Gender and Managerial Job Mobility:

Career Prospects for Executives Displaced by Acquisitions

Abstract

We examine gender differences in managerial job mobility by focusing on executives displaced (almost 90%) when their firms are acquired. Comparing outcomes for similarly-ranked managers from the same target firm and functional area, we find career disruptions result in a larger drop in rank for female managers. Gender differences are moderated when hiring firms have more women in upper-echelon positions. Rich managerial experience and external board service help women fare better in the job market. Overall, results point to a (implicit) 'gender-penalty' in terms of managerial job mobility, but also indicate contexts in which penalty is alleviated, and even reversed.

Keywords: Executive gender, job mobility, mergers and acquisitions, implicit gender bias, labor market

JEL Categories: G34, J16, J63, M51

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1. Introduction

Gender differences in labor market outcomes are well documented in the literature (Folke and Rickne, 2020; Zhang, 2019), with a broad consensus that women generally fare worse than men (Blau and Kahn, 2017). Considerable debate exists, however, about the underlying causes of the gender gap with two non-mutually exclusive approaches having emerged to account for the gap. The first is a supply-side rationale that systematic gender differences in attitudes, values, or preferences could lead men and women to 'make' different job choices and exhibit different behaviors in the job (Card, Cardoso, and Kline, 2016).[1] The second is a demand-side explanation that widespread biases hinder career opportunities for women relative to men (Cotter, Hermsen, Ovadia and Vanneman, 2001).[2] While there is substantial research on differences between men and women in the general labor market, possible gender variations at the senior management level have received comparatively less attention. It is conceivable that senior managers are in a different category from other employees: they tend to have substantial work histories and social and industry networks that could largely insulate them from gender bias. Yet, it may be precisely in the context

[1] There is a large literature on gender differences in beliefs and characteristics (Bertrand, 2010; Blau and Kahn, 2017), such that women are considered more risk-averse than men (Croson and Gneezy, 2009), less competitive (Niederle, 2014), and more considerate of others (Pratto, Stallworth and Sidanius, 1997). See, for example, Bertrand, Goldin, and Katz (2010), Gneezy, Niederle, and Rustichini (2003), Reuben, Wiswall, and Zafar (2017), and Wozniak, Harbaugh, and Mayr (2014). Notably, much of this literature focuses on "students, workers, or the general population" so that "it is unclear whether we should expect women at the top of the corporate ladder to be any different from men" (Adams and Funk, 2012: 2019). The notion that men and women have different characteristics and beliefs is quite widespread in academic research and popular media (Adams, 2016). Whether these gender differences found in the general population would also generalize to senior managers remains unclear (Ferreira, 2010).

[2] Studies of gender discrimination in employment settings focus either on employers' preferences for workers of one sex over the other (taste-based) or on employers' beliefs that workers of one sex or the other are more costly or less profitable to employ (statistical-based), both of which seek to provide demand-side explanations for the linkage between gender and career outcomes (Reskin and Bielby, 2005).

of leadership and authority that gender bias is most evident as substantial overlap exists between the qualities associated with "being manager and male" ('Think Manager Think Male' (TMTM) effect; Schein, Mueller, Lituchy, and Liu, 1996), but not between the 'manager' and 'female' (Heilman, Manzi, and Braun, 2015).[3] Our goal in the current investigation is to examine possible gender differences in job mobility for senior managers.

There are several challenges to studying gender differences in the managerial labor market. The employment decision, for instance, is the result of endogenous matching between managers and firms that could be influenced by a variety of gender-related supply and demand effects (Fernandez-Mateo and Fernandez, 2016; Xu, 2018). In our view, to isolate the role of demand-side factors on career outcomes for men and women, an ideal setting would be one in which men and women closely matched in their preferences and seniority were exogenously forced to enter the labor market under similar circumstances. Our study approximates this setting by exploiting a shock to the supply of senior managers in the labor market. Specifically, we investigate gender differences in job mobility (defined as, promotion, demotion, and lateral moves; Dohmen, Kriechel, and Pfann, 2004) among top managers displaced due to their firm being acquired by another firm as part of a M&A.[4] Selection issues are unlikely here as roughly 90% of managers from target firms are displaced after an acquisition, with gender playing no appreciable role in determining which managers are dismissed or retained. Further, the probability of a firm being acquired is unrelated to a manager's gender. Thus, the population of senior managers that abruptly

[3] It has long been argued that the pervasive and persistent expectation linking the leader role with men and not with women is "probably the single most important hurdle for women in management" (Antal and Izraeli, 1993, p. 63).
[4] Conceptually, our focus on labor market outcomes in the aftermath of involuntary displacement due to M&A is similar to Tate and Yang's (2015) examination of gender differences in worker wages after the closure of the plant where they work. In both cases, the goal is to isolate a set of forced job changes to alleviate endogeneity concerns.

– and often unexpectedly – find themselves in the labor market after M&A is appropriate for the purpose of identifying gender bias in job mobility.

Following prior research (Gayle, Golan, and Miller, 2012), we assess managerial job mobility based on changes in hierarchical level. Because organizational hierarchies are not readily comparable across firms, defining job mobility is difficult in most multi-firm data sets.[5] Based on the logic that seniority among managers is highly related to compensation (Murphy, 1999; Tate and Yang, 2015), some researchers have used compensation information to rank senior managers moving across firms (Fee and Hadlock, 2004).[6] Others have used only job titles to rank managers (Bertrand and Hallock, 2001; Xu, 2018). Accordingly, for our main analysis, we generate a hierarchy of managers using job titles and total compensation, such that rank 9 (highest rank in our sample) corresponds to the category with the highest compensation. In robustness analyses, we use three other ways to rank managers, two of which use compensation information and one where hierarchy is constructed independent of compensation (see Gayle et al., 2012). Our main results are robust to using these alternative ranking approaches.

We estimate regression models in which labor market outcomes are regressed on manager gender and various other attributes of the manager and the firm. Importantly, the regressions are estimated with target fixed-effects in addition to the manager rank and function fixed effects. By including these fixed effects, the gender indicator estimates the average within firm difference in

[5] Research on job mobility in the international context (that is, outside the US) sometimes allows for easier comparability across firms. Van der Klaauw and Da Silva (2011) use Portuguese matched employer-employee data that classifies employees into eight hierarchical levels, of which two levels are executives. Cassidy, DeVaro, and Kauhanen (2016) use Finnish data where all firms use the same 56 job titles across four hierarchical levels, making the classification comparable across firms. Unfortunately, these datasets do not distinguish between various managerial ranks (as we do in the present study). Furthermore, such data is not available for US firms, where there is no nationally accepted ranking of managerial positions. Studies of gender differences in job mobility among academics rely on well-accepted definitions of hierarchy (e.g., Bosquet, Combes, and Garcıa-Penalosa, 2019; Ginther and Kahn, 2004), but non-academic positions do not have a widely accepted hierarchy.

[6] Several studies in the broader labor market literature also use compensation to rank employees (e.g., Blau and DeVaro, 2007; Booth, Francesconi, and Frank, 2003).

outcomes between male and female managers, controlling for function and rank. Our results reveal a greater decline in post-M&A rank for female managers by about 0.53 ranks compared to men. This effect is statistically and economically significant. Since the unconditional decline in rank averages 0.82 points for managers in general, an additional decline of 0.53 represents an effect close to 65% higher for women. Our results are robust to using propensity score matching wherein each female manager in the sample is matched to a male manager with the closest value on the propensity score. Our results are also robust to including target-hiring firm fixed effects, and to dropping the 3 lowest ranked managers. The latter robustness test is to ensure that our results are not being driven by the set of firms that choose to disclose compensation information on more than the five highest paid managers, for whom disclosure is mandatory. We also look at the effect of the merger on compensation and find that compensation drops significantly more for women managers post-M&A.

Establishing whether men and women have differential access to management positions requires accounting for gender differences in motives and preferences, such as competitiveness and ambition (Buser, Niederle, and Oosterbeek, 2014). Prior research has suggested that women that expect demand-side factors to be biased against them may also be less likely to go back into the labor market (Fernandez-Mateo and Fernandez, 2016). While we cannot directly observe preferences of the displaced managers, we do observe the types of choices they make. Specifically, we do not find gender differences in job attrition, time to find the next position, and geographic distance to the new location (which addresses the concern that men and women have differential proclivities towards labor market participation). There are also no differences between target-firm male and female managers in general managerial ability, using the measure from Custodio, Ferreira, and Matos (2013). This should ease concerns that the differential labor market demand

for male and female managers is because of observable differences in their skills and experiences. Taken together, these findings provide evidence that our results are likely not driven by supply-side factors i.e., measurable differences in preferences and ability between male and female managers.

One could argue that M&As are not fully exogenous to manager preferences, so that some M&As may result in different outcomes for male and female executives simply because of gender differences in who helms the firm at the time or shrewd negotiations with the acquirer. To address these concerns, we conduct several additional analyses. We continue to find evidence for a greater drop in rank for female managers if we (a) drop top-3 ranked target firm managers from the sample as they may be most likely to affect the M&A outcomes; (b) drop managers who get jobs within 3 months from the M&A since such cases might reflect voluntary job mobility; (c) drop target firm managers hired by the acquiring firm; (d) use information about toeholds – which refers to acquirers buying target-firm shares in the market before launching the bid – to classify M&As as more or less hostile. The logic here is that when the acquirer has a toehold in the target, resistance to the acquisition is more difficult, which weakens the negotiating position of target firm managers.

While the general patterns suggest a degree of gender bias, it is quite possible that this is an implicit bias, which is "unintentional and outside of discriminator's awareness" (Bertrand, Chugh, and Mullainathan, 2007: 94). In the case of job mobility, it may be that female managers are disadvantaged post M&A because firms run predominantly by males (which is the case for the vast majority of public firms in the US) find it more difficult to evaluate women. Not surprisingly, some scholars and regulators call for greater gender diversity in the top management and in the board of directors (Adams, 2016). The logic for such action is that women in powerful positions cultivate a more female-friendly culture within their firms and are also less likely to pigeonhole

women, which then helps other women in the firm (Tate and Yang, 2015). We examine whether gender differences in job mobility are alleviated when the hiring firm has more women in (a) its top management team and (b) its board of directors. The evidence is generally supportive: having more women in top management teams does reduce the gender gap in job mobility, while more women on the corporate board has no statistically significant effect. We also find that if the target firm is in a highly male-dominated industry, women managers are more likely to suffer a greater drop in rank after the M&A. These findings are consistent with 'female friendly' conditions blunting the effects of gender bias.

If gender bias is unintentional, learning about a managers' abilities might overcome implicit bias at the hiring stage. Accordingly, we find that females with high levels of managerial experience, or those that serve/have served on external boards do not suffer a gender penalty in the managerial labor market. Prior research has found that board service is beneficial for managers in the labor market as it acts as a certification mechanism for their unique knowledge and competence (Boivie, Graffin, Oliver, and Withers, 2016). Finally, among executives high on general managerial ability (Custodio et al., 2013), no gender differences are found in job mobility; however, among executives low on managerial ability, females see a greater drop in rank post-M&A compared to males. These findings are consistent with the idea that women may have to explicitly demonstrate ability and skills to be considered as competent as men. Furthermore, we investigate promotion rates in hiring firms for managers hired from target firms. Suggestive of learning, we find that female managers from target firms – who may have been initially underplaced – are more likely to be promoted compared to their male colleagues in the new (hiring) firm.

Overall, our research points towards substantive gender differences in managerial job mobility, such that – *ceteris paribus* – women are at a disadvantage in the executive labor market compared to men. The different outcomes for male and female executives seem to be driven by implicit gender biases that are alleviated in female-friendly firms and when women managers have strong signals of competence and experience. Thus, our paper casts new light on gender differences in job mobility and reveals specific conditions that alter the gender bias in the labor market. In doing so, we not only provide much-needed empirical evidence on recruitment at the top of the labor market, we also identify the implicit mechanisms that produce gender inequity.

Our research contributes to a number of literatures. First, and foremost, we contribute to the literature on gender differences in managerial job mobility. Gayle, Golan and Miller (2012) examine gender differences in managerial job mobility, but they rely on the more limited Execucomp data (Top 5 paid managers) and do not address the endogeneity of executive gender and job mobility as we do in the present study. Xu (2018) is contemporaneous work that might be closest to ours, but her focus is only on gender differences in within-firm promotions. We look at job mobility within and across firms, relying on an empirical strategy that enables us to isolate demand-side factors (recruitment biases) from supply-side factors (availability of ambitious female candidates). There is also a broader literature on gender differences in job mobility in the general labor market (Cassidy, deVaro, and Kauhanen, 2016; Pearlman, 2018), but the extent to which findings from gender differences in the general workforce generalize to senior executives is an open empirical question.

Our research also contributes to the literature on M&A outcomes (e.g., Agrawal and Walkling, 1994; Pontiff, Shleifer, and Weisbach, 1990). Researchers have examined the departure of target company executives following their company's acquisition (Hambrick and Cannella,

1993; Hartzell, Ofek, and Yermack, 2004). Several studies document that managerial turnover is high in firms targeted for acquisitions (Hadlock, Houson, and Ryngaert, 1999; Martin and McConnell, 1991), presumably because the market for corporate control plays an important disciplinary role. Yet, the question we ask – whether a specific managerial attribute (gender) has an impact on where managers end up post-acquisition – has not been addressed so far. We also contribute to the growing literature on the positive externalities of having women in leadership positions (e.g., Matsa and Miller, 2011; Tate and Yang, 2015). Our research shows that having women in leadership positions, particularly top management roles, reduces bias in hiring outcomes for experienced managers. Thus, contrary to the popular idea that women leaders in male-dominated settings are either an obstacle to the advancement of other women (Derks, van Laar and Ellemer, 2016) or have no discernible effect (Betrand, 2018), our research is suggestive of 'women helping women' in recruitment and promotion for executive positions.

