Falling Down Hard: Gender Differences in Top Management Turnover

Charles J. Hadlock
University of Pittsburgh
cjhadlock@katz.pitt.edu

Paul Obermann
Idaho State University
paulobermann@isu.edu

Joshua R. Pierce
University of Alabama
joshua.pierce@ua.edu

First Draft: December 11, 2024
Current Draft: June 22, 2025

Falling Down Hard: Gender Differences in Top Management Turnover

ABSTRACT

We examine whether the underrepresentation of women in top executive ranks partially reflects a higher relative likelihood of departing from these ranks after attaining them. Our evidence strongly supports this hypothesis, with female executive turnover rates 15% to 20% higher than male rates, conditioning on a large number of controls. This difference entirely reflects the departure behavior of non-CEOs, as no gender difference is apparent for CEOs. Evidence based on severance payments and post-turnover labor market outcomes appears inconsistent with a gender difference in voluntary departures driving our findings.

An elevated rate of apparently less-than-voluntary turnover for female executives appears highly consistent with prior work indicating that women are evaluated more harshly than men in many employment settings. Adding to this case, gender differences in turnover rates are smaller for firms with characteristics that would suggest muted gender biases in these decisions. Importantly, elevated female executive turnover rates are particularly large when firms are performing poorly. This finding supports the hypothesis that firms are inefficiently placing more of the blame for subpar results on female members of the executive team. We consider alternative efficiency-based scenarios that might lead to gender differences in turnover behavior that we document, but uncover no supporting evidence.

After departing from their senior executive role, most executives resurface at new employers. However, they typically land in positions that are a significant step down, with the median executive assuming a role with an imputed new salary sharply below their prior salary. On average, men and women have fared similarly in this bleak retread market, but time trends suggest slightly better post-turnover outcomes for women compared to men in more recent years. Integrating the evidence, the annual likelihood of a turnover event in which an executive departs and does not obtain a new position at a level close to the departed role is significantly elevated for women compared to men, with no evident time trend. The likelihood of a departure followed by obtaining an apparently better position appears slightly higher for women, a favorable difference that appears to be increasing over time. Negative outcomes are far more likely than positive ones, and thus the net level of turnover risk appears significantly elevated for women throughout our sample period, with time trends indicating a partial leveling of the playing field.

Keywords: Management turnover; gender bias; labor markets
JEL Codes: G31; G32; L21; J20; J44

1. Introduction

Top executive positions are coveted roles, providing occupants with high levels of compensation, prestige, and power. As has been widely discussed, women remain significantly underrepresented in these positions, despite making some progress over time. Given the visibility of elite corporate jobs, low rates of female presence may significantly affect the ambitions and labor supply decisions of women lower in the corporate hierarchy, potentially creating an undesirable negative feedback loop.

The underrepresentation of women in top corporate roles must reflect either a low rate of being hired into an elite position and/or an inflated exit rate after obtaining a position. In this paper, we comprehensively analyze the latter possibility by examining gender differences in turnover behavior for highly ranked executives. While a few papers have considered this issue, prior studies use relatively coarse data and models. As we discuss, we believe this leads to systematically biased estimates that vary widely across prior studies. To overcome these shortcomings, we create a rich database that includes information on the timing of managerial departures, and also the subsequent career outcomes of departed executives. This allows us to investigate turnover risk for women relative to men in a net sense that includes both the likelihood of turnover and the consequences thereafter.

Our sample includes Execucomp-listed corporate executives from 2001 to 2021, which we merge with Boardex and LinkedIn to (a) confirm whether a departure occurred, (b) identify the date of any exit, (c) gather information on a rich set of covariates that may be correlated with gender, and (d) characterize post-exit labor market outcomes for departed executives. Our match rate between datasets is unusually high, as we hand-check all cases in which executive identities do not algorithmically match across data sources with high confidence. This is particularly

important given our focus on gender differences, as women's last names sometimes differ across datasets because of marital-status-related name changes.

We find that turnover rates for women executives are significantly higher than for men, even after conditioning on a large number of observables. The estimated relative increase in annual turnover risk for women is in the 15 to 20 percent range, a reasonably large number when compounded over several years. These exit rate differences entirely reflect non-CEO turnover behavior, as the estimated effect for CEOs is usually of the opposite sign. The situation does not appear to change over time, as the data reveal no evidence of a secular decline in inflated female turnover rates during our two-decade sample period. Notably, the difference in implied female turnover rates relative to men is significantly greater when firms are performing poorly.

We find that the typical executive who departs and resurfaces obtains a new position with an estimated compensation level that is 20% lower than their prior position, regardless of gender, suggesting that a large majority of job exits for executives below retirement age are involuntary, or at least negative career outcomes. However, it is possible that our documented gender variation in exits reflects differences within the relatively small number of entirely voluntary departures. The data cast strong doubt on this possibility. First, our results are stronger when we exclude executives over the age of 60, a group for which voluntary retirements may be common. Second, for executives under the age of 60, the rate of receiving severance pay associated with turnover appears to be at least as large for women as it is for men. Finally, we expect more job departures to be forced/involuntary when firms are performing poorly, and this is precisely when gender differences in turnover appear to be particularly large.

The gender differences we document are highly consistent with prior work in other settings, indicating that women are generally evaluated more harshly than men, and in particular, tend to inefficiently receive more blame when group output is disappointing. Buttressing this

case, we find that gender differences in departure rates are significantly smaller in industries with a relatively high representation of women in the top executive ranks, where firms may more fully appreciate the contributions of female executives. We also find that the gender differential in turnover rates is smaller when a firm's CEO appears to be more politically active, suggesting these firms may be more sensitive to the optics of any differential treatment of women that could be perceived as biased. However, we do not detect any significant differences based on whether the firm has a female CEO or a gender-diverse board.

An alternative efficient scenario that could generate elevated rates of female dismissals is one in which executives from both genders are selected in an optimal and bias-free way based on their expected contribution to firm value, but with more uncertainty regarding the abilities of female executives. In this case, the expected talents of both genders for a given position would be equivalent conditional on selection, and the inflated rate of female dismissals would reflect a higher propensity for assessed ability to fall below the retention threshold as firms Bayesian update their priors over time. Under this equal-means, different-variances scenario, we would expect female executives to also display an enhanced propensity to reveal themselves over time to be above the ability bar for an internal promotion. However, consistent with Xu (2024), we detect behavior opposite of this prediction, with female executives being significantly less likely to be promoted relative to males.

The elevated sensitivity of turnover to firm performance that we document for women could reflect efficient behavior if firm performance is a relatively more informative signal of their abilities compared to those of men. We present several pieces of evidence that cast doubt on this possibility. First, if women are generally more responsible for total firm performance, we would also expect them to be retained at a higher rate when firm performance is extremely high. The data do not support this prediction, as implied retention likelihoods at the absolute top of the

firm performance spectrum indicate that women do not quite pull even with men. Second, the external labor market does not appear to rely more heavily on firm performance signals for women compared to men when they raid for talent. Third, women's internal promotion rates do not increase relative to their male counterparts when firms are performing well. Finally, in a small auxiliary sample of division managers in which we have access to both divisional and firm-level performance measures, we detect no gender difference in the correlation between firm performance and individual (i.e., divisional) performance.

Given this constellation of evidence, we believe our turnover evidence is most consistent with an inefficient bias in the assessment of female executives. However, as has been widely discussed in the literature on labor market discrimination, it is difficult to unequivocally establish whether differences in the treatment of demographic groups arise from inefficient/biased decisions versus observational equivalent efficiency-based scenarios. Thus, the usual caveats apply.

Inflated female turnover rates imply that the turnover mechanism partially undoes any efforts to promote women into the top executive ranks at any single firm. However, it is possible that women fare better than men in the post-separation (retread) market. Hence, the net effect of turnover risk on the careers of highly ranked female executives relative to males is unclear. To investigate, we study gender differences in post-separation labor market outcomes using Boardex data, supplemented with information from LinkedIn, to identify new positions. A large majority of departed executives below retirement age do resurface at new employers. However, the positions they obtain typically represent a significant step down, with an imputed new salary based on job title and employer characteristics sharply lower than the prior salary for the median executive.

To see if there are gender differences in this relatively bleak post-separation labor market, we create a variety of measures of relative labor market success including whether a new job is obtained, whether a significantly better job is obtained, how quickly a new job is obtained, and the estimated salary change in the new position relative to the old. When we predict relatively more favorable outcomes, the coefficient on the female gender indicator varies in sign across models and is generally small in magnitude and statistically insignificant. Certainly, the data offer little support for the idea that women's career outcomes are significantly better on average in the retread market when blended over the sample period, behavior that might offset the consequences of their elevated turnover rates. However, we do find that post-turnover outcomes for women relative to men have improved significantly over time, perhaps because of diminishing gender biases by prospective new employers or increased efforts to recruit women externally.

By combining turnover and subsequent employment outcomes in a single model, we find that the likelihood in any given year of a top executive departing from their employer and either never resurfacing or assuming a position that represents a step down in the labor market is significantly higher for women relative to their male counterparts. There is no evident time trend in this behavior. The likelihood that a top executive departs during any given year and resurfaces in a role that is likely to represent a better position appears slightly higher for women, largely because of their much higher turnover rate. This small favorable difference has increased over time because of a positive trend for women in the post-turnover labor market. However, since bad outcomes are much more common than good ones, the turnover process appears, in a net sense, to be significantly tougher on women than on men top executives, with time trends that have only partially evened the playing field.

While the degree to which male and female executives fall in the labor market subsequent to turnover is similar, we do detect some interesting differences in the characteristics of the positions they assume. In particular, women are significantly more likely than men to take a position of a lower rank, but they are also more likely to land at relatively larger firms. These differences can be viewed as broadly consistent with prior evidence on gender differences in risk-taking and confidence. We also find that women, even conditional on many controls, are significantly less likely to take new positions at specialized finance entities such as private equity firms and hedge funds. This finding is consistent with much prior work on women's underrepresentation in finance roles arising from demand-side and/or supply-side considerations.

The rest of the paper is organized as follows. In Section 2, we situate our investigation within the context of the related prior literature, while Section 3 discusses the construction and characteristics of our sample. In Section 4, we present our main findings on gender differences in turnover rates and evidence related to the economic mechanism that may underlie these differences. Section 5 reports our findings on the post-exit labor market for executives and the net effect of the turnover process on women's careers relative to their male counterparts. In Section 6, we offer concluding thoughts.

2. Literature and Motivation

2.1 Women in the top executive ranks

Many gender differences in labor market outcomes have been identified for non-executives, with various demand-side and supply-side explanations suggested as possible sources of observed differences. Of particular interest on the demand side is whether employers have a distaste for hiring women into certain roles (e.g., Becker (1957)), or whether gender proxies for

unobserved but value-relevant employee traits (i.e., statistical discrimination as in Phelps (1972), Aigner and Cain (1977)). Neumark (2018) offers a comprehensive review.[1]

Given the findings in this literature, a number of researchers have examined gender differences in the top management labor market. Several features of this market make it particularly interesting. First, since senior corporate leaders are highly visible, observed differences may have a large effect on the career aspirations of more junior workers who aspire to move up the corporate ladder. Second, since the negative consequences to firms arising from inefficient decisions regarding their key leaders should be particularly high, discriminatory behavior may be more limited. Finally, firms may display a heightened sensitivity to gender issues when assembling their top management team, given high levels of public scrutiny.

A widely discussed fact is the substantial underrepresentation of women in the senior executive ranks (under 14% at the end of our sample period). Since obtaining a top corporate position requires many successive rounds of moving up the ranks, gender differences at each round will have a compounding effect on the composition of the eventual tournament winners. Prior work establishes that career interruptions often slow the progress of women in moving up the corporate hierarchy (e.g., Bertrand, Goldin, and Katz (2010), Keloharju, Knüpfer, and Tåg (2022)), likely contributing to larger gender differentials in more senior positions. He and Whited (2024) identify the lack of female candidates near the top of the corporate hierarchy as the principal reason for the dearth of female CEOs in large U.S. corporations.

With respect to pay, researchers have searched for evidence of discriminatory compensation discounts for female executives. This evidence here is quite mixed, with estimates of female discounts often becoming small or negligible when adequate controls are included in

[1] More subtle sources of discrimination have been suggested, including implicit bias as in Bertrand, Chugh, and Mullainathan (2005) and incorrect gender-adjustments in job candidate evaluations as in Exley and Nielsen (2024).

the estimation (e.g., Bertrand and Hallock (2001)). Others have presented evidence suggesting that compensation structures, rather than levels, may differ for women relative to male counterparts (e.g., Selody (2010), Albanesi, Olivetti, and Prados (2015), Groysberg, Healy, and Lin (2022)).

2.2 The role of gender in the selection and retention of top executives

The representation of women in the top corporate ranks will depend on the role of gender in both the selection and retention of top managers (i.e., entries and exits). Using information from an executive search firm, Fernandez-Mateo and Fernandez (2016) present evidence indicating that firms cast a wider net on the female pool when trying to identify candidates, conditional on searching for an outsider.[2] On the internal selection side, Gayle, Golan, and Miller (2012) report that female executives are significantly more likely to be internally promoted than their male counterparts. However, using larger samples and more refined data, Guest (2016) and Xu (2024) find that female executives are significantly less likely to be promoted internally than their male counterparts, consistent with findings that have been reported for non-executives (e.g., Blau and Devaro (2007), Benson, Li, and Shue (2024)).[3] Since senior executive positions are usually filled internally, it seems likely that any external efforts to focus on female candidates will be more than offset by these internal promotion dynamics.

On the exit side, our area of focus, several studies examine the relation between gender and top management turnover. A few of these studies suggest that turnover rates for female

[2] Groysberg, Healy, and Lin (2022) present additional evidence consistent with this behavior. In contrast, Guo, Gupta, Nanda, and Mortal (2022) report that female executives who are displaced after an acquisition tend to be in less demand by prospective new employers compared to their male counterparts.

