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PARTISAN POLITICS AND ANNUAL SHAREHOLDER MEETING FORMATS

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ABSTRACT

We study companies' decisions about holding annual shareholder meetings on-line during the Covid pandemic, and returning to classical in-person meetings post-pandemic. Among S&P 1500 companies, the frequency of virtual meetings shot up from less than 10 percent to more than 80 percent in the first year of the pandemic, with only gradual reversion to in-person meetings since then. Partisan politics has significant associations with these decisions. In-person meetings are more likely for companies that have Republican CEOs, and for companies with headquarters located in jurisdictions that vote Republican. Corporate democracy therefore seems to have been swept up by the tides of contemporary political feuds.

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I. Introduction

Annual shareholder meetings have played an important role in corporate governance for hundreds of years. In addition to the formalities of electing boards of directors and ratifying financial transactions, these meetings provide shareholders with opportunities to present proposals, ask questions of top management, and see and hear the managers' responses. The soft information conveyed by these encounters is potentially valuable, as one recent study (Li and Yermack, 2016) shows that companies discourage attendance by relocating annual meetings far from headquarters when management has adverse private information about the firm's performance.

For the large majority of firms, the onset of the Covid pandemic in March 2020 upended the practice of holding annual shareholder meetings in-person. Public health regulations implemented across the U.S. in mid-March 2020 discouraged or banned large gatherings, causing most of the country to stop traveling, remain in their homes, and begin using Internet platforms for work, school, and other group meetings such as church services. The Covid regulations came into effect just as most companies were preparing to hold their annual shareholder meetings, which tend to be heavily concentrated in a two-month period each year between mid-March and mid-May. Nearly all of these shareholder meetings were abruptly moved online and held virtually. As our data show, despite the end of the Covid pandemic, a

clear majority of companies have elected to continue holding their annual shareholder meetings online in virtual format, and we study these decisions in this paper.³

Virtual annual meetings held on Zoom and other platforms would have been a novelty for most public companies in 2020. While Delaware had permitted virtual shareholder meetings since 2000 and a minority of other states did as well, adoption of the practice had been slow, with well below 10% of public companies holding their shareholder meetings online in 2018 and 2019, according to data presented below.⁴ From March 2020 onward, suddenly more than 80% of companies began meeting online.

Public health restrictions were gradually lifted in 2021 and 2022 as effective Covid vaccines became available, and travel returned to pre-pandemic levels. However, companies only slowly resumed holding their annual shareholder meetings in-person. Our data indicate that more than two-thirds of annual shareholder meetings continued to take place in virtual format in 2023, the year in which the pandemic was officially declared over. Today the possibility that virtual meetings will become the majority practice on a permanent basis seems possible and even likely.

This paper studies companies' decisions to move their annual shareholder meetings online in 2020-21, as well as their subsequent choices of whether to resume holding annual meetings in-person in 2022-23. We find that partisan politics plays a significant role in these

³ Several recent papers have shown that Covid-19 forced companies to adopt technologies which have subsequently endured beyond the end of the pandemic and permanently impacted their operations. See, for example, Mclean and Steyn (2023) and Mishrif and Kahn (2023).

⁴ Broadridge (2012), in a pre-Covid guide to online shareholder meetings, noted that virtual meetings were not permitted at that time for companies registered in 18 states, and 11 other states required a physical meeting to take place while permitting shareholders to participate virtually in a hybrid format. Among the minority of states that did permit virtual meetings, some had strict regulations that made such meetings impractical or unrealistic. Many of these states hurriedly adopted new laws or regulations in 2020 when the public health emergency made virtual meetings the only possibility for most companies to convene their shareholders.

decisions. Just as Republican-leaning areas of the U.S. resisted various Covid regulations related to masks, social distancing, and large gatherings, we find that companies with headquarters located in Republican majority counties were more likely to continue holding shareholder meetings in-person during the pandemic, and if they did switch to virtual meetings, they were also quicker to revert to meeting in-person when the pandemic ended. Controlling for the local political climate, we also find that the political leanings of a company's CEO matter in the same way, with CEOs who donate mainly to Republican candidates exhibiting reluctance to hold virtual shareholder meetings both during and after the pandemic, and CEOs who are Democratic donors tending to do the opposite. These political patterns also applied to companies' choices of whether to meet virtually in the two years prior to the pandemic.

While the preferences of Republican CEOs for maintaining in-person shareholder meetings align with conservative political views against numerous Covid restrictions, they would also seem to enable the tactics of leftist shareholder activists, who have traditionally used in-person meetings to confront managers about corporate policies related to labor, climate, product safety, and other issues. Virtual shareholder meetings appear to allow companies to suppress shareholder questions strategically to reduce the voice of activists (Schwartz-Ziv, 2021), and for conservative corporate managers to bypass this opportunity seems ironic. Although probably less important in the context of corporate governance, holding meetings in-person does permit shareholders to cast their proxy ballots physically at the meeting site instead of using mail or Internet platforms. Enabling in-person voting does align with conservative objections to absentee voting by mail, which has become widely used in political elections and alleged by conservatives to favor Democratic candidates and enable fraudulent "ballot harvesting."

Our results complement two recent studies that examine annual shareholder meetings during the Covid pandemic. Brochet, Chychyla, and Ferri (2023) present a comprehensive analysis of virtual shareholder meetings both before and during the pandemic. They find that virtual meetings were quite rare until a platform introduced by Broadridge in 2009 was gradually adopted by companies during the 2010s; the authors identify just 20 meetings in 2011 that were either hybrid or entirely virtual, and they find that the number grew to 285 by 2019, a small amount among the thousands of public companies in the U.S. The authors find that firms in the technology industry were more likely to hold virtual meetings, as were those with greater shareholder engagement, as proxied by the frequency of earnings forecasts and the attendance of shareholders at investor conferences. Virtual meetings in their sample take less time and have fewer shareholder questions than in-person meetings. However, the authors argue that suppression of shareholder participation does not appear to be a motive for moving meetings online, based on the lack of differences in meeting length and questions for those firms that were forced to move meetings online by the Covid pandemic compared to those that were already doing so. Schwartz-Ziv (2021) also finds that virtual meetings are shorter and spend less time on shareholder questions. With the cooperation of data shared privately by two shareholder activists who attempt to ask questions at virtual meetings, she finds evidence that management uses its control of the on-line speakers' queue to screen out questions likely to be critical of the company's performance or governance.

The remainder of this paper is organized as follows. Section II discusses the sample selection and data description. Section III contains our regression analysis of companies' choices of meeting formats as a function of CEO ideology. Section IV investigates whether

virtual shareholder meetings are used as a device to evade shareholder scrutiny when a company is facing adverse business prospects. Section V concludes the paper.

II. Sample selection and data description

Our research design focuses on three two-year periods: the two years prior to the Covid pandemic, the two years during which the pandemic had the greatest impact on public life, and the two subsequent years. We label these periods Pre-Covid, Mid-Covid, and Post-Covid, and for the large majority of companies these periods contain the annual shareholder meetings for 2018 and 2019, 2020 and 2021, and 2022 and 2023 respectively. More precisely, we identify the date of the onset of the pandemic as March 15, 2020, based upon a visual inspection of daily U.S. air passenger boardings shown in Figure 1. Most states issued stay-at-home orders from late March or early April except for a few rural states (most of which have few if any major corporate headquarters) such as Arkansas, Iowa, Nebraska, North Dakota, Oklahoma, South Dakota, Utah, and Wyoming.⁵

We use the S&P 1500 as our sample frame and for each company, we designate the two annual meetings prior to March 15, 2020, as Pre-Covid, the next two as Mid-Covid and the following two as Post-Covid. Figure 2, Panel A shows the number of annual meetings by month in our sample, and the graph illustrates the evident importance of the April-May-June annual meeting season, which accounts for 80 percent of all meetings in our sample. As noted earlier, for most public companies the March 15, 2020 start of the pandemic occurred just weeks before shareholder meetings were scheduled to take place. Figure 1 shows that in the spring of 2021 air passenger traffic remained depressed, as many regions of the country continued to operate under

⁵ Covid-19 restrictions by state are summarized at <https://www.usatoday.com/storytelling/coronavirus-reopening-america-map>.

social distancing and anti-meeting regulations. Not until mid-June 2021 did air passenger traffic regain its pre-Covid level, and by that point most companies would have completed two annual shareholder meetings during the height of Covid restrictions. With the advent of vaccines and the gradual inoculation of a majority of the population, business activities in U.S. started to resume as normal in late 2021, even though the World Health Organization did not officially declare the end of the pandemic until May 2023.