2. Sample and Data

2.1 *Mergers and Acquisitions*

Our M&A sample is from Securities Data Company (SDC). We identify targets of successful mergers with an effective date between 2000 and 2017. Our data selection criteria follows Hauser (2018): (a) we select publicly traded U.S. targets, (b) exclude repurchases, recapitalizations, exchange offers, privatizations, (c) require that the acquirer owns 100% of the target firms after acquisition and (d) deal status is complete. There are 6,600 successful mergers from SDC that satisfy the selection criteria. After matching target firms with CRSP and Compustat, there are 4,501 mergers left, of which 2,257 mergers involve target firms with relevant data in the Boardex database.

For our main analysis, we consider acquisitions in which the target is fully absorbed by the acquirer (44% of the total M&A sample).[7] This sample comprises of 1,003 M&A deals with 7,079 managers, 1,106 of which are female (about 15%, which is consistent with Hanek, Garcia, and Tor's (2016) observation that women comprise 14.6% of executive officers in US public firms). In this sample, 88.6% managers of the target firm managers are let go post-acquisition, with only 11.4% of managers working for the acquirer afterwards.[8] As we show later, there is no gender difference for which managers remain with the acquirer, which alleviates concerns that male and female managers exit for different reasons.

2.2 *Senior managers and job rankings*

We obtain information on senior managers from Boardex organization summary file. We gather manager-firm-panel dataset from 2000 to 2018. The variable 'Seniority' indicates whether Boardex identifies the person as senior manager, executive director, or supervisory director. We exclude supervisory directors from our sample, considering only those identified as 'senior manager' or 'executive director' as senior managers. We use variable 'Role Name' to categorize managers into 33 different job titles, which we then organize into a hierarchy of ranks in a variety of ways. For our main analysis, we rank based on an OLS regression of log total compensation on job title indicators with firm- and year-fixed effects. We use the complete Boardex datafile on executive compensation (excluding board member compensation) to determine job title rankings. We drop the indicator variable for "VP & other C-suite" from the regression, and thus the coefficients for job titles represent the additional compensation earned in that job title compared

[7] For the remaining 56% of the initial M&A sample, the target firm continues to exist as a subsidiary of the acquirer. There are 1,254 such M&As in our sample. In these cases, 54% of the target firm managers are retained. While these cases are not part of our main analysis, we report on the gender outcomes for these M&As later for comparison purposes.

[8] Despite vocal proclamations by leading consulting firms involved in M&A engagements about the need to minimize executive turnover as an important objective during the integration of the two companies (Krug, Wright, and Kroll, 2014), a large body of research provides strong evidence for high turnover among target firm managers post-M&A (Martin and McConnell, 1991; Walsh and Ellwood, 1991).

to “VP & other C-suite”. We rank job titles based on the magnitude of the coefficients (33 categories), and also develop a broader ranking of 10 categories (aggregated based on the similarity of the coefficients). We name these variables detailed rank and coarse rank respectively. Higher ranks represent more seniority, though an increase of one rank does not imply an equivalent increase in degree of seniority for all ranks. We construct an alternative variable that takes this issue into consideration, by using coefficients from the compensation regression multiplied 100. We name this alternative variable, rank coefficient. See Table 1, Panel A for regression results and rankings. As noted earlier, other researchers have developed qualitatively similar rankings for managerial positions (e.g., Gayle, Golan, and Miller, 2012). We compare our rankings to those in Gayle et al (2012) and find that they are generally concordant. In robustness analysis, we utilize the Gayle et al (2012) ranking instead and obtain similar findings.

Our sample is composed of firm managers employed by the target firm at the time of the M&A announcement. Table 1 panel B presents the number of managers in our sample sorted by gender and rank. We see that the more senior the position, the lower the percentage of female managers, which is consistent with the idea that the percentage of women decreases as one moves up the organizational hierarchy (Klenke, 2017). For example, at rank 9 (the senior-most position), only 3% are female, while at rank 0 (the most junior position in our sample), 28% are female. We drop target firm managers with rank 0 at the time of the merger announcement from further analysis, because many of these managers drop out of the dataset post-M&A. Zero is the lowest rank for which we have data, and since target firm managers are known to fare worse after mergers (Martin and McConnell, 1991; Walsh and Ellwood, 1991), the attrition rate from rank 0 is high.

Insert Table 1

2.3 *Descriptive statistics*

Table 2 presents summary statistics for the whole sample of target-firm managers in Panel A and by job rank and gender in Panel B. Females represent 13.4% of the sample.[9] *Change in rank* is the difference between the rank of manager's first job after M&A and his/her rank in the target firm before the M&A.[10] *Coarse rank* drops by an average of 0.82, meaning that target-firm managers suffer a loss of close to 1 full rank in their first job after the M&A. Change in rank is also negative for the other two measures of rank, supporting the idea that managers are hired at lower ranks after M&As, consistent with prior research on post-acquisition labor market outcomes for managers. *Change in Total Compensation* is measured as the change in log compensation between compensation earned in the first full fiscal year in the hiring firm and the last full fiscal year before merger. We obtain data on compensation from Capital IQ because of its broader coverage. Compensation drops after M&A as well, consistent with the loss in rank results. The number of observations for change in compensation is small because compensation data is available for a subset of public firms, and public firms are only required to report compensation for their five highest-paid employees, though in practice, some firms voluntarily report compensation for additional employees.

[9] Females represent 15.62% of the sample if rank zero is included.
[10] The number of observations is somewhat smaller (than e.g. for *Female*) because employment information in Boardex is absent after the M&A for 11.6% of the sample.

The average target-firm manager in our sample is 51 years of age and has been with the firm for 5.54 years. Most managers have a bachelor's degree, almost half have master's degrees or MBAs, and 5% have Ph.Ds. Managers have worked for an average of 2.6 different companies by the time the M&A happens and served on an average of 0.64 boards. *Industry Adjusted ROA* and *Market Adjusted Stock Returns* are negative, implying that the average target firm underperforms its peers, which is consistent with prior research (Jarrell, Brickley, and Netter, 1988). *Attrition* is an indicator for the absence of employment information in Boardex after the M&A. Attrition rate is 11.6% for the managers in our sample. Target firm managers take an average of 1.38 years to find their next job, with 11.4% managers getting jobs in the acquiring firm and 58% finding jobs in private (unlisted) firms. Among the group of managers that join public firms, the difference in log assets between hiring and target firms is positive, implying that managers on average are hired at firms larger than the target firm (though this statistic does not account for managers hired by private firms that are likely smaller). The difference in ROA between hiring and target firms is positive, implying that managers are hired at better-performing firms. We use Fama and French 12 industries to track the industries of firms that hire managers displaced by the M&A and find that 27% of managers get jobs in different industries. The distance between headquarters of target and hiring firms averages about 555 miles (median of about 147 miles).

As shown in Panel B, female managers lose more rank than their male counterparts post-M&A, regardless of how rank is measured. Further, attrition rates – managers dropping out from our sample – are similar for male and female managers across ranks. Following Agrawal and Walkling (1994), we interpret attrition rates to mean that managers exit the managerial labor market. Our result suggests that male and female managers are equally likely to exit the market.

Further, we also find that at various ranks, male and female managers from target firms take a similar amount of time to find their next position. These latter two results mitigate concerns that after their firms are acquired, females are more likely to leave the job market and are less committed to finding new jobs than their male counterparts (see, for instance, Kossek, Su, and Wu (2017) for the "opt out" argument, and Belkin (2003) for popular discussion of high-achieving women 'opting out' of the paid labor force).

Insert Table 2

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3. Empirical Findings

3.1 *Gender and labor market outcomes after M&As*

Change in ranks

Table 3 presents ordinary least squares (OLS) estimates of the relation between a manager's gender and job market outcome after M&A. Specifically, we regress change in ranks on an indicator variable for the manager being female, and an extensive set of independent variables. Standard errors for all regressions are clustered at the firm level. In Panel A the change in ranks (dependent variable) is measured using *Coarse Ranks*. Regressions include rank-fixed-effects to account for the differential impact an acquisition may have on target firm managers at different ranks. Summary statistics suggest that higher ranks are more disadvantaged by the acquisition. We also include function-fixed-effects to account for variations in employability of different functional jobs. Year-fixed-effects account for variations in market conditions over time. Regression (1) includes the aforementioned fixed effects, and the indicator for female. The coefficient on *Female* is -0.489, statistically significant at the 1% level, which means that female

managers drop by an additional 0.489 ranks compared to their male colleagues after M&As. Since the unconditional change in rank is -0.819, our results show that female managers drop in rank about 60% more than the average manager in the sample.

In regression 2 we include target-fixed effects, so as to estimate the effect of manager gender on job mobility for executives from the same target firm. This regression requires that there are observations for both genders in the same target firm. The coefficient is now slightly higher (in absolute terms) at -0.534, statistically significant at the 1% level. In regression (3), we introduce additional covariates that may influence a manager's employability. Among these, we control for manager's age since older individuals may face greater difficulty finding jobs; for organizational tenure as longer tenure implies work experience at fewer firms and human capital that may be less transferable to a new employer; an indicator for managers working for the acquiring firm post-M&A since a manager's firm-specific knowledge may be valuable for the acquirer; for time spent searching for the new job, as more patient managers might obtain better positions; and finally an indicator for being hired by a private firm since private firms are generally less prestigious and may be more likely to hire a manager from a public firm at relatively higher ranks post-M&A.[11] The coefficient for female is now slightly higher (in absolute terms) at -0.595, statistically significant at the 1% level.

In regression (4), we control for additional variables related to managers' education and experience. In general, we expect more education and experience are valued by the labor market and should reduce potential loss in rank. To account for education, we include indicator variables for the manager having a graduate degree, MBA or Ph.D.; and number of certifications such as CFA or CPA. To account for experience, we control for number of companies the manager worked

[11] Some prior research (e.g., Kleinjans, Krassel, and Dukes, 2017) has reported gender differences in preference for jobs with 'occupational prestige' in exchange for lower wages.

at and number of external boards the manager served on before the acquisition. The coefficient on female is -0.574, it remains negative and statistically significant at the 1% level.

Regression (5) is similar to regression (4) except that we substitute rank-function fixed effects (i.e., rank x function) for rank and function fixed effects to account for differences in employability that may be specific to a rank and function. With rank-function fixed effects the coefficient on the female indicator estimates the difference in outcomes for male and female managers that were at the *same* rank and at the *same* function. The coefficient on female is now -0.590, it remains negative and statistically significant at the 1% level. Regression 6 is similar to regression 4, but includes controls for characteristics of the firm that hires the managers. Specifically, we control for industry-adjusted ROA of the hiring firm, log of firm size, market adjusted stock returns, and Fama-French 12 industry-fixed effects. Because of missing observations, we add control variables sequentially. For example, accounting variables for hiring firms are only available for public firms, which comprise about 42% of the sample. The coefficient on *Female* is -0.388, still negative and statistically significant at the 10% level. Note that due to missing observations the number of observations in regression 6 is a fraction of the number of observations in other regressions. The drop in the magnitude of the coefficient is due to the drop in sample size rather than to the additional control variables: the coefficient is of similar magnitude for a regression on a similar sample that does not include the additional control variables.

For robustness, panels B and C present results for regressions that have the same covariates but different dependent variables: *change in detailed rank* (Panel B) and *change in rank coefficient* (Panel C). Results remain qualitatively unchanged. For robustness we also employ the ordered probit model instead of linear regression (untabulated). The benefit of ordered probit is that ranks are treated as ordinal and the shift between ranks is predicted by estimated cut-offs, rather than the

shifts being linearly related to covariate values. Our results using ordered probit continue to show a greater loss in rank for female managers compared to their male counterparts.

Firms have different organizational structures, and it is possible that women systematically self-select into firms where jobs with similar responsibilities are associated with different job titles that are ranked lower by our ranking algorithm and by the alternative measures we use. To account for this possibility, we include in our regressions target-hiring firm fixed effects, which compare managers who leave the same target firm and are hired by the same firm (untabulated). Results remain unchanged, alleviating concerns that our results are due to systematic differences in the organizational structures of firms that hire male and female managers.

In sum, results so far suggest that target-firm managers drop in rank post-M&A. In particular, female managers see a significantly greater drop in rank than their male colleagues, and this 'gender gap' in job mobility appears robust to different specifications. The difference in outcomes between male and female managers could be the result of gender-related preferences (supply side effects). We would expect these preferences to be revealed in the various choices made by male and female managers in their search and choice of new jobs: e.g., location of the new employer, willingness to change industry, willingness to wait for an appropriate offer and so forth. As we will show, there is no significant difference observed between men and women along these various preference dimensions, suggesting that the drop in rank is unlikely to be the result of gender related preferences. This supports the view that the greater drop in rank for female executives represents a lower demand for them among employers.

