % Owned by Individuals | (0.009) | (0.011) 87.752*** | (0.011) 87.751*** | (0.008) | (0.008) 87.059*** | (0.009) 87.064*** |
| <i>Cum. Covid Rate</i> × % Owned by Individuals | | (0.658) 0.100^{**} | (0.688) 0.098^{**} | | (0.197) 0.077^{**} | (0.217) 0.076^{**} |
| Meeting | | (0.035) | (0.036) 0.003 (0.008) | | (0.030) | (0.029) 0.000 (0.007) |
| Cum. Covid Rate × Meeting | | | (0.008) 0.008 (0.051) | | | (0.007) -0.001 |
| <i>Cum. Covid Rate</i> × % Owned by Individuals × Meeting | | | (0.051) 1.591*** (0.233) | | | (0.046) 3.934*** (0.698) |
| N | 38,845 | 36,805 | 36,805 | 38,845 | 36,805 | 36,805 |
| Adjusted R-squared | 0.4932 | 0.5010 | 0.5018 | 0.4927 | 0.4999 | 0.5006 |

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

Note: All columns include day and firm fixed effects. The variable Cases and Deaths are standardized. The variable % Owned by Individuals is between [0,1]. The interaction % Owned by Individuals × Meeting is accounted for by the firm fixed effects. Standard errors are clustered by industry and presented in parenthesis.

Table A5: The impact of shareholder type on Covid donations for financial investors.

| | | | | Whether Fi | rm <i>i</i> has Do | onated 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) |
| Above Median Ownership | -0.004^{*} | -0.006^{*} | -0.003 | -0.204*** | 0.197*** | -0.002 | -0.004 | -0.003* | -0.202*** | 0.197*** |
| | (0.002) | (0.003) | (0.002) | (0.003) | (0.004) | (0.001) | (0.002) | (0.001) | (0.002) | (0.003) |
| 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) |
| Meeting | 0.005 | 0.002 | 0.003 | 0.002 | -0.006 | -0.004 | 0.003 | 0.002 | 0.001 | -0.008** |
| 0 | (0.027) | (0.006) | (0.008) | (0.007) | (0.008) | (0.030) | (0.004) | (0.006) | (0.006) | (0.003) |
| 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 | (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) |
| Ν | 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 |

x - p < 0.1; x - p < 0.05; x - p < 0.01.

Note: 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 A6: The impact of shareholder type on Covid donations through US national Covid

rates.

| | | | | Whether F | irm <i>i</i> has D | onated by T | ime 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) |
| Above Median Ownership | -0.000* | 0.000 | 0.000 | -0.200*** | 0.200*** | 0.000* | -0.000 | -0.000 | -0.200*** | 0.200** |
| | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
| 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) |
| Meeting | 0.000 | -0.000 | -0.000 | -0.000 | -0.000 | -0.000 | 0.000 | 0.000 | 0.000 | -0.000 |
| 0 | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
| 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 | (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) |
| Ν | 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 |

 $rac{1}{r}$ - p < 0.1; ** - p < 0.05; *** - p < 0.01.

Note: 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 A7: The impact of individual shareholders on Covid donations, standard error clustered by industry.

| | | Whether F | irm <i>i</i> has D | onated by T | "ime t (0/1) | |
|---|----------|-----------|--------------------|-------------|--------------|----------|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| <i>Cum. Covid Rate</i> 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) |
| % Invidvidual Blockholders | 0.062*** | 0.050*** | 0.259*** | 0.061*** | 0.049*** | 0.257*** |
| | (0.001) | (0.001) | (0.002) | (0.001) | (0.000) | (0.001) |
| 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) |
| Meeting | 0.003 | 0.003 | 0.002 | 0.000 | 0.000 | -0.003 |
| 0 | (0.008) | (0.008) | (0.010) | (0.007) | (0.007) | (0.007) |
| Cum. Covid Rate × Meeting | 0.033 | 0.037 | 0.011 | 0.060 | 0.068 | 0.015 |
| 0 | (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) |
| 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: 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 A8: The impact of large insitutional shareholders on Covid donations through US

national Covid cases.

| | | | Whe | ether Firm <i>i</i> | has Donate | ed 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) | |
| % Inst. Blockholders | 0.000* | 0.000 | -0.000*** | 0.000 | 0.000 | 0.000*** | 0.062*** | 0.042*** | -0.000 | |
| | (0.000) | (0.000) |) (0.000) | (0.000) (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | | |
| 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) | |
| Meeting | -0.000 | -0.000 | -0.000 | -0.000 | -0.000 | -0.000 | -0.000 | -0.000 | -0.000 | |
| - | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | |
| 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) | |
| 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: 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 A9: The impact of large insitutional shareholders on Covid donations through US national Covid deaths.