To build our dataset, we begin with in the Key Developments section of the CapitalIQ database and download information about annual shareholder meetings of S&P 1500 firms from January 2018 to May 2024, which yields 8,612 annual meetings for the 1,500 companies. We gather the detailed meeting information including SIC code, meeting date, time, form, and location from Securities and Exchange Commission (SEC) filings of proxy statements (DEF 14A and DEFA 14A) available from the EDGAR database.⁶ Some meetings are missing from the CapitalIQ database, and we supplement the CapitalIQ data when necessary by extracting data from SEC filings. We delete meetings by closed-end funds (SIC=0), REITs (SIC=6798), loan brokers (SIC=6163), short-term business credit firms (SIC=6153), and meetings without SEC filings. We merge our meetings roster with Compustat and CRSP, and after deleting firms that are missing from one of these databases we are left with 7,975 annual meetings. Finally, 269 meetings are held by firms headquartered in foreign countries, and we drop them from the sample. After these exclusions, our meeting sample contains 7,706 annual shareholder meetings held by 1,327 companies. Most firms have six meetings in our sample, with two Pre-Covid

⁶ DEF 14A forms are the definitive proxy statements containing official announcements of shareholder meetings, and DEFA 14A forms contain amendments, if any, to the initial DEF 14A filings. During the early periods of Covid-19 in March and April of 2020, many firms changed already-announced in-person meetings to virtual meetings, and such information generally appeared in DEFA 14A forms, which were filed at an abnormally high rate during this time.

meetings, two Mid-Covid meetings, and two Post-Covid meetings, except for those companies that are delisted due to mergers or insolvency, or appear late in the sample as new listings, or in rare cases skip an annual meeting in 2020 during Covid. We characterize a meeting as virtual if it is held exclusively online or in hybrid format; as noted below, the choice to classify hybrid meetings as virtual does not have a significant impact on the results of our analysis.

Figure 2, Panels B and C show the number of virtual meetings vs. in-person meetings in each meeting year and each Covid period. We define the meeting year as starting on March 16 of each calendar year and ending on March 15 of the next calendar year, because our sample uses March 15, 2020 as the beginning of the pandemic. Figure 2, Panel B shows the sudden increase of virtual meetings after the pandemic began. In the two Pre-Covid meeting years of 2018 and 2019, the percentages of virtual meetings are 7.9% and 9.1%. During the Mid-Covid years of 2020 and 2021, these percentages rise sharply to 82.3% and 80.4%, respectively. In the Post-Covid years of 2022 and 2023, the frequency of virtual meetings declines to 72.1% and 68.3%, respectively.

Figure 2, Panel C shows the distribution of meeting forms for the Pre-Covid, Mid-Covid, and Post-Covid periods. These subsamples' sizes are almost evenly distributed with 2,494 Pre-Covid meetings, 2,572 Mid-Covid meetings, and 2,640 Post-Covid meetings. We observe the same pattern as in Panel B; only 8.5% of Pre-Covid meetings are virtual, while the frequency increases to 81.3% for Mid-Covid meetings and 70.2% for Post-Covid meetings. The data indicate that even though most social activities such as school and work had reverted to in-person by 2023, annual shareholder meetings largely remained virtual in the post-pandemic U.S.

In regression analysis presented below, we study determinants of virtual annual shareholder meetings. In the sample overall, we use a binary dependent variable that equals 1 for

virtual meetings. In each of the two-year subsamples of Pre-Covid, Mid-Covid, and Post-Covid, we estimate ordered logit models where the dependent variable can take the value 0, 1, or 2. If a company has only one shareholder meeting in one of these two-year periods, we code its value equal to either 0 if it is in-person or 2 if it occurs virtually. We also study firms' decisions of whether to switch from in-person to virtual format in the Mid-Covid period, and whether to switch back from virtual to in-person Post-Covid. Our sample includes 1,261 companies that held both Pre-Covid and Mid-Covid meetings. Out of these 1,261, 118 were already meeting virtually prior to the pandemic and all continued to do so, leading us to focus our analysis on the 1,143 other companies that previously met in-person and contemplated switching to virtual. We use a binary variable that equals 1 if a company held at least one annual meeting virtually during the Mid-Covid period. Similarly 1,299 firms in our sample held both Mid-Covid and Post-Covid meetings, and 203 of them continued to meet in-person during both years of the pandemic. We therefore focus on the decisions of the remaining 1,096 firms that contemplated switching back from virtual to in-person meetings, and we use a binary variable that equals 1 if a company held only in-person Post-Covid meetings.

Our main explanatory variable of interest is the political leaning of each company's CEO. We use the CEO politics variable constructed by Christensen et al. (2015) and Graffin et al. (2020), based upon individual CEOs' political donation data reported to the U.S. Federal Election Commission from 1991-2022.⁷ The CEO politics variable equals the dollar value of the CEO's contributions to Democratic candidates and organizations, minus the dollar value to Republican candidates and organizations, divided by the dollar value of total contributions to both parties and averaged over two-year election cycles. Thus it is a continuous variable with a

⁷ Data, which the authors have continued to update subsequent to the publication of these two papers, are available from Prof. Christensen's home page at <https://sites.google.com/view/danechristensen/data/political-ideology-data>.

value between -1 and 1. We also use indicator variables for Republican and Democratic CEOs based upon whether the CEO politics variable has a negative value (indicating Republican) or positive value (indicating Democrat). Both the CEO politics variable and these two binary variables are set equal to zero for those CEOs who make no donations between 1991-2022, which includes managers who are not U.S. citizens. We find that our results exhibit little change if we instead set these values equal to missing for those CEOs who do not have political contribution data available on Open Secrets. Using donations over a long window should alleviate endogeneity concerns about recent donations being connected to government policies during the Covid pandemic. As shown in our tabulation of descriptive statistics in Table 1, the CEO politics variable shades slightly Republican, with a mean value of -0.084, and we are able to classify 31% of CEOs as Republican leaning and 20% as Democratic leaning based on their donations. Several studies have shown that the location of headquarters plays an important role in stock performance and corporate policies (see Pirinsky and Wang, 2006; John, Knyazeva, and Knyazeva, 2011; and Kaviani et al., 2024). To measure the local political climate near each firm, we use the average percentage of votes in the headquarters county for the Democratic Presidential candidate in each Presidential election between 2000 and 2020, as obtained from Harvard Dataverse. This variable's sample mean of 0.579 greatly exceeds the Democratic vote share in the U.S. as a whole, due to the concentration of corporate headquarters in major cities such as New York, Chicago, and Los Angeles which tend to vote heavily Democratic.

In considering whether to meet virtually or in-person, companies planning annual shareholder meetings may behave strategically if they expect them to be controversial or contentious. We construct three variables to capture this possibility. First, we use the fraction of votes cast in favor of the mandatory Say-on-Pay advisory vote on executive compensation,

calculated as the number of votes in favor divided by the sum of votes in favor and votes against (this standardizes the variable across companies, since some companies treat abstention votes differently than others). The say-on-pay vote sometimes functions as a generalized protest vote against poorly performing management even when compensation is not excessively high (Conyon, 2016). A second variable equals the total number of shareholder proposals placed on the ballot for the meeting, which we see as representing a rough measure of shareholder interest in expressing dissent against the company's policies. Third, we create an indicator variable that equals one if any ballot items receive Institutional Shareholder Services (ISS) voting recommendations that differ from the recommendations of management.⁸

Other firm characteristics are as follows. For a general corporate governance measure reflecting CEO entrenchment, we use the ISS Governance database and construct the E index by adding the indicator variables for six anti-takeover provisions: staggered boards, limits to shareholder bylaw amendments, poison pills, golden parachutes, and supermajority requirements for mergers and charter amendments (Bebchuk, Cohen, and Ferrell, 2008).⁹ We use data from the ISS Directors database to create a control variable for the log of board size, as it may be more challenging for all directors to attend an annual meeting if it occurs in-person, and this problem will be magnified if the directors are numerous. Institutional breadth equals the log of the number of institutions filing the Form 13-F during the prior fiscal quarter, and we include this

⁸ The ISS Company Vote Results database stopped providing data on ISS's historical recommendations for shareholder meetings after December 2021. For meetings beginning in 2022, we use the ISS Mutual Fund Vote Records to create a synthetic ISS recommendation measure. We extract the voting records of all mutual funds in the years 2020 and 2021 and identify those funds that vote consistent with ISS recommendations 99.9% of the time. Then, we take those funds' median votes cast in the post-2021 meetings as proxies for the unobserved ISS recommendations. Sample distributions of the real ISS recommendation variable in the pre-2021 meetings and the synthetic recommendation variable in the post-2021 period are extremely similar.