Insert Table 3

Change in compensation

We now estimate the relation between manager gender and change in compensation in the aftermath of an acquisition. In Table 4, we present OLS estimates for regressions of *Change in Total Compensation* on the managers' gender, and various sets of independent variables that control for firm and manager attributes. These compensation regressions provide evidence consistent with the finding that female managers suffer a relatively greater loss of rank after their firms are acquired. In these regressions, we do not include target-fixed effects, because in several cases we have data for only a single individual in the target firm. Regression (1) includes fixed effects for year, and target firm industry, rank and function. Regression (2) adds manager characteristics, regression (3) adds target characteristics, and regression (4) adds hiring firm characteristics. The coefficients on compensation range between - 0.508 ($p<0.1$) to -0.785 ($p<0.05$), implying a drop in log compensation for women managers that is between 50.8 and 78.5 percentage points greater than that for men.

These results provide additional empirical evidence suggesting post-M&A labor market demand favors male managers over female managers.

Insert Table 4

Propensity score matching (PSM)

Our previous analyses assume a linear relation between dependent variables and control variables, which may oversimplify the relation between manager gender and their job market outcomes after M&As. To allow for non-linear influence of controls on labor market outcomes, we use propensity score matching (PSM) to compare female managers to their male counterparts

with similar characteristics. The idea is to estimate the counterfactual outcomes of individuals by using the outcomes from a subsample of similar subjects from the control group, where 'similar' is defined in terms of a set of observable characteristics (Imbens, 2004).

We estimate the propensity score using a probit regression and model the probability of a target firm having a female manager based on characteristics believed to (a) differ among the general population of male and female managers and (b) to affect job outcomes. Our probit regressions includes the following independent variables: manager age, tenure, education level (Bachelor, Masters, or PhD), number of certificates, number of different companies the manager has worked for before the M&A, number of external boards the manager has served on before the M&A, natural log of target firm's total assets, target firm's industry adjusted ROA prior M&A, and indicators for manager's rank, function, target firm's industry (Fama-French 12 industries) and year of M&A (untabulated). We then match each female manager to one male manager with the closest propensity score, and require that the difference in scores is no greater than 0.01. Matching is done without replacement. There are 506 female managers with sufficient data on covariates used in this analysis, matched with 506 male managers, for a total of 1012 observations.

Table 5 Panel A presents summary statistics for treatment and control groups. We observe that female managers see a greater drop in rank than comparable male managers, and this difference is statistically significant at the 1% level. The difference between the two groups for remaining variables is indistinguishable from zero, suggesting our samples are closely matched.

In Table 5 Panel B we present results from OLS regressions explaining change in ranks using the matched sample. Regression analysis controls for residual differences in the sample. As before, the main variable of interest is *Female*. In regression (1) we include fixed effects for year, function and rank. In regressions (2) through (5) we add different sets of control variables,

analogous to what we do in Table 3. In regression (6) we add target firm fixed effects. The number of observations drops because these fixed effects require a target firm to have managers of both genders, and our matching algorithm does not require that a female manager be matched with a male manager from the same firm. The coefficient on female ranges between -0.485 ($p<0.1$) and -0.553 ($p<0.05$). Once again, results suggest a greater drop in rank for female managers compared to male managers. In Table 5 we present results for coarse ranks. Results remain qualitatively unchanged when we measure change in ranks using detailed rank or rank coefficients (untabulated).

PSM analysis confirms our earlier results: after M&As, female managers have greater drop in rank compared to their male colleagues, suggesting a significant 'gender gap' in demand for managers favoring men over women.

Insert Table 5

Robustness tests

We conduct a series of robustness checks to address potential concerns. One concern is that firms with women managers are more likely to be targeted for acquisition (Francis, Hasan, Shen, and Wu, 2019), presumably because either these firms prefer gender diversity over managerial effectiveness or women are considered less likely to fight back an M&A offer. We find that the probability of an acquisition is unrelated to CEO gender or the percentage of female executives in top 5 ranks or as a percent of all senior executives covered in Boardex, which should alleviate concerns that the target firm executive gender is systematically associated with the probability of a firm being acquired (see internet appendix, Table IA1). Further, we continue to

find a drop in rank for female managers in target firms with above median performance in the year prior to acquisition, which should alleviate concerns that women-led target firms prioritize diversity goals at the cost of managerial quality (untabulated).

Another concern, rooted in the notion that "the bargaining table [is] a male domain" (Kray and Thompson, 2005: 104), is that male executives are able to negotiate better post-M&A terms for themselves. To address this concern, we re-run our analysis by dropping top 3 ranked target firm executives, the managers most likely to influence M&A negotiations. Results remain qualitatively unchanged. These results and results discussed below are tabulated in internet appendix, Table IA2.

Further, we also consider M&As with toeholds. Our logic is that the negotiation power of the target firm manager is compromised when the acquiring firm already has a toehold in the target firm. If male managers negotiate better for themselves than female managers, then we expect male managers to have a lower drop in rank for non-toehold acquisitions than for toehold acquisitions, which would mean a lower gender rank differential for toehold acquisitions. This is not what we find when we run regressions similar to those in Table 3, but with an indicator added for toehold and its interaction with female. We find that the coefficient on female remains negative and significant, and the coefficient on interaction is negative (though insignificant), suggesting there is no change in the gender rank differential when management team has greater negotiation power.

As mentioned earlier, we follow the common approach in the literature to rank job titles based on compensation. One concern is that compensation disclosure is required for only the 5 highest paid employees in a firm, and disclosure for remaining managers is voluntary, which could potentially bias our results in such a way that we find a greater drop in rank for women managers. To safeguard against this possibility, we drop from our analysis lower-ranked managers (that is,

ranked below 4), and results are qualitatively unaffected. Further, and perhaps more importantly, we also use Gayle, Golan, and Miller (2012)'s non-compensation based executive rankings and obtain similar results.

We assume that all managers that end up at other firms after the acquisition do so involuntarily, because their job gets terminated. However, it could be that some executives leave voluntarily, and if men are more likely to leave voluntarily (Becker-Blease, Elkinawy, and Stater, 2010), then our results could reflect this difference. To account for this possibility we drop all managers who are employed within three months of the date of last employment with the target firm. Our results remain qualitatively unchanged.

3.2 *Alternative explanations*

So far, our results point to substantive gender bias in the executive labor market. The setting within which our investigation is conducted – job mobility of target firm executives post M&A – alleviates the concern that our findings result from supply-side effects. To further address this concern, we examine several alternative explanations for the female disadvantage in the managerial labor market. In Table 6, Panel A we estimate manager-level regressions to examine various characteristics of the managers in our sample and their job outcomes. Specifically, we run regressions similar to that in Table 3, regression 4, but with different dependent variables. Some have suggested that female managers may be of lower ability than male managers (seen as 'affirmative action' appointees; Bertrand, 2018; Heilman, Block, and Stathatos, 1997), which would then justify the greater drop in ranks for female managers post-M&A when they re-enter the labor market. In regression (1), we examine if gender affects acquiring firm's decision to hire the manager after the M&A. As noted earlier, only 11.4% of managers in the total sample are hired by the acquirer post-M&A. We expect that because the acquirer may have relatively more

information than external employers about target firm managers, acquirers would be less susceptible to discrimination, and more likely to retain highest quality managers from target firms irrespective of gender. The dependent variable is an indicator for the acquirer hiring a target-firm manager. The independent variables include our variable of interest 'female,' and control variables, fixed effects for target firm, rank-function and year, along with other variables expected to affect employment in acquirer firm. The coefficient on *Female* is statistically insignificant, suggesting there is no gender difference in the target firm managers retained by acquirers.

Insert Table 6

Next, we conduct a series of tests to examine gender differences in terms of the choices made by male and female managers in their search and selection of new jobs. In particular, we consider (a) attrition rates (regression 2), (b) time and distance between jobs (regressions 3 and 4), and (c) whether managers get jobs in an industry different from where they worked at the time of the M&A (regression 5). Perhaps, female managers simply do not make the same effort as their male counterparts in looking for a job after the M&A, which could then explain their greater loss in rank as a result. If that's the case, we should observe female managers have greater attrition rates, take longer to find their next job, and/or are less willing to take jobs at distant locations. *Attrition* is an indicator for the absence of employment information in Boardex after the M&A, and observations include managers without jobs after the M&A. *Time between Jobs* is computed in years for individuals who change jobs. *Distance* is the geodesic distance between headquarters for the two employers (this variable is often missing for private firms). *Change in Industry* and

indicator for M&A and new employer are in different Fama-French 12 industries, data is only available for public firms

Our findings are that the coefficient on the female indicator variable for regressions explaining attrition rates, and time and distance between jobs is statistically insignificant. These findings suggest that, in terms of key observable choices, it is unlikely that females are less motivated to land their next job. We also examine if gender affects manager's propensity to get a job in a different industry. Female managers might be less willing to make the effort to adjust and learn about a different industry if, for instance, they are more resistant to change or more risk averse than their male counterparts. Again, we find this not to be the case as the coefficient of the female indicator is insignificant. Taken together, these results suggest that post-M&A female managers act in ways very similar to male managers in searching for a new position.

We next consider if male and female managers differ in important characteristics likely to affect their job mobility. While some believe that women must be like men to break through the glass ceiling (Wajcman, 2013), others suggest that male and female managers differ systematically in important ways (Adams and Funk, 2012). In regressions (6) – (8), we regress social networks, experience at the management level, executive experience and an indicator for outside board service on our variable of interest, female indicator, and control variables. *Network* is the number of different individuals the manager has overlapped with through employment (in listed and unlisted firms), nonprofits/clubs/societies and education by the M&A effective date. *Executive experience* is years working in senior management as of M&A effective date. The coefficients on *Female* are statistically insignificant, suggesting that these observable managerial characteristics, that may affect the likelihood of being hired, are similar between male and female managers. Based on the idea that males and females accumulate systematically different work experiences on their

way up (Fitzsimmons, Callan, and Paulsen, 2014), it is possible that male managers accumulate more generalized skills than female executives, which are valued more broadly in the labor market. Using the managerial ability index developed by Custodio, Ferreira, and Matos (2013) as our measure for more managerial skills, we find no difference between male and female target-firm executives in our sample.

We also investigate if some types of firms are more likely to hire women, which may then explain their greater loss of rank in the labor market. Because "female executives are not randomly assigned to firms" (Baixauli-Soler, Belda-Ruiz, and Sanchez-Marin, 2017: 747), firms that hire women in senior positions may systematically differ from other firms. In Table 6, Panel B, regressions (1) – (3), we regress an indicator for the hiring firm being private, and change in size and ROA between hiring and target firms. Public, larger and better performing firms are more prestigious, and it is possible that women may trade-off a lower rank to work for a more reputed firm. Firm size and ROA are available for public firms only, and hence the smaller number of observations. The coefficient on *Female* is statistically insignificant suggesting there is no significant difference in the types of firms that hire female managers post-M&A.

Next, we investigate if post-M&A women executives are more likely to be hired in female-friendly firms, such firms may be less likely to discriminate against women. Social identity theory (Tajfel and Turner, 1979) and homophily literature (Kleinbaum, Staurt and Tushman, 2013) suggest that female leaders may help other females advance in the firm. This is both because they are less likely to view women through the lens of traditional gender stereotypes and also because they foster an organizational culture friendly to women. Others, however, argue that senior women tend not to support, and sometimes even actively undermine, women subordinates (also referred to as the 'queen bee' effect; Derks, van Laar, and Ellemers, 2016). In regressions (4) – (7) we

regress an indicator for hiring firm having a female CEO, percent of female executives in the hiring firm (measured using all executives for which we have data, and top five executives only), and an indicator for female leadership. A firm is considered to have female leadership if it satisfies one of the following requirements: firm is led by a female CEO at any time between 2000-2018; of the top 5 ranked managers that worked in the company between 2000 and 2018 more than 10% are female or at least 2 are female; of all the managers that worked in the company between 2000 and 2018, more than 15% are female or at least 2 are female. Number of observations in these regressions vary because of data availability on Boardex for the executive team of hiring firm. We find that hiring firms that have female CEOs, higher proportion of female executives, higher proportion of top 5 ranked females or female leadership are more likely to recruit women managers, suggesting lower levels of gender bias from firms with greater upper echelon representation of women.[12]

We perform survival analysis to examine how long it takes male and female managers to get their next job. If there is a preference to hire male executives, or women are less motivated to get their next job, then female executives may be unemployed longer. On the other hand, if female executives are more willing to accept lower ranked jobs, they may find jobs sooner. In Figure 1 we plot Kaplan-Meier survival curves for male and female managers to show fraction of managers without jobs at various points in time, measured as years since date of last employment at target firm. The curves for male and female managers are overlapping. In additional analysis (untabulated) we run a Cox proportional hazard model with manager characteristics expected to affect the duration of unemployment (age, tenure, education, and experience). The coefficient on

[12] It has been suggested that women managers prefer to work in female-friendly firms (Barbulescu and Bidwell, 2013). Our analysis does not rule out this possibility, though we show no gender differences for managers joining female friendly firms post M&A.

female is statistically insignificant. Further, the coefficient on female isn't sensitive to stratifying the data by target, function, rank and year. Our results suggest no differences in the time male and female managers take to get their next job after the M&A displacement.

3.3 *Cross-sectional determinants of labor market outcomes*

Drawing attention to the "unconscious manner in which stereotypic expressions may be produced and influence judgment and action" (Banaji and Greenwald, 1995: 182), some scholars have suggested that gender bias may be implicit in that it occurs outside the person's conscious awareness and without realization (Bertrand et al., 2005; Greenwald & Banaji, 1995). It is possible that the gender differences we observe in job mobility are driven by implicit bias. To examine this possibility, we consider conditions that may affect implicit bias.

