NBER WORKING PAPER SERIES

POLITICS AND GENDER IN THE EXECUTIVE SUITE

Alma Cohen
Moshe Hazan
David Weiss

Working Paper 28893
http://www.nber.org/papers/w28893

NATIONAL BUREAU OF ECONOMIC RESEARCH
1050 Massachusetts Avenue
Cambridge, MA 02138
June 2021

We thank Lucian Bebchuk, Nittai Bergman, Louis Kaplow, David Matsa, Itay Saporta, Analia Schlosser, Kathy Spier, Dan Zeltzer, and participants in the workshop at Harvard Law School and Tel-Aviv University for valuable comments and discussion, and Shay Achrich and Alon Bebchuk for excellent research assistance. Alma Cohen acknowledges financial support from the Israel Science Foundation – the Recanati Foundation and the IDB Group (grant No. 1935/18), and the Harvard Law School. This paper is part of the research work of the Project on Corporate Political Spending of the Harvard Law School Program on Corporate Governance. The views expressed herein are those of the authors and do not necessarily reflect the views of the National Bureau of Economic Research.

Politics and Gender in the Executive Suite
Alma Cohen, Moshe Hazan, and David Weiss
NBER Working Paper No. 28893
June 2021
JEL No. G30,J16,J30,M12,M14,M51

ABSTRACT

Are the political preferences of CEOs associated with the representation and compensation of women in the executive suite? We find that Democratic CEOs (those who contribute more to Democratic candidates) are associated with higher representation of women in the executive suite. To explore causality, we use an event study approach and show that replacing a Republican with a Democratic CEO is associated with 20%-60% in more women in the executive suite. Finally, we show that Democratic CEOs associated with a significant reduction (or even disappearance) of the gender gap in the level and performance-sensitivity of executive pay.

Alma Cohen
Harvard Law School
1525 Massachusetts Avenue
Cambridge, MA 02138
and NBER
alcohen@law.harvard.edu

Moshe Hazan
Eitan Berglas School of Economics
Tel-Aviv University
P.O. Box 39040
Tel-Aviv 69978
Israel
and CEPR
moshehaz@tauex.tau.ac.il

David Weiss
The Eitan Berglas School of Economics
Tel Aviv University
P.O.B. 39040
Ramat Aviv, Tel Aviv, 69978
Israel
davidweiss@post.tau.ac.il

1 Introduction

This paper investigates the relationship that CEO's political preferences have on the representation of women in the team of top non-CEO executives ("the executive suite"), as well as with the level and structure of the compensation of female executives in the executive suite. Our analysis covers all U.S. companies listed on the S&P 1500 during the period 2000-2018.

We hypothesize that CEOs who are more supportive of the Democratic Party (have "stronger Democratic preferences") are associated with higher female representation in the executive suite. We also hypothesize that CEOs who display preferences for Democratic candidates ("Democratic CEO") are associated with a smaller gender gap in the level and performance sensitivity of pay in the executive suite. We discuss (Section 2) a number of mechanisms that could contribute to producing the hypothesized associations. Our analysis provides evidence that is consistent with both hypotheses.

To study our subject, we put together data about the political preferences of CEOs with data about the gender and compensation of top executives. Following the literature (see, e.g. Bonica, 2016; Hutton et al., 2014), we assume that the political preferences of CEOs are reflected in their political contributions, and we base our analysis on a dataset that we constructed that contains information about the political contributions of all CEOs extracted from Federal Election Commission records. In addition to merging this dataset with the standard ExecuComp and Compustat datasets, we add a novel dataset that we put together based on Form 4 filings by executives. This novel dataset enables us to include in our analysis of the executive suite all executives that are sufficiently senior to be required to publicly report their trades under the securities laws. We discuss the assumption that CEO political contributions reflect their personal beliefs and the construction of our dataset based off of Form 4 data in depth in Section 3.

Using an OLS analysis, we find that CEOs with stronger Democratic preferences are associated with higher representation of women – to an extent that is both statistically and economically significant – among members of the executive suite. In particular, a CEO who contributes only to Democratic candidates is associated with an increase of about 15-25% in the fraction of women in the executive suite compared to a CEO who only contributed to Republican candidates.

To explore further the association between political preferences and female representation in the executive suite, we use an event-study approach to study events where companies replace their CEOs.[1] We classify an outgoing CEO or an incoming CEO as a Republican CEO (Democratic CEO) if the fraction of the CEO's contributions to Republicans (Democrats) exceed a specified threshold (using for robustness three alternative specifications of the threshold). We find that replacing an outgoing Republican CEO with an incoming Democratic CEO, rather than an incoming Republican CEO, is accompanied by an increase in female representation in the executive suite. This effect, we show, is statistically significant and economically significant, and could reach as much as 60% over three years. We also show that these results are driven by the new Democratic CEO hiring more women into the executive suite rather than reducing the size of the executive suite while keeping the number of women intact.

Using ExecuComp data on executive compensation, we find that non-CEO executives do not receive different compensation, in level or performance sensitivity, depending on whether the CEO at their firm is a Democrat or Republican CEOs. However, gender compensation gaps differ greatly by the political preferences of the CEO. In particular, we find that the level of compensation paid to female executives is lower than that paid to their male counterparts, and similar to the gap documented in the literature discussed below. However, once we also control for

[1] Xuan (2009) also exploits changes of CEOs to understand how CEOs allocate capital within firms.

CEOs' political preferences, we find that CEOs with Democratic preferences are associated with a significantly smaller gender pay gap. To illustrate, a move from a CEO that contributes only to Democrats to a CEO who contributes only to Republicans is associated with a more than doubling of the gender pay gap. Under some measures of CEO political preferences, we cannot reject the hypothesis that there is no gender pay gap under CEOs who only donate to Democrats.

In addition, using three standard measures of the performance sensitivity of compensation, we find that the compensation of female executives is less sensitive to performance.[2] However, we find a significant association between the magnitude of these gender gaps and CEOs' political preferences. Using each of the three standard measures, the gender gap in the performance sensitivity of pay is significantly smaller, or even non-existant, for CEOs who are more supportive of the Democratic Party than for CEOs who are more supportive of the Republican Party. Thus, our findings indicate that the gender gaps in the level and structure of pay identified by the literature are substantially related to CEOs' political preferences.

To the best of our knowledge, this paper is the first to study the relationship between CEOs' political preferences and the representation and compensation of women in the executive suite. However, there is a substantial literature on each of these subjects separately, and our work contributes to these three literatures.

Literature on the hiring of female non-CEO executives in the U.S. is substantial. Studies on the gender composition of the executive suite, which have thus far not considered CEOs' political preferences, include Bell (2005); Matsa and Miller (2011). The literature on gender pay gaps in the executives suite includes Bertrand and Hallock (2001); Munoz-Bullon (2010); Gayle et al. (2012); Albanesi et al. (2015); Newton and Simutin (2015); Carter et al. (2017); Quintana-Garcia and Elvira (2017). Like the literature on female representation

[2]This is also as documented by prior literature discussed below.

among top executives, this literature has thus far not examined the relationship between its subject of investigation and the political preferences of CEOs.

The literature on the political preferences of CEOs is also significant. Studies that focus on the distribution of CEO preferences between the two major parties include Bonica (2016) and Cohen et al. (2019). A number of studies have examined the relationship between CEOs' political preferences and various decisions made by their companies, including decisions regarding mergers and acquisitions (Elnahas and Kim, 2017), riskiness of investments and corporate debt levels (Hutton et al., 2014), tax sheltering (Francis et al., 2016), lobbying (Unsal et al., 2016), types of litigation (Hutton et al., 2015), corporate social responsibility (Di Giuli and Kostovetsky, 2014), transparency of political spending (Cohen et al., 2019), pay dispersion and diversity in the executive suite (Chin and Semadeni, 2017), the political donations of employees (Babenko et al., 2019), and dividend policy (Bayat and Goergen, 2020). However, researchers have not yet considered how CEOs' political preferences are associated with gender-related choices in general and in the hiring and compensation of female executives in particular.[3]

Finally, our research is part of and contributes to the broad literature that highlights the impact of CEOs' personal characteristics and circumstances on corporate decisions. This literature includes studies that show how corporate decisions are related to a CEO attributes, such as whether the CEO is overconfident (Malmendier and Tate, 2009; Malmendier et al., 2011), the CEO is optimistic and risk-tolerant (Graham et al., 2013), whether the CEO has daughters (Cronqvist and Yu, 2017; Dahl et al., 2011; Dasgupta et al., 2018; Wang et al.,

[3]Though we are unaware of other papers on how CEOs' political preferences influence gender issues in corporate America, Cohen and Yang (2019) examines how judges appointed by Republicans and by Democrats treat female defendants. The authors find that Republican-appointed judges give shorter sentences to female defendants. Relatedly, Carnahan and Greenwood (2018) show that law firms with more politically liberal partners, as measured by their political contributions, are more likely to hire female associates.

2019), whether the CEO is in the media limelight (Malmendier and Tate, 2009), whether the CEO served in the military (Malmendier et al., 2011; Benmelech and Frydman, 2015), the cultural and socioeconomic backgrounds of the CEO (Nguyen et al., 2017; Duchin et al., 2020), and the timing of the decisions within the CEO's lifecycle (see, e.g. Pan et al., 2016).

We proceed as follows. Section 2 discusses the institutional background and our hypotheses. Section 3 describes our data sources and the calculation of our main variables of interest. Section 4 studies how the political preferences of a CEO influence the gender composition of the executive suite, and analyzes our event study. Section 5 examines differences in level and structure of compensation between men and women in light of the CEO's political preferences. Finally, Section 6 concludes.

2 Institutional Background and Hypotheses

There has been a growing interest in the representation of women in high-level positions in general, and in the ranks of corporate executives in particular. Many companies have expressed an interest in or even a commitment to growing the incidence of female executives (see, e.g.,Larcker and Tayan (2020)) . In recent years, more investors and the media have been playing close attention to this issue. Thus, understanding all the factors that shape the hiring and compensation of women in top executive positions is of significant interest. In this section, we first discuss the CEO's role in hiring and compensating executives, which establishes that it is plausible that CEO preferences can impact the executive suite. We then discuss various hypotheses as to how CEO preferences may be associated with the facts we document in this paper.

2.1 CEOs' Role in Hiring and Compensating Other Top Executives

CEOs are widely assumed to be key players in the making of corporate decisions, and this assumption motivated the large body of literature noted in Section 1 regarding the association between personal characteristics of CEOs and corporate decisions. One type of corporate decisions that CEOs have notable impact on is decisions regarding the hiring and compensation of members of the executive suite.[4] It is desirable for the CEO to be comfortable working with members of the executive team and to have confidence in their ability to effectively carry out responsibilities assigned to them by the CEO.

Furthermore, the CEO is likely to have private information pertaining to the suitability and performance of executive suite members. Thus, corporate directors are likely to attach substantial weight, if not largely defer, to the CEO's preferences and recommendations concerning the hiring and compensation of the CEO's top executive team. This discussion regarding the significant influence that CEOs have on such hiring and compensation is consistent with input on these issues we have received from a number of senior experts from leading executive pay and search advisory firms.[5]

[4]For a further discussion on the role of the CEO on executive compensation, see Chin and Semadeni (2017) and the references contained therein.

[5]The experts from whom we received input on these questions are from the advisory firms of FW Cook, Spencer Stuart, Russell Reynolds, and Meridian. Among other things, the experts observed that:

- "CEOs normally recommend selection of their senior office teams for approval by board nominating & governance committees, and pay by compensation committees . . . In my experience, general approach is to support the CEO unless issue over rationale".
- "Generally the CEO puts forth pay recommendations for the executive team and the Compensation Committee reviews, adjusts as needed, and approves. . . . The CEO is . . . in the best position to judge individual performance, which definitely plays into pay recommendation."[T[he management team (including the CEO) drives the recruiting and interview process for executive team members . . . and brings a final candidate to the board for approval."
- "[T]he C-suite reports exclusively to the CEO . . . " [T]he CEO has the final say on hiring her/his team. The CEO has a lot of influence on individual executive compensation."

2.2 Hypotheses

We hypothesize that the political preferences of CEOs are associated with decisions regarding both the hiring and compensation of female executives. We have identified the following mechanisms as contributing, individually or in some combination, to produce such an association:

- *Gender Perceptions:* CEOs with stronger Democratic preferences may have more favorable views regarding women's relative skills and their effectiveness in top executive positions. They would thus be more willing to include women in the executive suite.

  This mechanism can also contribute to understanding how gender pay gaps differ by the CEO's political preferences. A Democratic CEO with a more favorable view of female executives might be more willing to pay female executives on par with their male counterparts. Similarly, such a CEO might attach more importance to providing incentives to female executives, and thus narrow the gender gap in the performance-sensitivity of pay.

- *Network Effects:* CEOs with stronger Democratic preferences may have more exposure to career-focused and high-level professional women (e.g., in fund raising and related activities), increasing both their network for hiring such women and their comfort working with such women.

- *Affinity Effects:* Female executives are more likely to have Democratic preferences than male executives (see, e.g. Cohen et al., 2019). To the extent that CEOs may feel more affinity towards executives with similar political views, and consequently prefer to include such executives in their executive suite, CEOs with stronger Democratic preferences may be more open to including in their executive suite women who are likely to have Democratic preferences. Under this mechanism, the association between Democratic preferences of the CEO and female executives is driven by CEOs' preference for like-minded executives rather than by CEOs' preferences for women.

Similarly, this mechanism would predict that Democratic CEOs are more likely to offer equal pay to female executives, for whom they feel an affinity, thus reducing the gender gap in pay.

- *Openness to Change:* Increasing the representation of women in the executive suite may well involve significant changes to the work environment ("the old boys club") and to corporate culture, increasing uncertainty. To the extent that liberal CEOs (those with stronger Democratic preferences) are more open to changes in the work environment than conservative CEOs (those with stronger Republican preferences), liberal CEO will be more willing to include women in their executive teams.

- *Corporate Strategies:* Companies that have or that adopt strategies requiring more interaction with or appeal to Democratic or female audiences (e.g., Democratic or female politicians or public officials) might be more likely to hire a Democratic CEO. In such cases, the value of having a Democratic CEO might also lie in the expectation that such a CEO would facilitate more women and Democratic executives in the executive suite. These executives will in turn assist the CEOs in interacting with the relevant audiences.

- *Preferences for Gender Diversity/Equality:* CEOs with stronger Democratic preferences may be more inclined to attach independent weight to greater gender diversity. This tendency could contribute to an association between Democratic preferences of the CEO and higher female representation in the executive suite.

  Similarly, this mechanism may yield a reduction in gender pay gaps under a Democratic CEO. This would be true even if the female executive has worse outside options than her male colleague.

Whereas the potential presence of these mechanisms informs and motivates our hypotheses, we do not attempt to identify the relative role and importance of these mechanisms. Our focus is on examining whether the hypothesized associations do exist. Given our findings that they do, we leave for future research the investigation into the extent to which the different mechanisms drive our findings.

Finally, we note that we do not attempt to evaluate normatively the outcomes produced by any group of CEOs, and we do not assess whether any such group makes gender-related choices in an optimal or sub-optimal way. We focus on examining whether the gender-related outcomes associated with Democratic and Republican CEOs are different, not on which group makes better decisions. Thus, while our results indicate that Democratic CEOs are associated with more women in the executive suite than Republican CEOs, these results do not indicate whether and to what extent any of these groups is acting sub-optimally.

3 Data and Summary Statistics

This section describes how we build our data sets and construct our main variables of interest. Section 3.1 describes the companies that make up our data universe, and the financial information we collect on them. In Section 3.2, we describe the two samples of corporate executives that we employ for our analyses, drawn from ExecuComp and Form 4 data. Section 3.3 explains how we infer an executive's gender, if it is not explicitly given in any of our data sources, and how we calculate our stock-option-based measures of incentive pay (delta and vega). In Section 3.4, we describe in detail how we determine the political preferences of the CEOs in our sample. Section 3.5 provides summary statistics of the main variables used in our analyses.

3.1 Companies

Our sample consists of executives at companies included in the S&P 1500 at any point during the period 2000-2018. The S&P 1500 is a composite index that combines three separate indices: the S&P 500, which consists of 500 companies with large market capitalization (currently, $6.1 billion or more); the S&P MidCap 400, consisting of 400 companies with medium capitalization (currently, between $1.6 and $2.8 billion); and the S&P SmallCap 600, consisting of 600 companies with small capitalization (currently, between $450 million and $2.1 billion) (S&P Dow Jones 2019, p. 6). In the aggregate, the S&P 1500 represents about 90% of total U.S. market capitalization. Thus our sample includes executives, including CEOs, of companies representing the great majority of public-company assets.

In addition to data on executives at these companies, we collect corporate financial information from the Compustat database. Specifically, we obtain information on industry (SIC code), headquarters location, assets, return on assets, book-to-market ratio, cash, dividends, and total debt.

3.2 Executives

Our primary source of information on CEOs and top executives of public companies is Standard & Poor's ExecuComp database, which covers companies in the S&P 1500 index. For all of the highest-paid executives (including CEOs), ExecuComp provides total compensation (TDC1), stock compensation, age, title, and gender. From this data, we can also infer a CEO's tenure.

We complement the ExecuComp dataset with Form 4 filing data from the Securities and Exchange Commission (SEC), accessed via EDGAR. These are reports made in compliance with Section 12 of the Securities Exchange Act of 1934, which requires every director, officer, or owner of more than 10% of a company's equity to report to the SEC his or her relationship to the company and provide information about any acquisitions or dispositions of company securities.[6] Under the assumption that all officers transact in the company stock, this data should allow us to paint a comprehensive picture of the officers in a firm.