⁹ We cannot use the alternative measure of entrenchment, the G index of Gompers, Ishii, and Metrick (2003), due to changes in the RiskMetrics database that make many variables unavailable from 2007 onward.

variable for reasons similar to including board size, as investors wishing to attend meetings may have more difficulty for those held in-person. The fraction of institutional ownership equals the quantity calculated from the Thomson Reuters S34 database for the most recent fiscal quarter prior to the shareholder meeting.¹⁰ Firm size equals the log of total assets as reported by Compustat at the end of the prior fiscal year. We include the prior year's stock return net-of-market, using the CRSP value-weighted index as the benchmark, in order to capture performance reasons that affect the choice of meeting format. Finally, since Brochet, Chychyla, and Ferri (2023) show that tech firms are more likely to hold annual shareholder meetings online before Covid-19, we follow their paper and construct an indicator for technology firms that equals one for companies with three-digit SIC 737 or 738.

Table 1 provides summary statistics of the variables. The indicator for virtual meetings has a mean of 0.539. The sample includes 1,262 firms with pre-Covid meetings, and most of them held the two Pre-Covid meetings in-person, as the sample mean for this period is 0.172 out of a possible 2.00. For the Mid-Covid period the sample includes 1,299 firms, and most held two virtual meetings, as the sample mean is 1.627 out of 2.00. In the Post-Covid period 1,327 sample firms have post-Covid meetings, and the fraction of virtual meetings are lower than in the Mid-Covid period but still high, as the mean of the virtual meetings indicator is 1.405 out of 2.00. These data are consistent with Panel C of Figure 2. For our indicators of changes of meeting format, we find that the fraction 0.829 of the 1,143 firms that have only in-person Pre-Covid meetings switch to virtual meetings once the pandemic starts. For the 1,096 firms that have at least one Mid-Covid virtual meeting, 14.3% revert to in-person meetings Post-Covid.

¹⁰ For those rare cases when this variable exceeds 1.00 due to data errors, we replace it by 0.99.

Other data in Table 1 exhibit values in line with other governance studies. Among the variables used to proxy for potential shareholder dissent, our firms have say-on-pay votes approved overwhelmingly in most cases, with a mean value of 91.6%. The average number of shareholder proposals is 0.353 with a large standard deviation of 1.02, as most shareholder meetings have zero shareholder proposals and the 99th percentile of shareholder proposals equals five. Disagreement between at least one ISS recommendation and the management recommendation occurs for 34.8% of the meetings. The average past fiscal year stock return net of market is 4.74% with a large standard deviation of 107.4%; the mean likely deviates from zero because we use the value-weighted market index as the benchmark but Table 1 reports the equal-weighted average, with the positive value implying that smaller firms outperformed larger ones in the 2018-23 period of the study.

III. CEO ideology and meeting forms

In this section, we study the relation between CEO ideology and firms' choices of meeting formats. We focus on the ideology of the CEO for two reasons. First, the selection of meeting format is mostly a management decision. Second, CEO ideology is representative of firm employees' ideology in many firms (Babenko, Fedaseyev, and Zhang, 2020). The psychology literature documents ample evidence of differences between liberals and conservatives regarding their openness to change versus their preference for order, discipline, and stability. Liberals score higher on openness, cognitive flexibility, and creativity (Tetlock, 1983; Altemeyer, 1998), while conservatives exhibit stronger preferences for order, discipline, and stability (McCrae, 1996; Jost et al., 2003; Farmer, Kidwell, and Hardesty, 2020). Evidence also suggests that conservatives avoid ambiguity and favor certainty more than liberals, who are

more novelty-seeking and have stronger comfort with change. Since annual meetings traditionally have taken place in-person, adopting the virtual format represents a conscious act of change. Hence, we hypothesize that firms run by liberal CEOs are more likely to hold virtual annual shareholder meetings. We analyze this choice separately by estimating three cross-sectional regressions for the Pre-Covid, Mid-Covid, and Post-Covid sub-periods, since the factors affecting the choices of meeting format varied considerably during each of these two-year intervals. Importantly for our study, Republican political leaders and conservative-leaning parts of the United States resisted many Covid regulations during the 2020-21 period, including those restricting interstate travel, limiting public meetings, and modifying the rules of political elections to expand remote voting by mail, drop box, and other methods that deviated from the traditional norms of voting in-person on election day. While similar methods of remote voting have been used for decades in the proxy system for corporate elections, eliminating the opportunity for shareholders to attend meetings and vote in-person on the meeting day may have provoked similar antagonism among Republican CEOs as conservative politicians have exhibited toward remote political voting.

III.A. Distribution of meeting formats by CEO ideology

We begin with a simple tabulation of the frequencies of virtual shareholder meetings conditional on CEO ideology in each of the three sub-periods of the study, with results shown in Table 2. The table shows consistent differences across periods in the frequency of Democratic and Republican CEOs' adoption of virtual meetings. During the 2018-2019 Pre-Covid period, 11.6% of firms with Democratic CEOs hold only virtual meetings, while the corresponding fraction of firms with Republican CEOs was just 5.9%. During the 2020-2021 Mid-Covid crisis

period, 85.3% of Democratic CEOs held only virtual meetings, while 76.8% of firms with Republican CEOs did so. In the 2022-2023 Post-Covid period 69.3% of firms with Democratic CEOs held virtual meetings only, compared to 60.1% of companies with Republican CEOs.

III.B. Ordered logit analysis of meeting formats by sub-period

Table 3 presents ordered logit regression estimates of firms' choices of annual meeting formats for each two-year sub-period. The dependent variable can take the value zero, one of two, depending on the number of virtual meetings held. Explanatory variables include our indicators for Democratic and Republican CEOs, the continuous CEO politics variable that takes a value between -1 and +1, with positive values indicating a tendency to donate to Democrats, and the average Democratic vote for Presidential candidates in the county where the company's headquarters is located. Independent variables for the CEO's political affiliation are measured at the start of each two-year sub-period, and firm-level control variables are averaged together for the two years represented by each sub-period. Standard errors are clustered by the headquarters state in all specifications to adjust for state-level Covid restrictions during the pandemic.

The first three columns of the table show estimates for the Pre-Covid period. For the independent variables of interest, a parsimonious model in the first column implies that Democratic CEOs are more likely to convene virtual meetings, with the result significant at the five percent level, while Republican CEOs are more likely to convene in-person meetings, significant at the ten percent level, and virtual meetings are more likely to the extent that the headquarters county votes Democratic. In the second column we add to the model the full range of control variables related to the meeting and the firm. Including these controls reduces the magnitude of the estimates for the Republican CEO and headquarters county voting tendency to

the point that they are no longer significant, while the estimate for the Democratic CEO indicator becomes slightly stronger. In the third column we replace the two CEO indicator variables with the continuous CEO politics variable, and this variable has a significantly positive estimate, implying that more virtual meetings occur when the CEO's donations tend toward Democratic candidates and organizations. In this specification the headquarters county's Democratic voting tendency again has a significantly positive estimate. Among the control variables we see that virtual meetings occur more often for smaller companies, for those firms with a higher value of the entrenchment index, and for companies with larger numbers of institutional investors. The institutional investor result, suggesting that virtual meetings occur when larger numbers of shareholders might potentially wish to attend, recurs in all three sub-periods. For the board size variable, we similarly obtain a positive estimate implying that holding firm size constant, companies with larger boards are more likely to hold virtual meetings, and this estimate is significant in the Mid-Covid and Post-Covid periods but not Pre-Covid. Variables related to the firm's recent performance and the agenda of the meeting do not have statistically significant estimates.