Female-friendly firms

If the bias against women in managerial roles is implicit, then firms with women at the helm may be less likely to discriminate against female executives. We therefore examine the influence of upper echelon gender diversity on men and women's post-M&A career trajectory. Specifically, we examine whether gender differences in job mobility are alleviated when the hiring firm has more women in (a) top management teams and (b) boards of directors.

In Table 7 we examine the potential influence of female leaders in the hiring firm on the relation between target-firm manager gender and change in rank post-M&A. The dependent variable is change in rank, independent variables are the same as in Table 3 regression (4), except that now we add a proxy for the hiring firm being female-led (which we call *Female-Friendly* firms) and an interaction of this variable with an indicator for target-firm executive gender is female. The interaction captures the impact female leaders have on the relation between manager gender and change in rank. A positive coefficient suggests an attenuation, or even a reversal, of

the gender – rank relation. In regressions (1) – (5) we use different proxies for female-led hiring firms, as specified in table heading. In turn we use: (a) an indicator for firm is led by a female CEO, (b) proportion of female managers in the firm, (c) proportion of female executives among the top 5 ranked firm managers, and (d) proportion of females on board, all measured in the firm-year prior to hiring the target-firm manager. In regression (5) we use the composite measure *Female Leadership*.

Our results show that female friendly firms appear to reverse the female disadvantage in the job market for target firm managers. In regression (1), the coefficient on *Female* x *Female CEO* interaction is 3.010, and statistically significant at the 1% level. The coefficient on female is -0.747. The marginal effect, obtained by summing these two coefficients, is positive (statistically significant at 0.01 level), suggesting that there is no 'gender penalty' in female-led firms.[13] The coefficients on the *Female* interaction with other proxies for female friendliness are also positive and statistically significant (with the exception of regression (4), where we examine the moderating effect of female board representation), suggesting a smaller gender bias in female friendly firms. The marginal effects for females in female friendly firms, is indistinguishable from zero at the 90th percentile of the variables *Female Executives Ratio* and *Females in Top 5 Ratio*, and for the indicator on *Female Leadership*. These results suggest no gender penalty for firms with high levels of female friendliness.

One reason for the recent push for greater female representation on corporate boards is the notion that female directors may help increase gender equality in the firm ('women helping women'; Cook and Glass, 2014; Matsa and Miller, 2011). The interaction of *Female* x *Females in*

[13] The marginal effect for females in firms led by female CEOs is positive and statistically significant, suggesting that, in these firms, female managers have an advantage over males. However, female CEOs compose only 3.5% of the sample, and thus this result needs to be interpreted with caution. Using other proxies for female friendliness, we do not find evidence of a female advantage.

Board Ratio is positive, but statistically insignificant at conventional levels. However, statistically insignificant does not mean economically meaningless. When the proportion of female board members reaches 30%, the gender – rank relation is muted (0.3 x 1.618 (coefficient on the interaction) plus -0.462 (coefficient on *Female*)). These findings are consistent with the idea that "many benefits of increased levels of board gender diversity may not be realized" until a critical mass is achieved (Guldiken, Mallon, Fainscmidt, Judge, and Clark, 2019: 2027). Taken together, these findings suggest that post-M&A, gender differences in managerial job mobility may be alleviated in female-friendly firms.

A male-dominated industry might be more hostile to female executives (Ko, Kotrba, and Roebuck, 2015). Prior research has shown that women are devalued more in male-dominated settings (Eagly, Makhijani, and Klonsky, 1992), and perceptions of effectiveness are higher for men than for women in male-dominated industries (Garcia-Retamero and Lopez-Zafra, 2006). Davidson and Burke (2004) report that men are preferred in more masculine or gender-neutral settings and resistance to women in leadership is stronger in highly masculine industries. Looking at the gender composition of industries in our time, some industries today remain largely male-dominated (e.g., construction), while some have become gender neutral or female-dominated (e.g., leisure and hospitality).

We obtain data on percentage of females in an industry from Bureau of Labor Statistics, Current Population Survey Table 18. We find that most target firm managers stay in the same industry. As noted earlier, summary statistics show only 27% of target-firm managers move to another industry post-M&A (defined using Fama-French 12 industries). In Table 7, regression (6) we include an interaction of *Female* x *Male-dominated Industry*. Most industries in the US labor market are numerically majority male (Ko, Kotrba, and Roebuck, 2015), so researchers have used

different proportions to identify an industry as male-dominated (e.g., Gardiner and Tiggemann 1999; Hornsby, Benson, and Smith, 1987). For the present study, we define *Male-dominated Industry* as one where percentage of female workers is in bottom tercile of observations. The interaction is negative and statistically significant, suggesting that the additional drop in rank for female managers is significantly worse in male-dominated industries. Thus, we find that, post-M&A, women executives fare worse in male-dominated industries, perhaps because stereotypical beliefs are likely more gendered in such contexts compared to industries with higher participation of women.

Insert Table 7

Past experience

If women managers are disadvantaged because of implicit bias, it may be the case that it is harder to evaluate women than men, especially since senior manager recruiting will typically involve decisions by other men. As such, we expect the female disadvantage to be smaller (or even disappear) when there is visible and strong evidence of managers' prior relevant experience. We proxy for experience with an indicator for the manager being in the top tercile of years in senior management (that is, exceptionally rich management experience) and an indicator for whether the manager has served on external boards prior to the M&A. Table 8 presents regressions examining the contingent influence of these two proxies for experience on the female-rank relation. In regressions (1) – (4), we add two variables to the baseline regressions presented in Table 3: an indicator for top tercile of managerial experience, measured as number of years working as a senior manager and its interaction with female indicator. The coefficient on the interaction is positive and

statistically significant at conventional levels, and the magnitude of the coefficient is such that the sum of the coefficient on the interaction with *Female* is statistically insignificant in all regressions, suggesting that females with high managerial experience are not any more disadvantaged in the job market than their male colleagues.

In regressions (5) – (8) we instead include an indicator for whether the manager served on another board and its interaction with female indicator. The coefficients on the interaction are again positive and statistically significant, and the sum of the coefficient on *Female* with the interaction is statistically insignificant in all regressions. These results suggest that the 'gender penalty' for female executives in the post-M&A labor market might not apply to those who have previously served on boards. Panel B examines the influence of managerial ability (as measured using Custodio, Ferreira, and Matos, 2013) on gender differences in job mobility. *High* (*Low) GAI* are indicators for GAI is in the top tercile (bottom two terciles) of the sample distribution. We find that the interaction of executive gender and high managerial ability is not significant, suggesting that among executives with superior skills and experience, there appears to be no difference in drop of rank post-M&A for men and women. However, the interaction of executive gender and low managerial ability is significant, suggesting that among executives with limited skills and experience, women see a greater drop in rank compared to men.

Insert Table 8

Taken together, our findings here suggest that the female disadvantage in the labor market may be reduced, or even eliminated, when women managers from target firms can show strong evidence of relevant prior experience. While these results are consistent with our thesis that

enhanced information about managers' competence reduces the gender penalty in the labor market for women executives, they also point to an insidious advantage for male executives who are apparently not expected to show similar evidence of prior experience.

Firm performance

There is considerable ambiguity about the actual influence managers have on firm performance. Prior research has suggested that women tend to be blamed more for the poor performance of their firm, because they are perceived as lacking in the qualities and attributes necessary to be a successful manager (Ryan and Haslam, 2007). We therefore examine if target-firm financial performance affects labor market outcomes differently for male and female managers in our sample. We measure financial performance using accounting and stock market performance. Accounting performance is EBIT divided by total assets, minus industry mean, where industry is defined at the 4 digit SIC level. Stock market performance is the 12 month stock return prior to merger announcement minus value-weighted market return for the same period. We define poor performance with an indicator for firm being in the bottom tercile of performance.

In Table 9 we add to our baseline specifications an interaction between poor performance and female. Regressions (1) – (4) present results for accounting performance. The coefficients on the interaction term are negative and statistically significant, suggesting that when target firms have poor performance, female managers suffer a greater drop in rank. Regressions (5) – (8) present results for stock market performance. Though the coefficients are negative and close in magnitude to those in regressions (1)–(4), they are statistically indistinguishable from zero.

Insert Table 9

These results provide suggestive evidence that female managers are penalized more than male managers for the poor performance of their firms. However, the differential effect of firm performance is observed only for accounting-based performance, but not for market-based performance.

3.4 *Managerial promotions in post-M&A hiring firms*

We argue that a possible reason female managers are hired post-M&A at lower ranks than their male counterparts is because of implicit bias, which makes it harder for decision-makers in the labor market (who are primarily men) to evaluate women executives compared to male executives. To the extent female executives are being under-placed relative to ability/experience, we would expect hiring firm managers to promote the female executives they hire at a faster rate as they learn about their true potential. Further, because experienced female managers are hired at comparable ranks as males, we expect them to be promoted slower than their less experienced female colleagues, and at a similar pace to men.

We track job promotions for all target firm managers in their subsequent post-merger employers between 2000 and 2018. We run a linear probability model, the dependent variable is an indicator for the manager being promoted that year. Because managers are unlikely to be promoted immediately after they start a new job, our analysis excludes data for managers recruited in the initial two years at the new job. Table 10 presents the results. The main independent variable of interest is an indicator variable for manager is female (*Female)*, it captures the extent to which female managers are promoted faster than male managers (regressions (1) and (2)). To capture the extent to which female manager promotion rates differ with experience, we also include proxies for female experience and their interaction with *Female*. In regressions (3) and (4) we proxy for experience with an indicator for the executive being in top tercile of executive experience, and in

regressions (5) and (6) with an indicator for manager having prior experience on an external board. Regressions include fixed-effects for year, target firm, hiring firm and function-rank at which the manager was hired. Regressions also include other control variables expected to affect promotion rates.

The coefficient on *Female* is statistically significant and suggests female managers are promoted at a rate that is 3 percentage points faster than their male colleagues (regressions (1) and (2)). Considering that in our sample managers are promoted at a 5% rate, female managers are promoted at a rate that is 60% faster. The coefficients on *Female* x *Top Tercile Experience* are negative and statistically significant (regressions (3) and (4)), the size of these coefficients is similar to the coefficients on *Female*, and the sums of the two coefficients are indistinguishable from zero, suggesting that *experienced* females and males are promoted at similar rates. When we proxy for experience with an indicator for whether manager has prior experience on an external board, results are similar (regressions (5) and (6)). The coefficients on *Female x External Boards* are negative and statistically significant in regression (5), though insignificant in regression (6), and the sums of the interaction with *Female* are indistinguishable from zero.

Results are consistent with female managers being under-placed in their new firms, perhaps because their quality is initially difficult to evaluate as it is obscured by prevailing stereotypes (the implicit bias argument). With time, and as hiring managers learn of female managers' true potential, they are promoted at faster rates. Past experience, alleviates the gender placement gap, as it makes quality easier to evaluate. This argument is consistent with our earlier results showing there isn't a gender gap for experienced females – the placement of experienced female managers is comparable to that of their male colleagues. This is consistent with the results in this section that suggest that experienced females are promoted at similar rates as their male colleagues.

Insert Table 10

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4. Conclusion

The present study seeks to cast new light on the relationship between executive gender and job mobility. It is well-known that, despite gender parity in educational achievement and labor market participation, women remain under-represented in executive roles, with men vastly outnumbering women above the middle management level all the way to the CEO position. Various possible reasons have been offered for the persistent and glaring gender gap in executive positions, but it has generally been difficult to address the endogeneity challenge associated with linking executive gender with their placement in the corporate hierarchy. A novel solution to the endogeneity problem is to look at job mobility in the sample of target firm managers displaced due to M&A activity. By tracking such managers over time after the acquisition, we are able to speak to whether, why and when there are gender differences in managerial job mobility.

We find that, after the M&A, the labor market demand is greater for male managers than female managers, even when they are from the same firm and the same functional area. After the M&A, male managers drop less in rank compared to female managers. Differences in job search attributes, such as time taken to find the next job or 'exit' from the managerial labor market, are not systematically different across gender in our sample. This suggests that the gender differences in managerial job mobility we find are not associated with differences in search effort or other choices made by male and female executives. Consistent with the notion that the bias against women in managerial roles may be implicit (Bertrand et al., 2005), gender differences in managerial job mobility are exacerbated in male-dominated industries but alleviated in female-

friendly firms where women are in CEO roles or have more than a token presence in upper echelon positions. Women who have impressive work experience – either as senior manager or having served as a board member pre-M&A – are also not disadvantaged relative to male executives. Further, in managers' new post-merger jobs, female managers (who are initially underplaced) are promoted faster than male managers. Taken together, these results suggest that the 'gender penalty' that women managers face in the labor market is moderated when they are not viewed stereotypically by decision-makers, and thus less likely to be the target of implicit bias.

The positive news is that the presence of women in senior positions and the adoption of female friendly policies by firms or by local jurisdictions appear to blunt the effects of implicit gender bias in the managerial labor market. As more women reach the upper echelons in corporations, we may observe the gradual diminution of gender bias in the labor market.