To assess the reliability of Form 4 data, we first determined whether the executives listed in ExecuComp also appear in the Form 4 data. Very few executives who appear in ExecuComp are absent from our Form 4 data. We then determined whether executives employed at a given firm in our database are observed at a high frequency, which provides an accurate indication of their continued employment. As the vast majority of executives file reports annually, their presence in our data is continuous. For completeness, we assume that an executive who files a Form 4 report at least once every four years is continuously employed. Overall, less than 3% of our observations involve such imputations, and the vast majority of those are cases of an executive filing a Form 4 report for one to two years. Furthermore, we find no systematic differences in the frequency of imputations between male and female executives under CEOs with different political preferences.

We then merge the Form 4 data by company and year with our ExecuComp data to produce a more comprehensive list of executives by company-year.[7]

[6]The definition of a corporate officer is less clear-cut than it seems. Although state statutes and corporate by-laws typically define the role clearly with regard to day-to-day operations of a firm, the term is not well defined in the Securities and Exchange Act of 1934 with reference to the responsibility to report transactions. It is not clear whether the failure to define the term was a legislative mistake or reflected an assumption that the term would be defined in keeping with contemporaneous usage in the corporate world. Thus the term has been the subject of multiple SEC rules and court cases over the years. It is the general counsel's role to decide who does and does not meet the definition of an officer, in keeping with the general counsel's understanding of the law. Guidelines exist for designating the role of "officer" in a firm. For example, Hurley (1975) discusses the history of the definition of an officer under the 1934 Act and recommends three criteria: likelihood of obtaining confidential information, responsibility for corporate policy, and participation in the executive council.

[7]We merge the two datasets in two phases. First, within each company we merge exact matches of last names with the same first and middle initial. Second, we match names using the Stata algorithm "matchit", which assigns a score to the relative similarity of the strings. Any match with a similarity score of less than 0.67 is manually checked; this cutoff was chosen after examining samples at various cutoffs and determining 0.67 to be an excellent measure of match quality. An example of a match performed in this way is Anthony Fadell of Apple Computers.

As noted, using Form 4 data allows us to identify a larger set of corporate executives than merely the most highly paid. This advantage is crucial for our ability to perform the event-studies described below in Section 4.2.

The disadvantage is that we lack a full set of information about these observations, including compensation packages and gender, age, and other demographic characteristics.[8] All of our analyses of the representation of women in the executive suite use two samples: the sample of all executives appearing in ExecuComp (the "ExecuComp sample") and the union of executives appearing in the amalgamation of information on executives from ExecuComp and Form 4, described here (the "Form 4 sample").

3.3 Gender and Compensation

Form 4 provides no data on gender, while ExecuComp includes gender beginning in 2007. We thus determine gender by means of textual analysis of executives' first names, performed by gender-api.com. In cases for which we have data from both gender-api.com and ExecuComp, they agree about 90% of the time, increasing our confidence in this source of data. When they disagree, we defer to the gender listed in ExecuComp.

We only have compensation data for executives listed in ExecuComp. To supplement that data, which specifies total compensation, we also calculate each executive's delta and vega, or the price and volatility sensitivities, respectively, of their stock-option portfolios.[9]

In ExecuComp he is listed as Tony Fadell; in Form 4 he is listed as Anthony Fadell. The lack of matching first initials means that we only merge successfully in the second phase. Because the score of the match between the strings "Anthony Fadell" and "Tony Fadell" is only 0.59, we manually confirm that this is indeed the same person (in that Tony is a common nickname for Anthony).

[8] We discuss below how we infer an executive's gender from his or her name.

[9] We do so using the procedure outlined in Core and Guay (2002), and using code developed by Kai Chen and graciously made available on his website. His code is in turn based on that published on Lalitha Naveen's website, used for her paper (Coles et al., 2006).

3.4 Political Preferences

We obtain information on CEOs' contributions to political parties from records made public by the Federal Election Commission (FEC). This is not a straightforward task; it involves linking the two datasets using names and companies, and inferring political preferences from contributions. We describe this process more fully in Appendix A.

To infer CEOs' political preferences we match CEOs with their political contributions, and identify the party that received their contributions. We derive a variety of measures of a CEO's political preference for use in our econometric analyses and use them in each of our exercises discussed below to show the robustness of our findings.

Because many CEOs make significant contributions in some years but not others, we define a CEO's political preference by calculate the fraction of a CEO's political contributions to either Democrats or Republicans that went to Republicans during a number of different periods.[10] For example, a value of 0 (1) implies that 100% of a CEO's political contributions went to Democrats (Republicans), while a value of 0.5 implies that political contributions were split evenly between the parties. Within this set of measures, the differences come down to which time periods are used together in order to measure a CEO's political preference.

Our first measure is the "election cycle". This measure groups all contributions from a four-year presidential cycle together, such as 2001-2004 for the 2004 election. As such, this measure of political preference is fixed by CEO during the entirety of the presidential cycle. Our second measure is a "four-year moving average". This measure sets a CEO's political preference in year t to be based upon donations between years $t-2$ and $t+1$. Notice that this measure is somewhat similar to the election cycle measure, as they both cover a four year time

[10] To be clear, we ignore contributions to independent/third party candidates, or contributions for which we could not identify the party to whom they belong.

period and only one presidential election at a time. Our third measure is the "last four years" ("Prev 4 Yr." in the tables). This measure determines a CEO's political preference in year t to be based off of donations between years t and $t - 3$. Our fourth measure is to combine contributions from all years to create a single, constant measure of a CEO's average political contributions to Republicans. We denote this measure the "sample average".

The question arises from our measures of CEO political preferences as to whether our measure captures CEOs' actual political preferences, as opposed to strategic considerations. Bonica (2016) performs a number of analyses to show that corporate elites make political contributions to advance their personal preferences or their business interests. Using companies from Fortune 500 he shows that the vast majority of CEOs contribute to only one party, whereas their corporation contributes strategically. He also shows that CEOs are much less likely to pick winners than are their corporations.

Consistent with Bonica's work, Hutton et al. (2014) also argue that, unlike corporate PACs which contribute strategically to serve corporate purposes, CEOs' political contributions reflect their personal beliefs. [11]

3.5 Summary Statistics

Figure 1 shows the average fraction of CEO's political contributions that go to Republicans by each of our four measures over time. On average, 60-70% of contributions from CEOs in our sample go to Republicans.[12] This fraction is most stable for the sample average measure, as that measure does not allow individual CEOs to change preferences over time.[13] All measures detect a slight decline in

[11] Cooper et al. (2010) show that the number of candidates a corporate PAC supports is correlated with subsequent abnormal stock-market returns, suggesting that these PACs are indeed focused on firm profits.

[12] For more on the breakdown in contributions from CEOs between Democrats and Republicans, see Cohen et al. (2019).

[13] That is, all changes in the sample average measure reflect changes in the sample of CEOs.

the average fraction of donations going to Republicans over time.

Tables 1 and 2 report summary statistics for our main analyses and our event study, respectively. We report the mean and standard deviation (in parentheses) for our variables of interest for all observations, as well as those conditional on the political preferences of the CEO. We also report the number of observations for each variable, both overall and by the CEO's political preference. Our measure of a CEO's political preferences for these tables is the sample mean.

The first Column of Table 1 reports statistics on CEOs who contribute less than 50% of their contributions to Republicans (and thus, more than 50% to Democrats). The second Column reports statistics on CEOs who contribute more than 50% of their contributions to Republicans (and thus, less than 50% to Democrats). The third Column reports statistics on all CEOs who we identify politically. The final Column reports statistics on CEOs not in our sample (NIS).

Panel A of Table 1 presents summary statistics on CEOs, including gender, age, tenure as CEO, and whether they also chair the board of directors. Three percent of all CEOs are female, while 4% (2%) of those who contribute more to Democrats (Republicans) are female. Four percent of CEOs not in our sample are women. The average age of all groups of CEOs in our sample is about 56 years old, while those out of our sample are slightly younger. The average tenure for CEOs in our sample is 7.6 years, with the average slightly higher (8.3 years) for CEOs who contribute more to Democrats than to those who contribute more to Republicans (7.3 years). CEOs not in our sample have slightly shorter tenure (5.2 years) which is consistent with the idea that CEOs contribute more during their tenure (Fremeth et al., 2013), such that CEOs with shorter tenure are less likely to have contributed.

Fifty-five percent of all CEOs also chair their boards of directors, while this number is slightly lower for those who contribute more to Democrats (52%) than for those who contribute more to Republicans (56%). CEOs not in our sample are significantly less likely to chair their board of directors (34%). It is likely that CEOs who are not also chairs of their boards are less likely to give contributions, similar to the fact that CEOs contribute most during their tenure.

Panel B presents summary statistics on the non-CEO executives in our samples: their age, total compensation, ratio of salary and bonus to total compensation ("ratio"), delta, and vega, with total compensation, delta, and vega are reported in thousands of dollars. All of this data comes from ExecuComp, and is thus reported only for the ExecuComp sample. Finally, Panel B also reports whether an executive is an insider (as defined above). Insider status is calculated using Form 4 data, because that broader sample of data is more likely to capture an executive having been employed at the firm in a previous time period. There are no major differences in these variables between CEOs of different political preferences. However, executives at firms outside of our sample are somewhat less likely to be identified as insiders, have lower compensation (of all forms), and a higher ratio of salary and bonus to total compensation. This is consistent with the evidence, discussed below, that CEOs of larger firms are more likely to be identified politically by our algorithm.

Panel C presents summary statistics on firm characteristics: number of female executives, total number of executives, and fraction of female non-CEO executives in both the ExecuComp and Form 4 samples. There are approximately 5.7 and 9.6 executives in the ExecuComp and Form 4 samples respectively, numbers that do not vary much in relation to CEO politics. Nine percent of ExecuComp non-CEO executives and 12% of their Form 4 counterparts are female. In both samples, CEOs who contribute more money to Democrats employ more women than those who contribute more to Republicans.

Figure 2 shows the fractions of executives who are female, in both samples, by the political preferences of the CEO. This shows a more continuous measure of how female representation in the executive suite varies by a CEO's political preferences. In the ExecuComp sample, the fraction of women in the executive suite declines monotonically with the fraction of a CEO's political contributions that go to Republicans. In the Form 4 sample, the fraction of women in the executive suite is roughly constant among CEOs who give no more than 40-60% of their contributions to Republicans, but then declines monotonically among CEOs who give to Republicans at higher rates.

Log of assets is roughly uniform among the three groups of CEOs. Companies run by CEOs who contribute more to Republicans have higher return on assets (ROA) than other CEOs. Cash, dividends, and debt all vary somewhat from group to group, but their variance can be attributed to differences in other variables, such as industry and company size.[14] In comparison, companies led by CEOs outside of our sample have similar numbers of executives, executives who are female, and fraction of executives who are female as those in the sample. However, companies outside of the sample are substantially smaller, as measured by total assets. They also have a lower return on assets, cash, dividends, and debt. Their book to market ratio is approximately the same as firms in our sample.

Table 2 duplicates Panel A of Table 1 for a subset of CEOs who are new to the position, if both their political preferences and those of their predecessors can be identified, and who thus constitute the sample used in our event-study analysis, reported in Section 4.2, as well as the CEOs not in the sample (NIS).

Relative to Table 2, we add the fraction of the executive suite that is female in the year prior to the change in CEO. We report statistics of the incoming CEO by the type of leadership change observed in the data. The first letter denotes the political preference of the outgoing CEO; the second letter denotes that of the incoming

[14] In untabulated regressions, we confirm that this is the case, with the exception of dividends. Companies run by CEOs who give more to Republicans tend to pay higher dividends, even after conditioning for industry and company size.

CEO: RR specifies a Republican CEO replacing a Republican, RD a Democratic CEO replacing a Republican, DD a Democratic CEO replacing a Democrat, and DR a Republican CEO replacing a Democrat. The column denoted "All" includes statistics on all CEOs in our sample, while the column "NIS" includes statistics on the CEOs not in our sample.

Panel A of Table 2 designates a CEO to be a Republican (Democrat) if they contribute at least 50% of their contributions to Republicans (Democrats). Panels B and C do the same, but set the cutoffs levels at 67% and 75% of contributions, respectively.

Overall, there were 4,021 firms whose CEOs changed during our period of study. Out of which, for a third we have information on the political preference of the outgoing and incoming CEOs. Table 2 shows that 76%-83% of the firms who switched a CEO for which we have information on both CEOs' political preferences, the outgoing CEO was a Republican.

Patterns in CEO gender are very similar to those reported in Table 1. Incoming CEOs designated as Democrats are more likely to be women, and somewhat younger than their Republican counterparts. We note that the stricter the cutoff for designating a CEO's political preference, the smaller the number of observations in our sample and the greater the number outside of our sample.

4 The Gender Composition of the Executive Suite

This section documents differences in the gender composition of the top-executive teams by the political preferences of CEOs. Section 4.1 looks at differences across the entire sample of companies. Section 4.2 then uses an event-study approach to examine the dynamics of the executive suite's gender composition around the time of a change in CEO.

4.1 All Companies

Our first exercise studies the relationship between the political preference of a company's CEO and the gender composition of its executives. To do so, we estimate regressions of the following structure:

$$Y_{ct} = \alpha_0 + \alpha \cdot FracRep_{ct} + \beta \cdot Female_{ct} + d_t + I_c + X'_{ct}\xi + \epsilon_{ct}, \tag{1}$$

where Y_{ct} is the fraction of company c's non-CEO executives in year t who are women. $FracRep_{ct}$ is the fraction of a CEO's political contributions that went to Republicans. As discussed above, we use four measures for this variable. $Female_{ct}$ is a dummy variable equal to 1 if the CEO is female. d_t is a set of year fixed effects and I_c represents firm fixed effects. X'_{ct} is a vector of firm characteristics, including (a) a quadratic in CEO age; (b) the log of the CEO's tenure; (c) whether the CEO also chairs the board of directors; (d) whether the CEO is an "insider", (defined above); (e) the interaction of insider status and being female, and (f) the log of the firm's total assets.[15] Standard errors are clustered at the firm level. We estimate (1) using either the Form 4 or the ExecuComp sample.

Table 3 shows the results of these regressions. Column 1 uses the sample of executives from Form 4 and defines $FracRep_{ct}$ based on the election cycle measure of political preference. The point estimate for $FracRep_{ct}$ is -0.009, and statistically significant at the 10% level. This suggests that CEOs who contribute only to Republicans ($FracRep_{ct} = 1$) have a lower fraction of women on their executive teams of about 0.9 percentage points.

Given that the fraction of executives who are women is 12.1% at the Form 4 sam-

[15] The insider variable interacted with the CEO being female controls for a mechanical issue: that promotion of a female executive to CEO status is likely to change the gender composition of the remaining non-CEO executive suite because a promoted female executive is likely to be replaced by a man, given that the vast majority of executives are male. Thus such an internal promotion will create a negative relationship between a female CEO and the fraction of non-CEO executives who are female. Controlling for the CEO's insider status, interacted with being female, solves this issue.

ple, this estimate is not small. CEOs who contribute at least 67% ($FracRep_{ct}$ = 0.67) (75% ($FracRep_{ct}$ = 0.75)) [100% ($FracRep_{ct}$ = 1)] to Republicans employ 5%, (5.6%) [7.4%] fewer women, than a CEOs who contribute 100% ($FracRep_{ct}$ = 0) to Democrats. Column 2 duplicates Column 1 using the sample of executives from ExecuComp, and finds a coefficient of -0.014, which is statistically significant at the 5% level. Given that the average fraction of executives who are women in the ExecuComp sample is about 9%, this implies that CEOs who contribute at least 67% (75%) [100%] to Republicans employ about 10.4% (11.7%) [15%] fewer women than CEOs who contribute 100% to Democrats.

Columns (3)-(8) repeat this pattern, but use different definitions of $FracRep_{ct}$. Column (3) and (4) define $FracRep_{ct}$ based on a four-year moving average measure of political preference; column (5) and (6) define $FracRep_{ct}$ based on the last four years measure of political preference; and columns (7) and (8) define $FracRep_{ct}$ based on the sample average measure of political preference.

The results are virtually unchanged. For the sample of executives from F4, the effect ranges from 5-9% (5.6-12%) [7.4-15.7%] fewer women, for CEOs who contribute at least 67% (75%) [100%] to Republicans compared to CEOs who contribute all of their contributions to Democrats. For the sample of executives from ExecuComp, this effect ranges from 10.4-17% (11.7-19%) [15-25.5%] fewer women, for CEOs who contribute at least 67% (75%) [100%] to Republicans compared to CEOs who contribute all of their contributions to Democrats. All estimates are significant at the 5% level (except for one who is marginally significant at the 15% level). [16]

We note that the magnitude of the estimates, as well as their statistical significance, rises with the length of the time period used to calculate a CEO's political

[16]Another interesting result reported in Table 3 is the lack of a relationship between company size, as measured by the log of total assets, and gender composition. Larger companies do not seem to have more gender diversity in their executive suites.

preference. This is as longer time periods include more contributions, and thus both include more CEOs and may be less noisy.

We conclude that companies run by CEOs who exhibit a strong Republican preference employ fewer women. These findings hold both for the broad sample of executives in the Form 4 sample, and for the more restricted sample of highly paid executives in the ExecuComp sample.

4.2 Event-Study Design

The previous analysis established an association between a CEO's political preference and the gender composition of the executive suite. To explore the issue of causation, we use below an event-study design, where the event is a change in a company's CEO. Our event-study analysis compares the gender composition of the executive suite at companies whose outgoing CEO is replaced by a successor of the opposite political preference with companies whose outgoing and incoming CEOs are of the same political preference.

We hypothesize that replacing a Republican CEO with a Democratic CEO will be followed by an increase in the representation of women in the executive suite. For our purposes, it does not matter whether the replacement of the Republican CEO by the Democratic CEO was or was not intended to bring about such a change in gender diversity in the executive suite. The company might have put in place a Democratic CEO in part because of the expectation that this CEO would facilitate an increase in gender diversity, or this increase might have been a mere by-product of a CEO appointment motivated by completely different reasons. For our purposes, what matters is only whether, as we hypothesize, a switch from a Republican CEO to a Democratic CEO tends to be followed by an increase in the incidence of women in the executive suite.