The pattern of results for pre-Covid meetings repeats itself in the Mid-Covid and the Post-Covid periods, although not all estimates are statistically significant. We find more virtual meetings for companies led by Democratic CEOs during the years of the pandemic, and fewer virtual meetings for companies led by Republican CEOs during the years after the pandemic ends. The headquarters county's political leaning has estimates below the one percent level during both the Mid-Covid and Post-Covid sub-periods, indicating that fewer virtual meetings take place in Republican political jurisdictions independent of the CEO's personal politics.

Many of our observations show the CEO as politically neutral, which would be the default if no political donations from an individual appear in the Open Secrets database. While a reluctance to donate may indeed indicate a lack of political commitment by a CEO, other groups such as foreign-born, non-citizen CEOs will also appear in this cohort. We check the sensitivity of our results to excluding from the analysis all CEOs for whom we have no donation data, and due to this exclusion our sample sizes for the various sub-periods fall by almost half. However, the pattern of our main results remains almost entirely unaffected by removal of these observations. In estimates that are untabulated to save space, we find more virtual meetings convened by Democratic CEOs Pre-Covid and Mid-Covid, and few virtual meetings convened by Republican CEOs Pre-Covid and Post-Covid. The continuous variable for CEO political ideology has nearly the identical sign, magnitude, and significance in all three sub-periods as it does in Table 3, even after excluding the observations for CEOs for whom we have no information about political affiliation.

III.C. Panel analysis of meeting formats by sub-period

As an alternative to measuring the dependent variable for meeting formats based upon two-year count data, we also estimate a simple logit model with one observation for each company-year, and the dependent variable equals one if the company holds a virtual annual shareholder meeting in that year. The specification is otherwise identical to that in Table 3, except that we do not need to use two-year averages for various independent variables. These logit estimates appear in Table 4, with the data partitioned for the three Covid sub-periods and a final set of estimates in the right columns for the entire sample. We cluster standard errors by firm to account for the possibility of serial correlation of the meeting format choice within each

company. Year fixed effects are also included to control for the time trend of meeting forms induced by the pandemic. In the estimates for the entire sample we also include firm fixed effects, which are not feasible for the models with two-year sub-periods. Coefficient estimates for models with firm fixed effects are mostly driven by within-firm variation, which allow us to draw inference on how the changes of CEO ideology within a firm are related to the changes of the meeting format.¹¹ We must exclude the headquarters county Democratic vote variable from the model with firm fixed effects, since this variable is measured accounting to a long average and does not change for a given firm if its headquarters stays the same (as nearly all of them do).

Results for the panel analysis in Table 4 are broadly similar to those for the ordered logit model in Table 3. We find that that CEO politics variable exhibits a positive association with the probability of a virtual meeting in all three sub-periods, as does the headquarters county's past voting for Democratic Presidential candidates. The indicator for Democratic CEOs has a positive and significant estimate for virtual meetings Pre-Covid and Mid-Covid, while the indicator for Republican CEOs has a negative and significant estimate Pre-Covid and Post-Covid.

III.D. Switching Meeting Forms

In related analysis we study firms' choices to change their meeting formats between the first and second sub-period and again between the second and third sub-period. For the first analysis, shown on the left side of Table 5, we look at the group of 1,110 firms that held only in-person Pre-Covid meetings, and we estimate a logit model for which the dependent variable equals one if the firm holds at least one Mid-Covid meeting in virtual format, and zero if the firm

¹¹ The number of observations for the full-period model is reduced, because the Logit panel regression with fixed effect drops observations when the explanatory variable can perfectly predict the dependent variable within a group (firm). For example, if there is no variation in both the meeting form and CEO ideology variables over time within a firm, all observations for that company will be excluded.

continues to hold only in-person Mid-Covid meetings. The sample with estimates in the right of Table 5 includes 1,059 firms that held at least one virtual Mid-Covid meeting, and the dependent variable equals one if the firm holds only in-person Post-Covid meetings, and zero if the firm holds at least one Post-Covid virtual meeting.

In Table 5 the indicator variable for Republican CEOs has a large estimate significant at the one percent level in both models. We find that Republican CEOs were much more likely to resist the move to on-line shareholder meetings in 2020-21, a result that echoed by the estimate for the local political climate, which shows that counties with a strong Democratic voting history significantly more likely to have companies moving shareholder meetings on-line at the height of the pandemic. Post-Covid we find that Republican CEOs of companies that had moved their shareholder meetings on-line were significantly more likely to return to in-person meetings.

IV. Earnings announcements following virtual vs. in-person meetings

Most of this paper's analysis frames the choice of early 2020s annual shareholder meeting formats as reactions to an unprecedented public health crisis. The data show a dramatic rise in virtual shareholder meetings in 2020, coinciding with the onset of the Covid pandemic, and only a gradual return to the traditional in-person format as the pandemic subsided. Our main analysis finds a significant political component influencing firms' decisions, with virtual meetings less likely when firms are run by Republican CEOs or located in more conservative political jurisdictions. These patterns seem to align well with general Republican opposition to socially restrictive Covid health regulations.

Beyond politics, other considerations will influence the choice of format for an annual meeting. As noted earlier, Schwartz-Ziv (2021) finds evidence that companies use online

meetings to suppress informal shareholder activism, while Brochet, Chychyla, and Ferri (2023) find that virtual meetings are more likely when shareholder engagement is higher, suggesting that the greater convenience of attending on-line is important to these companies' constituents. We investigate another potential motivation for moving meetings on-line that complements Schwartz-Ziv's (2021) study of questions asked by shareholder activists from the meeting floor. Li and Yermack (2016) find that firms shift meeting locations a great distance away from headquarters when the company has adverse negative information about future performance, a result illustrated by the patterns of quarterly earnings news released by companies after their shareholder meetings occur. We revisit this hypothesis by conjecturing that virtual shareholder meetings might represent the ultimate form of management evasion, since these meetings occur in no physical location at all and companies can manage the meeting platform in a way that removes all spontaneity such as unexpected questions from shareholders. In Table 6, we report the results of regression analysis of whether future quarterly earnings announcements contain more negative surprises in the aftermath of annual shareholder meetings held on-line, in accord with Li and Yermack's (2016) result that when meetings are held a long distance from the company's headquarters, more negative future earnings news is subsequently announced.

In our analysis shown in Table 6, the dependent variable is the two-day stock return around earnings announcements for each company, including the news day and the following day. We identify these dates using the RDQ variable from Compustat, and we include all four quarterly announcements in the year following each annual meeting (not all observations are currently available for post-2023 meetings, leading to a reduced sample size for the Post-Covid analysis). In addition to the standard Fama-French factors, we include our variables for CEO political ideology and an indicator variable for annual shareholder meetings that are

unexpectedly held on-line. This indicator variable, which we call “virtual meetings (adjusted),” is set equal to one for the top decile of residuals that we obtain after re-estimating the models in Table 4 without the political ideology variables.

Estimates in Table 6 provide no evidence in support of an evasion hypothesis. The indicator variable for unexpected virtual meetings does not have a significantly negative estimate in any of our subsamples and is actually positive in certain Pre-Covid and Mid-Covid specifications, implying that earnings news tends to be better rather than worse after annual meetings are held virtually. The variables for CEO political ideology have insignificant estimates in all Mid-Covid and Post-Covid models, and during the Pre-Covid period they have similar signs and magnitudes for both Democratic and Republican CEOs. We conclude that virtual meetings do not provide credible signals of future financial outcomes for a company, unlike the distance from headquarters for annual meetings held in-person, and that the political orientation of management does not impact this result. We conduct robustness tests by using ten-day rather than two-day earnings announcement windows, by including the top 20% and top 30% of residuals, and by using the virtual meeting indicator without any adjustment for expectations. Results are qualitatively similar after making these changes.

V. Conclusion

Until the Covid pandemic in the spring of 2020, companies only rarely took advantage of the opportunity to hold annual shareholder meetings on-line, even though this had been permitted in some jurisdictions for decades. Sudden health regulations limiting large gatherings caused more than 80% of public companies to begin holding annual shareholder meetings in virtual format in 2020, and four years later we continue to see a clear majority of companies

retaining the on-line format even as the pandemic has subsided. This change appears to represent an historic shift in one of the oldest and most important institutions of corporate governance.