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Table 1. Job titles and ranks

This table presents senior manager's job titles and ranks. Manager's job titles are sorted into 33 detailed ranks. We run an ordinary least squares (OLS) regression of the natural log of managers' total compensation on indicator variables for job titles, and firm- and year-fixed effects. We sort regression coefficients on job titles and assign detailed ranks such that higher values correspond to more senior positions in the firm. Detailed ranks are further grouped into 10 coarse ranks, based on similarity of the regression coefficients. The sample is the Boardex compensation database, excluding non-executive directors. The sample period is from 2000 to 2018. Panel A presents regressions results, detailed ranks and coarse ranks. Panel B presents the distribution of managers by gender and coarse rank. Standard errors are clustered at firm level. *, **, and *** indicate statistical significance levels of 10%, 5% and 1%, respectively.

Panel A. Job title rankings

	Coefficient	Detailed Rank	Coarse Rank
CEO and Chairman	0.887***	32	9
CEO and Vice Chairman	0.803***	31	9
CEO and President	0.767***	30	9
CEO	0.641***	29	8
Vice Chairman and (President or COO)	0.59***	28	8
President and COO	0.533***	27	8
President	0.455***	26	7
Vice Chairman and Division (CEO or Chairman or President)	0.45***	25	7
President and Other C-Suite (Such as CFO, CTO, CIO)	0.442***	24	7
President and Division CEO	0.434***	23	7
Chairman	0.434***	22	7
COO	0.417***	21	6
Vice Chairman and Other C-Suites	0.398***	20	6
Executive Vice President and COO	0.341***	19	6
Vice Chairman	0.289***	18	5
Executive Vice President and Division (COO or President)	0.26***	17	5
Vice President and COO	0.252***	16	5
Division (CEO or Chairman)	0.246***	15	5
Division (COO or President or Vice Chairman)	0.213***	14	4
Executive Vice President and Division (CEO or Chairman)	0.202***	13	4
Executive Vice President and CFO	0.192***	12	4
Other C-Suite (Exclude CFO)	0.161***	11	3
Executive Vice President	0.16***	10	3
CFO	0.145***	9	3
Executive Vice President and Other C-Suites	0.141***	8	3
Vice President and Division (CEO or Chairman)	0.141**	7	3
Vice President and (Division COO or Division President)	0.064***	6	2
Vice President and CFO	0.054***	5	2
Division Other C-Suites	0.021	4	1
Vice President and Other C-Suites (Exclude CFO)	0.000	3	1
Senior Vice President	-0.005	2	1
Other Positions	-0.026	1	0
Vice President	-0.066***	0	0

Panel B. Managers distribution by gender and rank

Coarse Rank	No. Males	No. Females	% Females
9	754	24	3.08%
8	177	6	3.28%
7	120	8	6.25%
6	135	20	12.90%
5	125	13	9.42%
4	483	59	10.89%
3	1,202	201	14.33%
2	267	33	11.00%
1	1,944	443	18.56%
0	766	299	28.08%
Total	5,973	1,106	15.62%

Table 2. Descriptive statistics.

Panel A presents descriptive statistics for the full sample. Panel B presents summary statistics by coarse rank and gender. Coarse rank 0 is excluded from the sample. Variable definitions are in Appendix. *, **, and *** indicate difference in means between male and female managers are statistically significant at levels of 10%, 5% and 1%, respectively.

Panel A. Descriptive statistics – full sample

	N	Mean	Median	S.D.
Female	6,014	0.134	0.000	0.341
Coarse Rank (Target)	6,014	3.383	3.000	2.768
Change in Coarse Rank	5,319	-0.819	0.000	3.448
Change in Detailed Rank	5,319	-2.143	0.000	11.939
Change in Rank Coefficient	5,319	-5.975	0.000	31.307
Change in Total Compensation	362	-1.512	-1.487	1.867
Age	4,997	51.352	51.000	7.726
Tenure	6,014	5.539	4.332	4.702
Bachelor's Degree	4,989	0.941	1.000	0.235
Master's Degree	4,989	0.171	0.000	0.377
MBA	4,989	0.326	0.000	0.469
Ph.D.	4,989	0.059	0.000	0.235
No. of Certificates	4,989	0.199	0.000	0.454
No. of Firms prior M&A	6,014	2.594	2.000	2.794
No. of Boards prior M&A	6,014	0.638	0.000	1.577
Ln (Executive Experience)	5,931	1.691	1.806	0.872
Served on Outside Board	6,014	0.186	0.000	0.389
Ln (Network Size)	5,739	5.455	5.529	1.272
Ln (Total Assets) (Target)	6,014	6.876	6.826	2.053
Ind. Adj. ROA (Target)	5,944	-0.004	0.002	0.282
Mkt. Adj. Stock Returns (Target)	6,014	-0.062	-0.093	0.457
Attrition	6,014	0.116	0.000	0.320
Time between Jobs	5,319	1.379	0.745	1.774
Retained by Acquirer	6,014	0.114	0.000	0.318
Hired by Private Firm	6,014	0.578	1.000	0.494
Female CEO (Hiring)	2,934	0.035	0.000	0.183
Female Executives Ratio (Hiring)	3,242	0.123	0.059	0.171
Females in Top 5 Ratio (Hiring)	2,607	0.056	0.000	0.180
Females on Board Ratio (Hiring)	1,445	0.111	0.111	0.100
Female Friendly Firm (Hiring)	3,429	0.140	0.000	0.149
Change in Firm Size	1,432	0.645	0.756	2.233
Change in ROA	1,400	0.012	0.003	0.357
Change Industry	1,432	0.271	0.000	0.445
Distance	2,227	555	147	759
Ln (Total Compensation) (Target)	404	14.106	14.020	1.078
Ln (Total Compensation) (Hiring)	373	12.646	12.439	1.841
GAI (General Ability Index)	5,438	1.978	1.777	0.991

Panel B. Descriptive statistics by gender and rank

	Coarse Rank Change		Detailed Rank Change		Rank Coeff. Change		Attrition		Time between Jobs	
Coarse Rank	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1	0.833	0.339***	3.829	2.057***	8.547	4.513***	0.115	0.119	1.433	1.397
2	0.738	-0.207**	3.600	0.276**	8.851	0.519**	0.101	0.121	1.216	1.353
3	-0.297	-0.862***	-0.603	-2.509***	-0.382	-4.79**	0.144	0.140	1.419	1.474
4	-0.614	-1.24*	-1.560	-3.667*	-0.538	-6.306*	0.093	0.085	1.252	1.022
5	-1.397	-1.154	-3.847	-3.385	-4.411	-5.194	0.112	0.000	1.354	1.536
6	-1.917	-1.950	-6.159	-5.450	-11.254	-8.263	0.111	0.000	1.577	1.434
7	-4.107	-3.833	-13.437	-13.000	-25.734	-24.825	0.141	0.250	1.589	2.151
8	-4.106	-4.667	-14.441	-16.834	-31.890	-37.713	0.090	0.000	1.549	1.071
9	-5.260	-5.917	-17.669	-19.334	-54.230	-56.830	0.096	0.000	1.219	1.106

Table 3. Gender and job rank changes around M&As

OLS regressions explaining change in coarse job ranks around M&As (Panel A), change in detailed rank (Panel B), and change in rank coefficient (Panel C). The main variable of interest is *Female*, an indicator for manager is female. See Appendix 1 for variable definitions. The type of fixed effects included in regressions is indicated at the bottom of table. Standard errors are clustered at firm level. T-statistics are reported in parentheses. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels respectively.

Panel A. Dependent variable = Change in coarse ranks

	(1)	(2)	(3)	(4)	(5)	(6)
Female	-0.489***	-0.534***	-0.595***	-0.574***	-0.590***	-0.388*
	(-5.20)	(-5.17)	(-4.70)	(-4.15)	(-4.30)	(-1.68)
Age			-0.040***	-0.038***	-0.038***	-0.044***
			(-5.43)	(-4.53)	(-4.43)	(-2.84)
Tenure			-0.001	-0.001	-0.001	-0.024
			(-0.05)	(-0.08)	(-0.05)	(-0.86)
Retained by Acquirer			0.070	0.161	0.081	0.431*
			(0.46)	(0.99)	(0.49)	(1.68)
Time between Jobs			0.248	0.349*	0.311	0.615*
			(1.41)	(1.86)	(1.65)	(1.93)
Hired by Private Firm			1.132***	1.079***	1.062***	
			(10.61)	(9.24)	(8.97)	
Master's Degree				-0.055	-0.059	0.321
				(-0.35)	(-0.39)	(1.25)
MBA				0.036	0.055	0.073
				(0.32)	(0.48)	(0.37)
PH. D				0.195	0.213	-0.268
				(0.74)	(0.79)	(-0.53)
No. of Certificates				-0.221*	-0.196	-0.124
				(-1.67)	(-1.47)	(-0.64)
No. of Firms prior M&A				-0.096***	-0.100***	-0.129**
				(-3.51)	(-3.56)	(-2.41)
No. of Boards prior M&A				0.110**	0.115**	0.147
				(2.38)	(2.46)	(1.61)
Ind. Adj. ROA (Hiring)						-1.015
						(-1.16)
Log (Total Assets) (Hiring)						-0.115*
						(-1.67)
Mkt Adj. Stock Return (Hiring)						-0.148
						(-0.64)
Year	Yes	Yes	Yes	Yes	Yes	Yes
Target Fixed Effects	No	Yes	Yes	Yes	Yes	Yes
Function Fixed Effects	Yes	Yes	Yes	Yes	No	Yes
Rank Fixed Effects (Coarse)	Yes	Yes	No	Yes	No	Yes
Fama-French 12 Ind. (Hiring)	No	No	No	No	No	Yes
Function x Rank (Coarse)	No	No	No	No	Yes	No
N	5318	5197	4269	3684	3671	829
Adj. R-sq	0.374	0.392	0.429	0.437	0.442	0.592

Panel B. Dependent variable = Change in detailed ranks

	(1)	(2)	(3)	(4)	(5)	(6)
Female	-1.690***	-1.833***	-2.004***	-1.906***	-1.944***	-1.323*
	(-5.24)	(-5.21)	(-4.67)	(-4.09)	(-4.20)	(-1.76)
Age			-0.118***	-0.108***	-0.118***	-0.145***
			(-4.61)	(-3.69)	(-4.03)	(-2.87)
Tenure			0.040	0.040	0.002	-0.087
			(0.84)	(0.75)	(0.03)	(-0.97)
Retained by Acquirer			-0.255	-0.050	-0.165	0.864
			(-0.49)	(-0.09)	(-0.29)	(1.01)
Time between Jobs			0.640	1.002	0.889	2.232**
			(1.06)	(1.55)	(1.37)	(2.06)
Hired by Private Firm			3.884***	3.673***	3.669***	
			(10.78)	(9.24)	(9.22)	
Master's Degree				-0.218	-0.216	0.806
				(-0.41)	(-0.41)	(0.95)
MBA				0.092	0.143	0.076
				(0.24)	(0.36)	(0.12)
PH. D				0.698	0.763	-0.684
				(0.78)	(0.83)	(-0.43)
No. of Certificates				-0.793*	-0.753	-0.392
				(-1.72)	(-1.63)	(-0.62)
No. of Firms prior M&A				-0.311***	-0.365***	-0.417**
				(-3.32)	(-3.89)	(-2.34)
No. of Boards prior M&A				0.407***	0.448***	0.428
				(2.59)	(2.84)	(1.38)
Ind. Adj. ROA (Hiring)						-3.396
						(-1.16)
Log (Total Assets) (Hiring)						-0.351
						(-1.62)
Mkt Adj. Stock Return (Hiring)						-0.504
						(-0.68)
Year	Yes	Yes	Yes	Yes	Yes	Yes
Target Fixed Effects	No	Yes	Yes	Yes	Yes	Yes
Function Fixed Effects	Yes	Yes	Yes	Yes	No	Yes
Rank Fixed Effects (Detail)	Yes	Yes	No	Yes	No	Yes
Fama-French 12 Ind. (Hiring)	No	No	No	No	No	Yes
Function x Rank (Coarse)	No	No	No	No	Yes	No
N	5318	5197	4269	3684	3671	829
Adj. R-sq	0.394	0.409	0.449	0.456	0.456	0.606

Panel C. Dependent variable = Change in rank coefficient

	(1)	(2)	(3)	(4)	(5)	(6)
Female	-3.945***	-4.187***	-4.626***	-4.136***	-4.172***	-3.408*
	(-5.22)	(-5.03)	(-4.48)	(-3.63)	(-3.69)	(-1.85)
Age			-0.298***	-0.268***	-0.310***	-0.358***
			(-4.74)	(-3.70)	(-4.23)	(-2.75)
Tenure			0.136	0.138	-0.049	-0.289
			(1.11)	(1.00)	(-0.37)	(-1.38)
Retained by Acquirer			-1.517	-1.031	-1.150	3.871*
			(-1.19)	(-0.75)	(-0.83)	(1.77)
Time between Jobs			1.246	2.190	1.925	7.462***
			(0.82)	(1.35)	(1.18)	(2.62)
Hired by Private Firm			9.371***	9.050***	9.077***	
			(10.51)	(9.12)	(9.07)	
Master's Degree				-0.540	-0.446	3.176
				(-0.41)	(-0.34)	(1.39)
MBA				0.457	0.541	1.016
				(0.46)	(0.53)	(0.64)
PH. D				1.926	1.989	-2.566
				(0.85)	(0.86)	(-0.68)
No. of Certificates				-1.709	-1.660	-2.410
				(-1.44)	(-1.39)	(-1.56)
No. of Firms prior M&A				-0.859***	-1.051***	-0.539
				(-3.75)	(-4.54)	(-1.21)
No. of Boards prior M&A				1.198***	1.263***	0.340
				(2.96)	(3.04)	(0.42)
Ind. Adj. ROA (Hiring)						-5.865
						(-0.81)
Log (Total Assets) (Hiring)						-0.976*
						(-1.78)
Mkt Adj. Stock Return (Hiring)						-1.065
						(-0.57)
Year	Yes	Yes	Yes	Yes	Yes	Yes
Target Fixed Effects	No	Yes	Yes	Yes	Yes	Yes
Function Fixed Effects	Yes	Yes	Yes	Yes	No	Yes
Rank Fixed Effects (Detail)	Yes	Yes	No	Yes	No	Yes
Fama-French 12 Ind. (Hiring)	No	No	No	No	No	Yes
Function x Rank (Coarse)	No	No	No	No	Yes	No
N	5318	5197	4269	3684	3671	829
Adj. R-sq	0.390	0.403	0.443	0.452	0.456	0.623

Table 4. Gender and changes in executive compensation around M&A

OLS regressions explaining change in managers' total compensation around M&A. Change in compensation is computed as the difference in natural logs of total compensation in hiring firm the first full fiscal year after hiring date and total compensation in target firm the last full fiscal year before M&A effective date. The main variable of interest is *Female*, an indicator for manager being female. See Appendix for variable definitions. The type of fixed effects included in regressions is indicated at the bottom of table. Standard errors are clustered at the firm level. T-statistics are reported in parentheses. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels respectively.