[3] Smith, Smith, and Verner (2013) report similar evidence for executives in Denmark, while Huang, Mayer, and Miller (2024) report evidence suggesting a gender bias in internal promotion decisions for managers at financial institutions.

senior executives are no higher than what is observed for their male counterparts (e.g., Gayle, Golan, Miller (2012), Huang and Kisgen (2013)). However, most of the evidence suggests an elevated rate of turnover for female executives, with studies varying widely in what their estimates imply regarding the relative elevation in turnover rates for women, ranging from 30% to 50% in Becker-Blease, Elkinawy, and Stater (2010) to around 5% in Xu (2024).[4] Our interpretation of this prior literature is that it broadly suggests an elevated turnover rate for women relative to men. However, the case is far from overwhelming, and the estimated magnitude of the effect is quite unclear.

A common feature in this prior work is the use of coarse data on turnover outcomes. For example, many authors assume that ceasing to be associated with a firm in Execucomp indicates turnover (e.g., Landsman (2019) and Keller, Molina, and Olney (2023)). However, since women tend to be on the lower end of the pay scale within the top ranks, they frequently disappear from the database because a minor change in their relative pay drops their compensation below the reporting threshold, even though they experience no substantive job change. Thus, unless the included control variables effectively adjust for this phenomenon, the estimated coefficient on gender in predicting turnover will be upwardly biased. In addition, executives often depart in the year before the individual's last listing in Execucomp, but they are listed in Execucomp because their final partial-year compensation requires disclosure. If this timing is not accounted for, as in past work, estimates of the sensitivity of turnover to performance will be biased, as performance will, in many cases, include a period that post-dates the turnover event being predicted.

[4] These figures are calculated by dividing the estimated elevation in female departure rates by overall departure rates. In a sample that reaches further down the hierarchy, Xu (2024) focuses on promotions but briefly discusses estimates for turnover. Additional gender-executive turnover evidence is reported by Hill, Upadhyay, and Beekun (2015), Landsman (2019), Gupta, Mortal, Sun, and Turban (2020), Lewellen (2022), and Keller, Molina, and Olney (2023).

An additional limitation of this prior work is that it largely fails to account for the fact that turnover events, as a group, will reflect a mix of both negative and positive outcomes for the executive. Many authors implicitly assume that (a) turnover, on average, represents a demand-side-induced negative career event for an executive, and (b) the negative implications of turnover are equal across genders. The first assumption seems reasonable, at least for non-retirement age executives, but has not been thoroughly examined. The veracity of the second assumption is an open question with, in our view, a diffuse prior. We are able to provide empirical evidence on these assumptions.

2.3 Gender differences in performance evaluation

One mechanism that could generate gender differences in executive labor market outcomes is through differences in how current and prospective employers evaluate executives. Of relevance to this possibility, a long literature in psychology and sociology documents a pro-male evaluation bias using survey and lab data (see Nieva and Gutek (1980)). With respect to performance signals, lab evidence suggests that women tend to be credited less for good group performance (e.g., Heilman and Haynes (2005)), and blamed more for bad group performance (e.g., Haynes and Lawrence (2012)). In the context of actual labor markets, Sarsons, Gërxhani, Reuben, and Schram (2020) present evidence consistent with the former behavior with respect to tenure decisions in academia and co-authored publications, while Adams and Kim (2020) find evidence consistent with the latter in the context of mutual fund manager careers subsequent to fund failures.

Given our specific focus on turnover, two recent studies are particularly relevant. First, in the context of mutual fund managers, Egan, Matvos, and Seru (2022) provide evidence that female managers are more likely than their male counterparts to be dismissed after a negative

individual signal in the form of a misconduct event. This gender punishment gap is consistent with an evaluation updating process with a negative bias against women. In the case of top executives, Landsman (2019) finds that women are dismissed more frequently than men when industry performance is poor, suggesting that firms have a propensity to overly blame women for poor performance that is driven by factors beyond their control (i.e., industry downturns).[5]

3. Sample Construction

Our sampling, data, and modeling choices are guided by our goal to more firmly establish whether, and to what degree, female top executives exit from their roles at a different rate than their male counterparts, and to provide evidence on the mechanisms underlying any differences. Additionally, we are interested in gender differences in the role firm performance plays in turnover, an issue that has received scant attention. Since a departure is typically not the end of an executive career, we also seek to evaluate the degree to which the net career consequences of turnover risk vary across gender, accounting for behavior in the post-separation labor market.

3.1 Sample selection

We select our sample from the Execucomp universe of executives at S&P 1500 firms (i.e., the five highest-paid executives, plus sometimes a few others). Since we rely heavily on Boardex data, our sample starts in 2001, when comprehensive Boardex coverage became available, and ends in 2021. We match companies across the databases using first the WRDS matching file,

[5] Gupta, Mortal, Silveri, Sun, Turban (2020) consider differences in turnover-performance sensitivities by gender for CEOs only. Below, we briefly explore the Landsman (2019) and Gupta et. al. (2020) findings using our richer data, with quite mixed results. The other studies cited above on gender differences in top executive turnover focus on differences in turnover rates and do not extend the analysis to differences in turnover-performance sensitivities.

followed by hand matching, in which we investigate a firm's history of name changes and confirm a match based on the presence of an overlapping management team across databases.

We first match individuals across databases algorithmically based on name, employer, and age, moving from exact full name and age matches to partial name and age matches (i.e., first initial and last name) to slightly looser matching (details in appendix). For executives who cannot be matched algorithmically with high confidence, we manually search for the executive in the Boardex files. In doing so, we find that for many women, the last name in one database disagrees with the other because of name changes that appear associated with changes in marital status. We also identify many cases in which a last name is slightly misspelled in one of the databases and cases where the treatment of hyphenated last names or multiple substring last names differs across files (e.g., van der Hoff). These efforts resulted in successfully locating Boardex identifiers for 95.98% of all sample Execucomp executives. The non-matched cases are composed almost entirely of individuals with very short stints in the Execucomp file (and thus presumably were not in a role long enough to be picked up by Boardex) or individuals in the first few sample years when Boardex coverage was slightly less comprehensive.

3.2 Identifying turnover

For each executive with disclosed pay and a non-missing title in Execucomp as of the end of a fiscal year, we use Boardex to identify whether and when a departure from an executive role took place during the year, conditional on the firm continuing to be listed in Execucomp (and thus surviving until year-end).[6] Our main turnover indicator variable is assigned a value of 1 in

[6] If an executive departs but starts a new position at a related firm within a year of the departure (e.g., a spun-off division, details in appendix), we treat the departure as a non-turnover event, as these changes are likely related to internal restructurings. This treatment has no substantive effect on our main findings.

the year of departure.[7] In many cases, Boardex indicates that an executive departed before the end of the year of their last Execucomp listing, in which case we code the turnover variable as a 1 in this prior year (i.e., one year earlier than otherwise). 40.28% of departures fall into this category, indicating substantial timing errors in using solely exiting from Execucomp to code turnover. In most of these cases, the executive's salary in the last year in office is less than the preceding year, as would be expected if the last salary represents a partial year payment.

In other cases, we find that an individual experienced no major change in role and remained with the firm (often for a long time), but they were apparently leapfrogged in the pay rankings, resulting in their departure from the firm's subsequent annual Execucomp listings. In these cases, the turnover variable is assigned a value of 0 (i.e., no turnover). For the small number of cases in which Boardex information for an individual is unavailable, we assume the individual left in the year after (the year of) the last Execucomp listing if the pay in the last year is higher than (lower than) the preceding year.

The resulting sample includes 179,082 executive-year observations, with an overall turnover rate of 11.09%. This is substantially lower than the rate of 13.76% that would be inferred from assuming turnover occurs whenever an individual does not appear in two consecutive Execucomp listings for a firm, indicating significant overstatements of baseline turnover rates in many prior studies. Sample summary statistics, reported in Table 1, appear comparable to those reported in other studies for large Execucomp-based samples.

3.3 Post-turnover job outcomes

[7] Boardex very occasionally indicates a change from an executive role to a non-executive role such as "employee," "consultant," or "advisor." Turnover is coded as a 1 for the year this change takes place, as these appear to be effective departures in which either (a) a severance/non-compete arrangement includes holding for a short time a non-executive generic title, or (b) a long-time executive is given an honorary or ceremonial role after retiring.

To characterize post-turnover labor market outcomes, we select a random set of 100 executives for whom we could locate LinkedIn profiles and compare LinkedIn information to the Boardex career profile for the individual. Inspection reveals that LinkedIn profiles are, on average, less comprehensive than Boardex, with many new employment positions soon after turnover listed by Boardex missing in LinkedIn, and very few substantive new positions listed in LinkedIn missing in Boardex. Given the self-disclosed nature of LinkedIn information, it is not surprising that individuals may intentionally or inadvertently fail to accurately list some career details.

Given these observations, we use Boardex information as the primary source to characterize post-separation career outcomes for sample executives. When Boardex does not indicate any subsequent employment position, we turn to LinkedIn (when a profile is available) and use the first listed post-turnover full-time position within five years of departure (if any) as the executive's post-turnover destination and role. We record an individual's first and second full-time jobs with start dates after the turnover date as listed in the Boardex employment file on, or the first LinkedIn position when Boardex reveals no new position. We supplement this with information indicating the first new role for an individual at a new employer in the Boardex organization composition file, yielding a handful of additional positions given the overlap across the Boardex files. The key information available for each new position is (a) the identity of the new employer, (b) the individual's job title, and (c) the length of time between the turnover event date and the start date of the new position.

Only 26.67% of new employers are public firms, and for public new employers listed in Execucomp, only a minority of positions (56.96%) are sufficiently senior to have a disclosed salary. Thus, it appears that the large majority of cases are individuals going to private employers, which are generally small, or taking lower-ranked positions at public employers. To

gauge the overall quality of new positions in terms of pay and status, we use the job title and size of the new employer to infer an estimated base salary, except for the limited number of cases with compensation information reported in Execucomp. Expected values of other compensation components (bonuses, incentive payouts) tend to be proportional to base salaries. Thus, given the large number of new private employers, imputed base salaries should serve as a reasonable and practical proxy for the level of a new position to compare to the prior role.

For non-public new employers (most of the sample), we use Revelio to identify the firm's number of LinkedIn profiled employees as of a position start date. We multiply this figure by the estimated median Compustat-to-LinkedIn employee count ratio to create an imputed employment level, our primary measure of a new employer's size. Estimated medians are derived from a fitted model using Compustat data, allowing for industry and time variation. We inspect job titles at old and new positions, grouping similar titles together. Each title is assigned a score from 1 (highest) to 8 (lowest) based on the relative pay ranks of individuals holding these titles in Execucomp. Additional details on these procedures are reported in the appendix.

We set estimated new salaries equal to the median salary for Execucomp executives in the same industry x firm size decile x position rank x year bin. The only exception is for new employers with 100 or fewer employees, as there are very few such Execucomp firms. These S&P 1500 firms are unusually large on other dimensions (assets, sales), surely resulting in significantly different executive compensation levels compared to the small new private employers in our sample. In these micro-firm cases, we instead use survey data on executive salaries for small private firms to assign new salaries. The appendix reports additional details, including some deliberately conservative elements in our imputation procedure that will tend to err on the side of assigning relatively high salaries to new positions.

In a limited number of cases, we have the individual's actual new salary from Execucomp. In these cases, the median ratio of actual new salary to imputed new salary is 1.052. Since new salaries are more likely to be listed in Execucomp when they are on the higher end of what is expected – as a mandatory compensation disclosure is more likely to be triggered – a number slightly above 1 for this upwardly biased sample suggests that our imputation procedure is, on average, quite accurate.

As we report in Table 2, most executives secure new positions after turnover (54.69%), particularly when they are under the age of 60 and unlikely to be voluntarily retiring (65.99% re-employment rate). Most executives who resurface do so within 2 years of departure (77.73%). Clearly, many executives evaluate their labor market options and land on their feet in a substantive role somewhere new in a reasonable time frame. Considering both the first new position and the highest paid new position (the "best" position), the Table 2 figures indicate that the typical executive falls just slightly in position rank (by a fraction of a ranking point on an 8-point scale). However, the median size of the first new employer relative to the old is 0.055, indicating that the first new position is typically at a much smaller employer. Even when we consider the best position the executive obtains, or the best position within a 2-year window, new employers are less than a fifth of the size of the prior employer at the sample median.

Turning to compensation, the median ratio of new salary to old salary is substantially below one for the executive's first new position (0.497). This improves slightly when we consider their best new position or their best new position within 2-years of turnover (0.759 and 0.787, respectively). Clearly, based on these figures, typical departures for sample executives represent significant negative career events, with imputed sharp pay cuts being quite common. The picture is only starker when recognizing the likely presence of a large number of departed

executives who desire new positions but do not gain re-employment in any role that they find suitable.

3.3 Univariate differences between genders

Since the early careers of male and female executives may evolve differently, in our multivariate models below, we condition on many observable characteristics to ascertain whether there is a gender effect on turnover that these characteristics cannot explain. To gauge possible differences, Table 3 presents summary statistics on firm and individual characteristics separated by gender. Consistent with prior work, women executives tend to be younger, shorter tenured, and lower ranked within the elite ranks of the corporate hierarchy. The firms where they serve are similar to men in terms of size, but the presence of women does vary by industry, with women being much more (less) likely to be employed by retail (manufacturing) firms. The presence of women in the elite ranks has also increased over time.

As we also report in the table, univariate differences in turnover rates by gender are evident, with women departing at a 1.08% greater rate than men (12.08% versus 11.00%). At the same time, women tend to obtain new jobs that are not quite as poor as men relative to their prior positions (first job median new-to-old salary ratios of 73.33% for women and 63.85% for men). Women also tend to get new jobs slightly more frequently than their male counterparts (62.76% versus 53.88%). However, we caution against making much of these figures, as they are very far from ceteris paribus comparisons given the other figures in the table, and in many cases disappear or reverse after conditioning on covariates.