Our paper finds that partisan politics has significant influence on companies' decisions about whether to adopt the virtual meeting format during the peak Covid years of 2020 and 2021, and whether to shift back to the classical form of in-person meetings in 2022 and 2023. In both cases, in-person meetings are more likely for companies that have Republican CEOs, and for companies with headquarters located in jurisdictions that vote Republican in national elections. The results have a close parallel with national political disagreements over whether to implement restrictive public health regulations and whether to permit remote or absentee forms of participation in political elections, policies that are generally supported by Democrats and decried by Republicans. Corporate democracy therefore seems to have been swept up by the tides of contemporary national political feuds between the left and the right.

The importance of companies changing from in-person to on-line shareholder meetings appears to be an important topic for future research, as some studies indicate that virtual meetings move more quickly and feature less interaction between management and investors. Rigorously studying the impact of virtual meetings seems all but impossible during the Covid period, however. Although the shift from in-person to virtual meetings was clearly exogenous for most firms, many other changes also occurred during Covid, including a temporary retreat by shareholder activists from hostile campaigns against underperforming companies. Firms also enjoyed easier access to finance and benefited from an unusual stock market boom during the pandemic, and mergers and acquisitions increased notably. We will probably need a number of years of data and creative identification strategies to isolate the importance of these and other

influences on corporate governance.

References

- Altemeyer, Bob, 1998, The other “authoritarian personality,” *Advances in Experimental Social Psychology* 30, 47-92.
- Babenko, Ilona, Viktor Fedaseyev, and Song Zhang, 2020, Do CEOs affect employees’ political choices? *Review of Financial Studies* 33, 1781-1817.
- Bebchuk, Lucian, Alma Cohen, and Alan Ferrell, 2009, What matters in corporate governance? *Review of Financial Studies* 22, 783-827.
- Broadridge, 2021, Guidelines for protecting and enhancing shareholder participation in online meetings, available at https://www.broadridge.com/_assets/pdf/broadridge-guidelines-for-protecting-and-enhancing-online-shareholder-participation-in-annual-meetings.pdf.
- Brochet, Francois, Roman Chychyla, and Fabrizio Ferri, 2023, Virtual shareholder meetings, *Management Science*, forthcoming.
- Christensen, Dane M., Dan S. Dhaliwal, Steven Boivie, and Scott D. Graffin, 2015, Top management conservatism and corporate risk strategies: Evidence from managers’ personal political orientation and corporate tax avoidance, *Strategic Management Journal* 36, 1918-1938.
- Canyon, Martin, 2016, Shareholder dissent on say-on-pay and CEO compensation, unpublished manuscript, available at <https://www.ssrn.com/abstract=2748645>.
- Farmer, Adam, Blair Kidwell, and David M. Hardesty, 2021, The politics of choice: Political ideology and intolerance of ambiguity, *Journal of Consumer Psychology* 31, 6-21.
- Gompers, Paul, Joy Ishii, and Andrew Metrick, 2003, Corporate governance and equity prices, *Quarterly Journal of Economics* 118, 107-156.
- Graffin, Scott D., Timothy D. Hubbard, Dane M. Christensen, and Eric Y. Lee, 2020, The influence of CEO risk tolerance on initial pay packages, *Strategic Management Journal* 41, 788-811.
- Jost, John T., Jack Glaser, Arie W. Kruglanski, and Frank J. Sulloway, 2003, Political conservatism as motivated social cognition, *Psychological Bulletin* 129, 339-375.
- John, Kose, Anzhela Knyazeva, and Diana Knyazeva, 2011, Does geography matter? Firm location and corporate payout policy, *Journal of Financial Economics* 101, 533–551.
- Kaviani, Mahsa, Lily Y. Li, Hosein Maleki, and Connie X. Mao, 2024, Media, partisan ideology, and corporate social responsibility, unpublished manuscript, available at <https://www.ssrn.com/abstract=3658502>.

Li, Yuanzhi, and David Yermack, 2016, Evasive shareholder meetings, *Journal of Corporate Finance* 38, 318-334.

Mclean, Gareth, and Adriana A. Steyn, 2023, The COVID-enforced adoption of technology for reluctant entrepreneurial businesses: A systematic literature review. *Proceedings of Seventh International Congress on Information and Communication Technology*, 783-795.

McCrae, Robert R., 1996, Social consequences of experiential openness, *Psychological Bulletin* 120, 323.

Mishrif, Ashraf, and Asharul Khan, 2023, Technology adoption as survival strategy for small and medium enterprises during COVID-19, *Journal of Innovation and Entrepreneurship* 12, no. 53.

Pirinsky, Christo, and Qingghai Wang, 2006, Does corporate headquarters location matter for stock returns? *Journal of Finance* 61, 1991–2015.

Schwartz-Ziv, Miriam, 2021, How shifting from In-Person to Virtual Shareholder Meetings Affects Shareholder Voice, unpublished manuscript, available at <https://www.ssrn.com/abstract=3674998>.

Tetlock, Philip E., 1983, Cognitive style and political ideology, *Journal of Personality and Social Psychology* 45, 118.

Figure 1
Daily number of U.S. flight passengers

The figure shows the daily number of airline travelers passing through U.S. Transportation Security Administration (TSA) checkpoints between January 1, 2020 and July 1, 2023. The beginning of the Covid-19 pandemic for our study is marked by the date of March 15, 2020, when air travel across the country fell precipitously.

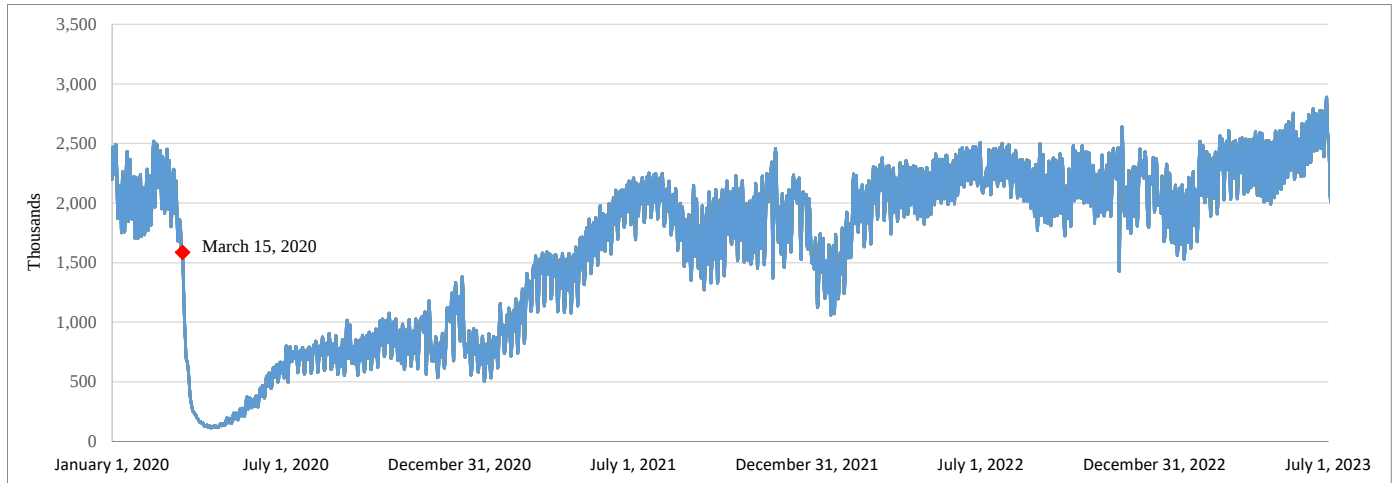
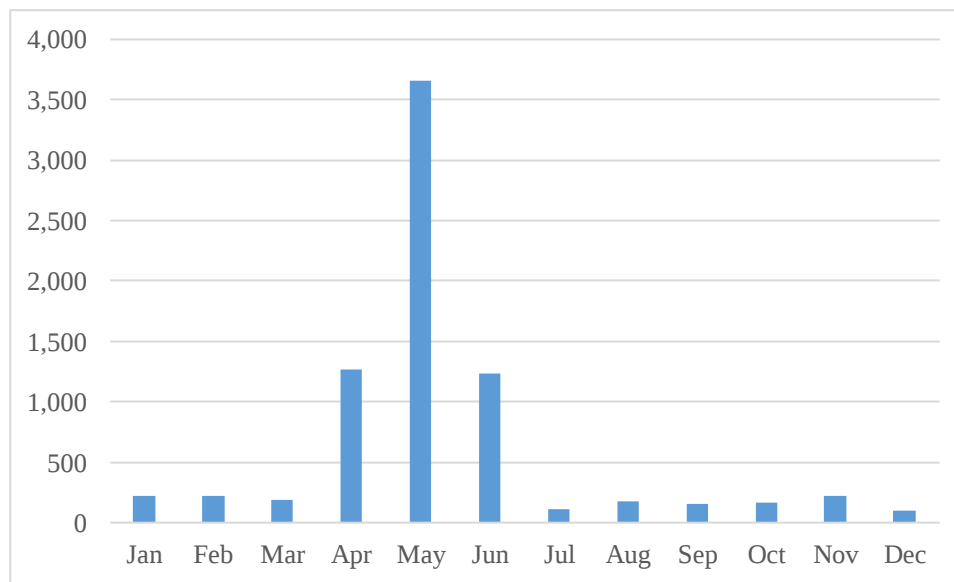