| | | | Whe | ther Firm <i>i</i> | has Donate | ed by Time t (| (0/1) | | | | | | | | | | | | | | | | | | | | | |
|---|--|------------------|------------------|--------------------|--------------|-------------------|------------------|--------------------------------|-----------------------------|---------|---------|---------|---------|---------|---------|-----|-----|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| - | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | | | | | | | | | | | | | | | | | | | |
| Institutional Blockholders is defined as: | | Banks | | 1 | Mutual Fun | ds | 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) 0.042*** (0.000) | (0.006) 0.000 (0.000) | | | | | | | | | | | | | | | | | | | |
| % Inst. Blockholders | $\begin{array}{c} -0.000\\ (0.000)\\ -0.013\\ (0.008)\\ 0.000\\ (0.000) \end{array}$ | -0.000 | | -0.000 | 0.000 -0.000 | -0.000*** (0.000) | 0.062*** (0.000) | | | | | | | | | | | | | | | | | | | | | |
| | | (0.000) | (0.000) | (0.000) | (0.000) | | | | | | | | | | | | | | | | | | | | | | | |
| U.S. Cum. Covid Deaths × % Inst. Blockholders | | (0.008) 0.000 | (0.008) 0.000 | -0.005 | 0.034*** | -0.005 | -0.009 | -0.032*** | 0.012* | 0.019** | 0.009 | | | | | | | | | | | | | | | | | |
| | | | | 0.000 | 0.000 | 0.000 | 0.000 | () | · · · · | · · · | · / | · · · | () | · / | · / | · / | · / | · / | (0.008) | (0.008) | (0.008) | (0.007) | (0.008) | (0.007) | (0.007) | (0.006) | (0.007) | (0.007) |
| Meeting | | | | | | | | | | | | | | | | | | | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | | |
| 0 | | | | | | | | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | | | | | | | | | | | | | |
| U.S. Cum. Covid Deaths × Meeting | 0.017 | 0.014 | 0.017 | 0.008 | 0.017 | 0.019 | 0.018 | 0.015 | 0.025 | | | | | | | | | | | | | | | | | | | |
| Ũ | (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 | | | | | | | | | | | | | | | | | | | |
| , i i i i i i i i i i i i i i i i i i i | (0.010) | (0.021) | (0.026) | (0.012) | (0.009) | (0.021) | (0.007) | (0.015) | (0.027) | | | | | | | | | | | | | | | | | | | |
| Ν | 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 | | | | | | | | | | | | | | | | | | | |

 $\frac{1}{(p+1)^2}$

Note: 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 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.

| | | W | /hether F | irm <i>i</i> has D | onated by T | "ime t (0/1) | | |
|---|-------------|-----------|-----------|--------------------|-------------|--------------|---------|----------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Exposure at branches is defined as: | | Case | es | | Deat | hs | | |
| Exposure at branches | 0.005 | -0.010 | 0.004 | 0.020 | 0.005 | -0.012 | 0.052 | 0.025 |
| | (0.022) | (0.073) | (0.116) | (0.037) | (0.018) | (0.062) | (0.099) | (0.031) |
| Above Median Indiv. Ownership | 0.195*** | 0.201*** | -0.000 | -0.073*** | 0.196*** | 0.202*** | -0.000 | -0.076** |
| | (0.006) | (0.008) | (0.007) | (0.006) | (0.005) | (0.008) | (0.004) | (0.006) |
| Exposure at branches × Above Median Indiv. Ownership | -0.040 | 0.016 | -0.044 | -0.133*** | -0.034 | 0.024 | -0.146 | -0.141** |
| | (0.035) | (0.068) | (0.143) | (0.046) | (0.034) | (0.066) | (0.113) | (0.046) |
| Meeting | 0.005 | -0.122*** | 0.000 | -0.120^{***} | 0.007 | -0.121*** | 0.013 | -0.115** |
| · | (0.012) | (0.022) | (0.008) | (0.008) | (0.013) | (0.015) | (0.027) | (0.008) |
| Exposure at branches × Meeting | 0.027 | 0.018 | -0.008 | 0.301*** | 0.044 | 0.050 | 0.084 | 0.371** |
| | (0.078) | (0.160) | (0.150) | (0.066) | (0.096) | (0.189) | (0.268) | (0.087) |
| <i>Exposure at branches</i> × Above Median Indiv. Ownership × Meeting | 0.111^{*} | 0.169 | -0.147 | -0.007 | 0.114^{*} | 0.159 | -0.197 | -0.051 |
| | (0.056) | (0.176) | (0.198) | (0.124) | (0.059) | (0.198) | (0.280) | (0.137) |
| Subset Industry: | All | Consumer | Health | I.T. | All | Consumer | Health | I.T. |
| Clustered S.E.: | Industry | Firm | Firm | Firm | Industry | Firm | Firm | Firm |
| N | 29,665 | 4,590 | 3,230 | 4,250 | 29,665 | 4,590 | 3,230 | 4,250 |
| Adjusted R-squared | 0.5029 | 0.4762 | 0.5272 | 0.6126 | 0.5020 | 0.4753 | 0.5325 | 0.6000 |

Table A10: The impact of Covid exposure at branches on donations.

Note: The variable *Exposure at branches* is the weighted average of the Covid rate, where the weights is the number of branches a firm has in a state. The industry "Consumer" refers to consumer discretionary. The variables Cases and Deaths are standardized. The interaction Above Median Indiv. Ownership × Meeting is accounted for by the firm fixed effects. Only firms with more than five branches. Standard errors are defined in the bottom panel.