3.4 Voluntary versus involuntary turnover

Sample turnover events surely reflect a mix of involuntary and voluntary departures, but the poor average post-turnover labor market outcomes strongly indicate that most sample departures are less-than-voluntary events. To focus on involuntary dismissals and the demand-side factors that drive them, in our analysis below, we emphasize findings for executives below retirement age, where voluntary retirement should be relatively uncommon. We also closely examine turnover preceded by poor firm performance, as we expect much of this turnover to reflect firms forcing out top executives in their efforts to right the ship.

To further evaluate the possibility of gender differences in completely voluntary departure behavior, we investigate the incidence of severance payments following turnover. While not all involuntary departures result in disclosed severance payments, as firms differ in their severance pay practices, the presence of a payment should be a noisy but informative signal of a less-than-voluntary departure. For each departing female executive under the age of 60, we identify male executive departures that match on the following dimensions: (a) the year of the turnover, (b) the executive age bracket (under 45, 45 to 49, 50 to 54, 55 to 59), (c) the firm's performance quintile, (d) the employer's one-digit SIC industry, (f) the executive's pay rank (based on base salary ranking from 1 to 5 at the firm, ranks below five excluded). Within the set of candidate matches, we pick the match from the firm that is closest to the firm in revenues, requiring the match to differ by no more than +/- 25%. This procedure yields a matched sample of 2 x 139 turnover events.

For these events, we search the firm's proxy disclosures and 8-K filings around the time of the turnover for evidence of a severance payment or other economic benefit associated with the departure (e.g., immediate vesting of restricted stock or options). We detect severance benefits of some type for 51.44% of departed executives, with women receiving severance at a slightly higher rate than men (54.7% versus 48.2%), a difference that is not significant at

conventional levels (two-sided p-value for difference of 0.28) but has a sign pointing to more involuntary and fewer voluntary departures for women relative to men. Assuming that the rate of severance eligibility following involuntary departures is similar for men and women, a reasonable assumption given our matching procedure, these figures offer no support for the hypothesis that female executives voluntarily depart from their roles at a higher rate than their male counterparts

4. Gender and Turnover

4.1 Baseline evidence

We now turn to a full multivariate analysis of the role of gender in top management turnover. The dependent variable in these models is the binary 0/1 turnover indicator, multiplied by 100, so that coefficient estimates represent the change in the predicted probability of turnover in percentage units. Following Egan, Matvos, and Seru (2022) and others, we estimate linear probability models, as these yield estimates that are easier to interpret than estimates from nonlinear (e.g., logit) models, and they easily allow for the extensive use of different fixed effects.[8]

A key explanatory variable in all models is a firm's prior-year stock return performance. Following the guidance in Fee, Hadlock, Huang, and Pierce (2018), we measure performance in percentile terms relative to the firm's industry-year cohort, recentered by subtracting 0.5 so that performance ranges from -.5 to +.5, with 0 indicating median level performance. We interact firm performance with an individual's pay rank, as we expect more senior executives to be held more accountable for firm performance. All models include year effects and fixed effects for the

[8] Estimated marginal effects for the gender variable from logit turnover models that do not include high-dimensional (i.e., firm) fixed effects, calculated at the sample mean, are very similar in magnitude and statistical significance to the corresponding linear probability estimates presented in the tables.

executive's pay rank, age, job title (grouping similar titles into bins, details in the appendix), functional area (e.g., marketing, operations, etc., details in the appendix), and, if firm fixed effects are not included, 2-digit industry. In addition, we include control variables measuring a firm's size and an individual's job tenure, along with educational background indicators. These covariates are intended to approximately represent the union of controls included in the related prior literature.

The firm performance coefficient in the initial baseline model reported in Column 1 of Table 4 indicates, as expected, a highly significant relation. The implied annual likelihood of departure for a median-ranked executive when performance declines from the highest performance level to the lowest (i.e., the 100th percentile to the 0th percentile) increases by 8.39%, a very large change relative to the sample-wide turnover rate of 11.09%. As expected, the performance-pay rank interaction is also highly significant, indicating that more highly ranked executives (with lower numerical ranking scores) are held relatively more accountable for firm performance. Many of the coefficients on other control variables have intuitive natural explanations.

Turning to the main coefficient of interest, the estimate on the female indicator of 1.78% is highly significant (t=6.19), indicating that women are significantly more likely to depart from an executive role than men in any given year, holding many factors constant, with a relative increase in turnover risk on the order of 16% (1.78/11.09 =16.05%). One way to gauge the magnitude of this estimated effect is to note that it implies a female executive would need to be at a firm that is more than one quintile better in performance than a male executive to be at equal turnover risk (1.78/8.39 = .2122 or 21.22 in percentile units).

When we add firm fixed effects to the model, as in Column 2 of Table 4, the female gender coefficient diminishes just slightly to 1.51%, remaining economically and statistically

significant (t=4.97). It is unclear whether including firm fixed effects should be the default choice. Given the sizeable number of firms with no women in the top ranks, including firm fixed effects eliminates much of the information content from these cases. Moreover, any diminishment in coefficient estimates when firm fixed effects are added suggests that women are matched to firms with higher turnover risk, which may represent an additional gender difference that is relevant to the underlying questions of interest. With these caveats in mind, to be conservative, we include firm fixed effects as the default choice in most subsequent models. Unless otherwise noted, our findings on the role of gender in labor market outcomes are as strong, and often stronger, when we omit these effects (see the internet appendix for estimates).

Departures for executives aged 60 and over are likely to include a substantial number of completely voluntary retirements. To focus on demand-side variation, we estimate in Column 3 of Table 4 a model that restricts attention to executives under the age of 60. The estimated elevation in female departure rates remains highly significant, and the magnitude grows slightly to 1.70%, indicating that gender differences in the propensity to retire do not drive our main finding. When we restrict attention solely to executives aged 60 or older, the (untabulated) estimated coefficient on the gender indicator is of opposite sign, small in magnitude, and insignificant. Given our desire to focus on demand-side factors, in most of our subsequent analyses, we restrict our attention to executives under the age of 60. In all but a few cases that we note, coefficient estimates without this restriction are similar to those reported in the tables (see the internet appendix for estimates).

4.2 Extensions of baseline evidence

Given their apex position, some of the prior literature focuses solely on CEOs. In Columns 4 and 5 of Table 4, we estimate separate models for non-CEOs and CEOs, respectively.

The differences here are quite stark. After separating out the CEOs, the predicted elevation in turnover rates for female non-CEOs relative to males is even larger, with an estimated increase of 2.06% (t=5.85). However, for CEOs, the predicted likelihood of a female turnover is actually less likely than for men (a 3.10% decrease), although this estimate is significant at the 10% level (t=1.94).

We are hesitant to conclude too much from the CEO-only regression, as the inclusion of firm fixed effects implies that we are estimating the gender effect from the relatively small number of firms that switch between male and female CEOs. When firm fixed effects are omitted, the estimated coefficient on the female gender indicator in predicting CEO turnover remains negative, but it becomes much smaller in economic magnitude and statistically insignificant (coefficient of -0.71%, t=0.96). Certainly, it appears that the sample-wide elevation in female turnover rates we observe entirely reflects differential outcomes for executives under the CEO. It is possible that the high visibility of the CEO role limits the behavior that underlies the role of gender in decisions regarding other top managers. Alternatively, a difference may arise from the fact that the board plays the primary role in CEO dismissal decisions, while the CEO typically serves in this role for their subordinates. In most of our subsequent analysis, we focus on non-CEOs, noting when this restriction has a substantive effect on our inferences (see the internet appendix for estimates).

As the figures reported earlier reveal, women's presence in the C-Suite has increased over time. Additionally, recent evidence suggests a shrinking gender gap over time in other settings including the market for directors (Gormley, Gupta, Matsa, Mortal, and Yang (2023)), auditors (Chen, Hallman, and Sunder (2025)), and finance academics (Sherman and Tookes (2022)). To examine whether similar changes have occurred for executive turnover, we include in Column 6 of Table 4 a term interacting the female indicator with a linear time trend. Perhaps surprisingly,

the small and insignificant coefficient on the interaction term offers no support for the hypothesis that inflated female departure rates have declined over time.

Given the key role of firm performance in turnover, in Column 7 of Table 4, we interact the female indicator with performance. This interaction coefficient is negative and significant, implying an elevation in the likelihood of a female departure relative to a male departure of 3.41% for firms at the lowest performance level compared to 0.78% for the best performers. Consistent with this inference, when we run regressions separately for each performance quintile, the (untabulated) estimated gender coefficients increase monotonically in both magnitude and significance moving from the top performance quintile to the bottom. The significantly larger elevation in female turnover rates for poor performers is highly consistent with the notion that women are blamed relatively more for poor firm performance.

If elevated rates of female turnover reflect a negative bias towards women, we would expect a smaller gender effect at firms with smaller biases. To investigate, we consider possible measures of bias strength. First, we reason that firms in industries with higher rates of women in the top ranks may be more appreciative of the contributions of female executives. Thus, we create a score based on female executive representation in the industry relative to the annual cohort, assigning scores by tercile (scores of -1/0/1 for lowest/middle/highest tercile). The estimates in Column 8 of Table 4 reveal a negative and significant coefficient on the female gender indicator interacted with this score, with an implied reduction in the inflated rate of female departures of 1.78% (2*-0.89) moving from the lowest to the highest female representation tercile.

One might expect female CEOs to be less biased than others in evaluating female subordinates, although prior evidence on the treatment of female subordinates by female

superiors in other contexts is mixed.[9] As we report in Column 9 of Table 4, when we interact the female manager indicator with a female CEO indicator, the coefficient on the interaction term is positive but insignificant (t=0.45). Certainly, women CEOs do not appear to be protecting female subordinates from elevated turnover risk, as the point estimates go in the opposite direction.[10]

Prior research suggests that boards with more female representation may mitigate gender differences in firms (e.g., Matsa and Miller (2011)).[11] Given this evidence, in Column 10 of Table 4 we allow the female coefficient on gender to vary by whether the firm has any female board members (the sample median is one female member). As we report, the estimated coefficient on the interaction term is negative, but small in magnitude and insignificant, offering no convincing evidence that female representation on boards changes the inflated female executive departure rates that we observe. These findings are similar if we: (a) drop the firm fixed effects, (b) use an indicator for whether the firm has 2 or 3 female board members, or (c) measure female board representation in absolute percentage terms or percentile terms relative to the rest of the sample.

A stream of recent research suggests that CEOs' political activities and leanings may have an effect on the firms that they manage (e.g., Babenko, Fedaseyeu, and Zhang (2020), Fos, Kempf, and Tsoutsoura (2025)). One possibility suggested by some of this work is that more

[9] The evidence in Kunze and Miller (2017) and Egan, Matvos, and Seru (2022) is consistent with female superiors being relatively more supportive of female subordinates, but the Bagues and Esteve-Volart (2010) and Hadlock, Huang, Obermann, and Pierce (2024) evidence goes in the opposite direction, and the findings of Bertrand, Black, Jensen, and Lleras-Nune (2019) suggest a neutral role.

[10] This contrasts with Keller, Molina, and Olney (2023), but their CEO gender measure appears to be based on the gender of future, current, and past CEOs, rather than solely the current CEO. Additionally, they use a coarse measure of turnover based solely on Execucomp listings and do not control for performance and many other model covariates.

[11] More generally, several authors show that board gender diversity is systematically related to firm outcomes (e.g., Adams and Ferreira (2009) and Matsa and Miller (2013). Falconieri and Akter (2022) provide a recent overview.

politically sensitive CEOs may be more careful to avoid any appearance of gender-biased decisions, regardless of the direction of their political leanings (e.g., Wowaka and Busenbark (2024)). To investigate, we merge the CEO political contribution data from Babenko, Fedaseyeu, and Zhang (2020) with our sample and create a politically active CEO indicator that assumes a value of 1 if a firm's CEO contributes to any political candidate in a given election cycle.

As we report in Column 11 of Table 4, the interaction of this variable with the female gender indicator is negative and highly significant, indicating that the inflated rate of female turnover largely disappears for firms with politically active CEOs at the helm (40.54% of the sample that overlaps with Babenko, Fedaseyeu, and Zhang's (2020) data). One might suspect this finding largely reflects the behavior of liberal CEOs, given their documented propensity to engage more in corporate social responsibility activities (Gupta, Briscoe, and Hambrick (2017)). However, when we divide politically active CEOs into those who contribute solely to Democratic candidates and all others, while the pure Democrat CEOs have estimated gender interaction coefficients that are more negative in magnitude than the others, the differences are not statistically significant (coefficients untabulated).

4.3 Additional evidence on the mechanism underlying gender-turnover differences

The evidence above presents a fairly compelling picture that less-than-voluntary turnover rates are significantly elevated for women relative to men, with a particularly large elevation when firm performance is poor. These findings are highly consistent with the presence of an inefficient gender bias in which women executives are, in general, judged more harshly than men, and in particular, are blamed more for poor firm performance. However, there are some efficiency-based scenarios that are also potentially consistent with the evidence we present.

One such scenario arises from the possibility that there may be more uncertainty regarding the abilities of women compared to men, even when their ex-ante expected contributions to the firm are equal. Under this scenario, learning may result in more extensive revisions over time when assessing female executives' abilities, leading to a higher dismissal rate as they will more frequently be revealed to be sufficiently far in the left tail of the distribution to trigger a dismissal. If this is the case, symmetric logic would imply that women should be more likely to be promoted, as they will also be more frequently revealed to have particularly high ability relative to prior expectations.

To investigate, we create a binary variable that assumes a value of 100 when a sample executive moves up at least two notches in a firm's ordinal pay ranking during a given year (restricted to executives ranked 3 or lower). All cases with no such promotion and no departure from the firm are assigned values of 0. When we predict promotions, the coefficient on gender, as reported in Column 1 of Table 5, is negative and significant, indicating that women are 1.81% less likely to be promoted than men in any given year. This evidence, which is consistent with what Xu (2024) reports, offers no support for the increased female uncertainty scenario.[12] Interestingly, in Column 2, where we interact gender with year, the positive and significant estimated interaction coefficient indicates that the female handicap in internal promotions has been decreasing over time, with an estimated negligible effect of -0.36% (-1.96 + 0.16*10) by the end of the sample period.