	(1)	(2)	(3)	(4)
Female	-0.756**	-0.785**	-0.742**	-0.508*
	(-2.28)	(-2.25)	(-2.14)	(-1.80)
Age		-0.030*	-0.026	0.008
		(-1.80)	(-1.53)	(0.83)
Tenure		-0.039**	-0.033	-0.022*
		(-1.97)	(-1.57)	(-1.75)
Retained by Acquirer		1.083***	1.098***	0.130
		(4.07)	(3.87)	(0.66)
Time between Jobs		0.075	0.087	0.013
		(1.09)	(1.23)	(0.27)
Master's Degree		-0.172	-0.176	0.185
		(-0.60)	(-0.63)	(1.07)
MBA		-0.204	-0.220	-0.175
		(-0.98)	(-1.05)	(-1.43)
Ph.D.		0.126	0.151	0.447*
		(0.23)	(0.29)	(1.75)
No. of Certificates		0.042	-0.003	0.111
		(0.17)	(-0.01)	(0.97)
No. of Firms prior M&A		-0.012	-0.020	-0.014
		(-0.30)	(-0.48)	(-0.57)
No. of Boards prior M&A		-0.006	0.008	0.035
		(-0.09)	(0.12)	(0.86)
Ind. Adj. ROA (Target)			-0.553	-0.040
			(-0.81)	(-0.09)
Ln (Total Assets) (Target)			-0.079	-0.302***
			(-0.98)	(-4.86)
Ind. Adj. ROA (Hiring)				-0.148
				(-0.84)
Ln (Total Assets) (Hiring)				0.014
				(0.26)
Ln (Total Compensation) (Target)				0.860***
				(24.58)
Year	Yes	Yes	Yes	Yes
Fama-French 12 Ind. (Target)	Yes	Yes	Yes	Yes
Function Fixed Effects	Yes	Yes	Yes	Yes
Coarse Rank Fixed Effects	Yes	Yes	Yes	Yes
Fama-French 12 Ind. (Hiring)	No	No	No	Yes
N	355	320	317	248
Adj. R-Sq	0.243	0.300	0.298	0.836

Table 5. Gender and job rank changes around M&As: Propensity score matched sample

Each female manager is matched to a male manager using propensity score, 1-to-1 nearest neighbor matching without replacement. Panel A presents summary statistics for treatment and control samples. Panel B presents OLS regressions explaining managers' change in coarse ranks around M&A using the propensity score matched sample. The main independent variable of interest is *Female*, an indicator for manager being female. See Appendix for variable definitions. The type of fixed effects included in regressions is indicated at the bottom of table. Standard errors are clustered at the firm level. T-statistics are reported in parentheses. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels respectively.

Panel A. Summary Statistics by Gender

	Male		Female		Difference	T-Stats
	N	Mean	N	Mean		
Change in Coarse Rank	506	-0.147	506	-0.549	0.402***	(3.16)
Age	506	48.779	506	48.781	-0.00	(-0.00)
Tenure	506	5.249	506	5.027	0.22	(0.86)
Retained by Acquirer	506	0.101	506	0.091	0.01	(0.53)
Time between Jobs	506	1.451	506	1.448	0.00	(0.03)
Hired by Private Firm	506	0.617	506	0.613	0.00	(0.13)
Master's Degree	506	0.174	506	0.162	0.01	(0.50)
MBA	506	0.292	506	0.271	0.02	(0.77)
PH. D	506	0.053	506	0.063	-0.01	(-0.67)
No. of Certificates	506	0.296	506	0.265	0.03	(0.93)
No. of Firms prior M&A	506	2.391	506	2.344	0.05	(0.33)
No. of Boards prior M&A	506	0.399	506	0.417	-0.02	(-0.27)

Panel B. OLS regressions explaining job rank changes around M&As

	(1)	(2)	(3)	(4)	(5)
Female	-0.485***	-0.487***	-0.482***	-0.421***	-0.553**
	(-3.12)	(-3.23)	(-3.20)	(-2.76)	(-2.51)
Age		0.008	0.004	0.003	-0.007
		(0.71)	(0.40)	(0.26)	(-0.40)
Tenure		0.010	0.010	0.002	0.012
		(0.49)	(0.48)	(0.11)	(0.36)
Retained by Acquirer		-0.022	-0.018	-0.081	-0.364
		(-0.09)	(-0.08)	(-0.34)	(-1.10)
Time between Jobs		-0.074**	-0.069*	-0.075*	0.117
		(-2.04)	(-1.85)	(-1.93)	(0.28)
Hired by Private Firm		0.855***	0.887***	0.896***	0.891***
		(5.86)	(6.01)	(5.76)	(4.02)
Master's Degree			0.021	0.017	-0.083
			(0.11)	(0.09)	(-0.30)
MBA			0.384**	0.432**	0.409
			(2.11)	(2.33)	(1.50)
PH. D			0.470	0.415	0.373
			(1.34)	(1.11)	(0.74)
No. of Certificates			0.072	0.011	-0.319
			(0.39)	(0.05)	(-0.97)
No. of Firms prior M&A			-0.012	-0.006	0.073
			(-0.24)	(-0.12)	(0.84)
No. of Boards prior M&A			0.094	0.095	-0.105
			(0.74)	(0.74)	(-0.62)
Target Fixed Effects	No	No	No	No	Yes
Function Fixed Effects	Yes	Yes	Yes	No	No
Rank Fixed Effects (Coarse)	Yes	Yes	Yes	No	No
Function x Rank (Coarse)	No	No	No	Yes	Yes
N	1012	1012	1012	993	695
Adj. R-sq	0.302	0.324	0.325	0.326	0.341

Table 6. Gender differences in managerial characteristics and hiring firm attributes

OLS regressions explaining manager characteristics (Panel A) and hiring firm characteristics (Panel B). Each regression has a different dependent variable, indicated in column heading. The main independent variable of interest is *Female*, an indicator for manager is female. All regressions include fixed effects for year, target firm, and executive's function-coarse rank in target firm. See Appendix for variable definitions. Standard errors are clustered at the firm level. T-statistics are reported in parentheses. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels respectively.

Panel A. Gender and managerial characteristics

	Retained by Acquirer	Attrition	Time between Jobs	Ln (Distance)	Chg. Ind.	Ln (Network)	Ln (Executive Exp.)	Served on Outside Board	GAI
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Female	-0.025	-0.001	-0.002	0.068	-0.027	-0.089	0.015	0.007	0.031
	(-1.44)	(-0.06)	(-0.14)	(0.35)	(-0.53)	(-1.41)	(0.61)	(0.36)	(0.58)
Age	-0.002**	0.008***	-0.001	0.008	-0.002	-0.011***	0.007***	0.003***	0.018***
	(-2.15)	(9.78)	(-1.38)	(0.80)	(-0.82)	(-3.44)	(4.59)	(2.80)	(6.29)
Tenure	0.001	0.002	-0.000	0.002	0.003	-0.019***	0.091***	-0.001	-0.024***
	(0.57)	(1.43)	(-0.15)	(0.12)	(0.62)	(-3.99)	(28.29)	(-0.41)	(-4.54)
Master's Degree	-0.007	-0.003	0.008	0.050	0.040	0.116**	0.017	0.005	0.059
	(-0.46)	(-0.21)	(0.49)	(0.29)	(0.88)	(2.42)	(0.73)	(0.28)	(1.14)
MBA	-0.019	-0.004	0.024**	-0.049	0.055	0.166***	-0.032	0.023	0.170***
	(-1.54)	(-0.39)	(2.01)	(-0.35)	(1.47)	(4.23)	(-1.19)	(1.59)	(4.31)
PH. D	0.064***	-0.030	0.022	0.320	-0.114	0.194**	-0.058	-0.067**	-0.051
	(2.63)	(-1.24)	(0.79)	(0.99)	(-1.55)	(2.40)	(-1.18)	(-2.15)	(-0.53)
No. of Certificates	0.016	-0.005	0.007	-0.287	0.030	0.213***	-0.042	0.009	-0.003
	(1.30)	(-0.43)	(0.51)	(-1.61)	(0.77)	(4.61)	(-1.04)	(0.57)	(-0.07)
No. of Firms prior M&A	0.006**	-0.009***	-0.001	-0.023	-0.011	0.011	0.048***	0.066***	0.001
	(2.26)	(-4.05)	(-0.29)	(-0.71)	(-1.08)	(1.17)	(9.55)	(16.41)	(0.05)
No. of Boards prior M&A	-0.002	-0.004	-0.001	0.118**	0.012	0.034**	-0.021*		0.053***
	(-0.51)	(-1.45)	(-0.22)	(2.01)	(0.89)	(2.35)	(-1.87)		(2.75)
Time between Jobs				-0.173	0.012				
				(-0.74)	(0.17)				
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Target Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Function x Rank (Coarse)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	3,671	4,049	3,671	1,320	826	3,576	3,671	3,671	3,404
Adj. R-Sq	0.254	0.142	0.971	0.392	0.414	0.288	0.604	0.370	0.293

Panel B. Gender and hiring firm characteristics

	Hired by Private Firm	Chg. Size	Chg. ROA	Female CEO (Hiring)	Female Executives Ratio (Hiring)	Females in Top 5 Ratio (Hiring)	Female Leadership (Hiring)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Female	-0.014	-0.324	-0.033	0.057**	0.029*	0.009	0.096***
	(-0.54)	(-1.50)	(-0.51)	(2.44)	(1.66)	(0.52)	(2.75)
Age	0.000	-0.029**	0.004*	0.001	0.000	0.001	0.001
	(0.05)	(-2.21)	(1.74)	(1.47)	(0.74)	(0.90)	(0.84)
Tenure	0.003	-0.007	-0.001	0.001	-0.002	-0.002	-0.004
	(1.41)	(-0.36)	(-0.35)	(0.35)	(-1.56)	(-1.31)	(-1.33)
Master's Degree	-0.018	-0.010	-0.017	0.011	0.017	0.023*	0.033
	(-0.78)	(-0.04)	(-0.57)	(0.80)	(1.32)	(1.86)	(1.02)
MBA	-0.003	-0.163	0.058**	-0.003	-0.015	-0.011	-0.005
	(-0.16)	(-0.98)	(2.13)	(-0.29)	(-1.58)	(-0.97)	(-0.20)
PH. D	0.008	0.089	0.046	0.010	-0.013	-0.004	-0.111**
	(0.20)	(0.25)	(0.37)	(0.39)	(-0.55)	(-0.13)	(-2.15)
No. of Certificates	0.001	-0.057	0.030	-0.011	-0.003	-0.017*	-0.004
	(0.06)	(-0.24)	(0.62)	(-0.88)	(-0.30)	(-1.78)	(-0.13)
No. of Firms prior M&A	0.002	-0.016	0.001	0.002	0.001	-0.001	-0.006
	(0.37)	(-0.34)	(0.22)	(0.57)	(0.23)	(-0.20)	(-1.07)
No. of Boards prior M&A	-0.009	0.068	-0.007	0.006	0.000	0.004	0.007
	(-1.28)	(1.18)	(-0.94)	(1.17)	(0.03)	(1.00)	(0.82)
Time between Jobs	-0.114***	-0.155	-0.014	-0.019	0.013	-0.013	-0.020
	(-3.77)	(-0.49)	(-0.32)	(-1.04)	(0.78)	(-0.83)	(-0.47)
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Target Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Function x Rank (Coarse)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	3,671	826	802	1,925	2,159	1,662	2,274
Adj. R-Sq	0.171	0.292	0.233	0.177	0.148	0.178	0.195

Table 7. Gender and job rank changes in female (un)friendly firms / industries

OLS regressions explaining changes in coarse ranks around M&As. The main independent variables of interest are *Female*, an indicator for manager is female, *Female Friendly*, and an interaction between the two variables. *Female Friendly* is measured in various ways, indicated in column headings. All regressions include fixed effects for year, target firm, and executive's function-coarse rank in target firm. See Appendix for variable definitions. Standard errors are clustered at the firm level. T-statistics are reported in parentheses. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels respectively