For an event study focusing on change, we need to use, instead of the continuous measure of political preferences, a classification of some CEOs as Democratic or

Republican if their contributions lean sufficiently strongly in favor of the relevant major party.

To do so, we use the sample average measure of political preferences, and use three possible cutoffs.[17] The first one is to label a CEO as a Republican (Democrat) if at least 50% of their contributions went to Republicans (Democrats). The second and third are to set this cutoff at 67% and 75% of contributions, respectively. The benefit of using a lower cutoff is that more CEOs are identified as being with a political party, thus enlarging the sample, while the cost is that more CEOs may be erroneously categorized with a political party, even if their political preferences are more moderate.

A question that can arise in connection with our measure is whether CEOs' political preferences are relatively stable over time. Several studies document that, during the years in which individuals serve as top corporate executives there is very little change over time in their political preferences reflected in their political contributions (Bonica, 2016; Fremeth et al., 2013; Hutton et al., 2014, 2015; Elnahas and Kim, 2017; Bayat and Goergen, 2020). We confirm that this stability of preferences is also present in our data.

We begin by discussing the selection of companies in our sample. As discussed in Section 3.5, Table 2, the main difference between companies in and out of this event study sample is that the CEOs are slightly younger and less likely to chair their board of directors. Another possible concern could be that the probability of an event (a change in CEO) being included in our sample might change over time, potentially biasing our results with data from time periods with more (or fewer) women in the executive suite. Table 4 shows the number of changes of CEOs, both in and out of our sample, by cutoff used to label CEO political preferences, over time. We break our time period into four: 2000-2004, 2005-2009, 2010-2014,

[17]This event-study design leaves us with a small sample. Using the sample average measure of political preferences allows us to maximize the sample size for a given cutoff.

and 2015-2018.[18] There is no clear pattern of the propensity for a change in CEO to be included in our sample over time.

Similarly, one might be concerned that companies included in our sample have different amount of gender diversity relative to those excluded from our sample. Table 5 shows the fraction of women in the executive suite, using the Form 4 sample, in the year prior to a change in CEO for companies included and not included the sample, by cutoff used to identify CEO political preferences, and over time. When the cutoff is 50%, there is no meaningful difference in female representation between the companies or over time. When the cutoff is 67% or 75%, there are slightly more women in the executive suite for those companies not included in the sample, however this difference is roughly constant over time, and may reflect small sample sizes, especially in later years.

We perform the event study exercises, detailed below, separately for companies whose outgoing CEOs are Republicans and Democrats. This approach is advantageous as it enables us to better measure trends in female executive employment at companies run by Republicans or Democrats before a change in their leaders' political preferences. That is, we are able to show that trends in executive gender composition do not differ, prior to a change in CEO, between companies that replace a Republican with a Democrat and those that select another Republican. Doing so increases confidence that the event-study design captures the effect of a change in the CEO's political preference on the gender composition of the executive suite, rather than differing trends at companies that replace a Republican with a Democrat or with another Republican. It is important, however, to do the event study separately by the identity of the outgoing CEO as companies run by outgoing Democrats have more women as those run by outgoing Republicans.[19]

[18] We note that the last time period is shorter than previous time periods, and as such has fewer observations.

[19] As discussed in Section 3.5, in particular regarding Table 2.

We proceed in two steps. First, Section 4.2.1 performs the main event study, and shows that replacing a Republican CEO with an incoming Democratic CEO yields a dynamic increase in the fraction of the executive suite that is female. Second, Section 4.2.2 breaks down this result, and shows that the increased fraction of women among executives is due to hiring more women (an increase in the numerator) rather than reducing the number of executives (a decrease in the denominator). We relegate the event study, as well as the breakdown of results, exploring the implications of replacing Democratic CEOs to Appendix B. We do so as the sample is much smaller yielding estimates that are noisy.

4.2.1 Event Study

We estimate regressions of the following structure:

$$\begin{aligned} Y_{ctk} = & \alpha_0 + \sum_{k=-3}^{3} \alpha_k \cdot t^k + Switch_{p,-p} + \sum_{k=-3}^{3} \gamma_k \cdot Switch_{p,-p} \cdot t^k \\ & + I_c + X'_{ct}\xi + \epsilon_{ctk}, \end{aligned}$$

where Y_{ctk} is the fraction company c's non-CEO executives who are women, k years around the year of a change in CEO, t, where the lag k ranges from -3 to 3 (i.e., from three years before to three years after the change in CEO).[20] The fraction of executives who are female is measured using the Form 4 sample.[21] t^k is a set of fixed effects for the lags before and after a switch in CEO, which allows us to measure any potential trends around the time of a CEO's replacement. We

[20]There is an issue regarding the exact timing of when a CEO began working. Some CEOs are reported to have a tenure of 1 when they begin, while others are a tenure of 0. The difference comes down to the calendar year- if a CEO began her job in December 2013, then in January 2014 she will have a tenure of 1. However, we are not sure which year the CEO actually began to work, and thus how to center the event study. Accordingly, we set the fraction of executives who are women in the first year of a CEO's tenure to be the average of the first and second year we see the CEO as in the position of CEO, since we are not entirely sure when the CEO actually began. As such, the observations we refer to as being two years after the switch might actually be three years after the switch.

[21]This event-study approach naturally results in a greatly restricted sample size, as we are limited to observations where we identify the political preferences of both the incoming and outgoing CEOs.

demean the dependent variable by year rather than include year fixed effects. Specifically, we regress Y_{ctk} on year fixed effects using the whole sample of data used in Section 4.1 above, and use the residuals in the estimation described here. The use of all the data to demean by year implicitly allows us to estimate year fixed effects using all available data, rather than the limited sample used in these event studies, and to accurately control for the general rise in female representation in the executive suite over time.

$Switch_{p,-p}$ is a dummy variable indicating that an outgoing CEO of political preference p is replaced by an incoming CEO of the opposite political preference $-p$.[22] We also include the interactions of *Switch* with t^k, with coefficients γ_k; these interactions capture differences between (a) the fraction of non-CEO executives who are female in the years before and after a CEO of party p is replaced with a CEO of party $-p$, and (b) the same changes at companies whose outgoing and incoming CEOs share a political preference. Thus, γ_k are our parameters of interest. I_c are company fixed effects. X'_{ctk} is a vector of firm characteristics, including (a) a quadratic in the CEO's age, (b) whether the CEO also chairs the board of directors, (c) whether the CEO is female, (d) whether the CEO is an insider, (e) the interaction of the CEO's insider status and being female, and (f) the log of the firm's total assets, in year $t + k$. Standard errors are clustered by firm.

Table 6 reports the results of our event study when studying the sample of companies replacing a Republican CEO with either a Democrat or Republican. Column 1 uses the 50% cutoff to determine CEO political preferences, and does not include the firm controls in X. Column 2 repeats Column 1, but includes these firm controls. Columns 3 and 4 (5 and 6) repeat Columns 1 and 2, respectively, but use the 67% (75%) cutoff for determining CEO political preferences. We omit the

[22] For example, consider the event study of the sample of outgoing Republicans who are replaced by either Democrats or Republicans. $Switch_{p,-p}$ takes a value of 1 if a company replaces a Republican with a Democrat. It thus measures difference in the gender composition of the executive suite between companies that replace a Republican with a Democrat and companies that replace a Republican with another Republican.

interaction between *Switch* and t^0. As such, the interpretation of the coefficients on these interactions is a comparison to the year a company changed CEOs. In all specifications, the coefficients on t^k are generally economically and statistically insignificant, indicating no trends in female executive employment around the time of a change in CEO, for this sample of companies.

In Columns 1 and 2 *Switch* is positive and statistically significant, at the 5% and 10% levels, respectively; in Columns 3 and 4 this variable is close to 0 and insignificant, and in Columns 5 and 6 it is negative and significant at the 1% level. However, estimates on the interaction between *Switch* and t^k prior to the change in CEO indicate no difference in trend in the fraction of the executive suite that is female between companies whose Republican CEOs are replaced with Democrats and with Republicans in all specifications. All specifications find an increase in female representation in the executive suite a year after a Republican CEO is replaced by a Democrat. This increase is 1.4 percentage points in Columns 1 and 2-2.2 percentage points. in Columns 3 and 4, and 3.0-3.2 percentage points in Columns 5 and 6. The estimates are significant at the 10% level in all specifications.

Two years after the change in CEO, female representation in the executive suite increases by 2.0-2.2 percentage points in Columns 1 and 2, 3.9-4.3 percentage points in Columns 3 and 4, and 5.4-5.5 percentage points in Columns 5 and 6. All of these estimates are statistically significant at the 5% level. Three years after the change in CEO, female representation in the executive suite increases by 2.2-2.4 percentage points in Columns 1 and 2, 3.5-4.1 percentage points in Columns 3 and 4, and 6.6-6.7 percentage points in Columns 5 and 6. The estimates are statistically significant at the 5% level in Columns 1 and 2, 15% level in Column 3, not significant in Column 4, and the 10% level in Columns 5 and 6.

We note that the magnitude of the estimates becomes larger when using stricter thresholds, but statistical significance does not always increase due to smaller sample sizes. We also note that these estimates are quite large, considering that the average fraction of executives who are women ranges from 11% (Columns 5 and 6) to 12.2% (Column 1). Indeed, when using a 50% (67%) [75%] cutoff, these estimates represent an increase of about 20% (40%) [60%] in the fraction of the executive suite that is female.

4.2.2 Breakdown of Results

We next break down the results of this exercise by asking: does the fraction of women in the executive suite rise because incoming Democratic CEOs hire new female executives (i.e., because the numerator increases). or because the number of executives drops (i.e., the denominator falls)?[23] Figure 3 breaks down the results described above for the 50% threshold event studies when replacing a Republican CEO by the political preferences of the incoming CEO. The top left panel shows that companies that replace a Republican with another Republican see only a small trend in the increase in the number of female executives employed. In contrast, the top right panel shows that companies that replace the Republican CEO with a Democrat see a large increase in the number of female executives, of approximately 0.6 women.

The middle panel shows that both types of companies see only small fluctuations in the number of executives they employ.[24] The bottom panel shows the net effect of these two facts: the fraction of executives who are women rises slightly when a Republican replaces a Republican, but much more when a Democrat replaces a Republican, when female representation rises from 12 to 18% of executives. Considering that the number of executives is approximately constant at 10, these

[23]To examine this, we look at the raw data, as opposed to net of year fixed effects, as described above.

[24]While it looks like companies that replace a Republican with another Republican may see a decline in the number of executives, the decline is quantitatively not large.

results suggest that the extra women added to the executive suite can account fully for the change in the fraction of executives who are women.

Figures 4 and 5 repeat Figure 3 for the 67% and 75% threshold exercises, respectively. The same patterns hold. Under the 67% (75%) threshold, the number of female executives increases when a Republican is replaced by a Democrat by approximately 0.8 (1.0) women. Considering that the fraction of executives who are women rises by about 0.08 (0.1), and that the number of executives is approximately constant at 10, these results again suggest that the extra women added to the executive suite can entirely account for the change in the fraction of executives who are women. Notice that the increase in the number of women in the executive suite upon replacing a Republican with a Democrat is increasing in the cutoff used to determine political preferences. This is consistent both with the results shown in Table 6, as with the notion that stricter cutoffs yield CEOs with stronger political preferences.

We cannot completely rule out the possibility that confounding factors cause companies to simultaneously replace a Republican CEO with a Democrat and increase female representation in the executive suite. However, our results are highly suggestive that replacing a Republican CEO with a Democrat yields an increase in female representation among executives. As discussed above, the sample of companies replacing a Democratic CEO is quite small, and thus the analysis is relegated to Appendix B. However, we note that the results shown there indicate that replacing a Democratic CEO with an incoming Republican CEO does not seem to impact female representation in the executive suite. The results presented here thus suggest that Democratic CEOs hire women, rather than that Republican CEOs fire women.

5 Gender Differences in Executive Pay

This Section documents how gender differences in total compensation (Section 5.1) and performance-sensitive pay (Section 5.2) vary with the political preferences of a company's CEO.

5.1 Total Compensation

To analyze gender differences in non-CEO executive total compensation between companies run by CEOs of different political preferences, we estimate regressions of the following structure:

$$\begin{aligned} Y_{pct} =& \alpha_0 + \alpha \cdot FracRep_{ct} + \beta \cdot Female_{ct} + \gamma \cdot ExecFemale_{pct} \\ & + \delta \cdot ExecFemale_{pct} \cdot FracRep_{ct} + \omega \cdot ExecFemale_{pct} \cdot Female_{ct} \\ & + d_t + I_c + X'_{ct}\xi + Z'_{pct}\chi + \epsilon_{pct}, \end{aligned} \tag{2}$$

where Y_{pct} is the log of total compensation of non-CEO executive p at company c in year t. $FracRep_{ct}$ is the fraction of a CEO's political contributions that went to Republicans. As in Section 4.1, we use the same variety of measures for this variable. $Female_{ct}$ is a dummy variable equal to 1 if the CEO is female. $ExecFemale_{pct}$ is a dummy variable equal to 1 if executive p is female. We interact $ExecFemale_{pct}$ with $FracRep_{ct}$, with coefficient δ. Our coefficients of interest are β and δ; they compare gender differences in compensation and how these gaps change with the political preference of the CEO. We also include an interaction between $ExecFemale_{pct}$ and $Female_{ct}$ (listed above with coefficient ω). d_t is a set of year fixed effects. I_c is a set of firm fixed effects. X'_{ct} is a vector of firm characteristics.

As before, X includes a quadratic in the CEO's age; the log of the CEO's tenure; an indicator of whether the CEO also chairs the board of directors; an indicator of whether the CEO is an insider, interacted with whether the CEO is female; and the log of total assets. We now add the return on assets, book-to-market value, cash, dividends, and total debt. Z'_{pct} is a set of individual controls for executive p, including a quadratic in his/her age, an indicator of whether the executive is an insider, and a set of dummy variables for the executive position's title.[25] As such, the controls we use are similar to those in the literature (Munoz-Bullon, 2010; Elkinawy and Stater, 2011; Carter et al., 2017; Quintana-Garcia and Elvira, 2017). Standard errors are clustered at the firm level.

Table 7 reports the estimation results. Column 1 regresses log total compensation on $ExecFemale$, $Female$, their interaction, and includes our firm controls X, individual controls Z, year fixed effects, and firm fixed effects, on the sample for which we have the political preferences of CEOs using the election cycle measure.[26] The estimate on $ExecFemale$ suggests that female executives are paid about 9% less than their male counterparts, with this difference statistically significant at the 1% level. Column 2 adds CEOs' political preferences $FracRep$, using the election cycle measure, as well as an interaction of the political preference with $ExecFemale$.

One might hypothesize that Republican CEOs may differ from Democratic CEOs in the level of compensation offered to their executives. However, the estimated relationship between CEO political preferences ($FracRep$) and the average level of pay in the executive suite is quantitatively and statistically insignificant.[27]

The estimate on $ExecFemale$ in Column 2 suggests that women are paid about

[25]Title groups include chief officers, an executive who is also a chairman, general counsel, human resources, vice president, other titles that include the word *senior*, and other.

[26] We use the sample for which we have the election cycle measure in order to make the estimates comparable with the those in Column 2, which includes these preferences. Notice that this sample happens to be the same as with the four-year moving averages and the last four years average. As such, we do not repeat this analysis again when using the four-year moving averages and the last four years average. However, we redo this exercise when using the sample average measure as discussed below.

[27]This finding is consistent across all specifications in the table.

5% less than men, and is statistically significant at the 5% level. Notice that this estimate is implicitly the gender compensation gap under CEOs who contribute all of their contributions to Democrats. The estimate on the interaction between *FracRep* and *ExecFemale* is -0.063, and is statistically significant at the 5% level. This implies that the gender compensation gap rises from 5% to 9.3% (9.8%) [11.4%] under CEOs who contribute at least 67% (75%) [100%] of their contributions to Republicans.

Column 3 repeats Column 2, but switches the measure of political preferences to be the four-year moving average measure.[28] The estimate on *ExecFemale* is -0.039, implying that women under CEOs who contribute all of their contributions to Democrats earn about 4% less than their male colleagues. However, this estimate is only statistically significant at the 15% level. The estimate on the interaction between *FracRep* and *ExecFemale* is -0.083, and is statistically significant at the 1% level. This implies that the gender compensation gap rises from 4% (with the estimate not statistically significant) under CEOs who contribute all of their contributions to Democrats to 9.5% (10.1%) [12%] under under CEOs who contribute at least 67% (75%) [100%] of their contributions to Republicans.

Columns 4 and 5 repeat Columns 1 and 2, but switches the measure of political preferences to be the last four-year measure. The estimates in Column 4 are virtually identical to those in Column 1, despite small differences in the sample.

Columns 6 and 7 also repeat Columns 1 and 2, respectively, but switch the measure of political preferences to be the sample average measure. The estimates in Column 6 are virtually indistinguishable from those in Column 1, with the exception of a larger sample size, due to the sample average measure including more CEOs, and a larger (but still insignificant) point estimate on the impact of having a female CEO.[29] In Column 7, the estimate on *ExecFemale* is -0.032, implying that

[28]As discussed in footnote 26, there is no need to replicate Column 1 under this sample, as the samples happen to be the same.

[29]As explained in footnote 26, the purpose of this exercise is to show how the estimates change

women under CEOs who contribute all of their contributions to Democrats earn about 3% less than their male colleagues. As in Column 3, this estimate is not statistically significant, and thus, again we cannot reject the hypothesis that female executives under CEOs who contribute 100% of their contributions to Democrats do not experience any gender wage gap. The estimate on the interaction between *FracRep* and *ExecFemale* is -0.091, and is statistically significant at the 1% level. This implies that the gender compensation gap rises from 3% under CEOs who contribute all of their contributions to Democrats (with the estimate not statistically significant) to 9.3% (10%) [12%] under CEOs who contribute at least 67% (75%) [100%] of their contributions to Republicans.[30]

Our findings can thus be summarized as follows. The gender wage gap under CEOs who contribute all of their contributions to Democrats is about 3-5%, and is statistically significant only under some measures of political preferences. However, the gender wage gap under under CEOs who contribute at least 67% (75%) [100%] of their contributions to Republicans is about 9% (10%) [12%], and is statistically significant under all measures of political preferences. These findings suggest that much of the general gender wage gap among top executives in S&P 1500 firms can be accounted for by the political preferences of the firms' CEOs.