Table A11: The impact of Covid exposure at branches on Covid donations, standard error clustered by industry.

| | | | | Whether F | 'irm <i>i</i> has D | onated by T | 'ime 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) |
| Shareholding Type | 0.199*** | -0.000 | 0.152*** | -0.200*** | 0.199*** | 0.200*** | -0.001 | 0.152*** | -0.200*** | 0.200*** |
| | (0.004) | (0.003) | (0.002) | (0.004) | (0.004) | (0.003) | (0.003) | (0.001) | (0.003) | (0.003) |
| 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) |
| Meeting | -0.207*** | 0.004 | -0.138*** | 0.005 | 0.008 | -0.210*** | 0.006 | -0.130*** | 0.008 | 0.009 |
| ° | (0.014) | (0.009) | (0.011) | (0.011) | (0.012) | (0.020) | (0.011) | (0.013) | (0.012) | (0.016) |
| Exposure at branches × Meeting | 0.122 | 0.027 | -0.011 | 0.099 | 0.074 | 0.138 | 0.042 | 0.007 | 0.141 | 0.073 |
| , v | (0.078) | (0.066) | (0.097) | (0.085) | (0.105) | (0.094) | (0.081) | (0.113) | (0.098) | (0.132) |
| <i>Exposure at branches</i> × <i>Shareholding Type</i> × 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) |
| 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 |

 $\frac{1}{p < 0.1; ** - p < 0.05; *** - p < 0.01.}$

Note: 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 A12: The impact of Covid exposure at branches on donations for individual shareholders.

| | | | Whether F | irm <i>i</i> has D | onated by T | Time t (0/1) | | |
|---|---------------------|---------------------|------------------|---------------------|---------------------|------------------|------------------|-----------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Exposure at branches is defined as: | | Ca | ses | | | Dea | aths | |
| Exposure at branches | 0.005 | 0.017 | 0.116* | 0.093 | 0.005 | 0.014 | 0.084 | 0.027 |
| | (0.018) | (0.030) | (0.063) | (0.161) | (0.015) | (0.025) | (0.050) | (0.135) |
| Above Median Indiv. Ownership | 0.195*** (0.004) | 0.193*** (0.009) | 0.343*** (0.009) | 0.336*** (0.014) | 0.196*** (0.004) | 0.192*** (0.008) | 0.340*** (0.009) | 0.333** (0.013) |
| <i>Exposure at branches</i> × Above Median Indiv. Ownership | -0.040 | -0.068 | -0.052 | -0.103 | -0.034 | -0.069 | -0.070 | -0.113 |
| i i | (0.026) | (0.045) | (0.077) | (0.105) | (0.026) | (0.051) | (0.093) | (0.124) |
| Meeting | 0.005 | 0.017 | 0.029** | 0.249*** | 0.007 | 0.020 | 0.033** | 0.256** |
| | (0.010) | (0.013) | (0.014) | (0.015) | (0.013) | (0.015) | (0.015) | (0.009) |
| Exposure at branches × Meeting | 0.027 | 0.100 | 0.134 | 0.040 | 0.044 | 0.136 | 0.182* | 0.059 |
| | (0.072) | (0.089) | (0.097) | (0.159) | (0.093) | (0.107) | (0.109) | (0.185) |
| <i>Exposure at branches</i> × Above Median Indiv. Ownership × Meeting | 0.111 | 0.032 | -0.131 | -0.233 | 0.114 | 0.020 | -0.162 | -0.339 |
| | (0.102) | (0.130) | (0.226) | (0.184) | (0.123) | (0.154) | (0.292) | (0.215) |
| Subset Firms with More than # of Branches: | All | +50% | +75% | +90% | All | +50% | +75% | +90% |
| Ν | 29,665 | 18,785 | 9,350 | 3,740 | 29,665 | 18,785 | 9,350 | 3,740 |
| Adjusted R-squared | 0.5029 | 0.5193 | 0.5625 | 0.5675 | 0.5020 | 0.5182 | 0.5588 | 0.5643 |

Note: The variable *Exposure at branches* is the weighted average of the Covid rate, where the weights is the number of branches a firm has in a state. Columns 2 to 4 and 6 to 8 subset the data to include only firms with more than the 50^{th} , 75^{th} or 90^{th} percentile of the number of branches. The variables Cases and Deaths are standardized. The interaction Above Median Indiv. Ownership × Meeting is accounted for by the firm fixed effects. Standard errors are clustered at the firm level and presented in parenthesis.

Table A13: The impact of Covid exposure at branches on donations for bank ownership.

| | | | Whether F | irm <i>i</i> has D | onated by T | ime t (0/1) | | |
|---|---------------------------------|--------------------------------------|--------------------------------------|--------------------------------|--------------------------------------|--------------------------------------|---------------------------------|--------------------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Exposure at branches is defined as: | | Ca | ises | | | Dea | aths | |
| Exposure at branches | -0.023 | -0.007 | 0.082 | 0.101 | -0.013 | -0.006 | 0.046 | 0.030 |
| Above Median Bank Ownership | (0.024) 0.199*** | (0.043) 0.202*** | (0.072) 0.154*** | (0.157) 0.153*** | (0.022) 0.200*** | (0.040) 0.202*** | (0.060) 0.157*** | (0.135) 0.155*** |
| Exposure at branches × Above Median Bank Ownership | (0.003) 0.026 | (0.006) 0.023 | (0.002) 0.062 | (0.004) 0.027 | (0.002) 0.015 | (0.004) 0.018 | (0.002) 0.067 | (0.005) 0.025 |
| Meeting | (0.024) -0.207*** (0.013) | (0.037) -0.200^{***} (0.018) | (0.055) -0.140^{***} (0.026) | (0.094) 0.092*** (0.015) | (0.023) -0.210^{***} (0.019) | (0.039) -0.203^{***} (0.023) | (0.054) -0.141*** (0.031) | (0.103) 0.098*** (0.012) |
| <i>Exposure at branches</i> × Meeting | 0.122* | 0.155** | 0.177 | -0.120 | 0.138* | 0.196** | 0.226* | -0.152 |
| <i>Exposure at branches</i> × Above Median Bank Ownership × Meeting | (0.065) -0.173 (0.117) | (0.071) -0.149 (0.150) | (0.110) -0.192 (0.214) | (0.107) 0.210 (0.239) | (0.081) -0.216 (0.164) | (0.078) -0.218 (0.187) | (0.127) -0.207 (0.259) | (0.131) 0.285 (0.272) |
| Subset Firms with More than # of Branches: | All | +50% | +75% | +90% | All | +50% | +75% | +90% |
| Ν | 29,665 | 18,785 | 9,350 | 3,740 | 29,665 | 18,785 | 9,350 | 3,740 |
| Adjusted R-squared | 0.5029 | 0.5179 | 0.5640 | 0.5637 | 0.5020 | 0.5177 | 0.5600 | 0.5614 |