	Female CEO (Hiring)	Female Executives Ratio (Hiring)	Females in Top 5 Ratio (Hiring)	Females in Board Ratio (Hiring)	Female Leadership (Hiring)	Male-dominated Industry (Target)
	(1)	(2)	(3)	(4)	(5)	(6)
Female	-0.747***	-0.947***	-0.627***	-0.462*	-0.816***	-0.398**
	(-3.89)	(-4.32)	(-3.25)	(-1.65)	(-3.40)	(-2.20)
Female Friendly	-0.805*	-1.405***	0.127	-3.018***	-0.376**	
	(-1.85)	(-3.05)	(0.26)	(-3.70)	(-2.48)	
Female x Female (un)Friendly	3.010***	2.468***	1.868**	1.618	0.630**	-0.493*
	(3.88)	(2.87)	(2.50)	(1.08)	(1.97)	(-1.88)
Age	-0.056***	-0.042***	-0.032***	-0.035***	-0.039***	-0.038***
	(-4.62)	(-3.80)	(-2.75)	(-3.13)	(-3.75)	(-4.45)
Tenure	0.010	0.004	-0.010	-0.046**	-0.009	-0.001
	(0.49)	(0.23)	(-0.49)	(-2.48)	(-0.47)	(-0.07)
Retained by Acquirer	0.222	0.271	0.365*	0.361**	0.293	0.084
	(1.08)	(1.37)	(1.93)	(2.00)	(1.56)	(0.51)
Time between Jobs	0.250	0.352	0.598**	0.438*	0.442*	0.315*
	(0.93)	(1.43)	(2.34)	(1.78)	(1.87)	(1.66)
Hired by Private Firm	1.471***	1.158***	0.783***		0.978***	1.058***
	(8.30)	(7.32)	(4.86)		(6.48)	(8.91)
Master's Degree	-0.007	0.017	0.113	0.151	0.202	-0.071
	(-0.03)	(0.08)	(0.53)	(0.93)	(1.02)	(-0.47)
MBA	-0.025	0.034	0.020	0.020	0.156	0.053
	(-0.16)	(0.24)	(0.13)	(0.15)	(1.12)	(0.46)
PH. D	-0.175	-0.216	-0.745**	0.002	-0.198	0.226
	(-0.41)	(-0.56)	(-2.02)	(0.01)	(-0.55)	(0.84)
No. of Certificates	-0.395**	-0.495***	-0.363**	-0.176	-0.443***	-0.200
	(-2.39)	(-3.28)	(-2.21)	(-1.21)	(-3.06)	(-1.51)
No. of Firms prior M&A	-0.125***	-0.135***	-0.108***	-0.086**	-0.126***	-0.101***
	(-3.04)	(-3.65)	(-2.75)	(-2.54)	(-3.70)	(-3.56)
No. of Boards prior M&A	0.260***	0.222***	0.103	0.121**	0.168***	0.119**
	(4.31)	(3.78)	(1.51)	(2.24)	(3.00)	(2.51)
Year	Yes	Yes	Yes	Yes	Yes	Yes
Target Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Function x Rank (Coarse)	Yes	Yes	Yes	Yes	Yes	Yes
N	1,925	2,159	1,662	1,717	2,274	3,664
Adj. R-Sq	0.487	0.495	0.560	0.597	0.485	0.442

Table 8. Gender and job rank changes by experience and ability

OLS regressions explaining changes in coarse ranks around M&As. In Panel A, the main independent variables of interest are *Female*, an indicator for manager is female, *Experience,* an indicator for executive is in the top tercile of experience, and an interaction between the two variables. *Experience* is measured with two different variables, indicated in column headings. In Panel B, we substitute *GAI* (general ability index) for experience. *High (Low) GAI* is an indicator for executive is in the top tercile (bottom two terciles) of general managerial ability. The type of fixed effects included in regressions is indicated at the bottom of table. See Appendix for variable definitions. Standard errors are clustered at the firm level. T-statistics are reported in parentheses. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels respectively

Panel A. Manager's Past Experience

	Top Tercile Executive Experience				Served on Outside Board			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Female	-0.696***	-0.800***	-0.769***	-0.766***	-0.623***	-0.741***	-0.719***	-0.742***
	(-6.05)	(-5.68)	(-4.94)	(-4.88)	(-5.78)	(-5.39)	(-4.88)	(-5.10)
Experience	-0.094	-0.028	0.024	0.002	-0.423***	-0.398***	-0.536***	-0.540***
	(-0.91)	(-0.21)	(0.17)	(0.02)	(-3.11)	(-2.78)	(-2.85)	(-2.85)
Female x Experience	0.546**	0.661**	0.660**	0.606**	0.605*	0.854**	0.864**	0.931**
	(2.54)	(2.53)	(2.30)	(2.18)	(1.72)	(2.32)	(2.23)	(2.37)
Age		-0.039***	-0.037***	-0.038***		-0.037***	-0.036***	-0.037***
		(-5.38)	(-4.50)	(-4.39)		(-5.08)	(-4.38)	(-4.29)
Tenure		-0.003	-0.007	-0.004		-0.002	-0.002	-0.002
		(-0.18)	(-0.38)	(-0.25)		(-0.15)	(-0.14)	(-0.12)
Hired by Acquirer		0.070	0.161	0.081		0.079	0.158	0.079
		(0.46)	(0.99)	(0.49)		(0.52)	(0.98)	(0.49)
Time between Jobs		0.249	0.350*	0.311		0.234	0.332*	0.294
		(1.42)	(1.87)	(1.64)		(1.33)	(1.78)	(1.56)
Hired by Private Firm		1.136***	1.086***	1.069***		1.128***	1.077***	1.061***
		(10.67)	(9.30)	(9.04)		(10.59)	(9.24)	(8.98)
Master's Degree			-0.057	-0.062			-0.057	-0.065
			(-0.37)	(-0.41)			(-0.37)	(-0.43)
MBA			0.037	0.055			0.033	0.050
			(0.32)	(0.48)			(0.29)	(0.44)
PH. D			0.185	0.205			0.168	0.193
			(0.70)	(0.77)			(0.63)	(0.72)
No. of Certificates			-0.218	-0.192			-0.212	-0.182
			(-1.64)	(-1.45)			(-1.60)	(-1.38)
No. of Firms prior M&A			-0.099***	-0.102***			-0.087***	-0.091***
			(-3.60)	(-3.61)			(-3.11)	(-3.20)
No. of Boards prior M&A			0.111**	0.116**			0.168***	0.173***
			(2.39)	(2.47)			(3.31)	(3.35)
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Target Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Function Fixed Effects	Yes	Yes	Yes	No	Yes	Yes	Yes	No
Rank Fixed Effects (Coarse)	Yes	Yes	Yes	No	Yes	Yes	Yes	No
Function x Rank (Coarse)	No	No	No	Yes	No	No	No	Yes
N	5,197	4,269	3,684	3,671	5,197	4,269	3,684	3,671
Adj. R-Sq	0.392	0.429	0.437	0.442	0.393	0.431	0.439	0.444

Panel B. Manager's general ability

	(1)	(2)	(3)	(4)
Female x High-GAI	-0.337*	-0.295	-0.347	-0.350
	(-1.76)	(-1.35)	(-1.52)	(-1.57)
Female x Low-GAI	-0.634***	-0.707***	-0.754***	-0.782***
	(-4.98)	(-4.34)	(-4.23)	(-4.43)
High-GAI	-0.114	-0.066	-0.028	-0.047
	(-1.06)	(-0.55)	(-0.22)	(-0.38)
Age		-0.041***	-0.040***	-0.041***
		(-5.30)	(-4.51)	(-4.50)
Tenure		0.005	0.001	0.001
		(0.33)	(0.04)	(0.04)
Retained by Acquirer		0.026	0.142	0.065
		(0.16)	(0.84)	(0.38)
Time between Jobs		0.128	0.274	0.223
		(0.70)	(1.39)	(1.12)
Hired by Private Firm		1.151***	1.089***	1.084***
		(10.04)	(8.76)	(8.63)
Master's Degree			-0.045	-0.047
			(-0.28)	(-0.29)
MBA			0.051	0.067
			(0.43)	(0.55)
PH. D			0.228	0.211
			(0.81)	(0.75)
No. of Certificates			-0.165	-0.145
			(-1.17)	(-1.02)
No. of Firms prior M&A			-0.101***	-0.104***
			(-3.61)	(-3.59)
No. of Boards prior M&A			0.122***	0.125***
			(2.62)	(2.66)
Year	Yes	Yes	Yes	Yes
Target Fixed Effects	Yes	Yes	Yes	Yes
Function Fixed Effects	Yes	Yes	Yes	No
Rank Fixed Effects (Coarse)	Yes	Yes	Yes	No
Function x Rank (Coarse)	No	No	No	Yes
N	4,758	3,935	3,419	3,404
Adj. R-Sq	0.394	0.432	0.439	0.444

Table 9. Gender and job rank changes by target firms' past performance

OLS regressions explaining changes in coarse ranks around M&As. The main independent variables of interest are *Female*, an indicator for manager is female, *Past Performance*, an indicator for firm performance is in the bottom tercile, and an interaction between the two variables. *Past Performance* is measured with two different variables, indicated in column headings. The type of fixed effects included in regressions is indicated at the bottom of table. See Appendix for variable definitions. Standard errors are clustered at the firm level. T-statistics are reported in parentheses. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels respectively

	Bottom Tercile Ind. Adj. ROA				Bottom Tercile Mkt. Adj Stock Return			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Female	-0.422***	-0.442***	-0.383**	-0.415***	-0.440***	-0.477***	-0.420**	-0.456***
	(-3.37)	(-2.98)	(-2.45)	(-2.66)	(-3.38)	(-2.90)	(-2.36)	(-2.58)
Female x Past Performance	-0.347*	-0.485*	-0.615**	-0.547*	-0.269	-0.326	-0.418	-0.360
	(-1.68)	(-1.86)	(-2.13)	(-1.91)	(-1.35)	(-1.35)	(-1.60)	(-1.37)
Age		-0.037***	-0.035***	-0.035***		-0.040***	-0.037***	-0.038***
		(-5.15)	(-4.25)	(-4.14)		(-5.42)	(-4.50)	(-4.40)
Tenure		-0.003	-0.004	-0.002		-0.001	-0.002	-0.001
		(-0.21)	(-0.24)	(-0.16)		(-0.07)	(-0.10)	(-0.07)
Retained by Acquirer		0.038	0.135	0.060		0.071	0.162	0.082
		(0.25)	(0.83)	(0.36)		(0.46)	(0.99)	(0.50)
Time between Jobs		0.307*	0.409**	0.362*		0.251	0.352*	0.314*
		(1.74)	(2.17)	(1.90)		(1.43)	(1.88)	(1.66)
Hired by Private Firm		1.127***	1.079***	1.068***		1.135***	1.085***	1.066***
		(10.55)	(9.22)	(8.96)		(10.63)	(9.29)	(9.01)
Master's Degree			-0.012	-0.009			-0.051	-0.057
			(-0.08)	(-0.06)			(-0.33)	(-0.37)
MBA			0.025	0.044			0.038	0.057
			(0.22)	(0.38)			(0.34)	(0.50)
PH. D			0.186	0.205			0.195	0.213
			(0.70)	(0.77)			(0.74)	(0.79)
No. of Certificates			-0.194	-0.167			-0.220*	-0.195
			(-1.46)	(-1.26)			(-1.66)	(-1.47)
No. of Firms prior M&A			-0.097***	-0.102***			-0.096***	-0.100***
			(-3.51)	(-3.67)			(-3.51)	(-3.56)
No. of Boards prior M&A			0.111**	0.119**			0.110**	0.115**
			(2.41)	(2.55)			(2.38)	(2.46)
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Target Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Function Fixed Effects	Yes	Yes	Yes	No	Yes	Yes	Yes	No
Rank Fixed Effects (Coarse)	Yes	Yes	Yes	No	Yes	Yes	Yes	No
Function x Rank (Coarse)	No	No	No	Yes	No	No	No	Yes
N	5,149	4,225	3,647	3,635	5,197	4,269	3,684	3,671
Adj. R-Sq	0.394	0.432	0.440	0.445	0.392	0.429	0.437	0.441

Table 10. Gender and promotions in hiring firms for target firm managers

OLS regressions explaining executive promotion probabilities. We track job promotions for all target firm managers in their subsequent post-merger employers. The dependent variable is an indicator for a 1-year increase in executive's coarse rank. The main independent variables of interest are *Female*, an indicator for manager is female, *Top Tercile Experience*, an indicator for manager is in top tercile of years as a senior executive, and *External Boards*, indicator for manager having prior board experience, and interactions of *Female* with each of these two variables. All regressions include fixed effects for firm, year and function-coarse rank at the time manager was hired. We exclude manager's first two years in the company. See Appendix for variable definitions. Standard errors are clustered at the firm level. T-statistics are reported in parentheses. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels respectively