Ideally, we would perform an analysis along the lines of the event-study done in Section 4.2. However, we only have data on executive compensation in the ExecuComp sample. In that sample, more than half of firms do not employ any female executives at all. Given that the event-study we perform is already on a small sample, this data limitation renders the analysis impossible. Additionally, our results above show that Democratic CEOs hire more women. We would not

when including a CEO's political preferences, as in Column 6. As such, we keep the sample constant between Columns 5 and 6.

[30] We also note that there is no significant difference in levels of pay under CEOs of different political preferences. Female CEOs tend to be associated with lower overall executive compensation, though this difference is not statistically significant. Finally, while the interaction between *ExecFemale* and *Female* is positive, and suggests that female executives earn 4-6% more under a female CEO than under a male CEO, this estimate is not statistically significant.

be able to analyze how the wages of these women change when a Democrat takes over. Similarly, it is not clear how the CEO would affect wages of women who were hired prior to the CEO taking office. While it is possible that the CEO would work to equalize wages, it is also possible that the CEO would only do so for new hires.

We next study gender differences in the performance-sensitivity of executive compensation under different types of CEOs.

5.2 Performance-Sensitivity Compensation

To analyze gender differences in performance-sensitive non-CEO executive compensation between companies run by CEOs of different political preferences, we estimate regressions as in (2), but with different dependent variables. We use three standard measures for Y_{pct}: (1) the ratio of salary and bonus to total compensation, which we call "the cash ratio," (2), the log of delta, and (3) the log of vega.[31] When the dependent variable is either log of delta or log of vega, we include as a control the sum of the executive's salary and bonus; higher levels of non-stock-option compensation are presumably correlated with higher levels of stock-option compensation.

It could be hypothesized that Republican CEO might make more use of incentives than Democratic CEOs. However, this hypothesis is not supported in the results reported below. With respect to each of our three measures of performance sensitivity, we find no general association between the political preferences of the CEO and the examined measure of performance sensitivity. However, we find a strong relationship between CEO political preferences and the gender gap in the performance sensitivity of executive pay, which we now discuss.

Table 8 repeats Table 7, but uses the cash ratio as the dependent variable. A higher

[31] Technically, we take the log of delta + \$1 or the log of vega + \$1 in order not to take the log of 0 in cases of no stock-option compensation.

value for this ratio indicates a higher share of total compensation that is paid in cash rather than equity compensation. In Columns 1, 4, and 6 we find that female executives earn a cash ratio that is 1.0-1.2% higher than their male counterparts, with the difference statistically significant at the 1% level.[32]

In Column 2, using the election cycle metric of political preferences, we find that the cash ratio for women is about 0.8% higher than their male counterparts under CEOs who contribute all of their contributions to Democrats, though this difference is not statistically significant. The estimate on the interaction between *FracRep* and *ExecFemale* is 0.007, suggesting that the gender gap in the cash ratio under CEOs who contribute at least 67% (75%) [100%] to Republicans is 0.47 (0.5) [0.7] percentage point higher than they would under CEOs who contribute only to Democrats. While this estimate is not statistically significant, the magnitude of these estimates suggests that a large amount of the gender differences in the cash ratio in Column 1 can be accounted for by CEO political preferences.

In Column 3, using the four-year moving average metric of political preferences, we find that the cash ratio for female executives is virtually indistinguishable from that of male executives under CEOs whose entire contributions goes to Democrats. The estimate on the interaction between *FracRep* and *ExecFemale* is 0.015, suggesting that the gender gap in the cash ratio under CEOs who contribute at least 67% (75%) [100%] to Republicans is 1 (1.1) [1.5] percentage point higher than it would be under CEOs who contribute all of their contributions to Democrats, with this estimate being statistically significant at the 10% level.

The results using the last four year metric of political preferences, Column (5) are virtually the same both in magnitude and significance as in Column (4).

In Column 7, using the sample average metric of political preferences, we find that the cash ratio for female executives is actually somewhat lower than that of

[32] As explained above, the difference between these specifications is just the sample.

male executives under CEOs whose entire contributions go to Democrats, though this difference is not statistically significant. The estimate on the interaction between *FracRep* and *ExecFemale* is 0.024, suggesting that the gender gap in the cash ratio under CEOs who contribute at least 67% (75%) [100%] to Republicans is 1.6 (1.8) [2.4] percentage point higher than they would be under CEOs whose entire contributions go to Democrats, with this estimate being statistically significant at the 1% level. Taken together, these results suggest that we cannot reject the hypothesis that the cash ratio is the same between male and female executives under CEOs who contribute all of their contributions to Democrats, and that gender differences in the cash ratio can potentially be entirely accounted for by the political preferences of a firm's CEO.[33]

Table 9 repeats Table 7, but switches the dependent variable to be the log of delta and, as discussed above, adds as a control the sum of the executive's salary and bonus. A higher value of log delta indicates that the executive's stock options are more sensitive to the company's stock price, indicating a higher level of performance incentives. In Columns 1, 4, and 6 we find that female executives earn a delta that is about 26-30% lower than their male counterparts, with the difference being statistically significant at the 1% level.

In Column 2, using the election cycle metric of political preferences, we find that the delta for female executives is about 16% lower than their male counterparts under CEOs whose entire contributions go to Democrats, with this difference being statistically significant at the 15% level. The estimate on the interaction between *FracRep* and *ExecFemale* is -0.282, suggesting that the gender gap in delta is about 17 (19) [25] percentage points larger under CEOs who contribute 67% (75%) [100%] to Republican than under CEOs whose entire contributions go to Democrats, with this difference being statistically significant at the 10% level.

[33] Additionally, we find no differences in the cash ratio under female CEOs either for either male or female executives in any of the specifications discussed here.

These estimates suggest that the majority of the gender gap in delta in Column 1 can be accounted for by a CEOs political preferences.

In Column 3, using the four-year moving average metric of political preferences, we find that delta for female executives is about 12% lower than that of male executives under CEOs whose entire contributions go to Democrats, but that this difference is not statistically significant. The estimate on the interaction between *FracRep* and *ExecFemale* is -0.371, suggesting that the gender gap in delta is 22 (24) [31] percentage points larger under CEOs who contribute 67% (75%) [100%] to Republicans than under CEOs whose entire contributions go to Democrats, with this estimate being statistically being significant at the 5% level.

In Column 5, using the last four years metric of political preferences, we find that delta for female executives is 13% lower than that of male executives under CEOs whose entire contributions go to Democrats, but that this difference is not statistically significant. The estimate on the interaction between *FracRep* and *ExecFemale* is -0.349, suggesting that the gender gap in delta is 21 (23) [29.5] percentage points larger under CEOs who contribute 67% (75%) [100%] to Republicans than under CEOs whose entire contributions go to Democrats, with this estimate being statistically significant at the 5% level.

In Column 7, using the sample average metric of political preferences, we find that delta for female executives is virtually the same as that for male executives under CEOs whose entire contributions go to Democrats, and the estimated differences are not statistically significant. The estimate on the interaction between *FracRep* and *ExecFemale* is -0.454, suggesting that the gender gap in delta under CEOs who contribute 67% (75%) [100%] to Republicans is 24 (28) [36] percent points than under CEOs whose entire contributions go to Democrats, with this estimate being statistically significant at the 1% level.

Taken together, these results suggest that we cannot reject the hypothesis that delta is the same between male and female executives under CEOs whose entire contributions goes to Democrats, and that gender differences in delta can potentially be entirely accounted for by the political preferences of a firm's CEO.[34]

Table 10 also repeats Table 7, but switches the dependent variable to be the log of vega. A higher value of log vega indicates that the executive's stock options are more sensitive to the company's stock price volatility, indicating a higher level of performance incentives (specifically, for risk taking). In Columns 1, 4, and 6 we find that female executives earn a vega that is about 26-28% lower than their male counterparts, with the difference statistically significant at the 1% level.

In Column 2, using the election cycle metric of political preferences, we find that the vega for female executives is about 19% lower than that of their male counterparts under CEOs whose entire contributions go to Democrats, with this estimate being statistically significant at the 10% level. The estimate on the interaction between *FracRep* and *ExecFemale* is -0.177, suggesting that the gender gap in vega under CEOs who contribute 67% (75%) [100%] to Republicans is about 11 (12) [16] percentage points larger than under CEOs whose entire contributions go to Democrats, but this estimate is not statistically significant.

In Column 3, using the four-year moving average metric of political preferences, we find that vega for female executives is about 16.5% lower than that for male executives under CEOs whose entire contributions go to Democrats, but this estimate is not statistically significant. The estimate on the interaction between *FracRep* and *ExecFemale* is -0.233, suggesting the gender gap in vega under CEOs who contribute 67% (75%) [100%] to Republicans is 15 (16) [21] percentage points larger than under CEOs whose entire contributions go to Democrats, but, again, this estimate is not statistically significant.

[34] Additionally, we find that having a female CEO is associated with executives receiving a delta that is about 22-28% lower than they would under a male CEO, however these estimates are not statistically significant. Female executives receive a delta that is about 60-85% higher than they would under a male CEO, with the estimates significant at the 5% level.

In Column 5, using the last four years metric of political preferences, we find that vega for female executives is 15% lower than that for male executives under CEOs whose entire contributions go to Democrats, but, again, this estimate is not statistically significant. The estimate on the interaction between *FracRep* and *ExecFemale* is -0.275, suggesting that the gender gap in vega under CEOs who contribute 67% (75%) [100%] to Republicans is about 17 (19) [24] percentage points larger than under CEOs whose entire contributions go to Democrats, with this estimate being statistically significant at the 15% level.

In Column 7, using the sample average metric of political preferences, we find that vega for female executives are about 15% lower than male executives under CEOs whose entire contributions go to Democrats, though this estimated difference is not statistically significant. The estimate on the interaction between *FracRep* and *ExecFemale* is -0.206, suggesting that the gender gap in vega under CEOs who contribute 67% (75%) [100%] to Republicans is about 13 (14) [19] percentage points larger than under CEOs whose entire contributions go to Democrats, though this estimate is not statistically significant. Taken together, these results suggest that much of the gender gap in vega can be accounted for by the political preferences of CEOs.[35]

We conclude that companies run by extreme Democratic CEOs have much smaller, and potentially nonexistent, gender pay gaps among top executives. Other companies, by contrast, have significant pay gaps. Interestingly, this pattern characterizes not only total compensation but also the makeup of the compensation package: significant gender gaps are apparent in the cash ratio, delta, and vega of compensation under CEOs with stronger Republican preferences. Thus, not only do female executives under such CEOs receive lower total com-

[35]We find that having a female CEO is associated with executives receiving a vega that about 69-75% lower than they would under a male CEO, with the estimates significant at the 5-10% level, and that female executives receive a vega that is about 77-117% higher than they would under a male CEO, with the estimates significant at the 1-5% level, depending on the specification.

pensation than their male counterparts; their compensation also has a much smaller equity component. The existing literature has argued that lower delta and vega for female executives indicate higher female risk aversion (Carter et al., 2017); it is hard to reconcile this explanation with the fact that these differences are greatly mitigated when taking into account the political preferences of a company's CEO.

6 Conclusion

This paper provides the first empirical evidence about the association between CEOs' political preferences and gender-related choices regarding the representation of women in the executive suite and the level and structure of their compensation. The evidence is consistent with our hypothesis that CEOs whose preferences are more aligned with Democrats are associated with the presence of more women in the executive suite and with a reduced gender gap in compensation of non-CEO executives. To better understand the direction of the association, we use an event-study analysis; the event is a change in a company's CEO. We show that when a Republican CEO is replaced with a Democrat rather than another Republican, the fraction of women in the executive suite increases.

Our study has significant implications for future work. Subsequent explorations of gender-related choices should take CEOs' political preferences into account in carrying out their analysis. In addition, future work may seek to investigate the relative roles of the various mechanisms we have discussed in producing the associations we have identified.

References

[1] Albanesi, Stefania, Claudia Olivetti, and Maria Jose Prados, 2015, Gender and dynamic agency: Theory and evidence on the compensation of top executives, in Solomon W. Polachek, Konstantinos Tatsiramos, and Klaus F. Zimmermann, eds., *Gender in the Labor Market*, volume 42 of *Research in Labor Economics*, 1–59 (Emerald Publishing Ltd).

[2] Babenko, Ilona, Viktar Fedaseyeu, and Song Zhang, 2019, Do CEOs Affect Employees' Political Choices?, *The Review of Financial Studies* 33, 1781–1817.

[3] Bayat, Ali, and Marc Goergen, 2020, Ceo political ideology, shareholder primacy and dividend policy, *ECGI Working Paper Series in Finance* .

[4] Bell, Linda A., 2005, Women-led firms and the gender gap in top executive jobs, IZA DP No. 1689.

[5] Benmelech, Efraim, and Carola Frydman, 2015, Military ceos, *Journal of Financial Economics* 117, 43–59.

[6] Bertrand, Marianne, and Kevin F. Hallock, 2001, The gender gap in top corporate jobs, *Industrial and Labor Relations Review* 55, 3–21.

[7] Bonica, Adam, 2016, Avenues of influence: on the political expenditures of corporations and their directors and executives, *Business and Politics* 18, 367–394.

[8] Carnahan, Seth, and Brad N. Greenwood, 2018, Managers' political beliefs and gender inequality among subordinates: Does his ideology matter more than hers?, *Administrative Science Quarterly* 63, 287–322.

[9] Carter, Mary Ellen, Francesca Franco, and Mireia Gine, 2017, Executive gender pay gaps: The roles of female risk aversion and board representation, *Contemporary Accounting Research* 34, 1232–1264.

[10] Chin, M. K., and Matthew Semadeni, 2017, Ceo political ideologies and pay egalitarianism within top management teams, *Strategic Management Journal* 38, 1608–1625.

[11] Cohen, Alma, Moshe Hazan, Roberto Tallarita, and David Weiss, 2019, The politics of ceos, *Journal of Legal Analysis* 11, 1–45.

[12] Cohen, Alma, and Crystal S. Yang, 2019, Judicial Politics and Sentencing Decisions, *American Economic Journal: Economic Policy* 11, 160–191.

[13] Coles, Jeffrey L., Naveen D. Daniel, and Lalitha Naveen, 2006, Managerial incentives and risk-taking, *Journal of Financial Economics* 79, 431–468.

[14] Cooper, Michael, Huseyin Gulen, and Alexei Ovtchinnikov, 2010, Corporate political contributions and stock returns, *Journal of Finance* 65, 687–724.

[15] Core, John E., and Wayne R. Guay, 2002, Estimating the value of employee stock option portfolios and their sensitivities to price and volatility, *Journal of Accounting Research* 40, 613–630.

[16] Cronqvist, Henrik, and Frank Yu, 2017, Shaped by their daughters: Executives, female socialization, and corporate social responsibility, *Journal of Financial Economics* 126, 543–562.

[17] Dahl, Michael S., Cristian L. Dezso, and David Gaddis Ross, 2011, Like daughter, like father: How women's wages change when ceos have daughters, Available at SSRN 1774434.

[18] Dasgupta, Ari, Lan Ha, Spurthi Jonnalagadda, Steven Schmeiser, and Hannah Youngerman, 2018, The daughter effect: do ceos with daughters hire more women to their board?, *Applied Economics Letters* 25, 891–894.

[19] Di Giuli, Alberta, and Leonard Kostovetsky, 2014, Are red or blue companies more likely to go green? politics and corporate social responsibility, *Journal of Financial Economics* 111, 158–180.

[20] Duchin, Ran, Mikhail Simutin, and Denis Sosyura, 2020, The Origins and Real Effects of the Gender Gap: Evidence from CEOs' Formative Years, *The Review of Financial Studies* 34, 700–762.

[21] Elkinawy, Susan, and Mark Stater, 2011, Gender differences in executive compensation: Variation with board gender composition and time, *Journal of Economics and Business* 63, 23–45.

[22] Elnahas, Ahmed M., and Dongnyoung Kim, 2017, Ceo political ideology and mergers and acquisitions decisions, *Journal of Corporate Finance* 45, 162–175.

[23] Francis, Bill B., Iftekhar Hasan, Xian Sun, and Qiang Wu, 2016, Ceo political preference and corporate tax sheltering, *Journal of Corporate Finance* 38, 37–53.

[24] Fremeth, Adam, Brian Kelleher Richter, and Brandon Schaufele, 2013, Campaign contributions over ceos' careers, *American Economic Journal: Applied Economics* 5, 170–88.

[25] Gayle, George-Levi, Limor Golan, and Robert A. Miller, 2012, Gender differences in executive compensation and job mobility, *Journal of Labor Economics* 30, 829–871.

[26] Graham, John R., Campbell R. Harvey, and Manju Puri, 2013, Managerial attitudes and corporate actions, *Journal of Financial Economics* 109, 103–121.

[27] Hurley, William P., 1975, Who is an "officer" for the purposes of the securities exchange act of 1934- colby v. klune revisited, *Fordham Law Review* 44, 489–510.

[28] Hutton, Irena, Danling Jiang, and Alok Kumar, 2014, Corporate policies of republican managers, *Journal of Financial and Quantitative Analysis* 49, 1279–1310.

[29] Hutton, Irena, Danling Jiang, and Alok Kumar, 2015, Political values, culture, and corporate litigation, *Management Science* 61, 2905–2925.

[30] Larcker, David F., and Brian Tayan, 2020, Diversity in the c-suite. the dismal state of diversity among fortune 100 senior executives, Rock Center for Corporate Governance, Stanford Closer Look Series- CGRP82.