x - p < 0.1; x - p < 0.05; x - p < 0.01.

Note: Note: The variable *Exposure at branches* is the weighted average of the Covid rate, where the weights is the number of branches a firm has in a state. Columns 2 to 4 and 6 to 8 subset the data to include only firms with more than the 50^{th} , 75^{th} or 90^{th} percentile of the number of branches. The interaction Above Median Bank Ownership × Meeting is accounted for by the firm fixed effects. Standard errors are clustered at the firm level and presented in parenthesis.

Table A14: The impact of Covid exposure at branches on donations for insurance ownership.

| | | | Whether F | irm <i>i</i> has D | onated by | 7 Time t (0/ | 1) | |
|--|---------|-----------|-----------|--------------------|-----------|--------------|----------|----------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Exposure at branches is defined as: | | С | lases | | | De | eaths | |
| Exposure at branches | 0.011 | 0.078* | 0.162*** | 0.121 | 0.009 | 0.077** | 0.127*** | 0.042 |
| | (0.023) | (0.040) | (0.056) | (0.164) | (0.020) | (0.037) | (0.046) | (0.142) |
| Above Median Insurance Ownership | -0.000 | -0.101*** | 0.009 | 0.151*** | -0.001 | -0.097*** | 0.005 | 0.153*** |
| 1 | (0.002) | (0.010) | (0.010) | (0.004) | (0.002) | (0.007) | (0.008) | (0.005) |
| Exposure at branches × Above Median Insurance Ownership | -0.026 | -0.072** | -0.076 | -0.018 | -0.020 | -0.074** | -0.072 | -0.003 |
| I I | (0.022) | (0.036) | (0.050) | (0.094) | (0.021) | (0.036) | (0.051) | (0.103) |
| Meeting | 0.004 | -0.086*** | 0.008 | 0.093*** | 0.006 | -0.078*** | 0.006 | 0.099*** |
| 0 | (0.009) | (0.012) | (0.019) | (0.014) | (0.011) | (0.013) | (0.024) | (0.011) |
| <i>Exposure at branches</i> × Meeting | 0.027 | 0.036 | -0.055 | -0.144 | 0.042 | 0.062 | -0.048 | -0.167 |
| 1 0 | (0.068) | (0.079) | (0.136) | (0.110) | (0.081) | (0.090) | (0.175) | (0.133) |
| <i>Exposure at branches</i> × Above Median Insurance Ownership × Meeting | 0.093 | 0.130 | 0.269 | 0.255 | 0.128 | 0.134 | 0.317 | 0.313 |
| 1 1 0 | (0.107) | (0.128) | (0.174) | (0.237) | (0.135) | (0.152) | (0.208) | (0.271) |
| Subset Firms with More than # of Branches: | All | +50% | +75% | +90% | All | +50% | +75% | +90% |
| N | 29,665 | 18,785 | 9,350 | 3,740 | 29,665 | 18,785 | 9,350 | 3,740 |
| Adjusted R-squared | 0.5021 | 0.5214 | 0.5670 | 0.5635 | 0.5016 | 0.5201 | 0.5618 | 0.5612 |

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

Note: Note: The variable *Exposure at branches* is the weighted average of the Covid rate, where the weights is the number of branches a firm has in a state. Columns 2 to 4 and 6 to 8 subset the data to include only firms with more than the 50^{th} , 75^{th} or 90^{th} percentile of the number of branches. The interaction Above Median Bank Ownership × Meeting is accounted for by the firm fixed effects. Standard errors are clustered at the firm level and presented in parenthesis.

Table A15: The impact of Covid exposure at branches on donations for mutual fund shareholders.