The particularly high rates of female turnover when firm performance is poor could reflect efficient behavior if firm performance is a relatively more informative signal of the

[12] The Xu (2024) study includes a broader set of executives and offers a rich analysis of gender and promotions based on changes in job titles. Our promotion evidence corroborates the Xu (2024) findings for a firm's most senior executives, and confirms the findings hold when using compensation to define ranks.

individual abilities of women. If this is the case, we would expect female turnover rates to be significantly lower than men when firm performance is very strong. However, if we restrict attention to firms in the top quintile of performance, the estimated (untabulated) coefficient on the female gender remains positive, of moderate magnitude (1.06%), but statistically insignificant (t=1.48). Certainly, there is no evidence that female executives depart from top-performing firms at a rate lower than their male counterparts.

Additional insight can be garnered using the data from Hadlock, Huang, Obermann, and Pierce's (2024) study on division manager turnover, as their study includes data on both individual performance and firm performance for quite senior executives. We extract from their sample the 1-year change in divisional ROA as a measure of individual performance, and the 1-year market-adjusted stock return as a measure of firm performance (variables defined in Table 1 of their study). Mean and median levels of individual performance are quite similar for male and female division managers, consistent with no difference in ability across groups. Additionally, the correlation between firm performance and divisional performance is insignificantly lower for women compared to men, casting more doubt on the notion that firm performance is a more informative indicator of individual performance for female executives.[13]

An alternative lens for evaluating gender differences in the informativeness of firm performance signals is to consider whether the external labor market relies relatively more on firm performance signals when poaching female executives. To investigate, we create an external promotion indicator that takes a value of 100 if an executive moves to a new position

[13] The mean (median) level of individual performance for male division managers is 0.64% (0.16%) greater than for females, a difference that is economically small and statistically insignificant (p-value of 0.35 using a t-test for a difference in means and 0.92 using a rank-sum test for a difference in medians). The correlation between individual and firm performance is 0.17 for men and 0.14 for women, a difference with a p-value of 0.69 using Stata's cortesti test.

with at least a 20% estimated pay increase within 90 days of the departure, and 0 otherwise.[14] These moves are relatively rare, representing under 4% of all turnover events. As we report in Columns 3 and 4 of Table 5, the small and weakly significant ($p<.10$) positive coefficients on the female indicator suggest a slightly elevated rate of these favorable outcomes for female executives. This is not surprising, as women should be more open to jumping at the margin given their more tenuous positions and diminished internal promotion prospects.

The estimated interaction effect on gender and firm performance, reported in Column 4, is small and insignificant, with a negative sign that hints at a lower sensitivity of external promotions to firm performance for women. We repeat this analysis in Columns 5 and 6 with a 30% pay increase as the external promotion threshold, and the findings are similar in economic magnitude, albeit slightly stronger statistically. Certainly, it does not appear that the external labor market treats firm performance as a more informative signal of the talents of female executives. Along parallel lines, we note that in the estimated internal promotion model discussed earlier (Column 2 of Table 5), the coefficient on the interaction of female with firm performance is negative and insignificant, lending no support for the notion that firm performance is viewed internally as a more informative signal the talents of female executives.[15]

5. Life after turnover

5.1 Obtaining new positions

[14] The figures in Groysberg, Healy, and Lin (2022) indicate an average pay increase of close to 20% for executives hired externally with the assistance of an executive search firm.

[15] The Table 5 insignificant performance coefficients are implicitly for a median-ranked executive. Given the negative coefficient estimates for performance interacted with pay rank, the implied role of performance will be positive (negative) for higher (lower) ranked executives. We suspect that the limited role of performance in columns 1-2 reflects few internal promotion opportunities when performance is strong, and in columns 3-6 reflects supply-side effects, such as an unwillingness to forfeit stock options that have sharply increased in value. The gender-performance interactions we discuss should pick up the marginal effect of gender, holding these other considerations constant.

Summary statistics above on new employment indicate that turnover is typically a negative outcome for a senior executive. However, if women tend to get better new jobs than men in the retread market, then the expected net consequences of turnover risk for women may be similar to, or perhaps better than, those for men. To investigate, we estimate models predicting post-turnover labor market outcomes. In an initial model predicting whether new employment is obtained (Column 1 of Table 6), the small estimated negative coefficient on the female indicator is economically and statistically insignificant (estimate of -0.53% relative to an overall re-employment rate of 54.69% as reported in Table 2, t=-0.40). When we interact the female gender indicator with a year trend Column 2, the coefficient is positive and significant, indicating that women's re-employment prospects relative to men have improved significantly over time.[16]

In Columns 3 and 4 of Table 6, we present estimates from analogous models predicting whether the individual obtains a new position within 2 years of the turnover event. The coefficients for the female gender variable are negative, larger in magnitude, and significant at the 10% and 5% levels, respectively, suggesting a slightly lower chance of relatively quick re-employment for women, on average, over the entire sample period. However, the positive interaction term on gender and a time trend in Column 4 suggests again a significant relative improvement for women relative to men over time.

While new jobs are, on average, relatively poor compared to the previous ones, the relative quality of these jobs varies widely. Thus, we next predict whether an executive gets a new job within two years that is likely superior to their prior position, as measured by an

[16] Firm performance is generally insignificant in models of re-employment, suggesting that the negative signal of turnover far outweighs any residual signal value from performance. Conditional on turnover, voluntary departures are surely positively correlated with performance, and thus, firm performance may also partially capture supply effects.

estimated new salary that is at least 20% higher than the prior salary. As we report in Columns 5 and 6 of Table 6, the point estimates for the female variable are positive, but small in economic magnitude and statistically insignificant. As in the other models, the interaction of female with year in the Column 6 model is positive and highly significant. In this case, the estimate suggests a difference of notable magnitude that favors women, as the coefficient of .501 indicates that by 2021 women had a 5.27% elevated likelihood (0.27 + 10*0.5) of obtaining an apparently superior new job within 2 years of turnover, a large figure relative to mean sample-wide rate of only 10.58%.

Finally, rather than predicting new employment outcomes in an unconditional sense, we consider variation in the relative quality of new positions, conditional on obtaining new employment. To do so, we create a dependent variable that is set equal to the natural log of one plus the ratio of the salary at the best new position to the old salary. As we report in the final two columns of Table 6, when predicting this dependent variable, the coefficient on the female indicator is very small in magnitude and insignificant, with no evident time trend. We have experimented with restricting attention in these models to positions obtained within 2 years of the turnover date, with no substantive change in coefficient estimates. Similar comments apply if we use a dependent variable based on the first position obtained rather than the best position.

5.2 Net effects from turnover and life thereafter

Taking stock of the evidence, top women executives below the CEO separate from their employers at a significantly higher rate than men, especially when firm performance is poor. Over the sample period, landing trajectories after turnover are similarly poor on average for men and women, but time trends suggest that, on some dimensions, women are now faring somewhat better than men in the post-turnover retread market. To integrate this evidence, we create a

"bad" outcome indicator variable which assumes a value of 100 only for observations in which an executive departs and either (a) does not resurface in a new job within two years or (b) resurfaces within two years solely into positions with estimated salaries at least 20% lower than their prior salary. Similarly, we create a "good" outcome variable that assumes a value of 100 if an executive departs and obtains a position within two years with an estimated salary at least 20% larger than the prior salary.

When predicting bad turnover outcomes, the estimated coefficient on gender, as reported in Column 1 of Table 7, is positive and highly significant, indicating that women are 1.56% more likely than men to experience a bad outcome turnover event in a given year. This is a large (over 19%) increase relative to an overall bad turnover outcome rate of 7.99%. When we interact gender with year in predicting bad outcomes, as in Column 2 of Table 7, the coefficient on the interaction indicates no relative improvement in the likelihood of a bad outcome for women over time. The coefficient on the gender-performance interaction in this model is negative and significant at the 10% level (t=-1.74), suggesting that the elevated likelihood of experiencing a bad outcome for women is larger when firm performance is poor.[17]

Turning to good outcomes, the positive and significant coefficient estimates on the gender variable in Columns 3 and 4 of Table 7 indicate an increase in the likelihood of a good turnover outcome for women relative to men in any given year of around 0.31%. Given much higher turnover rates for women and similar job prospects conditional on turnover, this slight increase must reflect an elevated likelihood of females being on the retread market, resulting in a greater chance of being one of the fortunate few to secure a relatively desirable new position. As

[17] The drop in significance on the gender-performance interaction when predicting bad turnover (Table 7) versus all turnover (Table 4) likely reflects lower power when predicting rarer events, coupled perhaps, with some tendency for the external labor market to recognize that women may, in some cases, have been inefficiently blamed at their prior employer. The Table 7 models are agnostic on new positions with relatively small (+/- 20%) changes in pay.

expected, given our earlier findings, when predicting good outcomes, the gender-year interaction coefficient is positive and highly significant, as reported in the Column 4 model, indicating that women's slight elevation in good turnover likelihood outcomes has grown larger over time. However, even at the end of the sample period, the implied point estimates suggest that the elevated risk of a bad turnover outcome for a female executive is still substantially larger than any offsetting elevation in their likelihood of a good turnover outcome (1.53% versus 0.78%).

5.3 Gender differences in characteristics of new positions obtained

While male and female executives typically take equal steps down in the labor market after turnover, the characteristics of the new jobs they assume may differ. In particular, prior evidence suggests possible differences between men and women in confidence and willingness to take risks.[18] Given this evidence, one might expect women to play it relatively safer in terms of positions they take after turnover, holding constant the general level of the position assumed.

We first consider whether there are evident gender differences in the tradeoff between size and rank that executives may face when considering new employment opportunities. To investigate, we create a "Go small" ("Go big") variable which assumes a value of 100 if an executive joins a new employer that is 50% smaller (larger) than their prior employer and 0 otherwise. Additionally, we create a "Rank up" ("Rank down") 0/100 indicator for whether a new position is at least two ranks better than (worse than) the prior position, using our eight-point ranking scale based on job titles. In predicting these rank change outcomes, we exclude

[18] For evidence exploring this issue in general populations, see Niederle and Vesterlund (2007) and Croson and Gneezy (2009). Faccio, Marchica, and Mura (2016) present evidence of female CEOs' elevated propensity to avoid risks, while Adams and Funk (2012) present somewhat contradictory evidence with respect to female directors.

executives who had positions of ranks 1 or 2 (7 or 8), as they cannot move up (down) by two ranks.

We predict these outcomes, conditional on obtaining a new position, in the first 4 columns of Table 8.[19] The highly significant estimated gender coefficient in Column 1 (Column 2) indicates that female executives are 4.79% less likely (4.11% more likely) to join a much smaller (larger) employer. At the same time, the highly significant gender coefficients in the rank change regression indicate that women are over 5.30% more likely (less likely) than men to move substantially down (up) in rank when they join a new employer (see Columns 3 and 4). This evidence suggests that women tend to occupy lower-ranked positions at larger firms compared to their male counterparts, a behavior that appears broadly consistent with what might be expected based on the literature on gender differences in confidence and comfort with risk.

Since the prior literature suggests that women's careers are more constrained by family responsibilities (e.g., Bertrand, Goldin, and Katz (2010)), one might expect female executives to be less willing to move a far distance for a new position. The data, however, do not support this prediction, as the gender coefficient in a model explaining the difference between the new and old employer, reported in Column 5 of Table 8, is small (31.89 miles), of the wrong sign (positive), and statistically insignificant (t=0.70). This evidence remains substantively unchanged if we use a dependent variable indicating a relatively distant or local move (i.e., distance below/above various thresholds). This lack of evident gender differences may reflect the fact that sample executives are generally older and serve in such senior roles that family constraints may be less binding.

[19] Since we restrict attention to executives who obtain new jobs in this subsection, one may argue that the requirements that the executive be under the age of 60 and not a CEO may be dropped. We report our findings in Table 8, continuing to impose these restrictions to be consistent with the rest of our models. However, our findings remain substantively unchanged when we include CEOs and executives over the age of 60.

Much has been written about the particularly low representation of women in elite finance-related roles (e.g., Adams and Kirch (2016) and Adams and Xu (2022)). A small number of executives in our sample resurface after turnover at employers that we refer to as "high finance," a group that includes private equity firms, specialized finance firms, and hedge funds (see the appendix for categorization details). As we report in Column 6 of Table 8, when predicting obtaining a position at a high finance firm, the estimated coefficient on gender is negative and highly significant, indicating that women are almost 2% less likely than men to obtain such a position, a large number relative to a sample overall likelihood of 5.62%. Thus, even for the very senior executives we study, and after conditioning on a rich set of covariates, the tendency for women to be unsuccessful in matching with elite finance employers persists.[20]

6. Conclusion

Given the stark underrepresentation of women in the top executive ranks, we investigate whether women tend to exit from these ranks more frequently than men. We assemble a rich dataset that allows us to confirm whether and when a departure from a top executive role takes place. The data reveal that female senior executives exit from their roles at a significantly higher rate than men, with a relative increase in turnover departure probabilities in the 15% to 20% range, conditional on a rich set of covariates. This finding reflects gender differences in the exit behavior of all members of the executive team except for those serving in the role of CEO. The differences in turnover rates we document do not appear to reflect differences in voluntary departures, as the quality of post-turnover labor market opportunities is similarly poor on average

[20] In untabulated models, we find that the relatively low propensity for women to obtain high finance roles is roughly offset by their relatively higher propensity to land roles in at nonprofits (including the government) and in consulting.

for both genders, and women receive severance payments at a rate that appears at least as high as it is for men.

Our evidence of elevated rates of apparently less-than-voluntary turnover for women appears highly consistent with the hypothesis that female executives are generally evaluated more harshly than men, a behavior that has been detected in other labor market settings. Buttressing the case, we find that elevated female executive departure rates are lessened for firms with characteristics that could reasonably be expected to result in a diminished role for gender bias in turnover decisions. Importantly, we also find that the sensitivity of turnover to firm performance is significantly higher for women, implying a much higher relative elevation in female turnover rates when a firm is performing poorly. This finding is highly consistent with the notion that firms inefficiently place more blame on women executives when a firm generates subpar results. We consider alternative efficiency-based scenarios that might explain the gender differences in executive turnover behavior we observe, but detect no evidence supporting these alternatives.