[31] Malmendier, Ulrike, and Geoffery Tate, 2009, Superstar ceos, *Quarterly Journal of Economics* 124, 1593–1638.

[32] Malmendier, Ulrike, Geoffery Tate, and Jon Yan, 2011, Overconfidence and early-life experiences: The effect of managerial traits on corporate financial policies, *Journal of Finance* 66, 1687–1733.

[33] Matsa, David A., and Amalia R. Miller, 2011, Chipping away at the glass ceiling: Gender spillovers in corporate leadership, *American Economic Review: Papers and Proceedings* 101, 635–639.

[34] Munoz-Bullon, Fernando, 2010, Gender-compensation differences among high-level executives in the united states, *Industrial Relations* 49, 346–370.

[35] Newton, David, and Mikhail Simutin, 2015, Of age, sex, and money: Insights from corporate officer compensation on the wage inequality between genders, *Management Science* 61, 2355–2375.

[36] Nguyen, Duc Duy, Jens Hagendorff, and Arman Eshraghi, 2017, Does a CEO's Cultural Heritage Affect Performance under Competitive Pressure?, *The Review of Financial Studies* 31, 97–141.

[37] Pan, Yihui, Tracey Yue Wang, and Michael S. Weisbach, 2016, Ceo investment cycles, *The Review of Financial Studies* 29, 2955–2999.

[38] Quintana-Garcia, Cristina, and Marta M. Elvira, 2017, The effect of the external labor market on the gender pay gap among executives, *Industrial and Labor Relations Review* 70, 132–159.

[39] Unsal, Omer, Kabir M. Hassan, and Duygu Zirek, 2016, Corporate lobbying, ceo political ideology and firm performance, *Journal of Corporate Finance* 38, 126–149.

[40] Wang, X., Cencen Gao, and Mingming M. Feng, 2019, Ceos raising daughters and female executives, *Asia-pacific Journal of Accounting and Economics* 1–19.

[41] Xuan, Yuhai, 2009, Empire-Building or Bridge-Building? Evidence from New CEOs' Internal Capital Allocation Decisions, *The Review of Financial Studies* 22, 4919–4948.

Appendices

A Identifying the Political Contributions of CEOs

In this appendix, we detail how we identify the political contributions that CEOs make. This involves two steps. The first step is to map the information we have on each CEO, such as their name, company they work for, and their address, onto the FEC dataset to identify what contributions a CEO made. We detail this in Section A.1. The second is to identify whether a given contribution counts as being towards Democrats or Republicans, which we detail in Section A.2. Much of the information here is very similar to that described in a companion paper Cohen et al. (11).

A.1 Matching CEOs to Contributions

Information on CEO contributions comes from the Federal Election Commission (FEC). The FEC is a regulatory agency, created by the 1974 Amendments to the Federal Election Campaign Act (FECA Amendments of 1974, Pub. L. No. 93-443, 88 Stat. 1263 (1974)). All candidates for federal office, and committees affiliated with them, must register with the FEC and report contributions received from all donors that exceeds (individually or combined) $200. Similarly, party committees and political committees not affiliated with any particular candidate must also periodically report donations (52 U.S.C. Section 30104(b)(3)(A)). Thus, the database that the FEC publishes includes all nontrivial donations made to candidates or to active political committees, amounting to tens of millions of dollars each year. Each FEC report has to indicate names of the donor and recipient, and the donor's home address, employer, and job title. However, in many reports the information about the donor's home address, employer, and job title is missing or incomplete.

We match the FEC database with our CEO database described in Section 3. The process is not straightforward. There may be more than one donor with the same name as a CEO. A CEO might use his/her nickname in one dataset, and not the other. They might sometimes use a nickname and sometimes their full name, with or without a middle name.[36]

[36] We use two datasets to match names to nicknames. The first is the name to nickname dataset, accessible at GitHub, under "name to nick", and the second is the reverse mapping, accessible at GitHub, under "nick to name".

Using ExecuComp, we identify the names of every CEO of companies ever listed in the S&P 1500 between 2000 and 2018, along with the name of the company and zip code of the company headquarters.[37] We use a Python library "whoswho" to do a preliminary match with all FEC contributions where the name of the contributor is the same as the name of the CEO.[38] From this preliminary match, we create three sets of matches.

The first set selects all the contributions in which either the "employer" or "occupation" fields match precisely the name of the company for which the CEO worked. This involves creating a database of consistent company names for matching purposes.[39] The second set checks if the occupation entry is consistent with the contributor being an executive.[40] If it is, and either there is a lenient company-name match or the zipcode of the contributor is within 80 kilometers of the company headquarters, we accept the match.[41] The third match is similar to the second match, but instead of requiring that the contributor's occupation is consistent with being an executive, a match on the middle name between the executive and contributor is sufficient.

We then expand all three of these sets of matches to include any other contributions that come from someone with the same name and zip code as exists in these sets of matches. Thus, our set of contributions for a given CEO includes all the contributions found in either set, after expanding to include other contributions with the same name and zip code. Of the 7,469 CEOs in our dataset, we are able to match 5,597 executives.

[37]We use data on contributions from 1996 onwards, as some of our measures, such as the last four years measure, require information from before a CEO-year observation.

[38]As part of this process, we clean both datasets from titles such as "Mr" and "Mrs", or "esq" and "MBA", containing information that we do not use in our matching algorithm. We include relevant information such as "jr" or "sr", which we use to differentiate people with seemingly identical names (such as fathers and sons). Additionally, this algorithm removes prefixes such as "van" and "de" that could obfuscate our matching process. To do so, we employ the nameparser package, which is part of the whoswho library.

[39]To do so, we must create a consistently named set of unique company names to merge between the datasets. To do so, we clean company names of acronyms such as "llc", "ltd", and "co", using a Python package called "cleanco". We also remove stop words such as "or", "the", and "of" using the Python package "nltk". Additionally, we expand common shortcut to allow for accurate matching, such as transforming "intl" to "international" and "rlty" to "realty".

[40]Specifically, the occupation must include either "board" or "chair" (or chairman/chairwoman) or "chief" or "dir." (or director), "founder", "pres" (or president), "trustee", "CEO", "VP".

[41]Here, we define lenient to be cases where a name is contained in another name. For instance, if the company in the FEC is "New York Bank", and the company listed in ExecuComp is "New York Bank Mellon".

A.2 Identifying the Party of a Contribution

We now describe how we infer whether a contribution is made to Democrats or Republicans. To do so, we ask whether a given contribution ultimately benefits Republicans or Democrats. This analysis is not as straight forward as it may seem. Technically, most contributions are made to committees. For many political committees, the FEC database contains information regarding the committee's party affiliation, in which case we simply use the identity given by the FEC.[42] Some of these committees are the main campaign committees of specific candidates affiliated with a major party, are explicitly authorized by these candidates to raise funds on their behalf, or at least are not expressly disavowed by the candidate they support. In these cases, there is an official connection between a committee and a candidate.

Other committees, although not explicitly or implicitly authorized by a candidate, are connected with a political party, either because they are part of the official party structure (party committees) or because they are established by officeholders belonging to a political party (so called leadership PACs). In all of these cases, the FEC database contains information regarding the committee's party affiliation. We consider, therefore, all donations made to authorized candidate committees, party committees, and leadership PACs as made to candidates of the affiliated party.

Other political committees, however, are not clearly linked to a party because they are not affiliated in any of the above ways with a political party or a candidate of that party. In such cases, we analyze the FEC records regarding the expenditures that these committees make.[43] When a CEO donates a given amount to such a committee, we allocate this amount between Republicans and Democrats based on how the committee allocates its total spending between support for each group. There are some committees that we do not manage to identify their politics based off of how they give money. For these committees, we identify their politics based on which committees transfer to them. For instance, a committee that receives large transfers from a Republican political committee is presumably

[42] Some committees or candidates change political party affiliation over time. In such cases, we identify a candidate as being associated with the party they are most often identified with by the FEC.

[43] One consideration is how to treat "24a" expenditures. These are expenditures by political committees *against* candidates, rather than in their favor. We assume that an expenditure against a Democrat is an expenditure in favor of a Republican, and vice versa. Since we do not know how to interpret an expenditure against an independent candidate, we treat these expenditures as unknown.

Republican. There are 31 committees that receive a total of about $70 million in contributions from our executives that remain unidentified even after this process. We manually identify these committees based off of their names and looking for them on Google.[44]

In short, if a given contribution is identified by the FEC as going to a Democrat (Republican), we assume that 100% of that contribution goes to Democrats (Republicans). If the FEC does not identify the committee's political affiliation, we explore the expenditures made by that committee, infer a percent that the committee gives to each party, and divide the contribution accordingly, ignoring contributions to unknown recipients. For example, assume a CEO gave $1,000 to the Example PAC. The Example PAC is not identified by the FEC as belonging to any party. However, by analyzing Example PAC's expenditure data, we infer that Example PAC gives 30% of its money to Republicans, 10% to Democrats, 10% to Independent candidates, and 50% is unknown. We treat this $1,000 contribution as being a $600 contribution to Republicans and a $200 contribution to Democrats.

Of the 54,911 committees reported in the FEC dataset between 1996-2020, we identify the political affiliations of 27,124 via the FEC. A further 12,338 we identify off of the expenditures the committees made. A further 557 committees we identify from the political affiliation of committees that donate to them. An additionally 31 we identify manually, as discussed above. Finally, 14,861 are unidentified. However, note that not all of these committees actually received contributions from CEOs in our sample.

Of the $996,357,180 in contributions from CEOs we identify, $700,877,185 go to Republicans, $279,560,419 to Democrats, and $11,926,073 to Independents. This leaves $3,993,943, or about 0.4% of CEO political contributions unidentified. In terms of how we identify the money, $406,685,437 is identified by the political affiliation of the receiving committee designated by the FEC. $514,725,285 of the contributions we identify based off of the committee's activity. $356,032 is identified based on the political affiliation of the contributing committee. $70,596,483 is to the 31 manually identified committees discussed above.

[44]For instance, "DNC-NON-FEDERAL MIXED" is clearly a Democratic committee, while "RNC REPUBLICAN NATIONAL STATE ELECTIONS COMMITTEE" is clearly a Republican committee. It is unclear why their party affiliation is left blank by the FEC.

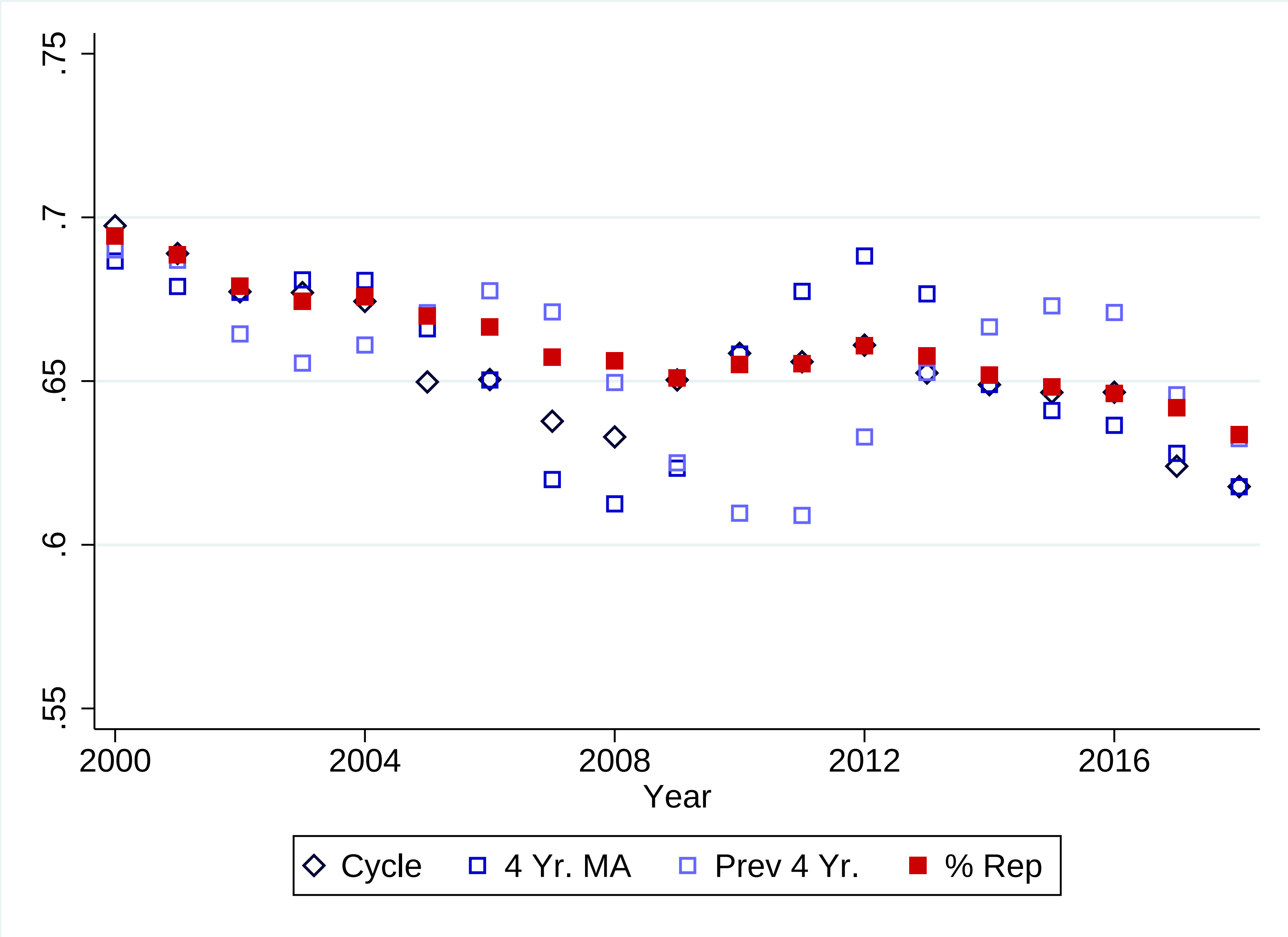
B Event Study, Replacing Democratic CEOs

In this appendix, we perform the event study described in Section 4.2.1, as well as the breakdown of results described in Section 4.2.2, on the sample of firms replacing a Democratic CEO with either an incoming Democrat or Republican. As a reminder to the reader, we relegate this analysis to an appendix due to small sample sizes.

Table A1 repeats Table 6 on this sample. In all specifications, the coefficients on t^k are generally economically and statistically insignificant, indicating no trends in female executive employment around the time of a change in CEO, for this sample of companies. In Columns 1 and 2 *Switch* is virtually zero in magnitude and statistically indistinguishable from zero, while in Columns 3-6 this variable is positive and statistically significant at the 15% in Columns 3, 5% level in Column 4, not significant in Column 5, and significant at the 10% level in Column 6. The estimates on the interaction between *Switch* and t^k prior to the change in CEO indicate no difference in trend in the fraction of the executive suite that is female between companies whose Democratic CEOs are replaced with Democrats and with Republicans in all specifications. Similarly, after the switch in CEO, there is no consistent or statistically significant evidence that the fraction of women in the executive suite changes after replacing a Democrat with a Republican CEO.

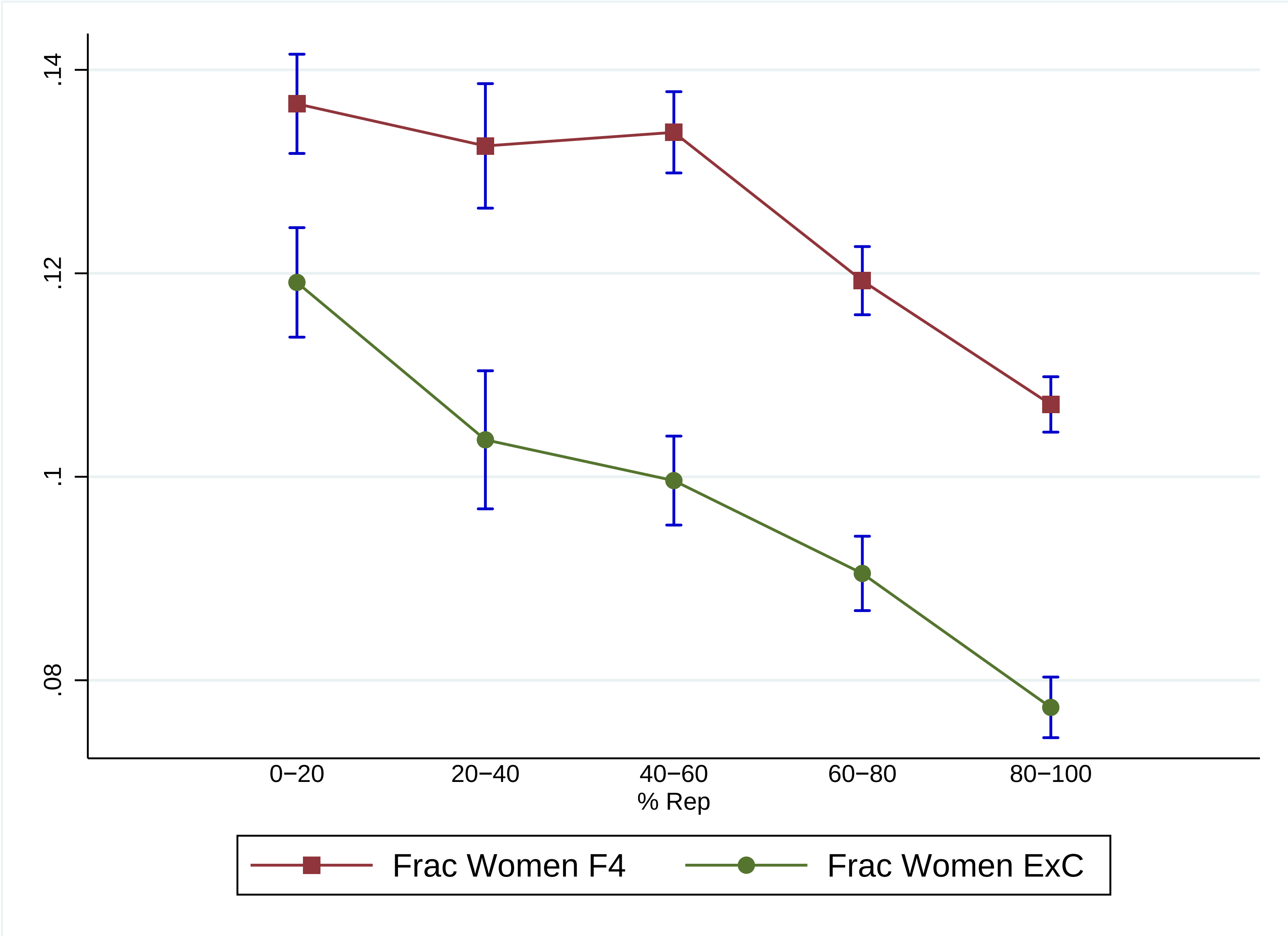
Figures A1, A2, and A3 repeat Figures 3, 4, and 5, respectively. We do not note any consistent pattern in the data, and again remind the reader that there are very small samples in these figures. They are included here for completeness only.