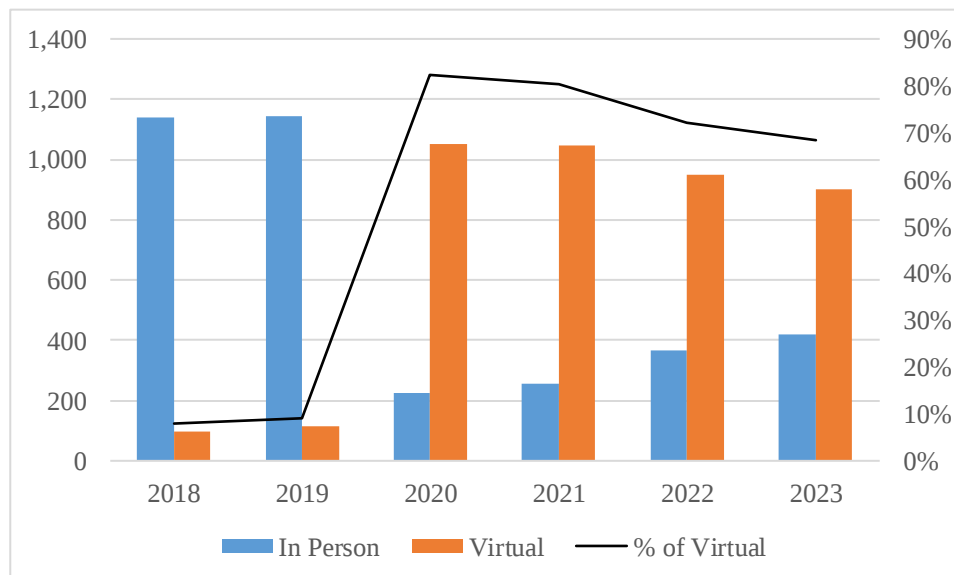
Figure 2
Distributions of annual shareholder meetings

The figure shows the distribution of 7,706 annual shareholder meetings of 1,327 S&P 1500 U.S. firms from March 2018 to March 2024, with data arranged by months (Panel A), meeting years (Panel B), and Covid-19 periods (Panel C). The meeting year is defined as starting from March 16th of the current calendar year and ending on March 15th of the next calendar year, as our sample is built using March 15, 2020 as the beginning of the pandemic. The Pre-Covid period includes the 2018 and 2019 shareholder meetings, the Mid-Covid period includes 2020 and 2021 meetings, and the Post-Covid period includes 2022 and 2023. Hybrid shareholder meetings are classified as virtual for purposes of this study.

Panel A: Annual shareholder meetings by months



Panel B: In-person and virtual shareholder meetings by meeting years



Panel C: In-person and virtual shareholder meetings by Covid-19 periods

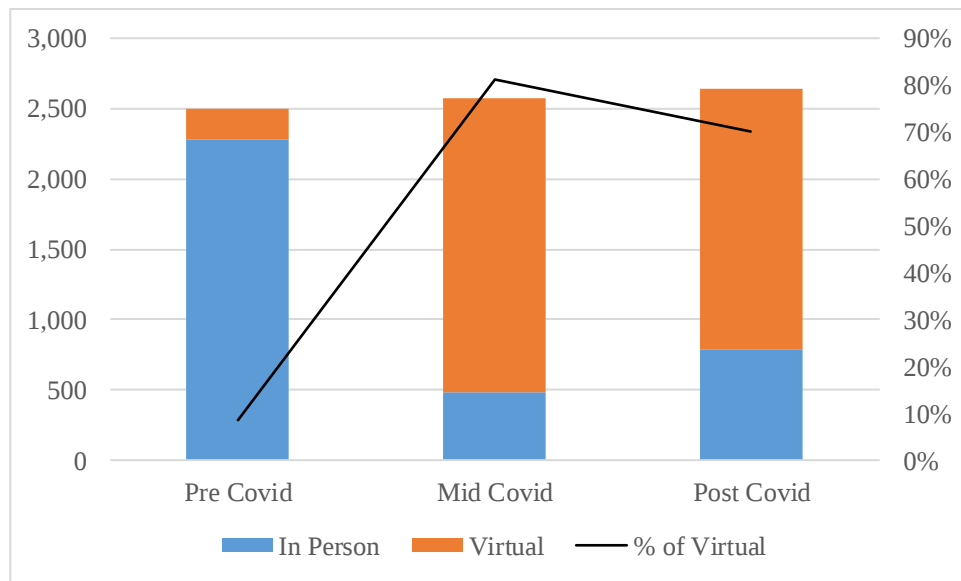


Table 1
Summary statistics

This table provides summary statistics for firm and meeting characteristics, constructed using data from Compustat, CRSP, SEC filings, the ISS governance dataset, the ISS company voting dataset, the Thomson Reuters institutional ownership dataset, the county voting dataset by Harvard Dataverse, and OpenSecrets. The virtual meeting indicator equals one if an annual shareholder meeting is held virtually or in hybrid format and equals zero if held in-person. The number of virtual meetings in the two-year Pre-Covid (2018 and 2019), Mid-Covid (2020 and 2021), and Post-Covid (2022 and 2023) periods refers to meetings in the one-year intervals beginning March 16 of each year, as the Covid-19 pandemic is treated as having started on March 15, 2020. The change from in-person to virtual indicator equals one if a firm held only in-person Pre-Covid meetings and then holds at least one virtual Mid-Covid meeting; the variable is undefined for firms that held at least one virtual meeting Pre-Covid. Similarly, the change from virtual to in-person indicator equals one if a firm holds at least one virtual Mid-Covid meeting and then holds only in-person Post-Covid meetings; this variable is undefined for firms that held no virtual Mid-Covid meetings. The CEO political ideology variables are constructed following Christensen et al. (2015) using political contribution data during 1991-2022. A Democratic CEO donates more to Democratic candidates or affiliated organizations than to Republicans, and vice versa. The CEO political ideology variable takes a value between -1 and 1 and equals the dollar value of the CEO's Democratic contributions minus Republican contributions, all divided by total contributions to both parties and averaged across election cycles. The Democratic vote in headquarters county equals the percentage of votes for Joseph Biden in the 2020 Presidential election. Say on pay support equals the fraction of votes cast in favor of this item, divided by the sum of votes cast in favor and against. The number of shareholder proposals equals the total number of shareholder proposals on the agenda for an annual meeting. The negative ISS indicator equals one if Institutional Shareholder Services recommends voting against management for at least one agenda item in an annual meeting. The E Index equals the sum of indicator variables for six anti-takeover provisions: staggered boards, limits to shareholder bylaw amendments, poison pills, golden parachutes, and supermajority requirements for mergers and charter amendments. Board size equals the log of the number of directors in the meeting year. Institutional breadth equals the log of the number of institutional investors filing Form 13-F during the year. Institutional ownership equals the latest value during the year calculated with the Thomson-Reuters S34 data. Firm size equals the log of total assets from Compustat. Prior year's return, net of market equals the previous fiscal year's shareholder return minus the value-weighted market return in the same period as reported by CRSP. The technology industry indicator equals one for firms with three-digit SIC codes 737 and 738.