Most executives below retirement age resurface at new employers after turnover. However, the positions they obtain are, on average, significantly worse than their prior positions based on imputed salary estimates, largely reflecting that they tend to move to much smaller new employers. When we predict overall labor market success in the relatively bleak retread market using a variety of measures, we detect no significant gender differences blended over the entire sample period. However, we do detect a positive time trend for women in terms of slightly more favorable outcomes than males subsequent to turnover in more recent years. We also find that, after turnover, women tend to accept relatively lower-ranked roles at relatively larger firms compared to their male counterparts. Additionally, they are particularly unlikely to land at elite and highly specialized finance entities

Integrating this evidence, the likelihood in any given year that a top executive departs from their employer and either never resurfaces or assumes a position that represents a step down in the labor market is significantly elevated for female executives relative to their male counterparts, with no evident time trend. The likelihood that an executive departs and obtains new employment in what appears to be a better position is slightly higher for women compared to men, primarily because they are much more likely to turn over in any given year. This small favorable difference for women has increased significantly over time. Since negative outcomes are far more likely than positive ones, the net level of turnover risk appears significantly elevated for women throughout our sample period, but time trends indicate a partial leveling of the playing field. It appears that a similar gender-gap-shrinking trend is also present when it comes to firms' internal promotion decisions. It remains to be seen whether these trends continue, and certainly more research is needed to fully understand the apparent differential treatment of the genders once they reach the top executive ranks. The challenge appears not only to get there, but also to stay there.

References

Adams, Renée , and Daniel Ferreira. 2009. Women in the Boardroom and Their Impact on Governance and Performance. *Journal of Financial Economics*, 94(2): 291–309.

Adams, Renée and Peggy Funk. 2012. Beyond the Glass Ceiling: Does Gender Matter? *Management Science*, 58(2): 219–235.

Adams, Renée and Mu S. Kim. 2020. Gender Discrimination as a Consequence of Team Failure. SSRN working paper, No. 3215521.

Adams, Renée, and Tom Kirchmaier. 2016. Women on boards in finance and STEM industries. *American Economic Review*, 106(5), 277–281.

Adams, Renée and Jing Xu. 2023. The inequality of finance. *Review of Corporate Finance*, 3(2).

Aigner, Dennis J. and Glen G. Cain. 1977. Statistical Theories of Discrimination in Labor Markets. *Industrial and Labor Relations Review*, 30(2): 175–187.

Albanesi, Stefania, Claudia Olivetti and María José Prados. 2015. Gender and Dynamic Agency: Theory and Evidence on the Compensation of Top Executives. *Research in Labor Economics*, 42: 1–59.

Babenko, Ilona, Vadim Fedaseyeu, and Song Zhang. (2020). Do CEOs Affect Employees' Political Choices? *The Review of Financial Studies*, 33(4), 1781–1817.

Bagues, Manuel F. and Berta Esteve-Volart. 2010. Can Gender Parity Break the Glass Ceiling? Evidence from a Repeated Randomized Experiment. *Review of Economic Studies*, 77(4): 1301–1328.

Becker, Gary S. 1957. The economics of discrimination. University of Chicago Press.

Becker-Blease, J. R., Susan Elkinawy, and Mark Slater. 2010. The Impact of Gender on Voluntary and Involuntary Executive Departure, Economic Inquiry, 48(4), 1102–1118.

Bertrand, Marianne, Sandra E. Black, Sissel E. Jensen, and Adriana Lleras-Muney. 2019. Breaking the Glass Ceiling? The Effect of Board Quotas on Female Labour Market Outcomes in Norway. *Review of Economic Studies*, 86(1): 191–239.

Bertrand, Marianne, Dolly Chugh, and Sendhil Mullainathan. 2005. Implicit Discrimination. *American Economic Review*, 95(2): 94–98.

Bertrand, Marianne, Claudia Goldin, and Lawrence F. Katz. (2010), "Dynamics of the gender gap for young professionals in the financial and corporate sectors", *American Economic Journal: Applied Economics*, 2 (3): 228–55.

Bertrand, Marianne, and Kevin F. Hallock. (2001), "The gender gap in top corporate jobs", Industrial and Labor Relations Review, 55 (1): 3–21.

Benson, Alan, Danielle Li, and Kelly Shue. 2024. Gender and promotions: Evidence from administrative employee records. *Quarterly Journal of Economics* (forthcoming).

Blau, Francine D. and Jed DeVaro. 2007. New Evidence on Gender Differences in Promotion Rates: An Empirical Analysis of a Sample of New Hires. *Industrial Relations*, 46(3): 511–536.

Buser, Thomas, Muriel Niederle, and Hessel Oosterbeek. (2014), "Gender, competitiveness, and career choices" *The Quarterly Journal of Economics*, 129 (3), 1409–1447.

Chen, Jade, Nicholas Hallman and Jayanthi Sunder. 2025. Evolving Gender Disparities in Auditing. SSRN working paper.

Croson, Rachel and Uri Gneezy. 2009. Gender Differences in Preferences. *Journal of Economic Literature*, 47(2): 448–474.

Egan, Mark L., Gregor Matvos and Amit Seru. (2022). "When harry fired sally: The double standard in punishing misconduct," *Journal of Political Economy*, 130 (5), 1184-1248.

Exley, Christine L., and Nielsen, Kirby. (2024). The gender gap in confidence: Expected but not accounted for. *American Economic Review*, 114(3), 851–885.

Faccio, Mara, Maria-Teresa Marchica and Roberto Mura. 2016. CEO Gender, Corporate Risk-Taking, and the Efficiency of Capital Allocation. *Journal of Corporate Finance*, 39: 193–209.

Falconieri, Sonia, and Mahfuja Akter. (2022). Gender Diversity and Beyond in Corporate Finance: Where Do We Stand? *Review of Corporate Finance*, forthcoming.

Fee, C. Edward, Charles J. Hadlock, Jing Huang and Joshua R. Pierce. 2018. Robust Models of CEO Turnover: New Evidence on Relative Performance Evaluation. *Review of Corporate Finance Studies*, 7(1): 70–100.

Fee, C. Edward, Charles J. Hadlock, and Joshua R. Pierce. (2018), "New evidence on managerial labor markets: An analysis of CEO retreads", *Journal of Corporate Finance*, 48: 428-441.

Fernandez-Mateo, Isabel, and Roberto M. Fernandez. (2016), "Bending the pipeline? Executive search and gender inequality in hiring for top management jobs", *Management Science*, 62(12):3636–3655.

Fos, Vyacheslav, Kempf, Elisabeth, and Tsoutsoura, Margarita. (2022). The political polarization of corporate America. Harvard Business School Working Paper No. 23003.

Gayle, George-Levi, Limor Golan, and Robert A. Miller. (2012), "Gender differences in executive compensation and job mobility", *Journal of Labor Economics*, 30(4):829–872.

Gormley, Todd A., Vishal K. Gupta, David A. Matsa, Sandra C. Mortal and Lukai Yang. 2023. The Big Three and Board Gender Diversity: The Effectiveness of Shareholder Voice. *Journal of Financial Economic*s, 149(2): 323–348.

Groysberg, Boris, Healy, Paul, and Lin, Eric. (2022). Determinants of gender differences in change in pay among job-switching executives. ILR Review, 75(1), 168–199.

Guest, Paul M. (2016). "Executive mobility and minority status", *Industrial Relations*, 55(4):604–631.

Guo, Xiaohu, Vishal K. Gupta, Sandra Mortal, and Vikram Nanda. (2024), "Gender and managerial job mobility: Career prospects for executives displaced by acquisitions", *Journal of Financial and Quantitative Analysis*, 59 (7), 3299-3339.

Gupta, Anil, Forrest Briscoe, and Donald C. Hambrick. (2017). Red, Blue, and Purple Firms: Organizational Political Ideology and Corporate Social Responsibility. *Strategic Management Journal*, 38(5), 1018–1040.

Gupta, Vishal, Sandra Mortal, Sabatino Silveri, Minxing Sun, and Daniel Turban. (2020), "You're fired: Gender disparities in CEO dismissal", *Journal of Management*, 46 (4), 560-582.

Hadlock, Charles J., Jing Huang, Paul Obermann, and Joshua R. Pierce. (2024), "Protecting your friends: The role of connections in division manager careers", *Journal of Financial and Quantitative Analysis*, 4, 1-34.

Haynes, Michele C., and Lawrence, John S. (2012). Who's to blame? Attributions of blame in unsuccessful mixed-sex work teams. *Basic and Applied Social Psychology*, 34(6), 558–564.

He, Li and Toni M. Whited. 2024. Underrepresentation of Women CEOs. SSRN working paper.

Heilman, Madeline E., and Haynes, Michelle C. (2005). No credit where credit is due: Attributional rationalization of women's success in male–female teams. *Journal of Applied Psychology*, 90(5), 905–916.

Hill, Aaron D., Arun D. Upadhyay, and Rafik I. Beekun. (2015), "Do female and ethnically diverse executives endure inequity in the CEO position, or do they benefit from their minority status? An empirical examination", *Strategic Management Journal*, 36, 1115–1134.

Huang, Jiekun and Darren J. Kisgen. (2013), "Gender and corporate finance: Are male executives overconfident relative to female executives?"*, Journal of Financial Economics*, 108, 822-839.

Huang, Ruidi, Erik J. Mayer, and Darius P. Miller. (2024), "Gender bias in promotions: Evidence from financial institutions", *Review of Financial Studies*, 37, 1685-1728.

Keller, Wolfgang, Teresa Molina, and William W. Olney. (2023), "The gender gap among top business executives," *Journal of Economic Behavior and Organization*, 211, 270-286.

Keloharju, Matti, Knüpfer, Samuli, and Tåg, Joacim. (2022). What prevents women from reaching the top? *Financial Management*, 51(3), 711–738.

Kunze, Astrid and Amalia R. Miller. 2017. Women Helping Women? Evidence from Private Sector Data on Workplace Hierarchies. *Review of Economics and Statistics*, 99(5): 769–775.

Landsman, Rachel. (2019), "Gender differences in executive departure," Working paper, Bucknell University.

Lewellen, Katharina. (2022), "Women in charge: Evidence from hospitals," Working paper, Tuck School at Dartmouth.

Matsa, David A. and Amalia R. Miller. 2011. Chipping Away at the Glass Ceiling: Gender Spillovers in Corporate Leadership. *American Economic Review*, 101(3): 635–639.

Matsa, David A. and Amalia R. Miller. 2013. A Female Style in Corporate Leadership? Evidence from Quotas. *American Economic Journal: Applied Economics*, 5(3): 136–169.

Neumark, David. (2018). Experimental research on labor market discrimination. *Journal of Economic Literature*, 56(3), 799–866.

Niederle, Muriel and Lise Vesterlund. 2007. Do Women Shy Away from Competition? Do Men Compete Too Much? *Quarterly Journal of Economics*, 122(3): 1067–1101.

Nieva, Veronica F., and Gutek, Barbara A. (1980). Sex effects on evaluation. *Academy of Management Review*, 5(2), 267–276.

Phelps, Edmund S. (1972). The statistical theory of racism and sexism. *American Economic Review*, 62(4), 659–661.

Reuben, Ernesto, Sarsons, Heather, Gërxhani, Klarita, and Schram, Arthur. (2021). Gender differences in recognition for group work. *Journal of Political Economy*, 129(1), 101–147.

Heather Sarsons, Klarita Gërxhani, Ernesto Reuben and Arthur Schram. 2021. Gender Differences in Recognition for Group Work. *Journal of Political Economy*, 129(1): 101–147.

Selody, Karen. 2010. Is the Risk Worth the Reward for Top Female Executives? Working paper.

Sherman, Mila Getmansky and Heather E. Tookes. 2022. Female Representation in the Academic Finance Profession. *Journal of Finance*, 77(1): 317–365.

Smith, Nina, Valdemar Smith and Mette Verner. (2013), "Why are so few females promoted into CEO and vice president positions? Danish empirical evidence, 1997-2007", *Industrial and Labor Relations Review*, 66 (2): 380–408.

Wowak, Kaitlin, and John Busenbark. (2024). The politics of product safety: Top management team political ideology and serious medical product recalls. *Management Science* (forthcoming).

Xu, Jing. (2024), "The gender gap in executive promotions", *Journal of Corporate Finance*, 89 1-22.

Table 1 - Summary Statistics

Panel A: Sample Composition	Number/Rate	
Number of Unique Executives	37,494	
Number of Executive-Firm-Years	179,082	
Number of Unique Firms	3,154	
Number of Firm-Years	38,080	
Turnover Rate	11.09%	
Panel B: Summary Statistics	Mean/Percent	Median
Book Assets (Millions of USD chained in 2021 Dollars)	22,728.81	2,813.77
Sales/Revenue (Millions of USD chained in 2021 Dollars)	7,697.21	1,694.92
Employees	25,254.29	4,500.00
Executive Age	52.80	53.00
Executive Pay Rank (1 - 6)	3.02	3.00
Execucomp Tenure	5.20	4.00
Boardex Tenure	10.58	8.00
Holds CEO Title	21.61%	
Holds COO Title	6.72%	
Holds CFO Title	19.86%	
Holds Other 'Chief' Title	9.82%	
Corporate EVP	26.62%	
Corporate SVP	17.75%	
Corporate VP	10.95%	

Note.- The sample includes all Execucomp-listed executives who were in office at the start of a fiscal year in the 2001-2021 sample period and have non-missing start-of-year values for the baseline control variables included in Model 1 of Table 4. Turnover is coded as a 1 if an executive departs from an executive role at the firm over the ensuing fiscal year, excluding cases when they move to a related entity (e.g., departing with a spun-off division). Reported statistics are calculated from information reported in the Compustat, Execucomp, and Boardex databases. Details on the definitions of variables are reported in the appendix. Executive pay rank is based on an executive's base salary rank at the firm in a given year, with all executives below the top 5 assigned a pay rank of 6. All dollar value variables are inflation-adjusted to 2021 dollars. All variables in the paper, except binary indicators and those converted to percentiles, are winsorized at the 1% and 99% tails. Titles are not mutually exclusive, and thus, an executive can hold more than one of the indicated titles.