Figure 1: CEOs' Political Preferences, 2000-2018.



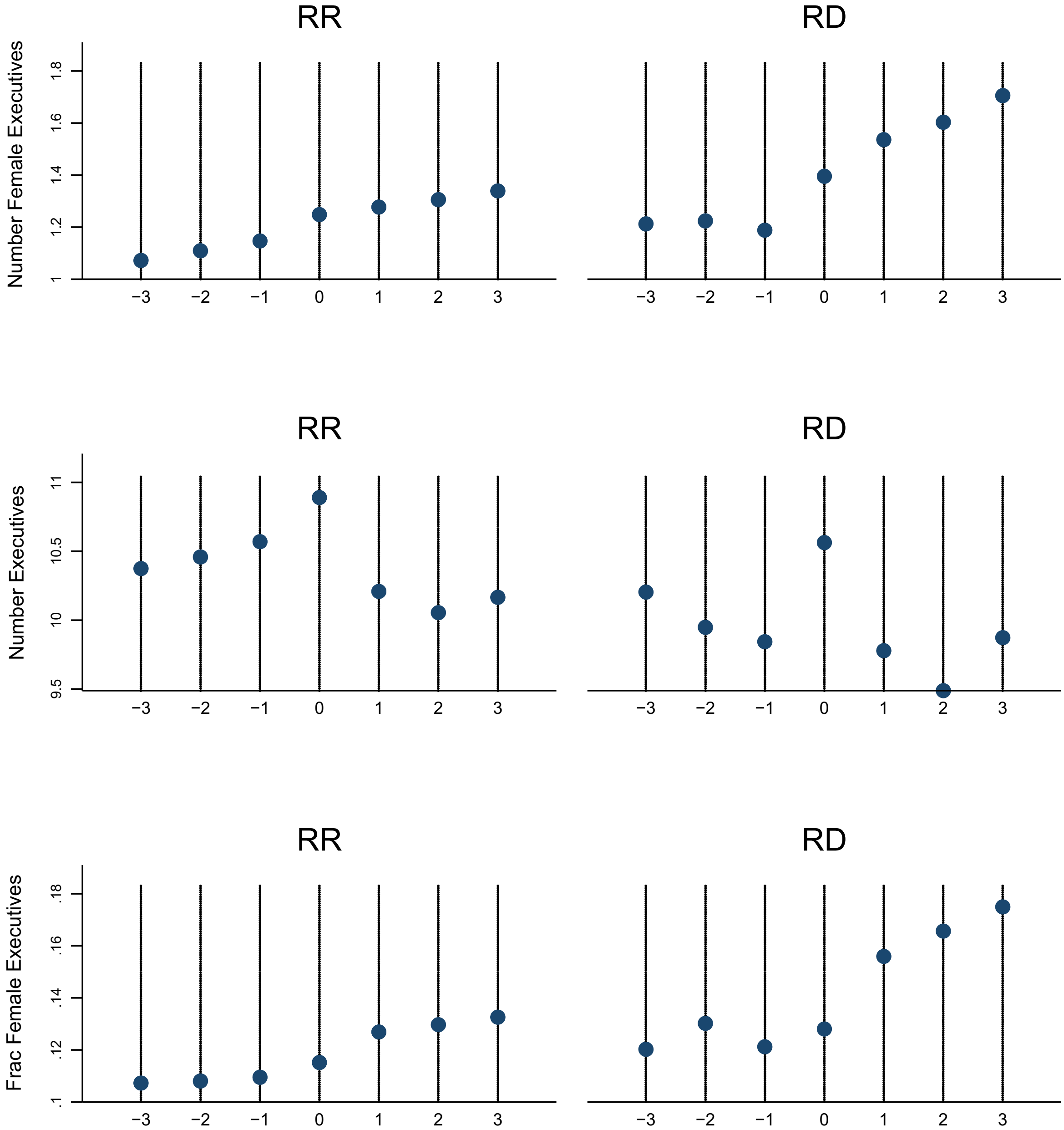
Notes: This figure plots the average fraction of CEO political donations that went to Republicans, by year, for each of our four measures. "Cycle" refers to the election cycle measure. "4 Yr. MA" represents the four-year moving average measure. "Prev 4 Yr." represents the average of the four years prior to current year. "% Rep" represents the sample average measure. All variables as defined in the text.

Figure 2: Fraction of Executives who are Female, 2000-2018.



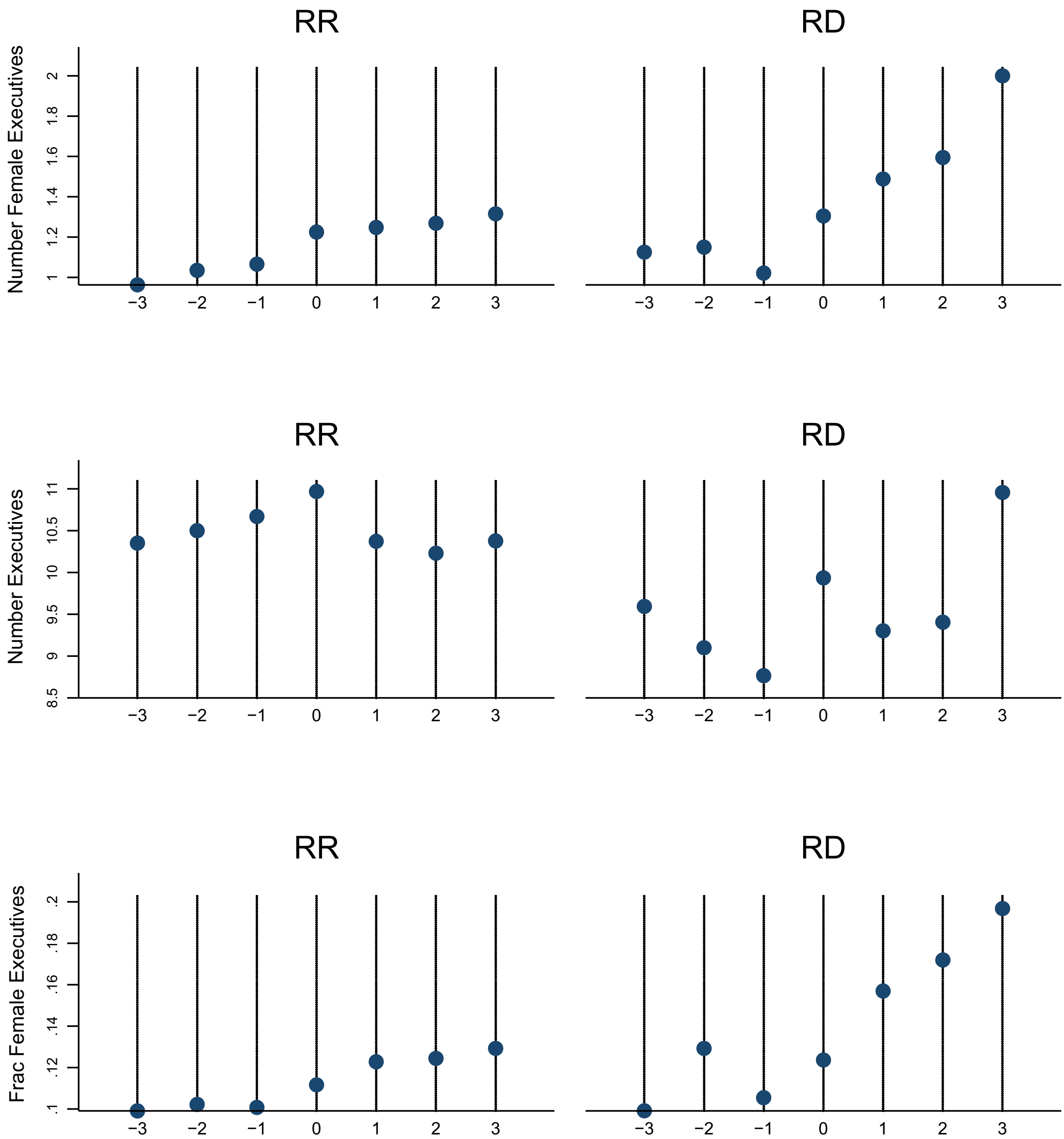
Notes: This figure plots the average fraction of women among executives in the Form 4 sample ("Frac Women F4") and in the ExecuComp sample ("Frac Women ExC") by the fraction of a CEO's contributions that were donated to Republicans, as measured by the sample average measure. The bands represent the 95% confidence interval for these estimates. The bins on the X-axis represent the range of CEO donation types grouped together. For instance, "0-20" groups together CEOs who gave 0-20% of their political donations to Republicans.

Figure 3: Event-Study: Interpreting the Results, 50% Threshold.
Replacing a Republican CEO



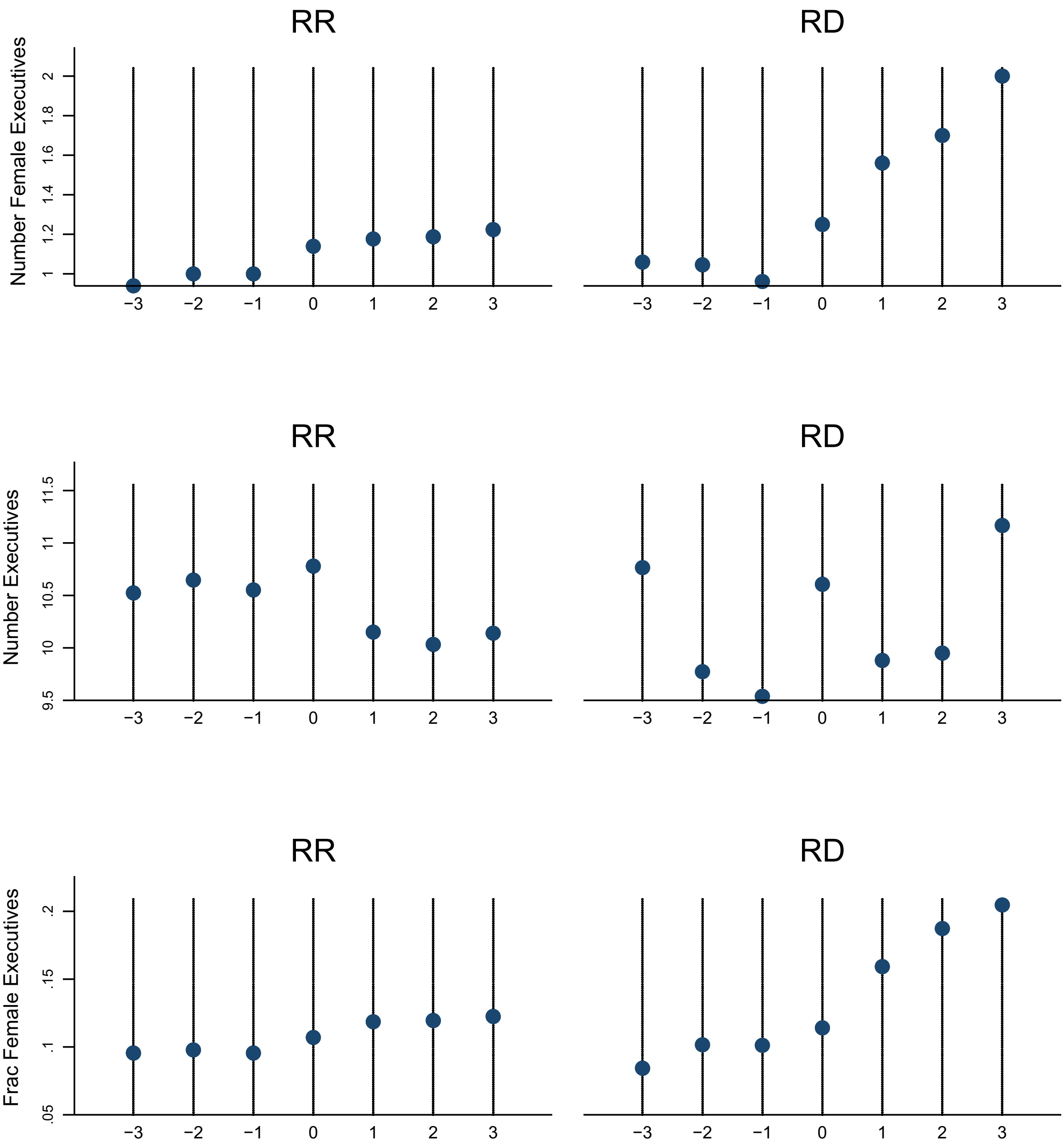
Notes: The top panel shows the number of female executives relative to the timing of a change in CEO, by type of change in CEO. The middle panel shows the total number of executives relative to the timing of a change in CEO, by type of change in CEO. The bottom panel shows the fraction of executives who are female relative to the timing of a change in CEO, by type of change in CEO. The change in CEO happens at time 0. "RR" represents an outgoing Republican CEO replaced by anther Republican. "RD" represents an outgoing from a Republican CEO replaced by a Democratic. The data are from the Form 4 sample. All variable definitions are as in the text.

Figure 4: Event-Study: Interpreting the Results, 67% Threshold.
Replacing a Republican CEO



Notes: The top panel shows the number of female executives relative to the timing of a change in CEO, by type of change in CEO. The middle panel shows the total number of executives relative to the timing of a change in CEO, by type of change in CEO. The bottom panel shows the fraction of executives who are female relative to the timing of a change in CEO, by type of change in CEO. The change in CEO happens at time 0. “RR” represents an outgoing Republican CEO replaced by anther Republican. “RD” represents an outgoing from a Republican CEO replaced by a Democratic. The data are from the Form 4 sample. All variable definitions are as in the text.

Figure 5: Event-Study: Interpreting the Results, 75% Threshold.
Replacing a Republican CEO



Notes: The top panel shows the number of female executives relative to the timing of a change in CEO, by type of change in CEO. The middle panel shows the total number of executives relative to the timing of a change in CEO, by type of change in CEO. The bottom panel shows the fraction of executives who are female relative to the timing of a change in CEO, by type of change in CEO. The change in CEO happens at time 0. "RR" represents an outgoing Republican CEO replaced by anther Republican. "RD" represents an outgoing from a Republican CEO replaced by a Democratic. The data are from the Form 4 sample. All variable definitions are as in the text.

Table 1: Summary Statistics: Firms, CEOs.
Means (Standard Deviations)

Variable	Below 50%	Above 50%	All	NIS
	Panel A: CEO Characteristics			
CEO Female	0.04	0.02	0.03	0.04
	(0.21)	(0.16)	(0.17)	(0.20)
CEO Age	55.70	56.48	56.27	54.65
	(7.86)	(7.00)	(7.25)	(7.25)
CEO Tenure	8.31	7.34	7.61	5.19
	(8.14)	(7.28)	(7.54)	(5.72)
CEO Chairman	0.52	0.56	0.55	0.34
	(0.50)	(0.50)	(0.50)	(0.47)
N	6,891	18,628	25,519	8,551
	Panel B: Executive (non-CEOs) Characteristics			
Age(ExC)	51.76	52.17	52.06	51.18
	(7.41)	(7.08)	(7.17)	(7.47)
Insider	0.91	0.92	0.92	0.82
	(0.29)	(0.27)	(0.28)	(0.38)
Compensation	2587.06	2289.23	2370.07	1505.84
	(4832.28)	(3697.35)	(4039.20)	(2586.86)
Salary & Bonus	700.87	602.44	629.16	453.28
	(1128.29)	(714.55)	(848.19)	(826.73)
Ratio	0.42	0.40	0.41	0.47
	(0.26)	(0.24)	(0.25)	(0.26)
Delta	177.83	214.29	204.41	82.21
	(1472.27)	(5475.16)	(4736.97)	(742.36)
Vega	41.56	41.13	41.25	18.54
	(105.53)	(128.91)	(123.01)	(59.55)
N	26,754	71,819	98,573	44,551

Continued on next page

Table 1 – *Continued from previous page*

	Below 50%	Above 50%	All	NIS
		Panel C: Firm Characteristics		
# Female Executives (ExC)	0.580	0.421	0.464	0.492
	(0.790)	(0.669)	(0.707)	(0.759)
# Executives (ExC)	5.641	5.683	5.672	5.629
	(1.201)	(1.203)	(1.203)	(1.383)
Frac Female (ExC)	0.114	0.084	0.092	0.097
	(0.161)	(0.138)	(0.145)	(0.152)
# Female Executives (F4)	1.237	1.065	1.112	0.899
	(1.341)	(1.238)	(1.269)	(1.145)
# Executives (F4)	9.163	9.493	9.404	8.156
	(4.214)	(4.440)	(4.383)	(3.606)
Frac Female (F4)	0.140	0.114	0.121	0.115
	(0.144)	(0.126)	(0.132)	(0.143)
Log Assets	7.974	8.165	8.114	6.879
	(1.876)	(1.694)	(1.747)	(1.620)
Return on Assets	0.027	0.039	0.035	0.006
	(0.147)	(0.192)	(0.181)	(0.669)
Book to Market	0.520	0.526	0.524	0.545
	(0.445)	(0.440)	(0.441)	(0.522)
Cash	1844.969	1312.606	1456.374	463.682
	(6237.085)	4498.337)	(5032.940)	(2127.477)
Dividends	152.814	203.865	190.042	70.296
	(518.246)	(620.084)	(594.658)	(384.047)
Debt	4179.213	3781.838	3889.015	1161.331
	(13550.633)	(10375.568)	(11321.063)	(5540.483)
N	6,891	18,628	25,519	8,551

Notes: All variables as defined in text. The variables Salary & Bonus, delta, and vega are in USD'000. The rows denoted N report the number of observations. ExC denotes the ExecuComp sample, while F4 denotes the Form 4 sample. All age and compensation variables are from the ExecuComp sample. "Below 50%" is the set of CEOs who contributed less than half of their political contributions to Republicans, while "Above 50%" is the set of CEOs who contributed at least half of their political contributions to Republicans. "All" is the full set of CEOs in our sample. "NIS" is the set of CEOs not in our sample as their political preferences could not be ascertained.