	N	Mean	Std. Dev.	P1	P25	P50	P75	P99
Virtual meeting indicator	7,706	0.539	0.499	0	0	1	1	1
Virtual meetings (Pre-Covid)	1,262	0.172	0.546	0	0	0	0	2
Virtual meetings (Mid-Covid)	1,299	1.627	0.740	0	2	2	2	2
Virtual meetings (Post-Covid)	1,327	1.405	0.880	0	0	2	2	2
Change from in-person to virtual, Mid-Covid	1,143	0.829	0.377	0	1	1	1	1
Change from virtual to in-person, Post-Covid	1,096	0.143	0.351	0	0	0	0	1
Democratic CEO	7,706	0.204	0.403	0	0	0	0	1
Republican CEO	7,706	0.310	0.463	0	0	0	1	1
CEO political ideology	7,706	-0.084	0.591	-1	-0.435	0	0	1
Democratic vote in headquarters county	7,706	0.579	0.134	0.241	0.495	0.570	0.680	0.832
Say on pay support	7,568	0.916	0.120	0.372	0.918	0.955	0.978	0.996
Number of shareholder proposals	7,568	0.353	1.024	0	0	0	0	5
Negative ISS	7,415	0.348	0.476	0	0	0	1	1
E Index	7,474	4.094	0.665	2	4	4	5	5
Board size (log)	7,474	2.253	0.230	1.609	2.079	2.303	2.398	2.773
Institutional breadth (log)	7,706	5.921	0.782	4.625	5.352	5.771	6.425	7.926
Institutional ownership	7,706	0.812	0.180	0	0.746	0.856	0.932	0.994
Firm size (log of total assets)	7,706	8.668	1.692	5.281	7.437	8.566	9.747	13.060
Prior year's return, net of market	7,693	0.047	1.074	(0.669)	(0.200)	(0.016)	0.190	1.408
Technology industry indicator	7,706	0.077	0.266	0	0	0	0	1

Table 2
CEO ideology and the choice of meeting form

The table shows the percentage of firms whose total number of virtual meetings equal to 0, 1, or 2 out of the two annual meetings in the Pre-Covid, Mid-Covid, and Post-Covid periods, sorted by CEO ideology. CEO ideology is based on the majority of each CEO's political donations during 1991-2022, as constructed by Christensen et al. (2015).

	Pre-Covid (2018-2019)			Mid-Covid (2020-2021)			Post-Covid (2022-2023)		
	Virtual = 0	Virtual = 1	Virtual = 2	Virtual = 0	Virtual = 1	Virtual = 2	Virtual = 0	Virtual = 1	Virtual = 2
Democratic CEO	220	8	30	30	9	226	65	17	185
Republican CEO	431	2	27	74	23	322	114	31	218

	Pre-Covid (2018-2019)			Mid-Covid (2020-2021)			Post-Covid (2022-2023)		
	Virtual = 0	Virtual = 1	Virtual = 2	Virtual = 0	Virtual = 1	Virtual = 2	Virtual = 0	Virtual = 1	Virtual = 2
Democratic CEO	85.3%	3.1%	11.6%	11.3%	3.4%	85.3%	24.3%	6.4%	69.3%
Republican CEO	93.7%	0.4%	5.9%	17.7%	5.5%	76.8%	31.4%	8.5%	60.1%

Table 3
Cross-sectional analysis of meeting formats in Pre-Covid, Mid-Covid, and Post-Covid periods

The table shows ordered logit cross-sectional regression estimates of choices of annual shareholder meeting formats in the Pre-Covid, Mid-Covid, and Post-Covid periods. The dependent variable equals zero if all meetings are in-person, one if half of the meetings are virtual, and two if both meetings are virtual in each period. Explanatory variables include political ideology, meeting, and firm characteristics. CEO ideology variables are from the beginning of each period. Details of variable construction are provided in Table 1. Standard errors are clustered by the headquarters state in all specifications. *t*-statistics appear in the parentheses below coefficient estimates, and *, **, and *** indicate significance at the 0.1, 0.05, and 0.01 levels, respectively.

	Pre-Covid			Mid-Covid			Post-Covid		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Democratic CEO	0.412** (1.972)	0.499** (2.306)		0.450** (2.365)	0.252 (1.212)		-0.083 (-0.526)	-0.207 (-1.329)	
Republican CEO	-0.398* (-1.929)	-0.239 (-1.098)		0.080 (0.551)	-0.232 (-1.444)		-0.338** (-2.384)	-0.528*** (-3.549)	
CEO political ideology			0.384** (2.476)			0.242* (1.794)			0.205 (1.353)
Democratic vote in headquarters county	1.558** (2.143)	1.416 (1.644)	1.446* (1.701)	2.586*** (5.291)	2.314*** (5.255)	2.330*** (5.315)	1.809*** (3.354)	1.466*** (2.727)	1.497*** (2.890)
Say on pay support		-0.411 (-0.506)	-0.385 (-0.473)		0.844 (0.934)	0.859 (0.957)		0.338 (0.525)	0.332 (0.499)
Number of shareholder proposals		0.109 (0.752)	0.099 (0.664)		0.292 (1.567)	0.294 (1.598)		0.085 (1.251)	0.089 (1.345)
Negative ISS		-0.064 (-0.209)	-0.039 (-0.126)		-0.087 (-0.416)	-0.087 (-0.416)		-0.188 (-1.210)	-0.207 (-1.322)
E Index		0.313** (2.141)	0.309** (2.056)		0.024 (0.209)	0.017 (0.158)		0.364*** (3.760)	0.354*** (3.734)
Board size (log)		0.123 (0.266)	0.131 (0.283)		1.539*** (4.415)	1.534*** (4.396)		0.691** (2.500)	0.666** (2.477)
Institutional breadth (log)		0.541*** (3.097)	0.554*** (3.207)		0.396*** (2.266)	0.397** (2.255)		0.460*** (3.374)	0.441*** (3.290)
Institutional ownership		-0.830 (-1.514)	-0.830 (-1.503)		0.278 (0.612)	0.295 (0.642)		0.000 (0.001)	0.066 (0.171)
Firm size (log of total assets)		-0.230** (-2.491)	-0.227** (-2.475)		0.056 (0.520)	0.050 (0.475)		-0.023 (-0.311)	-0.045 (-0.607)
Prior year's return, net of market		0.114 (0.534)	0.097 (0.474)		-0.088 (-0.549)	-0.096 (-0.610)		0.134 (0.812)	0.130 (0.777)
Technology industry indicator		0.183 (0.615)	0.209 (0.710)		0.063 (0.180)	0.068 (0.194)		0.247 (0.998)	0.248 (1.021)
Observations	1,262	1,221	1,221	1,299	1,256	1,256	1,327	1,274	1,274
Pseudo R-squared	0.0192	0.0364	0.0335	0.021	0.073	0.0723	0.0126	0.0428	0.0381

Table 4
Panel analysis of meeting formats: Sub-periods and the whole sample

The table shows panel regression estimates of choices of annual shareholder meeting formats in the Pre-Covid, Mid-Covid, and Post-Covid periods, and in the entire sample. For each meeting, the dependent variable equals one if the meeting is held virtually and zero if the meeting is in-person. Explanatory variables include political ideology, meeting, and firm characteristics. CEO ideology variables are from the beginning of each period. Details of variable construction are provided in Table 1. Meeting year fixed effects are included in all columns, while firm fixed effects are used only in the entire sample analysis because the sub-period samples contain only two meetings per firm. Standard errors are clustered by firm to adjust for serial correlation in the choice of meeting formats over time within a firm. *t*-statistics appear in the parentheses below coefficient estimates, and *, **, and *** indicate significance at the 0.1, 0.05, and 0.01 levels, respectively.