| | | 1 | Whether F | irm <i>i</i> has Do | onated by T | Time t (0/1) | | |
|--|-----------|-----------|--------------|---------------------|-------------|--------------|---------|-----------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Exposure at branches is defined as: | | Cas | ses | | | Dea | ths | |
| Exposure at branches | -0.000 | 0.014 | 0.125* | 0.117 | 0.001 | 0.010 | 0.091* | 0.046 |
| | (0.016) | (0.028) | (0.064) | (0.157) | (0.013) | (0.022) | (0.052) | (0.133) |
| Above Median Mut. F. Ownership | 0.152*** | 0.155*** | -0.018^{*} | -0.348*** | 0.152*** | 0.155*** | -0.013 | -0.343*** |
| 1 | (0.002) | (0.003) | (0.009) | (0.010) | (0.001) | (0.002) | (0.008) | (0.009) |
| <i>Exposure at branches</i> × Above Median Mut. F. Ownership | -0.020 | 0.010 | -0.021 | 0.002 | -0.012 | 0.025 | -0.008 | 0.006 |
| 1 | (0.026) | (0.040) | (0.056) | (0.098) | (0.027) | (0.040) | (0.061) | (0.107) |
| Meeting | -0.138*** | -0.133*** | 0.030 | 0.248*** | -0.130*** | -0.130*** | 0.034 | 0.255*** |
| 0 | (0.009) | (0.011) | (0.020) | (0.017) | (0.011) | (0.012) | (0.024) | (0.011) |
| <i>Exposure at branches</i> \times Meeting | -0.011 | 0.037 | 0.038 | -0.034 | 0.007 | 0.069 | 0.085 | -0.047 |
| 1 0 | (0.085) | (0.119) | (0.119) | (0.064) | (0.094) | (0.140) | (0.142) | (0.070) |
| <i>Exposure at branches</i> × Above Median Mut. F. Ownership × Meeting | 0.139 | 0.090 | 0.109 | 0.042 | 0.172 | 0.084 | 0.111 | 0.077 |
| 1 1 0 | (0.108) | (0.143) | (0.185) | (0.208) | (0.124) | (0.166) | (0.224) | (0.250) |
| Subset Firms with More than # of Branches: | All | +50% | +75% | +90% | All | +50% | +75% | +90% |
| N | 29,665 | 18,785 | 9,350 | 3,740 | 29,665 | 18,785 | 9,350 | 3,740 |
| Adjusted R-squared | 0.5021 | 0.5172 | 0.5610 | 0.5602 | 0.5017 | 0.5171 | 0.5572 | 0.5582 |

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

Note: The variable *Exposure at branches* is the weighted average of the Covid rate, where the weights is the number of branches a firm has in a state. Mut. F. stands for mutual funds. Columns 2 to 4 and 6 to 8 subset the data to include only firms with more than the 50^{th} , 75^{th} or 90^{th} percentile of the number of branches. The variables Cases and Deaths are standardized. The interaction Above Median Mut. F. Ownership × Meeting is accounted for by the firm fixed effects. Standard errors are clustered at the firm level and presented in parenthesis.

Table A16: The impact of Covid exposure at branches on donations for private equity fund shareholders.

| | | | Whether F | irm <i>i</i> has D | onated by T | ime t (0/1) | | |
|---|-----------|-----------|-----------|--------------------|-------------|-------------|-----------|----------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Exposure at branches is defined as: | | Ca | ses | | | Dea | aths | |
| Exposure at branches | 0.000 | 0.021 | 0.130* | 0.257 | -0.001 | 0.017 | 0.092 | 0.213 |
| | (0.018) | (0.037) | (0.072) | (0.163) | (0.015) | (0.033) | (0.061) | (0.146) |
| Above Median P.E. Ownership | -0.200*** | -0.204*** | -0.153*** | -0.159*** | -0.200*** | -0.203*** | -0.155*** | -0.163** |
| 1 | (0.003) | (0.006) | (0.002) | (0.003) | (0.002) | (0.005) | (0.002) | (0.005) |
| <i>Exposure at branches</i> × Above Median P.E. Ownership | -0.008 | -0.008 | -0.019 | -0.190** | -0.001 | -0.008 | -0.007 | -0.217** |
| | (0.021) | (0.034) | (0.053) | (0.089) | (0.020) | (0.034) | (0.055) | (0.098) |
| Meeting | 0.005 | 0.015 | 0.027 | 0.248*** | 0.008 | 0.018 | 0.028 | 0.255** |
| Ŭ, | (0.009) | (0.011) | (0.018) | (0.014) | (0.011) | (0.012) | (0.020) | (0.008) |
| Exposure at branches × Meeting | 0.099 | 0.125 | 0.061 | 0.111 | 0.141 | 0.152 | 0.129 | 0.136 |
| | (0.085) | (0.114) | (0.143) | (0.152) | (0.098) | (0.138) | (0.159) | (0.180) |
| <i>Exposure at branches</i> × Above Median P.E. Ownership × Meeting | -0.048 | -0.032 | 0.059 | 0.000 | -0.082 | -0.032 | 0.020 | 0.000 |
| | (0.107) | (0.136) | (0.189) | (.) | (0.128) | (0.162) | (0.218) | (.) |
| Subset Firms with More than # of Branches: | All | +50% | +75% | +90% | All | +50% | +75% | +90% |
| N | 29,665 | 18,785 | 9,350 | 3,740 | 29,665 | 18,785 | 9,350 | 3,740 |
| Adjusted R-squared | 0.5010 | 0.5168 | 0.5607 | 0.5812 | 0.5008 | 0.5164 | 0.5569 | 0.5763 |

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

Note: The variable *Exposure at branches* is the weighted average of the Covid rate, where the weights is the number of branches a firm has in a state. P.E. stands for private equity funds. Columns 2 to 4 and 6 to 8 subset the data to include only firms with more than the 50^{th} , 75^{th} or 90^{th} percentile of the number of branches. The variables Cases and Deaths are standardized. The interaction Above Median P.E. Ownership × Meeting is accounted for by the firm fixed effects. Standard errors are clustered at the firm level and presented in parenthesis.