Table 2: Summary Statistics: Event Study CEO Characteristics
Means (Standard Deviations)

	RR	RD	DD	DR	All	NIS
	Panel A. Cutoff 50%					
Frac Female -1	0.11	0.12	0.17	0.13	0.12	0.11
	(0.12)	(0.13)	(0.14)	(0.13)	(0.12)	(0.13)
CEO Female	0.04	0.06	0.10	0.02	0.04	0.05
	(0.19)	(0.24)	(0.30)	(0.15)	(0.21)	(0.21)
CEO Age	53.39	53.31	52.26	53.89	53.32	52.77
	(6.27)	(7.15)	(7.09)	(7.27)	(6.63)	(7.18)
CEO Chairman	0.33	0.28	0.31	0.27	0.31	0.20
	(0.47)	(0.45)	(0.46)	(0.45)	(0.46)	(0.40)
Insider	0.89	0.84	0.84	0.93	0.89	0.77
	(0.31)	(0.36)	(0.36)	(0.26)	(0.32)	(0.42)
N	890	185	154	179	1,408	2,613
	Panel B. Cutoff 67%					
Frac Female -1	0.10	0.11	0.15	0.14	0.11	0.12
	(0.11)	(0.13)	(0.14)	(0.14)	(0.12)	(0.13)
CEO Female	0.03	0.03	0.07	0.02	0.03	0.05
	(0.17)	(0.18)	(0.26)	(0.13)	(0.18)	(0.22)
CEO Age	53.30	52.81	50.99	54.07	53.10	52.93
	(6.25)	(6.94)	(8.09)	(7.26)	(6.60)	(7.07)
CEO Chairman	0.34	0.28	0.30	0.30	0.33	0.22
	(0.47)	(0.45)	(0.46)	(0.46)	(0.47)	(0.41)
Insider	0.90	0.76	0.81	0.98	0.89	0.79
	(0.30)	(0.43)	(0.39)	(0.13)	(0.31)	(0.41)
N	562	58	69	56	745	3,276

Continued on next page

Table 2 – *Continued from previous page*

	RR	RD	DD	DR	All	NIS
	Panel C. Cutoff 75%					
Frac Female -1	0.10	0.10	0.13	0.15	0.10	0.12
	(0.11)	(0.13)	(0.13)	(0.15)	(0.12)	(0.13)
CEO Female	0.02	0.06	0.04	0.03	0.03	0.05
	(0.15)	(0.24)	(0.19)	(0.16)	(0.17)	(0.22)
CEO Age	53.13	52.49	50.90	55.15	53.02	52.95
	(6.43)	(7.19)	(8.70)	(7.21)	(6.83)	(7.01)
CEO Chairman	0.34	0.34	0.29	0.30	0.33	0.23
	(0.48)	(0.48)	(0.46)	(0.46)	(0.47)	(0.42)
Insider	0.90	0.80	0.83	0.97	0.89	0.80
	(0.30)	(0.41)	(0.38)	(0.16)	(0.31)	(0.40)
N	409	35	52	40	536	3,485

Notes: All variables are defined in the text, with Frac Female -1 being the fraction of the executive suite, as measured by the Form 4 sample, who are women in the period before a change in CEO. Column RR reports statistics on a Republican replacement for an outgoing Republican CEO; Column RD reports statistics on a Democratic replacement for a Republican CEO; Column DD reports statistics on a Democratic replacement for a Republican CEO; Column DR reports statistics on a Republican replacement for a Democratic CEO; Column "All" reports statistics for all of the aforementioned cases together; Column "NIS" reports statistics for cases not in our sample (in case either the incoming or outgoing CEO cannot be identified as being either a Democrat or Republican). The row denoted N reports numbers of observations. The political preference of a CEO is defined using the sample mean measure. Panel A defines a CEO as being a member of a party if they contributed at least 50% of their contributions to that party. Panels B and C increases the cutoff to 67% and 75%, respectively.

Table 3: Fraction of Women Executives

Political Preference	Election Cycle		4 Yr. Moving Ave.		Prev 4 Yr.		Sample Ave.	
Sample	F4	ExC	F4	ExC	F4	ExC	F4	ExC
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Frac Republican	-0.009*	-0.014**	-0.009+	-0.014**	-0.012**	-0.016**	-0.019**	-0.023**
	(0.005)	(0.006)	(0.006)	(0.006)	(0.005)	(0.006)	(0.009)	(0.011)
CEO Female	-0.020	-0.055+	-0.020	-0.054+	-0.019	-0.052+	-0.040	-0.066*
	(0.034)	(0.035)	(0.034)	(0.035)	(0.033)	(0.035)	(0.039)	(0.039)
CEO Age	-0.001	-0.003	-0.001	-0.003	-0.001	-0.003	-0.001	-0.004+
	(0.002)	(0.003)	(0.002)	(0.003)	(0.002)	(0.003)	(0.002)	(0.003)
CEO Age^2	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)
log CEO Tenure	0.001	-0.001	0.001	-0.001	0.001	-0.001	0.000	-0.001
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Chair	0.003	-0.002	0.003	-0.002	0.003	-0.001	0.003	-0.001
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.003)	(0.004)
CEO Insider	0.013**	0.014*	0.013**	0.013*	0.011*	0.012*	0.011**	0.013**
	(0.006)	(0.007)	(0.006)	(0.007)	(0.006)	(0.007)	(0.006)	(0.006)
CEO Insider×Female	-0.043	-0.042	-0.044	-0.043	-0.044	-0.044	-0.021	-0.027
	(0.032)	(0.034)	(0.032)	(0.033)	(0.032)	(0.033)	(0.037)	(0.038)
log Assets	-0.004	-0.004	-0.004	-0.004	-0.004	-0.004	-0.004	-0.004
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
N	22,357	22,355	22,357	22,355	22,233	22,231	25,521	25,519
Adj. R^2	0.6548	0.6159	0.6548	0.6158	0.6557	0.6163	0.6480	0.6072
Mean Dep. Variable	0.1220	0.0916	0.1220	0.0916	0.1220	0.0916	0.1220	0.0916

Notes: $^{+}$ $p < 0.15$, * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors (in parenthesis) are clustered at the firm level. All specifications include firm and year fixed effects. "Election Cycle", "4 Yr. Moving Ave.", "L 4", and "Sample Ave." represent difference measures of CEO political preferences, as defined in the text.

Table 4: Number of Event Study Observations

	Cutoff 50%		Cutoff 67%		Cutoff 75%	
Period	All	NIS	All	NIS	All	NIS
2000-2004	400	600	238	762	179	821
2005-2009	383	815	198	1,000	143	1,055
2010-2014	370	637	186	821	128	877
2015-2018	255	561	123	693	86	730
Total	1,408	2,613	745	3,276	536	3,483

Notes: Number of changes of CEOs by time periods and whether the event is (column "All") or not (column "NIS") in our sample.

Table 5: Fraction of Women Executive, one Period Before Change

	Cutoff 50%		Cutoff 67%		Cutoff 75%	
Period	All	NIS	All	NIS	All	NIS
2000-2004	0.10	0.09	0.09	0.09	0.09	0.09
2005-2009	0.12	0.10	0.10	0.11	0.09	0.11
2010-2014	0.13	0.12	0.12	0.13	0.11	0.13
2015-2018	0.14	0.14	0.13	0.15	0.12	0.15

Notes: Fraction of women executives one period before a change of the CEO by time periods, whether the event is (column "All") or not (column "NIS") in our sample, and threshold for determining political preferences of the incoming and outgoing CEO.

Table 6: Event Study – The Outgoing CEO is Republican

Dep. Variable	Fraction of Women Executives					
	Cutoff 50%		Cutoff 67%		Cutoff 75%	
	(1)	(2)	(3)	(4)	(5)	(6)
$Switch_{R,D} \times (t = -3)$	0.010	0.010	0.006	0.017	-0.006	0.012
	(0.012)	(0.012)	(0.023)	(0.023)	(0.033)	(0.032)
$Switch_{R,D} \times (t = -2)$	0.010	0.005	0.017	0.006	-0.005	-0.002
	(0.012)	(0.010)	(0.026)	(0.018)	(0.023)	(0.023)
$Switch_{R,D} \times (t = -1)$	0.001	-0.000	0.001	0.010	0.004	0.010
	(0.008)	(0.008)	(0.016)	(0.016)	(0.022)	(0.022)
$Switch_{R,D} \times (t = 1)$	**0.014***	**0.014***	**0.022***	**0.022***	**0.030***	**0.032***
	(0.007)	(0.007)	(0.012)	(0.012)	(0.017)	(0.017)
$Switch_{R,D} \times (t = 2)$	**0.022****	**0.020****	**0.043****	**0.039****	**0.054****	**0.055****
	(0.010)	(0.010)	(0.019)	(0.019)	(0.026)	(0.027)
$Switch_{R,D} \times (t = 3)$	**0.024***	**0.022***	**0.042**$^{+}$	**0.035**	**0.067***	**0.066***
	(0.012)	(0.012)	(0.026)	(0.026)	(0.038)	(0.039)
$t = -3$	-0.004	-0.001	-0.006	-0.002	-0.007	-0.007
	(0.004)	(0.005)	(0.005)	(0.006)	(0.006)	(0.008)
$t = -2$	-0.002	0.002	-0.003	0.002	-0.004	-0.006
	(0.003)	(0.006)	(0.004)	(0.007)	(0.005)	(0.008)
$t = -1$	-0.001	0.005	-0.006*	0.001	-0.007*	-0.008
	(0.003)	(0.005)	(0.004)	(0.007)	(0.004)	(0.008)
$t = 1$	0.006**	0.006**	0.005^{+}	0.005	0.006^{+}	0.005
	(0.003)	(0.003)	(0.003)	(0.004)	(0.004)	(0.004)
$t = 2$	0.004	0.004	0.003	0.002	0.006	0.002
	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)
$t = 3$	0.004	0.003	0.005	0.003	0.005	0.001
	(0.004)	(0.004)	(0.005)	(0.006)	(0.006)	(0.007)
$Switch_{R,D}$	0.036**	0.034*	-0.001	-0.015	-0.055***	-0.053***
	(0.018)	(0.020)	(0.033)	(0.036)	(0.012)	(0.013)
Firm Controls	No	Yes	No	Yes	No	Yes
N	5,641	5,557	3,255	3,198	2,318	2,278
Adj. R^2	0.5594	0.5694	0.5695	0.5876	0.5849	0.6001
Mean Dep. Variable	0.122	0.122	0.115	0.115	0.110	0.110

Notes: $^{+}$ $p < 0.15$, * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors (in parenthesis) are clustered at the firm level. Firm Controls include the log of firm assets, indicators for whether the CEO is Female, chair of the board, an insider (also interacted with the CEO being female), and a quadratic in CEO age. All specifications include firm fixed effects. The dependent variable is demeaned by year, as explained in the text.

Table 7: Executive Log Compensation (non-CEO)

Political Preference		Election Cycle	4 Yr. Mov. Ave.	Prev 4 Yr.		Sample Ave.	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Exec Female	-0.089***	-0.051**	-0.039+	-0.087***	-0.051**	-0.088***	-0.032
	(0.011)	(0.024)	(0.024)	(0.011)	(0.024)	(0.011)	(0.024)
Frac Republican		0.003	0.001		0.028		0.025
		(0.024)	(0.025)		(0.023)		(0.038)
Frac Republican × Exec Female		-0.063**	-0.083***		-0.060*		-0.091***
		(0.031)	(0.032)		(0.032)		(0.032)
CEO Female	-0.003	-0.005	-0.007	0.008	0.007	-0.087	-0.084
	(0.148)	(0.148)	(0.148)	(0.148)	(0.148)	(0.153)	(0.154)
Exec Female × CEO Female	0.073+	0.066	0.064	0.071	0.065	0.072+	0.063
	(0.050)	(0.050)	(0.050)	(0.050)	(0.050)	(0.046)	(0.045)
N	87,125	87,125	87,125	86,520	86,520	98,573	98,573
Adj. R^2	0.6139	0.6139	0.6140	0.6150	0.6151	0.6082	0.6083

Notes: $^{+}$ $p < 0.15$, * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors (in parenthesis) are clustered at the firm level. All specifications include controls for whether the executive is an insider, title fixed effects (defined in the text), a quadratic in executive age, indicators for whether the CEO is female, chair of the board, an insider (also interacted with the CEO being female), a quadratic in CEO age, the log of CEO tenure, the log of total firm assets, return on assets, book-to-market value, cash, dividends, and total debt. "Election Cycle", "4 Yr. Moving Ave.", "L 4", and "Sample Ave." represent difference measures of CEO political preferences, as defined in the text.

Table 8: Compensation Structure - Ratio

Political Preference		Election Cycle	4 Yr. Mov. Ave.	Prev 4 Yr.		Sample Ave.	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Exec Female	0.012***	0.008	0.003	0.012***	0.003	0.010***	-0.005
	(0.003)	(0.006)	(0.006)	(0.003)	(0.006)	(0.003)	(0.006)
Frac Republican		0.000	0.000		-0.009		-0.012
		(0.008)	(0.008)		(0.008)		(0.011)
Frac Republican× Exec Female		0.007	0.015*		0.014*		0.024***
		(0.008)	(0.008)		(0.008)		(0.008)
CEO Female	-0.027	-0.027	-0.027	-0.028	-0.027	-0.004	-0.005
	(0.047)	(0.047)	(0.047)	(0.047)	(0.048)	(0.035)	(0.036)
Exec Female× CEO Female	-0.006	-0.006	-0.005	-0.006	-0.005	0.001	0.003
	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.012)	(0.012)
N	87,128	87,128	87,128	86,523	86,523	98,576	98,576
Adj. R^2	0.4775	0.4775	0.4775	0.4774	0.4775	0.4723	0.4724

Notes: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors (in parenthesis) are clustered at the firm level. All specifications include controls for whether the executive is an insider, title fixed effects (defined in the text), a quadratic in executive age, indicators for whether the CEO is female, chair of the board, an insider (also interacted with the CEO being female), a quadratic in CEO age, the log of CEO tenure, the log of total firm assets, return on assets, book-to-market value, cash, dividends, and total debt. "Election Cycle", "4 Yr. Moving Ave.", "Prev 4 Yr.", and "Sample Ave." represent difference measures of CEO political preferences, as defined in the text.