Table 2 - Statistics on Obtaining New Positions

Number of turned-over executives	19,868
Rate of obtaining any new job	54.69%
Rate of obtaining any new job (Age<60)	65.99%
New jobs obtained within 3 months	33.20%
New jobs obtained within 6 months	44.65%
New jobs obtained within 1 year	60.31%
New jobs obtained within 2 years	77.73%

	First Job	Best Job (<2 years)	Best Job
Change in Rank	0.309	-0.007	0.066
New Size/Old Size	0.055	0.160	0.143
New Pay/Old Pay	0.497	0.787	0.759

Note. – New positions are identified from Boardex, supplemented with information from LinkedIn. For sample executives who experience turnover, we record the first and second subsequent positions identified in the Boardex employee file, as well as the first position identified in the Boardex officer file (the vast majority of which are duplicates). If Boardex information is unavailable for an individual, we track the first new position listed in their LinkedIn profile after turnover (if any). Position titles are assigned to 8 ranks, as detailed in the appendix. The highest (lowest) rank is 1 (8), so a positive number in the change in rank variable indicates a move down in rank. Firm size is based on the number of employees, with employee numbers imputed for non-Compustat firms from LinkedIn information. Pay at new positions, when not available from Execucomp, is imputed based on year, rank, industry, and firm size, as detailed in the text and the appendix. The new-to-old pay salary ratio is based on inflation-adjusted salaries, using the procedure outlined in the appendix. For executives with more than one new position (more than one new position within 2 years of turnover), an executive's best job (best job within 2 years) is the position within this set that has the highest imputed ratio of new to old base salary. The reported new to old employer size and pay ratios are sample medians. The rates of new jobs obtained are based on the 19,868 turnover events. The change in rank, new-to-old size ratio, and new-to-old pay ratio are conditional on turnover and obtaining a new position.

Table 3 - Male vs. Female Executives - Univariate Differences

	Female	Male	Difference	P-Value
Pay Rank	3.575	2.967	0.607	<0.001
Age	50.846	52.991	-2.145	<0.001
Boardex Tenure	9.169	10.713	-1.544	<0.001
Execucomp Tenure	3.951	5.310	-1.359	<0.001
Year in Sample	2011.573	2010.041	1.533	<0.001
Holds CEO Title	9.17%	22.74%	-0.136	<0.001
Holds COO Title	3.74%	6.99%	-0.033	<0.001
Holds CFO Title	22.39%	19.63%	0.028	<0.001
Holds EVP Title	32.23%	26.11%	0.061	<0.001
Holds SVP Title	23.22%	17.25%	0.060	<0.001
Holds VP Title	13.28%	10.73%	0.025	<0.001
Firm in 1-Digit SIC Industry 3	19.32%	25.61%	-0.063	<0.001
Firm in 1-Digit SIC Industry 5	16.00%	10.14%	0.059	<0.001
Industry-Year Revenue Percentile	0.52	0.52	-0.001	0.7138
Annual Turnover Rate	12.08%	11.00%	0.011	<0.001
Obtains New Job After Turnover	62.76%	53.88%	0.089	<0.001
Obtains New Job After Turnover (Age<60)	68.94%	65.63%	0.033	0.0086
New Salary/Old Salary (First Job)	73.33%	63.85%	0.095	<0.001
New Salary/Old Salary (Best Job within 2 years)	102.01%	92.26%	0.098	<0.001
New Salary/Old Salary (Best Job)	105.64%	97.28%	0.084	0.0014

Note.- All statistics in the female and male columns are means calculated at the start of the year over the set of sample firm-years in which an executive is exposed to turnover risk. The revenue percentile variable is a firm's percentile rank relative to other firms in the same 2-digit industry in a given year, with 0.50 indicating the 50th percentile. All other variables are defined in the earlier tables, the text, and the appendix. P-values are for simple t-tests comparing female and male executives.

Table 4 – Baseline Turnover Models

VARIABLES	(1) Turnover	(2) Turnover	(3) Turnover	(4) Turnover	(5) Turnover
Female Indicator	1.777***	1.507***	1.702***	2.055***	-3.099*
	(0.287)	(0.303)	(0.324)	(0.351)	(1.599)
Firm Performance	-6.373***	-5.019***	-5.254***	-5.368***	-3.996***
	(0.297)	(0.294)	(0.309)	(0.365)	(1.194)
Firm Performance X (Payrank-3)	0.672***	0.744***	0.822***	0.912***	1.307**
	(0.159)	(0.159)	(0.171)	(0.236)	(0.600)
Revenue Percentile	2.015***	4.178***	3.854***	3.752**	0.072
	(0.449)	(1.409)	(1.419)	(1.593)	(2.346)
Boardex Tenure	-0.166***	-0.098***	-0.139***	-0.167***	-0.015
	(0.011)	(0.012)	(0.013)	(0.015)	(0.045)
Execucomp Tenure	0.105***	0.419***	0.403***	0.454***	0.533***
	(0.026)	(0.027)	(0.028)	(0.035)	(0.078)
Ivy League School Undergrad	-0.959***	-0.823**	-0.748*	-0.642	0.352
	(0.360)	(0.407)	(0.438)	(0.530)	(1.404)
MBA Degree	0.654***	0.375**	0.453**	0.564**	0.149
	(0.175)	(0.189)	(0.200)	(0.234)	(0.681)
Observations	179,077	179,069	147,795	120,628	27,009
R-squared	0.032	0.071	0.068	0.070	0.140
Dep Var Mean	11.09%	11.09%	9.91%	10.78%	6.04%
Firm FE	No	Yes	Yes	Yes	Yes
Industry FE	Yes	No	No	No	No
Year FE	Yes	Yes	Yes	Yes	Yes
Age FE	Yes	Yes	Yes	Yes	Yes
Payrank FE [Ranks 1 to 6]	Yes	Yes	Yes	Yes	Yes
Job Category FE [19 categories]	Yes	Yes	Yes	Yes	Yes
Functional Area FE [13 areas]	Yes	Yes	Yes	Yes	Yes

Note.- All coefficient estimates are for linear probability models in which the dependent variable assumes a value of 100 if turnover occurs during an observation year and 0 if there is no turnover. Firm performance is based on a percentile basis relative to the sample 2-digit industry-year cohort, centered around 0, so values range from -0.5 (worst performers) to 0.5 (best performers). The payrank variable takes integer values from 1 to 6, with higher values indicating a lower rank within the firm based on the executive's salary. The female industry friendliness variable assumes a value of -1 for firms in 1-digit industries in the bottom tercile of female executive representation and 0 (+1) for the middle (top) tercile. Interaction terms using payrank (year) are centered around the sample midpoint by subtracting 3 ranking points (the year 2011), resulting in an implied female gender coefficient for an executive of pay rank 3 (an executive in office at the start of 2011). Additional details on the fixed effects categories are reported in the appendix. Robust standard errors clustered at the firm level are reported in parentheses under coefficient estimates. All models in columns 6-11 restrict attention to non-CEOs under the age of 60. ***p<0.01, **p<0.05, *p<0.1

Table 4 – Baseline Turnover Models (continued)

VARIABLES	(6) Turnover	(7) Turnover	(8) Turnover	(9) Turnover	(10) Turnover	(11) Turnover
Female Indicator	1.961***	2.096***	2.072***	2.030***	2.552***	2.888***
	(0.360)	(0.353)	(0.350)	(0.362)	(0.757)	(0.698)
Firm Performance	-5.368***	-5.124***	-5.369***	-5.368***	-5.373***	-5.231***
	(0.365)	(0.377)	(0.365)	(0.365)	(0.365)	(0.502)
Firm Performance X (Payrank-3)	0.913***	0.956***	0.914***	0.914***	0.913***	0.878***
	(0.236)	(0.236)	(0.236)	(0.236)	(0.236)	(0.317)
Revenue Percentile	3.767**	3.764**	3.741**	3.802**	3.994**	2.675
	(1.593)	(1.593)	(1.593)	(1.593)	(1.615)	(2.496)
Boardex Tenure	-0.167***	-0.167***	-0.167***	-0.167***	-0.167***	-0.166***
	(0.015)	(0.015)	(0.015)	(0.015)	(0.015)	(0.021)
Execucomp Tenure	0.456***	0.455***	0.455***	0.455***	0.455***	0.501***
	(0.035)	(0.035)	(0.035)	(0.035)	(0.035)	(0.049)
Ivy League School Undergrad	-0.637	-0.640	-0.633	-0.644	-0.645	-0.468
	(0.531)	(0.530)	(0.530)	(0.530)	(0.531)	(0.710)
MBA Degree	0.568**	0.565**	0.567**	0.562**	0.565**	0.418
	(0.234)	(0.234)	(0.234)	(0.234)	(0.234)	(0.319)
Female X (Year-2011)	0.088					
	(0.055)					
Female X Firm Performance		-2.628**				
		(1.097)				
Female Industry Friendliness			0.254			
			(0.253)			
Female X Female Industry Friendliness			-0.892**			
			(0.411)			
Female CEO				0.897		
				(0.873)		
Female X Female CEO Indicator				0.745		
				(1.657)		
Female on Board Indicator					-0.385	
					(0.401)	
Female X Female on Board Indicator					-0.607	
					(0.827)	
Politically Active CEO Indicator						-0.270
						(0.377)
Female X Politically Active CEO Indicator						-2.681***
						(0.907)
Observations	120,628	120,628	120,628	120,628	120,628	66,857
R-squared	0.070	0.070	0.070	0.070	0.070	0.077
Dep Var Mean	10.78%	10.78%	10.78%	10.78%	10.78%	10.70%
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	No	No	No	No	No	No
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Age FE	Yes	Yes	Yes	Yes	Yes	Yes
Payrank FE [Ranks 1 to 6]	Yes	Yes	Yes	Yes	Yes	Yes
Job Category FE [19 categories]	Yes	Yes	Yes	Yes	Yes	Yes
Functional Area FE [13 areas]	Yes	Yes	Yes	Yes	Yes	Yes

Table 5 – Models of External and Internal Promotions

VARIABLES	(1) Internal Promotion	(2) Internal Promotion	(3) External Promotion 20% Jump	(4) External Promotion 20% Jump	(5) External Promotion 30% Jump	(6) External Promotion 30% Jump
Female Indicator	-1.811***	-1.956***	0.182*	0.180*	0.177**	0.183**
	(0.369)	(0.382)	(0.095)	(0.097)	(0.086)	(0.088)
Female X (Year-2011)		0.164***		0.008		0.000
		(0.056)		(0.015)		(0.014)
Female X Performance		-0.796		-0.467		-0.406
		(1.049)		(0.289)		(0.255)
Firm Performance	-0.650*	-0.578	-0.080	-0.036	-0.022	0.016
	(0.370)	(0.382)	(0.081)	(0.084)	(0.067)	(0.070)
Firm Performance X (Payrank-3)	-1.348***	-1.330***	-0.126**	-0.118*	-0.126**	-0.119**
	(0.407)	(0.409)	(0.062)	(0.062)	(0.056)	(0.056)
Revenue Percentile	-1.752	-1.712	-0.118	-0.114	-0.394	-0.392
	(1.705)	(1.707)	(0.343)	(0.343)	(0.294)	(0.294)
Boardex Tenure	-0.173***	-0.173***	-0.027***	-0.027***	-0.020***	-0.021***
	(0.017)	(0.017)	(0.003)	(0.003)	(0.003)	(0.003)
Execucomp Tenure	-0.260***	-0.257***	0.005	0.005	0.005	0.005
	(0.038)	(0.038)	(0.007)	(0.007)	(0.006)	(0.006)
Ivy League School Undergrad	0.234	0.247	0.131	0.132	0.165	0.165
	(0.622)	(0.622)	(0.151)	(0.151)	(0.134)	(0.134)
MBA Degree	1.056***	1.064***	0.275***	0.275***	0.282***	0.282***
	(0.261)	(0.261)	(0.065)	(0.065)	(0.057)	(0.057)
Observations	78,742	78,742	120,628	120,628	120,628	120,628
R-squared	0.198	0.198	0.033	0.033	0.033	0.033
Dep Var Mean	9.05%	9.05%	0.58%	0.58%	0.43%	0.43%
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Age FE	Yes	Yes	Yes	Yes	Yes	Yes
Payrank FE [Ranks 1 to 6]	Yes	Yes	Yes	Yes	Yes	Yes
Job Category FE [19 categories]	Yes	Yes	Yes	Yes	Yes	Yes
Functional Area FE [13 areas]	Yes	Yes	Yes	Yes	Yes	Yes

Note.- All coefficient estimates are for linear probability models in which the dependent variable assumes a value of 100 if the predicted event occurs and 0 otherwise, estimated over the sample of executive-years exposed to turnover risk for non-CEOs under the age of 60. The dependent variable in columns 1 and 2 assumes a value of 100 if an individual stays at the sample firm and their pay rank at the firm jumps by at least 2 levels. The dependent variable in columns 3 and 4 (5 and 6) takes a value of 100 if an executive departs from a sample firm and assumes a new position within 90 days with a salary (actual or imputed) that is 20% larger (30% larger) than the position they departed from. The models in columns 1 and 2 are restricted to individuals with pay ranks of 3 or lower. The construction and definitions of all explanatory variables are the same as in the earlier tables. Robust standard errors clustered at the firm level are reported in parentheses under coefficient estimates. ***p<0.01, **p<0.05, *p<0.1