Table A17: The impact of Covid exposure at branches on donations for financial ownership.

| | | V | Vhether F | irm <i>i</i> has De | onated by T | `ime t (0/1) | | | | |
|---|----------|----------|-----------|---------------------|-------------|--------------|---------|--------------|--|--|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | | |
| Exposure at branches is defined as: | Cases | | | | | Deaths | | | | |
| Exposure at branches | -0.011 | -0.003 | 0.095 | 0.098 | -0.005 | -0.007 | 0.056 | 0.024 | | |
| | (0.024) | (0.040) | (0.078) | (0.158) | (0.022) | (0.037) | (0.066) | (0.136) | | |
| Above Median Financial Ownership | 0.199*** | 0.202*** | -0.011 | -0.346*** | 0.200*** | 0.202*** | -0.006 | -0.342* | | |
| * | (0.003) | (0.006) | (0.012) | (0.010) | (0.002) | (0.004) | (0.010) | (0.009) | | |
| Exposure at branches × Above Median Financial Ownership | 0.012 | 0.021 | 0.040 | 0.018 | 0.005 | 0.021 | 0.050 | 0.021 | | |
| * * | (0.023) | (0.035) | (0.057) | (0.094) | (0.023) | (0.036) | (0.057) | (0.103) | | |
| Meeting | 0.008 | 0.016 | 0.015 | -0.100*** | 0.009 | 0.019 | 0.023 | -0.088* | | |
| č | (0.010) | (0.013) | (0.015) | (0.023) | (0.013) | (0.014) | (0.017) | (0.016) | | |
| Exposure at branches × Meeting | 0.074 | 0.125 | 0.138 | 0.068 | 0.073 | 0.149 | 0.186 | 0.089 | | |
| | (0.072) | (0.085) | (0.105) | (0.160) | (0.092) | (0.104) | (0.119) | (0.186) | | |
| Exposure at branches × Above Median Financial Ownership × Meeting | -0.012 | -0.053 | -0.111 | -0.347^{*} | 0.038 | -0.042 | -0.128 | -0.464^{*} | | |
| | (0.107) | (0.128) | (0.234) | (0.176) | (0.125) | (0.148) | (0.306) | (0.204) | | |
| Subset Firms with More than # of Branches: | All | +50% | +75% | +90% | All | +50% | +75% | +90% | | |
| N | 29,665 | 18,785 | 9,350 | 3,740 | 29,665 | 18,785 | 9,350 | 3,740 | | |
| Adjusted R-squared | 0.5009 | 0.5171 | 0.5618 | 0.5641 | 0.5007 | 0.5167 | 0.5585 | 0.5617 | | |

Note: Note: The variable *Exposure at branches* is the weighted average of the Covid rate, where the weights is the number of branches a firm has in a state. Financial stands for all financial institutions (mutual funds, venture capital, private equity, banks, and hedge funds). Columns 2 to 4 and 6 to 8 subset the data to include only firms with more than the 50^{th} , 75^{th} or 90^{th} percentile of the number of branches. The interaction Above Median Financial Ownership × Meeting is accounted for by the firm fixed effects. Standard errors are clustered at the firm level and presented in parenthesis.

Table A18: Effect of competitors on Covid donations, standard errors are clustered by industry.

| | | r Firm <i>i</i> h y Time <i>t</i> (| as Donated (0/1) |
|---|------------------|--|-------------------------------|
| | (1) | (2) | (3) |
| % Competitors Already Donating | 0.050 (0.035) | 0.050 (0.037) | 0.044 (0.038) |
| Meeting | (0.033) | (0.037) 0.008 (0.025) | 0.006 (0.026) |
| % Competitors Already Donating × Meeting | | (0.023) 0.003 (0.041) | (0.020) (0.004) (0.043) |
| % Owned by Individuals | | (***) | 70.552*** (1.053) |
| $\%$ Competitors Already Donating \times % Owned by Individuals | | | 0.356^{*} (0.185) |
| % Competitors Already Donating × $%$ Owned by Individuals × Meeting | | | 0.008 (0.383) |
| N Adjusted R-squared | 48,442 0.4486 | 48,442 0.4486 | 45,898 0.4570 |

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

Note: 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 A19: Effect of competitors on Covid donations by shareholder type, standard errors clustered by industry.

| | V | Vhether Fi | rm <i>i</i> has I | 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) |
| Above Median Ownership | 0.192*** | -0.030 | 0.010 | 0.035** | -0.130*** | 0.152*** |
| | (0.016) | (0.020) | (0.021) | (0.014) | (0.017) | (0.020) |
| % 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) |
| Meeting | 0.026 | 0.034 | 0.001 | -0.015 | -0.002 | 0.003 |
| - | (0.021) | (0.026) | (0.031) | (0.023) | (0.031) | (0.041) |
| % 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) |
| 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: 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 \times Meeting is accounted for by firm fixed effects. Standard errors are clustered by industry and presented in parenthesis.

| | 0 | le Searches | | (0) | ulative Goog | 5 | | |
|---|---------------|-----------------|-----------|-------------|--------------|-------------|----------------|--------------|
| | | nily (2) | | days | | days | | ays |
| | (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 \times 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 \times 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 \times 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 \times 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 \times 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 \times 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 \times 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 \times 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 \times 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 \times 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 \times 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 \times 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 \times 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% |
| 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 |

Table A20: Google searches to individual shareholders.