Table 9: Compensation Structure - Delta

Political Preference		Election Cycle	4 Yr. Mov. Ave.	Prev 4 Yr.		Sample Ave.	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Exec Female	-0.350***	-0.178^{+}	-0.124	-0.351***	-0.140	-0.299***	-0.015
	(0.057)	(0.116)	(0.112)	(0.057)	(0.112)	(0.053)	(0.109)
Frac Republican		-0.020	-0.022		-0.059		0.037
		(0.105)	(0.107)		(0.100)		(0.135)
Frac Republican$\times$ Exec Female		-0.282*	-0.371**		-0.349**		-0.454***
		(0.161)	(0.158)		(0.158)		(0.156)
CEO Female	-0.252	-0.268	-0.270	-0.273	-0.260	-0.329	-0.320
	(0.364)	(0.373)	(0.376)	(0.363)	(0.375)	(0.315)	(0.316)
Exec Female$\times$ CEO Female	0.616**	0.579**	0.572**	0.618**	0.576**	0.545**	0.491**
	(0.264)	(0.262)	(0.262)	(0.263)	(0.261)	(0.233)	(0.231)
N	93,085	93,085	93,085	92,436	92,436	105,418	105,418
Adj. R^2	0.2357	0.2357	0.2358	0.2359	0.2360	0.2321	0.2322

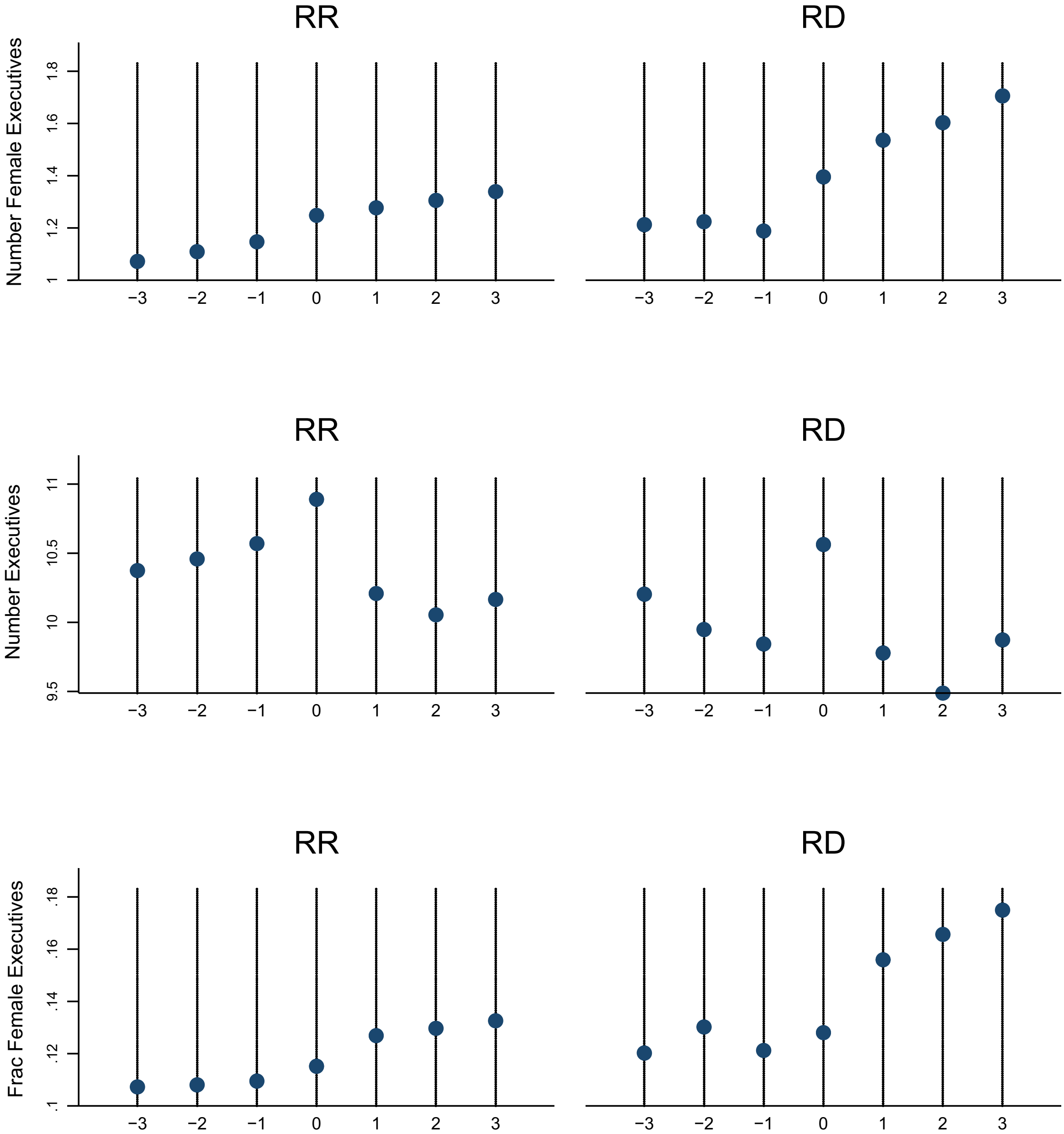
Notes: $^{+}$ $p < 0.15$, * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors (in parenthesis) are clustered at the firm level. All specifications include controls for whether the executive is an insider, title fixed effects (defined in the text), a quadratic in executive age, indicators for whether the CEO is female, chair of the board, an insider (also interacted with the CEO being female), a quadratic in CEO age, the log of CEO tenure, the log of total firm assets, return on assets, book-to-market value, cash, dividends, and total debt. “Election Cycle”, “4 Yr. Moving Ave.”, “Prev 4 Yr.”, and “Sample Ave.” represent difference measures of CEO political preferences, as defined in the text.

Table 10: Compensation Structure - Vega

Political Preference		Election Cycle	4 Yr. Mov. Ave.	Prev 4 Yr.		Sample Ave.	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Exec Female	-0.322***	-0.214*	-0.180	-0.325***	-0.158	-0.294***	-0.165
	(0.063)	(0.126)	(0.126)	(0.064)	(0.126)	(0.059)	(0.126)
Frac Republican		-0.095	-0.058		-0.078		0.047
		(0.152)	(0.159)		(0.148)		(0.227)
Frac Republican$\times$ Exec Female		-0.177	-0.233		-0.275^{+}		-0.206
		(0.173)	(0.172)		(0.174)		(0.174)
CEO Female	-1.191*	-1.217*	-1.208*	-1.183*	-1.171*	-1.383**	-1.377**
	(0.680)	(0.680)	(0.676)	(0.682)	(0.683)	(0.638)	(0.637)
Exec Female$\times$ CEO Female	0.774***	0.750***	0.746***	0.776***	0.743***	0.594**	0.571**
	(0.267)	(0.268)	(0.268)	(0.267)	(0.268)	(0.254)	(0.253)
N	93,085	93,085	93,085	92,436	92,436	105,418	105,418
Adj. R^2	0.3884	0.3884	0.3884	0.3890	0.3890	0.3840	0.3840

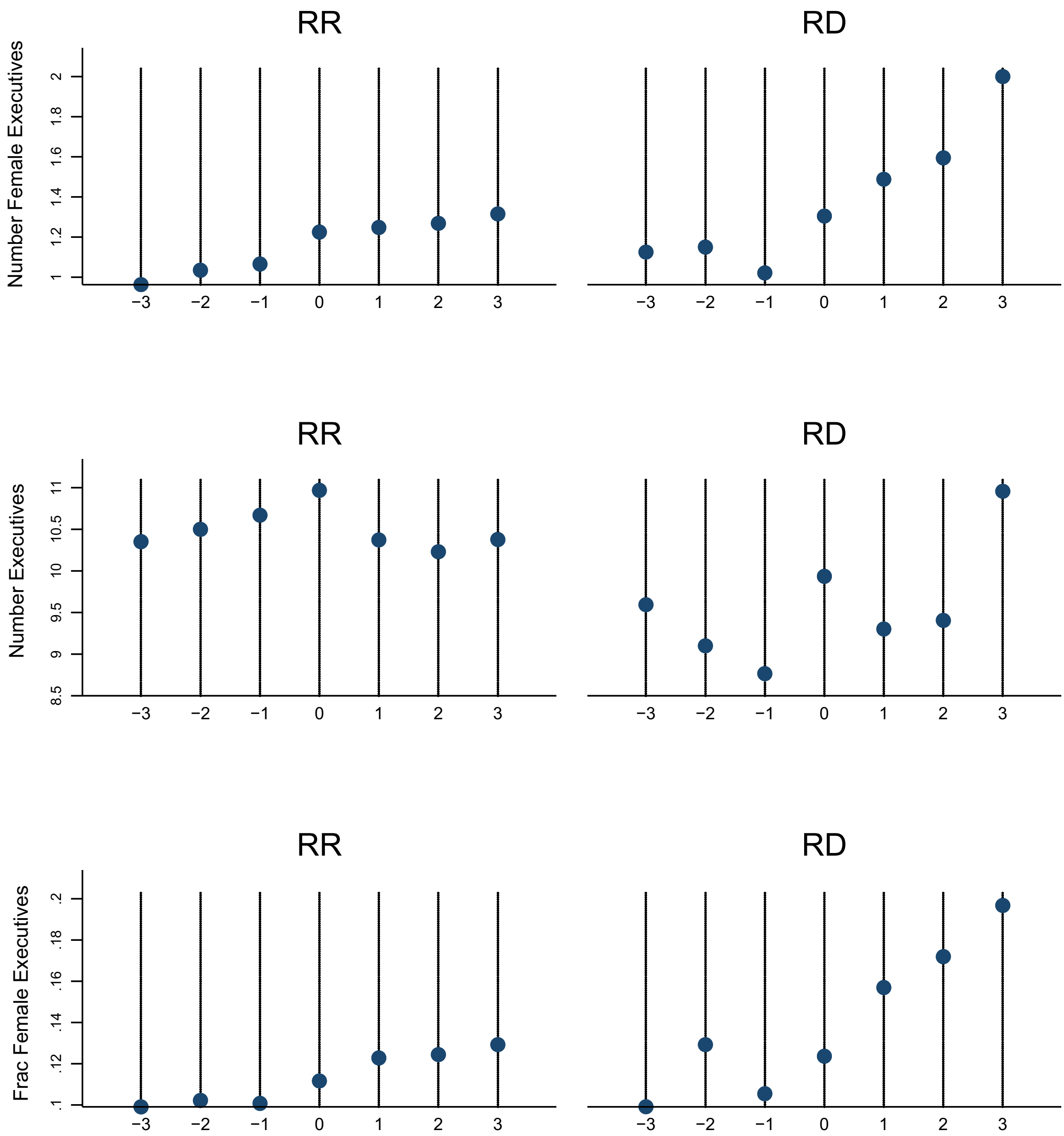
Notes: $^{+}$ $p < 0.15$, * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors (in parenthesis) are clustered at the firm level. All specifications include controls for whether the executive is an insider, title fixed effects (defined in the text), a quadratic in executive age, indicators for whether the CEO is female, chair of the board, an insider (also interacted with the CEO being female), a quadratic in CEO age, the log of CEO tenure, the log of total firm assets, return on assets, book-to-market value, cash, dividends, and total debt. "Election Cycle", "4 Yr. Moving Ave.", "Prev 4 Yr.", and "Sample Ave." represent difference measures of CEO political preferences, as defined in the text.

Figure A1: Event-Study: Interpreting the Results, 50% Threshold.
Replacing a Democratic CEO



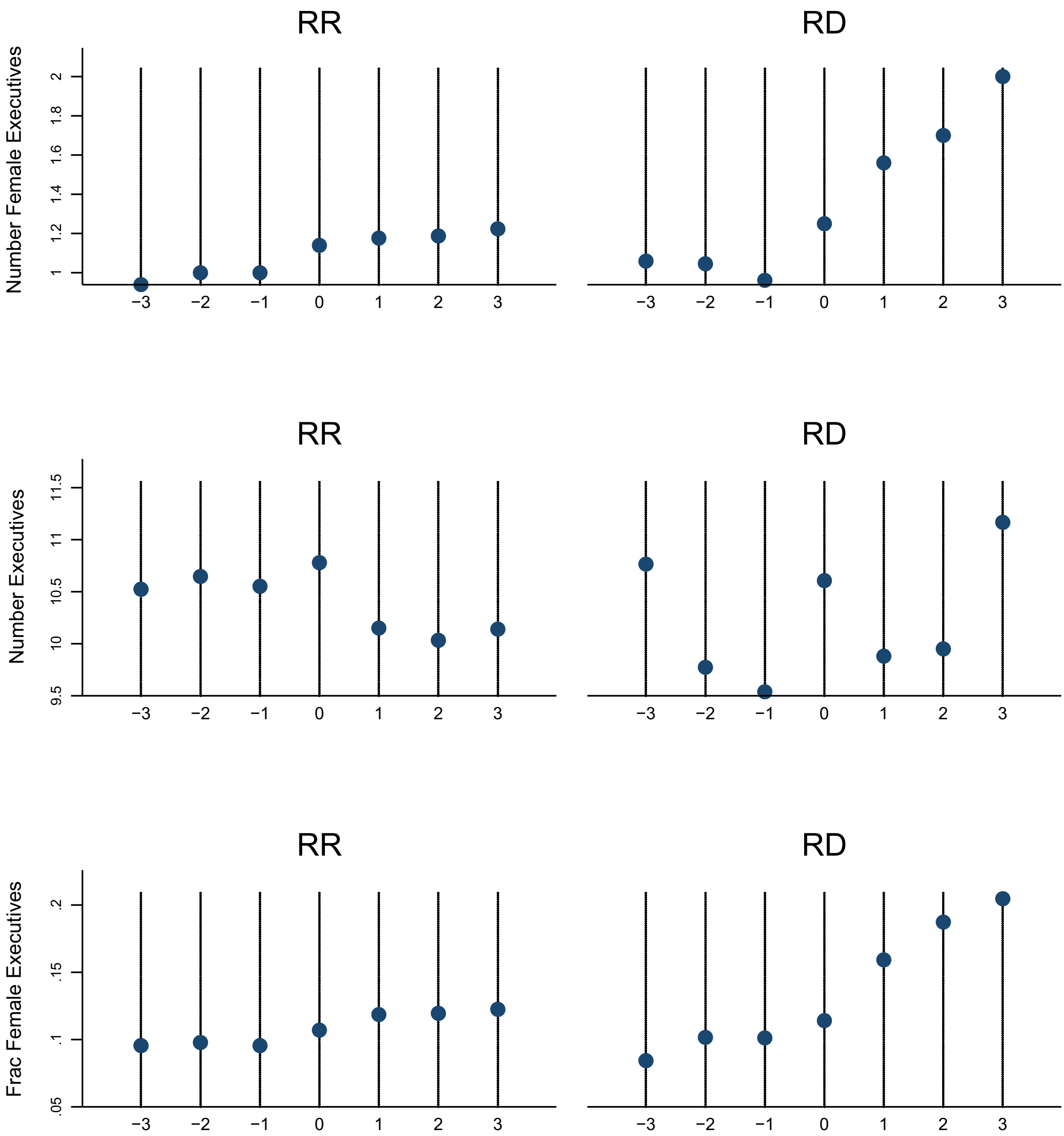
Notes: The top panel shows the number of female executives relative to the timing of a change in CEO, by type of change in CEO. The middle panel shows the total number of executives relative to the timing of a change in CEO, by type of change in CEO. The bottom panel shows the fraction of executives who are female relative to the timing of a change in CEO, by type of change in CEO. The change in CEO happens at time 0. "DD" represents an outgoing Democratic CEO replaced by anther Democrat. "DR" represents an outgoing from a Democratic CEO replaced by a Republican. The data are from the Form 4 sample. All variable definitions are as in the text.

Figure A2: Event-Study: Interpreting the Results, 67% Threshold.
Replacing a Democratic CEO



Notes: The top panel shows the number of female executives relative to the timing of a change in CEO, by type of change in CEO. The middle panel shows the total number of executives relative to the timing of a change in CEO, by type of change in CEO. The bottom panel shows the fraction of executives who are female relative to the timing of a change in CEO, by type of change in CEO. The change in CEO happens at time 0. “DD” represents an outgoing Democratic CEO replaced by anther Democrat. “DR” represents an outgoing from a Democratic CEO replaced by a Republican. The data are from the Form 4 sample. All variable definitions are as in the text.

Figure A3: Event-Study: Interpreting the Results, 75% Threshold.
Replacing a Democratic CEO



Notes: The top panel shows the number of female executives relative to the timing of a change in CEO, by type of change in CEO. The middle panel shows the total number of executives relative to the timing of a change in CEO, by type of change in CEO. The bottom panel shows the fraction of executives who are female relative to the timing of a change in CEO, by type of change in CEO. The change in CEO happens at time 0. "DD" represents an outgoing Democratic CEO replaced by anther Democrat. "DR" represents an outgoing from a Democratic CEO replaced by a Republican. The data are from the Form 4 sample. All variable definitions are as in the text.

Table A1: Event Study – The Outgoing CEO is Democrat

Dep. Variable	Fraction of Women Executives					
	Cutoff 50%		Cutoff 67%		Cutoff 75%	
	(1)	(2)	(3)	(4)	(5)	(6)
$Switch_{R,D} \times (t = -3)$	-0.005	-0.001	0.001	0.012	0.009	0.013
	(0.016)	(0.016)	(0.027)	(0.024)	(0.028)	(0.030)
$Switch_{R,D} \times (t = -2)$	-0.003	0.000	-0.009	0.002	0.018	0.022
	(0.014)	(0.014)	(0.023)	(0.020)	(0.026)	(0.026)
$Switch_{R,D} \times (t = -1)$	-0.016	-0.009	-0.014	-0.005	0.002	0.005
	(0.011)	(0.011)	(0.019)	(0.018)	(0.024)	(0.025)
$Switch_{R,D} \times (t = 1)$	**-0.001**	**-0.003**	**0.003**	**0.003**	**-0.001**	**0.001**
	(0.010)	(0.011)	(0.014)	(0.014)	(0.016)	(0.016)
$Switch_{R,D} \times (t = 2)$	**0.004**	**0.003**	**0.002**	**0.001**	**-0.003**	**-0.001**
	(0.014)	(0.014)	(0.021)	(0.021)	(0.026)	(0.026)
$Switch_{R,D} \times (t = 3)$	**-0.012**	**-0.014**	**-0.027**	**-0.036**$^{+}$	**-0.022**	**-0.025**
	(0.016)	(0.016)	(0.023)	(0.023)	(0.028)	(0.028)
$t = -3$	-0.002	0.005	-0.005	-0.024	-0.024^{+}	-0.035
	(0.013)	(0.014)	(0.018)	(0.020)	(0.016)	(0.028)
$t = -2$	0.001	0.005	-0.003	-0.026^{+}	-0.017	-0.028
	(0.011)	(0.012)	(0.015)	(0.017)	(0.013)	(0.024)
$t = -1$	0.012	0.013	0.007	-0.016	-0.003	-0.011
	(0.008)	(0.011)	(0.011)	(0.017)	(0.011)	(0.022)
$t = 1$	0.006	0.006	0.002	-0.001	0.015	0.012
	(0.008)	(0.008)	(0.009)	(0.010)	(0.011)	(0.011)
$t = 2$	0.002	-0.002	0.001	-0.007	0.016	0.012
	(0.011)	(0.011)	(0.015)	(0.016)	(0.015)	(0.016)
$t = 3$	0.011	0.006	0.014	0.005	0.023	0.019
	(0.012)	(0.011)	(0.016)	(0.017)	(0.018)	(0.018)
$Switch_{R,D}$	-0.002	-0.015	0.055^{+}	0.046**	0.050	0.043*
	(0.023)	(0.024)	(0.036)	(0.020)	(0.038)	(0.024)
Firm Controls	No	Yes	No	Yes	398	392
N	1,690	1,679	584	578	No	Yes
Adj. R^2	0.6403	0.6588	0.6912	0.7164	0.7179	0.7306
Mean Dep. Variable	0.152	0.152	0.150	0.151	0.151	0.153

Notes: $^{+}$ $p < 0.15$, * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors (in parenthesis) are clustered at the firm level. Firm Controls include the log of firm assets, indicators for whether the CEO is Female, chair of the board, an insider (also interacted with the CEO being female), and a quadratic in CEO age. All specifications include firm fixed effects. The dependent variable is demeaned by year, as explained in the text.