Table 6 – Job Outcomes After Turnover

VARIABLES	(1) New Job	(2) New Job	(3) New Job (<2y)	(4) New Job (<2y)	(5) Good Job (<2y)	(6) Good Job (<2y)	(7) Salary Change	(8) Salary Change
Female Indicator	-0.531	-0.990	-2.483*	-2.963**	0.642	0.270	0.001	0.001
	(1.323)	(1.319)	(1.453)	(1.461)	(0.980)	(0.966)	(0.011)	(0.011)
Female X (Year-2011)		0.617***		0.645***		0.501***		0.002
		(0.231)		(0.246)		(0.156)		(0.002)
Firm Performance	-3.069*	-3.073*	-1.623	-1.627	2.139*	2.135*	0.004	0.004
	(1.597)	(1.594)	(1.737)	(1.734)	(1.101)	(1.102)	(0.013)	(0.013)
Firm Performance X (Payrank-3)	-0.438	-0.467	-1.582	-1.613	-0.647	-0.671	0.007	0.007
	(1.043)	(1.040)	(1.143)	(1.140)	(0.804)	(0.803)	(0.009)	(0.009)
Revenue Percentile	15.849***	15.717***	15.466**	15.328**	-1.663	-1.770	-0.034	-0.035
	(5.509)	(5.510)	(6.626)	(6.633)	(4.250)	(4.245)	(0.044)	(0.044)
Boardex Tenure	-0.599***	-0.597***	-0.567***	-0.565***	-0.182***	-0.181***	-0.003***	-0.003***
	(0.074)	(0.074)	(0.074)	(0.074)	(0.042)	(0.042)	(0.001)	(0.001)
Execucomp Tenure	-0.735***	-0.729***	-0.889***	-0.882***	-0.462***	-0.457***	-0.007***	-0.007***
	(0.157)	(0.157)	(0.161)	(0.161)	(0.094)	(0.094)	(0.001)	(0.001)
Ivy League School Undergrad	2.589	2.696	2.991	3.103	0.722	0.809	-0.002	-0.002
	(2.145)	(2.145)	(2.446)	(2.444)	(1.694)	(1.690)	(0.017)	(0.017)
MBA Degree	9.794***	9.818***	8.622***	8.646***	3.855***	3.873***	0.034***	0.034***
	(0.951)	(0.950)	(1.051)	(1.050)	(0.718)	(0.718)	(0.007)	(0.007)
Observations	12,537	12,537	12,537	12,537	12,537	12,537	8,960	8,960
R-squared	0.361	0.361	0.319	0.319	0.239	0.240	0.351	0.351
Dep Var Mean	66.72%	66.72%	53.63%	53.63%	10.58%	10.58%	86.65%	86.65%
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Age FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Payrank FE [Ranks 1 to 6]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Job Category FE [19 categories]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Functional Area FE [13 areas]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Note.- Coefficient estimates in columns 1-6 are for linear probability models in which the dependent variable assumes a value of 100 if the predicted event subsequent to turnover occurs and 0 otherwise, estimated over the set of non-CEO sample executives under the age of 60 who depart from their employer. The dependent variable in columns 1 and 2 (3 and 4) takes a value of 100 if the executive resurfaces at any new position after departure (within 2 years of departure). The dependent variable in columns 5 and 6 takes a value of 100 if the executive resurfaces within 2 years in a role in which their estimated inflation-adjusted new-to-old salary ratio is at least 1.20. The estimates in columns 7 and 8 are linear regression coefficients, where the dependent variable is the natural log of one plus the inflation-adjusted new position-to-old position salary ratio, using the highest ratio if multiple new positions are detected for the executive. The construction and definitions of all explanatory variables are the same as in the earlier tables. They are measured as of the start of the year in which the turnover event occurs. Robust standard errors are reported in parentheses under coefficient estimates. ***p<0.01, **p<0.05, *p<0.1

Table 7 – Net Effects: Predicting Bad and Good Turnover Outcomes

VARIABLES	(1) Bad Outcome	(2) Bad Outcome	(3) Good Outcome	(4) Good Outcome
Female Indicator	1.564***	1.597***	0.308**	0.263**
	(0.300)	(0.312)	(0.131)	(0.131)
Female X (Year - 2011)		-0.007		0.052***
		(0.048)		(0.020)
Firm Performance	-3.966***	-3.809***	-0.285**	-0.219*
	(0.329)	(0.339)	(0.114)	(0.118)
Female X Performance		-1.681*		-0.704*
		(0.966)		(0.404)
Firm Performance X (Payrank-3)	0.839***	0.867***	-0.154*	-0.141
	(0.208)	(0.209)	(0.093)	(0.094)
Revenue Percentile	2.615*	2.621*	-0.263	-0.251
	(1.389)	(1.390)	(0.479)	(0.479)
Boardex Tenure	-0.068***	-0.069***	-0.040***	-0.040***
	(0.014)	(0.014)	(0.005)	(0.005)
Execucomp Tenure	0.427***	0.427***	0.003	0.003
	(0.031)	(0.031)	(0.010)	(0.010)
Ivy League School Undergrad	-0.866*	-0.866*	0.187	0.191
	(0.458)	(0.458)	(0.205)	(0.205)
MBA Degree	-0.449**	-0.449**	0.558***	0.561***
	(0.198)	(0.198)	(0.092)	(0.092)
Observations	120,628	120,628	120,628	120,628
R-squared	0.064	0.064	0.037	0.037
Dep Var Mean	7.99%	7.99%	1.15%	1.15%
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Age FE	Yes	Yes	Yes	Yes
Payrank FE [Ranks 1 to 6]	Yes	Yes	Yes	Yes
Job Category FE [19 categories]	Yes	Yes	Yes	Yes
Functional Area FE [13 areas]	Yes	Yes	Yes	Yes

Note.- All coefficient estimates in this table are for linear probability models in which the dependent variable assumes a value of 100 if the indicated turnover outcome occurs during an observation year and 0 otherwise. The dependent variable in columns 1 and 2 assumes a value of 100 when turnover occurs during an observation year and the departing executive either does not resurface in a new job within 2 years of departure or, for any such new job obtained, the estimated inflation-adjusted new-to-old salary ratio is 0.80 or less. The dependent variable in columns 3 and 4 assumes a value of 100 when turnover occurs during an observation year and the departing executive obtains a new position within 2 years, with an inflation-adjusted new-to-old salary ratio of 1.20 or greater. All models are estimated over the sample of non-CEO executives under the age of 60. The construction and definitions of all explanatory variables are the same as in the earlier turnover tables. Robust standard errors are reported in parentheses under coefficient estimates. ***p<0.01, **p<0.05, *p<0.1

Table 8 – Variation in Characteristics of New Position

VARIABLES	(1) Go Small	(2) Go Big	(3) Rank Up	(4) Rank Down	(5) Distance	(6) High Finance
Female Indicator	-4.789***	4.112***	-5.358***	5.313***	31.888	-1.977***
	(1.485)	(1.199)	(1.204)	(1.610)	(45.702)	(0.641)
Revenue Percentile	27.829***	-20.827***	9.103*	-7.905	280.528	6.066*
	(6.403)	(5.194)	(5.447)	(7.124)	(210.526)	(3.135)
Firm Performance	-2.295	-0.252	2.080	2.120	62.432	1.711**
	(1.732)	(1.294)	(1.500)	(1.818)	(58.508)	(0.774)
Boardex Tenure	-0.370***	-0.273***	-0.124*	0.487***	-4.476	-0.013
	(0.076)	(0.043)	(0.067)	(0.081)	(2.976)	(0.037)
Execucomp Tenure	-0.228	-0.341***	-0.044	0.762***	-11.044*	0.046
	(0.165)	(0.103)	(0.144)	(0.174)	(6.314)	(0.081)
Ivy League School Undergrad	3.565	-0.994	0.124	-3.689	87.087	3.397**
	(2.652)	(1.858)	(2.246)	(2.693)	(80.230)	(1.596)
MBA Degree	6.704***	5.088***	3.149***	-7.768***	-24.071	2.238***
	(1.084)	(0.793)	(0.930)	(1.136)	(31.655)	(0.536)
Observations	12,537	12,537	10,986	11,008	3,417	12,537
R-squared	0.275	0.295	0.310	0.314	0.415	0.234
Dep Var Mean	53.2%	15.68%	21.38%	47.78%	745.05	5.62%
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Age FE	Yes	Yes	Yes	Yes	Yes	Yes
Payrank FE [Ranks 1 to 6]	Yes	Yes	Yes	Yes	Yes	Yes
Job Category FE [19 categories]	Yes	Yes	Yes	Yes	Yes	Yes
Functional Area FE [13 areas]	Yes	Yes	Yes	Yes	Yes	Yes

Note.- Coefficient estimates in all models except column 5 are for linear probability models in which the dependent variable assumes a value of 100 if the indicated type of new position is obtained, and 0 otherwise, estimated over the set of sample executives who obtain at least one new position subsequent to turnover. Estimates in column 5 are for an OLS model where the dependent variable is the distance between the new and old employers' headquarters in miles. The dependent variable in column 1 (column 2) takes a value of 100 if the executive obtains a position at a firm that is 50% smaller (larger) than the prior employer, using the number of employees as the measure of firm size. The dependent variable in column 3 (column 4) assumes a value of 100 if the title rank of the new position on an 8-point scale (with 1 for the highest rank) is at least two ranks better than (worse than) the prior position, restricting the estimation in this column to executives with a prior rank of 3 or lower (6 or higher). The dependent variable in column 6 is an indicator of whether the new position is at an employer that we assign to the high finance category. All explanatory variables are defined as in the earlier tables. Robust standard errors are reported in parentheses under coefficient estimates. *** p<0.01, ** p<0.05, * p<0.

Appendix

A.1 Matching Executives in Execucomp and Boardex

Our sample includes all executives with non-missing job titles in the annual listings of Execucomp from the end-of-year 2000 listing (start of year 2001) to the end-of-year 2020 listing (start of year 2021), and we predict turnover for these executives during the fiscal year from 2001 up to and including 2021. We attempt to match all of these executives Execucomp execid numbers with Boardex directorid identifiers. As an initial step, we merge Execucomp company identifier (gvkey) to Boardex company identifiers (companyid) using the WRDS linking table. We match additional firms by identifying the prior names of firms with name changes and assigning a link if the firms' names closely match and there is an overlap in listed managers in both databases. In some cases, we match an Execucomp identifier to more than one Boardex identifier (and vice versa), with different matches in place for different years. This possibility arises because the databases differ at times in how they treat mergers, divestitures, and reorganizations with respect to whether a firm and identifier survive intact or whether the firm is effectively a new firm meriting a new identifier.

To match individuals across databases, we first programmatically clean and standardize certain features of the name strings to account for different treatments of titles, prefixes, suffixes, etc. We then match individuals in a multistage process, adopting more liberal matching criteria for the remaining unmatched individuals at each subsequent stage. These stages were derived iteratively, as we inspected the remaining unmatched individual after each stage and identified reasons why certain individuals who clearly were a match upon visual inspection of the files had not yet matched. In the handful of cases in which we identify multiple matches in a stage, we inspect additional data fields (e.g., education and employment histories) to make a unique match.

Over 90% of matches are made in the first stage in which we require (a) an exact first and last name match, (b) an overlapping period of executive service at the same employer, and (c) ages that differ by at most three years. In stage 2, we relax the exact first name match requirement in stage 1 to a first initial agreement requirement, as the databases vary at times in how first names are reported (e.g., Zach/ Zachary or Phil/Phillip). In stage 3, we completely drop the first name/initial requirement, to account for common nicknames that do not match in letter (e.g., Bill as a nickname for William). However, we add in this stage a requirement of the last name being unique in each database, and ages being within 1 year of each other across databases.

In stage 4, we drop all of the prior requirements and instead require (a) a match in salary within a 0.5% bound across databases at the same employer, and (b) reported ages that differ no more than three years. To sort out possible duplicates and validate matches, we, supported by fuzzy matching, hand-validate all matches manually. In stage 5, we repeat stage three but with the modification that the unique last name requirement is dropped. In stage 6, we drop all prior requirements and require (a) an exact match in salary in the same year across databases, (b) a matching last name across databases, and (c) reported ages that differ by at most one year across databases. In stage 7, we repeat stage 2 but drop the overlapping period of service requirement and tighten the age requirement to a one year or less difference. In stage 8, we repeat stage 1, but instead of using the formal first name we use the "usual" first name from Boardex, which are typically nicknames. Stage 9 repeats stage 2 but uses the usual name first initial rather than the formal first name first initial. In stages 8 and 9, we loosen the age restriction to a 15 year or less difference, as manual inspection of remaining unmatched individuals revealed clear typos in ages, but we wanted to avoid matching in common family executive team cases (e.g., father and son) where the age difference is typically 20 to 40 years. In stage 10, we modify stage 9 by dropping the overlapping period of service requirement

The unmatched individuals after the stages outlined above are cases in which we could not find a simple algorithmic way to match an individual across files with high confidence. These cases typically arise because of spelling errors in one database, different treatments of multiple substrings in a last name, and marital-status related changes in last name. Thus, we hand-inspect these remaining cases and manually match individuals, sometimes supplemented with web searches to resolve any ambiguities. We are particularly careful to look at all cases with first names that are traditionally associated with women to make sure we are not missing a potential match. We are able to match 95.98% of all executives, with a large majority of the unmatched cases being individuals who are only briefly in the Execucomp database and/or individuals serving in the early 2000s when Boardex was increasing its coverage.

A.2 Grouping and ranking job titles

For sample executives' positions at the Execucomp employer, we parse Execucomp job title descriptions and assign each title to a specific group, using some judgement in assigning similar titles together and ignoring certain qualifiers such as "interim" and "acting." We ordinally rank these groups based on average within firm salary rankings for different titles and retain for the individual the title with the highest rank. This process results in 18 ordinally ranked mutually-exclusive groups: (1) CEO or Chair & President, (2) President, (3) Chairperson, (4) COO, (5) Vice chair, (6) CEO of a unit/region/activity, (7) CFO, (8) Chairperson of a unit/region/activity, (9) President of a unit/region/activity, (10) Executive VP, (11) Senior VP, (12) Secretary, (13) Other corporate role starting with "Chief," (14) Corporate VP, (15) Head/Principal/Chief of Legal, (16) VP of a Unit, (17) Treasurer, (18) Controller. For individuals with no title in these groups, the job title is assigned to the category "other," and this title group is left unassigned in the ordinal rankings for title at the Execucomp employer.