	Pre-Covid		Mid-Covid		Post-Covid		Whole Sample	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Democratic CEO	0.481**		0.110		-0.128		0.300	
	(1.977)		(0.537)		(-0.771)		(0.426)	
Republican CEO	-0.204		-0.359**		-0.459***		-1.938***	
	(-0.772)		(-2.182)		(-3.113)		(-3.322)	
CEO political ideology		0.369**		0.246**		0.209*		1.832***
		(2.075)		(1.972)		(1.810)		(3.681)
Democratic vote in headquarters county	1.356*	1.377	2.215***	2.233***	1.435***	1.463***		
	(1.649)	(1.642)	(4.287)	(4.322)	(3.015)	(3.074)		
Say on pay support	-0.317	-0.289	0.125	0.121	0.419	0.418	0.454	0.350
	(-0.459)	(-0.415)	(0.226)	(0.218)	(0.908)	(0.901)	(0.443)	(0.342)
Number of shareholder proposals	0.114	0.108	0.299*	0.304*	0.011	0.014	-0.304*	-0.300
	(1.079)	(1.052)	(1.761)	(1.788)	(0.199)	(0.252)	(-1.696)	(-1.642)
Negative ISS	-0.132	-0.117	-0.093	-0.096	-0.143	-0.151	-0.066	-0.114
	(-0.589)	(-0.521)	(-0.550)	(-0.569)	(-1.114)	(-1.181)	(-0.232)	(-0.399)
E Index	0.341**	0.339**	0.045	0.040	0.402***	0.395***	-0.226	-0.342
	(2.275)	(2.239)	(0.421)	(0.374)	(4.155)	(4.105)	(-0.335)	(-0.521)
Board size (log)	0.185	0.187	1.466***	1.457***	0.557*	0.530	-2.008	-1.962
	(0.396)	(0.399)	(4.156)	(4.132)	(1.724)	(1.635)	(-1.441)	(-1.412)
Institutional breadth (log)	0.591***	0.601***	0.433***	0.425***	0.505***	0.488***	0.615	0.563
	(2.714)	(2.762)	(2.675)	(2.642)	(3.928)	(3.859)	(0.923)	(0.762)
Institutional ownership	-0.819	-0.828	0.240	0.272	-0.028	0.010	2.459	2.299
	(-1.553)	(-1.579)	(0.594)	(0.672)	(-0.081)	(0.029)	(1.263)	(1.177)
Firm size (log of total assets)	-0.266**	-0.261**	0.056	0.044	-0.012	-0.027	1.553***	1.629***
	(-2.428)	(-2.458)	(0.729)	(0.573)	(-0.178)	(-0.411)	(2.927)	(3.077)
Prior year's return, net of market	0.049	0.045	-0.057	-0.054	0.048	0.039	-0.088	-0.088
	(0.503)	(0.463)	(-1.122)	(-1.118)	(0.393)	(0.322)	(-1.121)	(-1.123)
Technology industry indicator	0.086	0.108	0.011	0.014	0.223	0.225	-1.987	-1.934
	(0.263)	(0.332)	(0.038)	(0.046)	(0.854)	(0.861)	(-1.052)	(-1.033)
Meeting year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	No	No	No	No	No	No	Yes	Yes
Observations	2,416	2,416	2,486	2,486	2,286	2,286	5,461	5,461
Pseudo R-squared	0.0406	0.0381	0.0891	0.0873	0.0519	0.0481	0.912	0.913

Table 5
Changes in meeting format

The table presents logit regression estimates of firms' decisions to switch from in-person Pre-Covid meetings to virtual Mid-Covid meetings, and from virtual Mid-Covid meetings to in-person Post-Covid meetings. The sample in the left of the table consists of 1,110 firms that held only in-person Pre-Covid meetings, and the dependent variable equals one if the firm holds at least one Mid-Covid meeting in virtual format, and zero if the firm continues to hold only in-person Mid-Covid meetings. The sample in the right of the table includes 1,059 firms that held at least one virtual Mid-Covid meeting, and the dependent variable equals one if the firm holds only in-person Post-Covid meetings, and zero if the firm holds at least one Post-Covid meeting in virtual format. Standard errors are clustered by the headquarters state in all specifications. *t*-statistics appear in the parentheses below coefficient estimates, and *, **, and *** indicate significance at the 0.1, 0.05, and 0.01 levels, respectively.

Dependent variable:	Change from in-person to virtual, Mid-Covid		Change from virtual to in-person, Post-Covid	
	(1)	(2)	(3)	(4)
Democratic CEO	0.007 (0.028)		0.368 (1.457)	
Republican CEO	-0.347** (-2.035)		0.524*** (2.594)	
CEO political ideology		0.197 (1.200)		-0.092 (-0.381)
Democratic vote in headquarters county	1.966*** (3.683)	1.975*** (3.656)	-1.090 (-1.186)	-1.188 (-1.293)
Say on pay support	0.255 (0.221)	0.229 (0.198)	-0.165 (-0.182)	-0.090 (-0.095)
Number of shareholder proposals	0.483* (1.809)	0.492* (1.858)	-0.014 (-0.243)	-0.013 (-0.228)
Negative ISS	-0.175 (-0.751)	-0.189 (-0.810)	0.348 (1.497)	0.362 (1.607)
E Index	0.012 (0.099)	0.009 (0.075)	-0.688*** (-4.460)	-0.681*** (-4.439)
Board size (log)	1.445*** (4.067)	1.434*** (4.050)	0.026 (0.059)	0.080 (0.187)
Institutional breadth (log)	0.441** (2.045)	0.432** (1.990)	-0.502** (-2.301)	-0.483** (-2.228)
Institutional ownership	0.281 (0.467)	0.304 (0.503)	0.629 (1.235)	0.530 (1.083)
Firm size (log of total assets)	0.089 (0.692)	0.073 (0.592)	0.104 (0.910)	0.125 (1.078)
Prior year's return, net of market	-0.123 (-0.544)	-0.120 (-0.549)	-0.297 (-1.270)	-0.292 (-1.267)
Technology industry indicator	-0.082 (-0.204)	-0.087 (-0.217)	-0.371 (-0.976)	-0.383 (-0.990)
Observations	1,110	1,110	1,059	1,059
Pseudo R-squared	0.0915	0.0897	0.0517	0.0448

Table 6
Stock returns around earnings announcements after shareholder meetings

The table shows Fama-French regression estimates for abnormal stock returns around quarterly earnings announcements, for the next four quarters following each company's annual shareholder meeting. Abnormal stock returns are measured over a two-day window that includes each earnings announcement day and the next day. The main explanatory variable is an indicator for virtual meetings (adjusted), which we construct by estimating the regression models in Table 4 without including the political ideology variables. We save the residuals from these estimates and set the indicator for virtual meetings (adjusted) equal to one for those residuals in the top decile of the distribution. Standard errors are clustered at the calendar date level. *t*-statistics appear in the parentheses below coefficient estimates, and *, **, and *** indicate significance at the 0.1, 0.05, and 0.01 levels, respectively.

	Pre-Covid			Mid-Covid			Post-Covid		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Virtual meeting indicator (adjusted)	0.003*	-0.001	0.003*	0.004**	0.003*	0.003**	-0.001	-0.001	-0.001
	(1.877)	(-0.475)	(1.860)	(2.470)	(1.677)	(2.183)	(-0.453)	(-0.277)	(-0.490)
Democratic CEO		-0.003**			-0.000			-0.001	
		(-2.049)			(-0.260)			(-0.443)	
Republican CEO		-0.002*			-0.000			-0.000	
		(-1.793)			(-0.270)			(-0.358)	
Virtual (adj.) × Democratic CEO		0.008**			-0.002			-0.003	
		(2.037)			(-0.492)			(-0.533)	
Virtual (adj.) × Republican CEO		0.006*			0.001			0.001	
		(1.870)			(0.327)			(0.283)	
CEO political ideology			0.000			0.002			0.000
			(0.065)			(0.627)			(0.077)
Virtual (adj.) × CEO political ideology			-0.000			0.000			0.000
			(-0.087)			(0.345)			(0.077)
Market excess return	1.056***	1.056***	1.056***	1.101***	1.101***	1.102***	1.047***	1.047***	1.047***
	(26.384)	(26.332)	(26.386)	(26.411)	(26.418)	(26.421)	(15.709)	(15.621)	(15.678)
High - low	0.315***	0.318***	0.315***	0.400***	0.400***	0.400***	0.478***	0.478***	0.478***
	(3.013)	(3.034)	(3.010)	(9.417)	(9.401)	(9.397)	(4.749)	(4.721)	(4.735)
Small - big	0.792***	0.792***	0.792***	0.541***	0.541***	0.541***	0.815***	0.814***	0.814***
	(3.672)	(3.659)	(3.671)	(8.357)	(8.363)	(8.357)	(6.689)	(6.665)	(6.686)
Momentum	-0.024	-0.023	-0.024	-0.123**	-0.123**	-0.123**	0.028	0.028	0.028
	(-0.219)	(-0.208)	(-0.219)	(-2.302)	(-2.310)	(-2.308)	(0.361)	(0.360)	(0.362)
Observations	18,842	18,842	18,842	19,566	19,566	19,566	14,309	14,309	14,309
Pseudo R-squared	0.066	0.066	0.066	0.089	0.089	0.089	0.052	0.052	0.052