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

| BUSINESS INSIDER FRANCE | TECH | ECONOMIE | POLITIQUE | STRATÉGIE | LIFESTYLE | + |
|-------------------------------|------|----------|-----------|-----------|-----------|---|
|-------------------------------|------|----------|-----------|-----------|-----------|---|

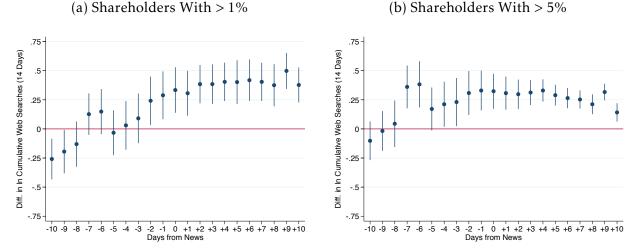
Google pledges to donate \$800 million and 3 million face masks in an effort to combat the coronavirus

Hugh Langley | Publié le 27/03/2020 à 19h20



Notes: This is the example of a datapoint in our dataset. We record that Google pledged a donation on March 27th, 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: Difference in the (log) Cumulative Google searches to Individual Shareholders and Other Investors (14 days), event study



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 A20 reports the coefficient estimates.

C Addendum on Abnormal Returns

This section shows that the abnormal returns analysis in the main text is robust to a different approach. In the main text we predicted day t stock returns (i.e., the percentage change in the closing price over two consecutive trading days) using the previous 60 days (i.e., days between t - 61 and t - 1) instead of the previous 30 days (i.e., days between t - 31 and t - 1). Appendix Figure C1 shows the results from running regression 1 on these new data when either AR (Panel a) or 14-days CAR (Panel b) is the dependent variable. Appendix Table C1 reports the coefficients for the last two analyses as well as those for the 7- and 10-days CARs. The results are very similar to those presented in the main text.

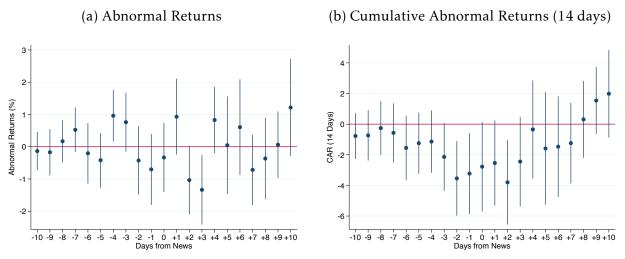


Figure C1: Abnormal and cumulative abnormal returns, event study

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

| Table C1: Abnormal and cumulative abnormal returns, stock return forecasts based on |
|---|
| past 60 days, event study. |

| | Abnormal | | ve Abnorm | |
|--------------------|--------------------|-------------------|-------------------|-------------------|
| | Returns | 7 days | 10 days | 14 days |
| | (1) | (2) | (3) | (4) |
| 10 Days Before | -0.136 | 0.543 | 0.216 | -0.771 |
| 10 Duys Deloie | (0.302) | (0.789) | (0.806) | (0.768) |
| 9 Days Before | -0.172 | 1.197 | 0.106 | -0.734 |
| J Days Delore | (0.365) | (0.889) | (0.868) | (0.837) |
| 8 Days Before | 0.168 | 1.219 | 0.879 | (0.057) -0.255 |
| o Days Delore | | | | |
| 7 Dave Pafara | $(0.333) \\ 0.524$ | (0.997) 0.267 | (0.946) 0.228 | (0.892) -0.568 |
| 7 Days Before | (0.3524) | | | |
| (Davis Pafana | () | (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 | (1.007) -1.470 |
| 0.247011101 | (0.755) | (1.345) | (1.418) | (1.670) |
| 7 Days After | (0.733) -0.717 | (1.343) -0.288 | (1.418) -1.733 | (1.070) -1.240 |
| / Days miles | (0.555) | (1.046) | (1.250) | (1.338) |
| 8 Days After | -0.366 | 0.940 | 0.106 | 0.312 |
| o Days Allel | | | (1.411) | |
| 9 Dave After | (0.641) | (1.110) | | (1.274) |
| 9 Days After | 0.063 | 0.790 | 1.578 | 1.540 |
| 10 D | (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) |
| Ν | 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 Heterogenous Effects Across 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 2 as follows,

 $y_{it} = \beta_0 + \beta_1 \text{Covid Rate}_{it} + \beta_2 \text{Ownership}_i + \beta_3 \text{AGM Meeting}_i$

- + β_4 Covid Rate_{it} × Ownership_i + β_5 Covid Rate_{it} × AGM Meeting_i
- + β_{int} Covid Rate_{it} × Ownership_i × AGM Meeting_i
- + $\beta_7 \text{CEO}_i + \beta_8 \text{CEO}_i \times \text{Covid Rate}_{it} + \beta_9 \text{CEO}_i \times \text{Ownership}_i + \beta_{10} \text{CEO}_i \times \text{AGM Meeting}_i$ (6)
- + β_{11} CEO_i × Covid Rate_{it} × Ownership_i + β_{12} CEO_i × Covid Rate_{it} × AGM Meeting_i
- + β_{int2} CEO_i × Covid Rate_{it} × Ownership_i × AGM Meeting_i
- $+ \alpha_i + \tau_t + \varepsilon_{it}.$

The equation includes the same terms as equation 2 while adding lines four to six, which account for the direct effect of firm *i*'s CEO characteristics (either age or compensation measured as of December 2019) and its interaction effects with all the other variables. The coefficients of interest are β_{12} 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_i. As in the main text, we account for firm and day fixed effects and cluster the standard errors by firms. We let Ownership_i vary across individual, bank, and financial shareholders. All continuous variables are standardized.