We inspect the salary rankings for each of these 18 categories and condense them into 7 groups based on natural breakpoints in the salary data. Using the figures in parentheses above, Group 1 includes positions of level 1, Group 2 includes positions in levels 2-4, Group 3 includes positions in levels 5-8, Group 4 includes positions in levels 9-10, Group 5 includes positions in levels 11-13, Group 6 includes positions in levels 14-15, and Group 7 includes positions in levels 17-18. We add a Group 8 later for titles at new employers that we deem to be lower than Group 7 level positions.

For new positions, we parse the Boardex job title and assign the titles to the same 18 categories detailed above for Execucomp titles, which we then convert in the same way into the 8 groups. Since there are some new (usually lower level) titles in Boardex, we need to assign these additional positions to one of the 8 groups. New positions with "Chief" in the title that do not appear in Execuccomp appear to us to be less important positions (likely explaining why they never appear in the top 5 in Execucomp), and thus we assign them one level lower than the other "Chief" positions (i.e., to Group 6). Positions with the title "managing director, "partner," "principal," or "owner" are assigned to Group 2, as these titles often indicate very senior roles. All other positions are assigned to the lowest level, Group 8. Many of the job titles for this group indicate a (non-board) director-level or manager-level position that usually are one or more levels below VP level in common descriptions of corporate hierarchies.

A.3 Salary imputation algorithm – firms with over 100 employees

For new positions at employers with over 100 employees and no actual salary data for the new position in Execucomp, we estimate base salaries at new positions by assuming the person receives a salary equal to the median of Execucomp firms in the same 1-digit industry x firm size (employee) decile x job title rank (see above) x year bin. For bins with no observations (except job title rank

positions), we use the corresponding number for the title rank that is one position higher. If this group has no observations, we drop the industry requirement. Since there are no job title rank 8 positions in Execucomp, as these represent position titles that appear too low to cross the compensation reporting threshold, we assume the new salary for rank 8 positions is equal to 91.28% of the corresponding title rank 7 position. This figure represents the median ratio of the fifth to fourth highest salary at all Execucomp firms and thus would appear to be a reasonable choice as an estimate of the salary gradient as one steps down in rank.

New employer industry codes are based on Compustat, if available. Otherwise, we use the most common Compustat industry code for the Boardex sector of the firm, using the set of new employers that are present in both databases to identify the modal category. In the minority of cases in which a new employer's Boardex sector is missing, we assume the new employer is in the same 1-digit industry as the prior employer.

Our measure of firm size needed to estimate new salaries is taken directly from Compustat for the minority of new employers listed there. Otherwise, we identify the number of employees listing the new firm as their employer in Revelio's LinkedIn database as of the executive's position start date. In this process, we match Boardex and LinkedIn firm identifiers using an algorithm similar in spirit to our matching of individuals across databases, first using Revelio's linking indicators when available, and then matching firm name strings in a multiple stage process (details available upon request). Since not every employee is listed on LinkedIn, we calculate the ratio of Compustat employees to LinkedIn profiles for all observations where we have both figures and then estimate a median (quantile) regression that allows for 1-digit industry and year fixed effects. The predicted employee count from this regression using the employer's LinkedIn profile count is taken as the employee count for the new employer. Firms are then assigned to deciles based on where the actual/imputed employee figure locates them in the distribution relative to the Execucomp 1-digit industry annual cohort.

A.4 Salary imputation algorithm – firms with 100 or fewer employees

To impute salaries for positions at firms with 100 or fewer employees, we rely on 2022 survey data for CEO salaries reported in the 2023-2024 version of the *CEO and Senior Executive Compensation in Private Companies* report published by Chief Executive Group, LLC. We assign firms to the following four employee count groups: 0-9 employees, 10-24 employees, 25-49 employees, and 50-100 employees. We assume CEO salaries in 2022 for each group are equal to the reported median salary for the revenue range category with an upperbound that, when divided by the Compustat median revenue to employee ratio for 2022, indicates an employee number that lies within the employee range for the employee count group. CEO salaries for years prior to 2022 are imputed by multiplying the 2022 figure by the ratio of the Execucomp median CEO salary in the observation year by the Execucomp median CEO salary in 2022. Salaries for job title ranks below the CEO level are assumed to equal the imputed CEO salary level times the median ratio of salaries of all executives of that job title rank to CEO salary calculated over the Execucomp sample.

A.4 Inflation adjusting salaries to create new/old salary ratios

When we have an executive's actual new first full year salary from the Execucomp database (10.45% of all new positions), we inflation adjust their last salary at the employer they departed from by assuming it would have grown at the corresponding median annual raise rate over for all Execucomp executives during the interim period between measurement years. For salaries imputed based on employee estimates, the imputation procedure uses the last full year of service at the prior employer in

assigning salary estimates, so it effectively adjusts salary to reflect the pay scale at the time of departure, allowing us to directly calculate the ratio of new to old pay on an inflation-adjusted basis.

A.5 Identifying related firm new employers

As detailed in the text, turnover is coded as taking place in the fiscal year that an individual departs from an executive role at a firm, unless the executive leaves to join a firm that is related to the prior employer; for example, a division manager becoming the CEO of a division that was spun off during the year. To identify these related party departures, for all sample turnover events, we use a detailed prompt to instruct ChatGPT to classify whether the old and new firms are in any way related and, if so, how. We check the AI's accuracy by hand-checking a randomized and representative sample of the entire population and find it to be highly accurate, often identifying relationships that are initially missed by simple manual web searches. We inspect the description and timing of relationships identified by the AI and code the event as a related-party departure if it does appear that the firms were related in a substantive way around the time of the departure.

A.6 Identifying new employers categorized as high-finance firms

To classify high finance firms, we assign to this category all firms that Boardex characterizes as being in the private equity, investment company, or specialty and other finance sectors, except the few cases when it is clear from inspection of the employer title that the entity is a foundation or a non-profit or is affiliated with a governmental body. All other Boardex sectors, except the generic category of "Business services" are assumed not to be high finance entities. For the "Business services" category, we use Google Gemini supplemented by Google searches to determine if the firm is, broadly defined, in the private equity, investment company, specialty finance or hedge fund space. If a firm has no Boardex sector listed, we screen for employer titles that include keywords that are common in the titles of high finance firms (e.g., fund, advisor, associates, etc.) and conduct the same Google Gemini/Google search procedure to flag high-finance new employers.

A.7 Coding functional areas for job roles

Similar to Xu (2024), we use job titles to assign individuals the following 13 functional areas: (1) accounting, (2) administration, (3) finance, (4) general managers, (5) human resources, (6) information technology/technical/scientific/R&D, (7) legal, (8) marketing, (9) operations, (10) public relations, (11) sales, (12) corporate secretary, and (13) strategic/strategy. These assignments are based on flagging strings or substrings in the job title that are typically related to the functional area (e.g., for the accounting category the substrings: Account, Control, Comptroller, Acctg, Acct). The one exception is the general manager category, which is the category assigned for all job titles that cannot be assigned to the other categories based on common substrings. If a job title contains substrings that qualify it for two or more of the areas (e.g., VP of marketing and sales), we assign them to the functional area category of the qualifying substring that appears first in the job title.

A.8 Variable definitions

Dependent Variables

Turnover – An indicator equal to 100 if the executive departs from the firm in a given year, not including moving to a related entity, and zero otherwise.

External promotion 20% (30%) Jump – An indicator equal to 100 if an executive, following a turnover, obtains a new job within 90 days of their departure date and the new to old salary ratio is greater than or equal to 1.20 (1.30), and 0 otherwise.

Internal promotion – An indicator equal to 100 if an executive stays with the same firm and has a payrank (on a 1 to 6 scale) that increase by 2 in a given year, and 0 for all other observations.

New job – An indicator equal to 100 if an executive obtains any new job following a turnover event and zero otherwise.

New job within 2 years – An indicator equal to 100 if an executive obtains any new job within two years of a turnover event and 0 otherwise.

Good job within two years – An indicator equal to 100 if an executive obtains a new job with a new to old salary ratio of at least 1.20 within two years of turnover and 0 otherwise.

Salary change – The natural logarithm of 1 plus the new to old salary ratio. We winsorize the salary change ratio at the 1st and 99th percentile tails.

Bad turnover outcome – An indicator equal to 100 if a turnover occurs and was not followed by obtaining a new job with a new to old salary ratio of at least 0.80 within two years of the turnover event, and 0 otherwise.

Good turnover outcome – An indicator equal to 100 if a turnover occurs and is followed by obtaining a new position within 2 years of the turnover event with a new to old salary ration of at least 1.20, and 0 otherwise.

Go small – An indicator equal to 100 if an executive accepts a position after turnover at an employer that has a new employer to old employee count ratio of no more than 0.50, and 0 otherwise.

Go big – An indicator equal to 100 if an executive accepts a position after turnover at an employer that has a new employer to old employee count ratio of at least 1.50, and 0 otherwise.

Rank up – An indicator equal to 100 if an executive accepts a position after turnover at a position with a job title that is ranked at least 2 steps higher than the old title using the 8-point job title ranking scale described elsewhere in this appendix, and 0 otherwise.

Rank down – An indicator equal to 100 if an executive accepts a position after turnover at a position with a job title that is ranked at least 2 steps lower than the old title using the 8-point job title ranking scale described elsewhere in this appendix, and 0 otherwise.

Distance – The physical distance in miles between the headquarters' location zip codes of the new and old employer. Zip codes are obtained from Compustat and Boardex and distances are calculated using the zip code latitude and longitude coordinates in the GeoNames database inputted into the Haversine distance formula.

High finance – An indicator equal to one if the new job is in the specialized area of high finance as described elsewhere in the appendix, and 0 otherwise.

Independent variables

Female indicator – An indicator equal to one if the executive is female and zero otherwise as reported in Execucomp.

Revenues – The percentile rank of a firm's revenues in the year ending immediately prior to the turnover prediction year, measured relative to the Execucomp annual cohort, with 0 indicating the lowest revenue firm and 1 the highest.

Firm performance – The percentile rank of the firm's 12-month buy-and-hold return (including dividends) in the year prior to the turnover prediction year as reported by CRSP, measured relative to the firm's 2-digit SIC industry annual Compustat cohort. The raw percentile rank is re-centered around 0, and thus ranges from -0.5 to +0.5, with 0 indicating the 50^{th} percentile buy-and-hold return. For observations without a CRSP return, we use Compustat data and calculate the return as the sum of the firm's capital gains yield and dividend yield, adjusted for stock splits.

Boardex tenure – The number of years that the executive has held a position at the firm, calculated as the time between the start of the year for which turnover is being predicted and the executive's Boardex-provided start date at the firm, rounded to the nearest integer.

Execucomp tenure – The number of years that the executive has been listed at the firm in the Execucomp database, calculated as the difference between the fiscal year ending immediately prior to the turnover-prediction year minus the year of the executive's first listing at the firm.

Ivy league – An indicator equal to one if the executive has an undergraduate degree from an Ivy League School and zero otherwise, coded using Boardex education data. The Ivy league is composed of: Brown University, Columbia University, Cornell University, Dartmouth College, Harvard University, University of Pennsylvania, Princeton University, and Yale University.

MBA degree – An indicator equal to one if the executive holds an MBA degree and zero otherwise, coded using Boardex education data.

Female on board – An indicator equal to one if the board of the firm at the start of the turnover prediction year has at least one female director as revealed in the Boardex files, and 0 otherwise.

Female CEO – An indicator equal to one if a firm's CEO at the start of the turnover prediction year is female, and 0 otherwise.

Female industry friendliness – Female industry representation is the percentage of Execucomp executives at the 1-digit industry level who are female as of the start of the turnover-prediction year. Firms in industries in the bottom/middle/top terciles on this representation score are assigned female industry friendliness scores of -1/0/+1 respectively.

Politically active CEO indicator– An indicator that assumes a value of 1 if a CEO makes a contribution to a political candidate as indicated in the Babenko, Fedaseyeu, and Zhang (2020) data in the two-year

election cycle period that includes the start of the year during which turnover is being predicted. If no contribution is made, this variable is assigned a value of 0.

Fixed effects

Industry – Fixed effects based on the historical SIC code reported for the firm in Compustat as of the start of the turnover prediction year.

Firm – Fixed effects for each Compustat gvkey firm identifier.

Year – Fixed effects for the fiscal year for which turnover is being predicted.

Age – Fixed effects for the age of the executive in years as of the start of the fiscal year for which turnover is being predicted. Ages are integers taken from the Execucomp database, supplemented with the implied age from Boardex when Execucomp age data is missing. For the 0.42% of the sample with no age reported, we set the executive's age equal to the sample median of 53. In addition to age fixed effects, we also include a missing age indicator in all models. Ages are winsorized at the 1% tails before creating the fixed effects.

Payrank – Fixed effects for each integer rank of the base salary of an executive, calculated within the firm-year cohort for the year ending immediately before the turnover prediction year (1 for the highest paid, 5 for the fifth highest paid). Individuals with pay ranks below 5 are much less common than those ranked 1 to 5, as expected given mandatory disclosure rules only extend to the top 5. Thus, all individuals with a salary ranked below 5 are assigned a pay rank of 6.

Job title – Fixed effects indicating the executive's highest Execucomp job title as of the start of the turnover prediction year (i.e., end of prior fiscal year) as described in the job title ranking section of this appendix. Job titles are placed into 18 mutually exclusive groups and a group 19 other category (representing less than 2% of the sample) for all executives without a title that places them in another title group.

Functional area – Fixed effects for an executive's functional area based on the Execucomp job title held as of the start of the turnover prediction year (i.e., end of the prior fiscal year). The functional area assignment procedure is detailed elsewhere in this appendix.