First, we focus on CEO age, and we let CEO_i be a dummy variable that is one if firm *i*'s CEO is older than the median age, 65. We present estimates of $\hat{\beta}_{12}$ and $\hat{\beta}_{int2}$ in Appendix Table D1, which shows that 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_i to indicate the share of equity held by a certain shareholder type with at least 10% of equity or with less than 2%. Appendix Table D2 measures covid rates using cumulative cases at the headquarter while D3 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, $\hat{\beta}_{12}$ 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 D4 indicates no differential effect of CEO compensation on donation through different ownership categories, on average. Moving to blockholders instead, Appendix Tables D5 and D6 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.

| | Whether Firm <i>i</i> has Donated by Time t (0/1) | | | | | | |
|---|---|---------|---------|----------|---------|---------|--|
| | (1) | (2) | (3) | (4) | (5) | (6) | |
| <i>Cum. Covid Rate</i> is defined as: | | Cases | | | Deaths | | |
| Ownership % is defined as | Indiv. | Fin. | Banks | Indiv. | Fin. | Banks | |
| <i>Cum. Covid Rate</i> × 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) | |
| <i>Cum. Covid Rate</i> × <i>Ownership</i> % × 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) | |
| 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 | |

Table D1: Heterogenous effect by CEO age.

Note: 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. Firm and time fixed effects are included. Standard errors are clustered by firm and presented in parenthesis.

Table D2: Heterogenous effect of covid cases by CEO age and blockholders.

| | Whether Firm <i>i</i> has Donated by Time t (0/1) | | | | | | |
|--|---|---------|---------|---------|---------|---------|--|
| | (1) | (2) | (3) | (4) | (5) | (6) | |
| Blockholders is defined as: | Ind | iv. | F | in. | Ba | nks | |
| % <i>Blockholders</i> is the shares of <i>Blockholders</i> owning: | >10% | (0%,2%) | >10% | (0%,2%) | >10% | (0%,2%) | |
| <i>Cum. Covid Cases</i> × 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) | |
| <i>Cum. Covid Cases</i> × % <i>Blockholders</i> × 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) | |
| 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: 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. Firm and time fixed effects are included. Standard errors are clustered by firm and presented in parenthesis.

| | Whether Firm <i>i</i> has Donated by Time t (0/1) | | | | | | |
|--|---|---------|---------|---------|---------|---------|--|
| | (1) | (2) | (3) | (4) | (5) | (6) | |
| Blockholders is defined as: | Ind | liv. | F | in. | Ba | nks | |
| % Blockholders is the shares of Blockholders owning: | >10% | (0%,2%) | >10% | (0%,2%) | >10% | (0%,2%) | |
| <i>Cum. Covid Deaths</i> \times Meeting \times 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) | |
| <i>Cum. Covid Deaths</i> × % <i>Inst. Blockholders</i> × 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) | |
| 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 | |

Table D3: Heterogenous effect of covid deaths by CEO age and blockholders.

Note: 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. Firm and time fixed effects are included. Standard errors are clustered by firm and presented in parenthesis.

Table D4: Heterogenous effect by CEO compensation.

| | Whether Firm <i>i</i> has Donated by Time t (0/1) | | | | | | |
|--|---|---------|---------|---------|---------|----------|--|
| | (1) | (2) | (3) | (4) | (5) | (6) | |
| <i>Cum. Covid Rate</i> is defined as: | | Cases | | | Deaths | | |
| Ownership % is defined as | Indiv. | Fin. | Banks | Indiv. | Fin. | Banks | |
| <i>Cum. Covid Rate</i> × 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) | |
| <i>Cum. Covid Rate</i> × % <i>Ownership</i> × 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) | |
| 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: 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. 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. Firm and time fixed effects are included. Standard errors are clustered by firm and presented in parenthesis.

| | Whether Firm <i>i</i> has Donated by Time t (0/1) | | | | | | | |
|--|---|-----------|-----------|---------|-----------|---------|--|--|
| | (1) | (2) | (3) | (4) | (5) | (6) | | |
| Blockholders is defined as: | Ind | iv. | Fii | n. | Bar | nks | | |
| % Blockholders is the shares of Blockholders owning: | >10% | (0%,2%) | >10% | (0%,2%) | >10% | (0%,2%) | | |
| <i>Cum. Covid Cases</i> × 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) | | |
| <i>Cum. Covid Cases</i> × % <i>Blockholders</i> × 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) | | |
| 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 | | |

Table D5: Heterogenous effect of covid cases by CEO compensation and blockholders.

Note: 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. Firm and time fixed effects are included. Standard errors are clustered by firm and presented in parenthesis.

Table D6: Heterogenous effect of covid deaths by CEO compensation and blockholders.

| | Whether Firm <i>i</i> has Donated by Time t (0/1) | | | | | | |
|--|---|-----------|-----------|---------|-----------|---------|--|
| | (1) | (2) | (3) | (4) | (5) | (6) | |
| Blockholders is defined as: | Ind | iv. | Fii | ۱. | Bar | iks | |
| % Blockholders is the shares of Blockholders owning: | >10% | (0%,2%) | >10% | (0%,2%) | >10% | (0%,2%) | |
| <i>Cum. Covid Deaths</i> × 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) | |
| <i>Cum. Covid Deaths</i> \times % <i>Blockholders</i> \times Meeting \times 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) | |
| 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: 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. Firm and time fixed effects are included. Standard errors are clustered by firm and presented in parenthesis.