	(1)	(2)	(3)	(4)	(5)	(6)
Female	0.031*	0.035*	0.050**	0.055**	0.042**	0.042**
	(1.67)	(1.69)	(2.13)	(2.17)	(2.05)	(2.00)
Top Tercile Experience			0.010	0.012		
			(0.96)	(1.11)		
Female x Top Tercile Experience			-0.044*	-0.050**		
			(-1.94)	(-2.02)		
External Boards					-0.004	-0.004
					(-0.75)	(-0.84)
Female x External Boards					-0.025*	-0.022
					(-1.65)	(-1.45)
Age	-0.003***	-0.003***	-0.003***	-0.003***	-0.002***	-0.002**
	(-2.93)	(-2.59)	(-3.20)	(-2.81)	(-2.66)	(-2.38)
Tenure	0.002	0.003	0.001	0.002	0.001	0.001
	(0.83)	(1.34)	(0.65)	(1.21)	(0.65)	(0.78)
Senior Experience	-0.001	-0.000			-0.000	-0.000
	(-0.77)	(-0.27)			(-0.35)	(-0.35)
Master's Degree		-0.023		-0.026		-0.019
		(-1.38)		(-1.56)		(-1.31)
MBA		0.002		0.001		0.005
		(0.13)		(0.07)		(0.41)
PH. D		-0.034		-0.032		-0.020
		(-1.07)		(-1.01)		(-0.68)
Num. of Certificate		-0.026*		-0.026*		-0.018
		(-1.78)		(-1.72)		(-1.32)
Year	Yes	Yes	Yes	Yes	Yes	Yes
Hiring Company Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes
Target Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Function x Rank (Coarse)	Yes	Yes	Yes	Yes	Yes	Yes
N	7251	6568	7251	6568	7251	6568
Adj. R-Sq	0.004	0.008	0.005	0.009	0.004	0.008

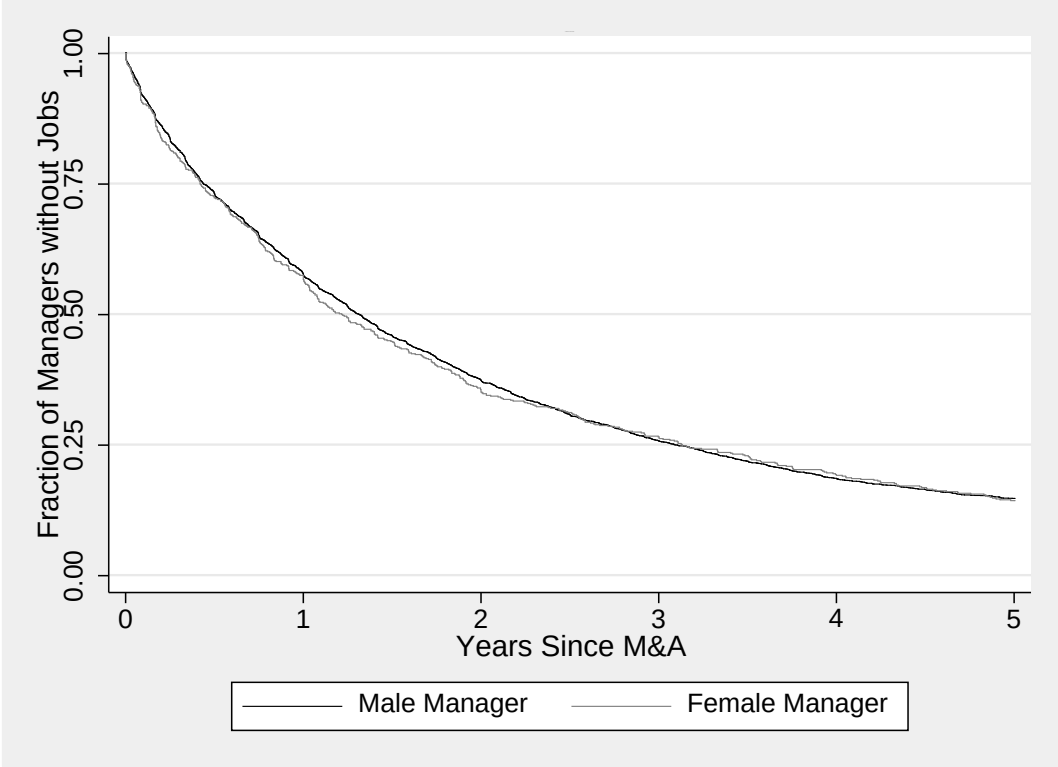

Figure 1. Kaplan-Meier survival estimates

Fraction of male and female managers without jobs at various points in time. The X-axis is years since last employment at target firm.

Appendix

Table A1. Variable definitions

Age	Manager's age, which equals year minus manager's birth year. (Source: Boardex)
Attrition	Indicator for BOARDEX does not track manager's employment record after M&A. (Source: Boardex)
Bachelor's Degree	Indicator for manager having a bachelor's degree. (Source: Boardex)
Change in Coarse Rank	Coarse rank of a manager's first job after M&A minus last job in target firm. (Source: Boardex)
Change in Detailed Rank	Detailed rank of a manager's first job after M&A minus last job in target firm. (Source: Boardex)
Change in Firm Size	Ln (Total Assets) of hiring firm the fiscal year end after hiring date minus its value for target firm the fiscal year end before the M&A effective date. (Source: Compustat)
Change in Rank Coefficients	Rank coefficient of a manager's first job after M&A minus last job in target firm. (Source: Boardex)
Change in ROA	ROA of hiring firm the fiscal year end after hiring date minus its value for target firm the fiscal year end before the M&A effective date. (Source: Compustat)
Change in Total Comp.	Ln (Total Compensation) for hiring firm minus its value for target firm. (Source: Capital IQ)
Change Industry	Indicator for manager working in an industry that is different from target firm's industry after M&A. Industry is defined using Fama-French 12 industry classification. (Source: Compustat)
Coarse Rank	Job titles sorted into 10 ranks (0 - 9). A greater number means a more senior position. (Source: Boardex)
Detailed Rank	Job titles sorted into 33 ranks (0 - 32). A greater number means a more senior position. (Source: Boardex)
Distance	The distance (in miles) between the headquarters of target firm and hiring firm. (Source: Boardex and Compustat)
Female	Indicator for manager is female (Source: Boardex)
Females in Top 5 Ratio (Hiring)	Ratio of the number of top-5 ranked female managers to the number of top-5 ranked managers in hiring firm a year prior to hiring the target-firm manager. (Source: Boardex)
Female CEO (Hiring)	Indicator for hiring firm is led by a female CEO. (Source: Boardex)
Female Leadership (Hiring)	Indicator for hiring firm satisfies at least one of the following criteria: firm is led by a female CEO at any time between 2000-2018; of the top 5 ranked managers that worked in the company between 2000 and 2018 more than 10% are female or at least 2 are female; of all the managers that worked in the company between 2000 and 2018, more than 15% are female or at least 2 are female. (Source: Boardex)
Females in Board Ratio (Hiring)	Ratio of the number of female board members to the total board size in the hiring firm a year prior to hiring the target firm manager. (Source: Boardex)

Female Executives Ratio (Hiring)	Number of female managers divided by total number of managers in hiring firm the year prior to hiring the target firm manager. (Source: Boardex)
Function	Manager's functional area classifications are: operations; marketing; sales; information technology; research and development; operations support; legal; secretary; finance; accounting; real estate; administration; supply chain; customer service; public relations; human resources; strategy; risk management; investment; top management (if manager's job title is CEO, chairman, president or vice chairman); miscellaneous (such as purchase, corporate, and shared services); and unknown (if we cannot identify functional area from the job title). (Source: Boardex)
GAI (General Ability Index)	We follow Custodio, Ferreira, and Matos (2013). GAI equals 0.268X1 + 0.312X2 + 0.309X3 + 0.218X4 + 0.153X5. X1 is number of different positions a manager performed during his career. X2 is number of different public firms a manager has worked for. X3 is number of different industries (four-digit SIC) a manager has worked for. X4 is an indicator variable for manager held a CEO position. X5 is an indicator variable for manager has worked for a conglomerate firm. Each variable is measured as of M&A effective date. High (low) GAI are indicators for GAI is in the top tercile (bottom two terciles) of the sample distribution. (Source: Boardex)
Hired by Private Firm	Indicator for manager's new hiring firm is a private firm. (Source: Boardex)
Ind. Adj. ROA (Target)	Target firm's industry adjusted ROA the fiscal year before M&A effective date. ROA is Earnings before interest and tax (EBIT) scaled by total assets (AT). Industry ROA is median ROA of target firm's industry (4-digit SIC) that year. (Source: Compustat)
Ln (Executive Experience)	Executive experience is defined as the effective date of M&A minus manager's first start role date in Boardex divided by 365. (Source: Boardex)
Ln (Network Size)	Network size is the number of individual connections a manager has before M&A effective date outside the target firm. We consider 4 connection types: listed companies, unlisted companies, nonprofits/clubs/societies, and education. (Source: Boardex)
Ln (Total Assets) (Target)	Target firm's total assets the fiscal year before M&A effective date. (Source: Compustat)
Ln (Total Compensation) (Hiring)	Total compensation in hiring firm the first full fiscal year after hiring date. (Source: Capital IQ)
Ln (Total Compensation) (Target)	Total compensation in target firm the last full fiscal year before M&A effective date. (Source: Capital IQ)
Male-Dominated Industry	Indicator for target firm's industry is in the bottom tercile of female-employees-ratio. Industry is defined using 2-digit NAICS codes. Ratio of female employees is obtained from U.S. Bureau of Labor Statistics, Current Population Survey, Table 18.
Master's Degree	Indicator for manager having a master's degree. (Source: Boardex)
MBA	Indicator for manager having an MBA degree. (Source: Boardex)
Mkt. Adj. Stock Return (Target)	Target firm's 12-month market adjusted return before the M&A announcement date. Market return is CRSP's equal weighted return (includes distributions). (Source: CRSP)

No. of Boards prior M&A	Number of boards a manager has worked for prior to M&A, tracked using Boardex.
No. of Certificates	Number of certificates, such as CFA, CPA, the manager holds. (Source: Boardex)
No. of Firms prior M&A	Number of firms a manager has worked for prior to M&A, tracked using BOARDEX.
Ph.D.	Indicator for manager holds a Ph.D. degree. (Source: Boardex)
Rank Coefficient	Regression coefficients for job title indicators from Table 1, Panel A, multiplied by 100.
Retained by Acquirer	Indicator for manager retained by acquiring firm. (Source: Boardex)
Served on Outside Board	Indicator for manager has served as an outside director by M&A effective date. (Source: Boardex)
Tenure	Manager tenure (in years) in the target firm, which equals M&A effective date minus date s/he started to work for target firm divided by 365. (Source: Boardex)
Time between Jobs	Manager's first start role date in the hiring firm minus his/her last end role date in the target firm divided by 365. (Source: Boardex)

Internet Appendix

Table IA1. Probability of a firm being an M&A target

OLS regressions explaining the probability of a firm being an M&A target. The sample covers all Compustat firms that have executive / board information on Boardex from 2000 to 2017. The dependent variable is an indicator for the firm being acquired in a given year. The main independent variables of interest are *Female Executives Ratio, Females in Top 5 Ratio, and Females in Board Ratio, and Female CEO.* See Appendix for variable definitions. Control variables are defined as per Karpoff, Schonlau, and Weherly (2017). Regressions include industry and year fixed effects. Standard errors are clustered at the firm level. T-statistics are reported in parentheses. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels respectively.

	(1)	(2)	(3)	(4)
Pct. Female Executive	-0.004			
	(-0.67)			
Pct. Top 5 Female Executive		-0.000		
		(-0.06)		
Pct. Female on Board			0.003	
			(0.39)	
Female CEO				0.005
				(1.09)
Firm Size	0.000	0.000	-0.001*	0.000
	(0.43)	(0.27)	(-1.75)	(0.30)
Leverage	0.038***	0.037***	0.031***	0.038***
	(7.57)	(7.33)	(6.39)	(7.27)
Market to Book	-0.002***	-0.002***	-0.001***	-0.002***
	(-3.33)	(-3.11)	(-2.76)	(-3.03)
Liquidity Ratio	-0.003	-0.002	-0.002	-0.002
	(-0.73)	(-0.58)	(-0.47)	(-0.46)
Property Ratio	0.003	0.002	0.001	0.002
	(0.79)	(0.57)	(0.35)	(0.54)
Sales Growth	0.002	0.002	-0.000	0.002
	(1.24)	(1.34)	(-0.28)	(1.26)
Industry Concertation	-0.016*	-0.012	-0.008	-0.014
	(-1.76)	(-1.33)	(-0.97)	(-1.49)
Market-adjusted Return	0.001	0.001	-0.001	0.001
	(0.81)	(0.48)	(-0.70)	(0.58)
Fixed Effects	Ind. /Yr.	Ind. /Yr.	Ind. /Yr.	Ind. /Yr.
N	49769	48963	43104	47987
Adj. R-sq	0.008	0.008	0.006	0.008

Table IA2. Gender and job rank changes: Variations on Table 3

Regression specifications follow Table 3, Panel A, but with variations indicated in column headings. The main independent variable of interest is *Female*, an indicator for manager being female. Dependent variable is change in coarse ranks, except in regression (4), where the dependent variable is based on Gayle, Golan and Miller (2012). In regressions (1), (3) and (5) we drop from the sample target firm managers in top-3 coarse ranks, bottom 3 ranks, and hired within 3 months of leaving the target firm, respectively. In regression (2) we include additional control variables: an indicator for toehold (equals to one if the percent of shares owned by the acquiring firm at the time of the deal announcement is greater than zero), and its interaction with *Female*. See Appendix for variable definitions. The type of fixed effects included in regressions is indicated at the bottom of table. Standard errors are clustered at the firm level. T-statistics are reported in parentheses. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels respectively.

	Drop Top-3 Rank	Toehold	Drop Bottom-3 Rank	Gayle, Golan, Miller	Drop if Hired within 3 Months
	(1)	(2)	(3)	(4)	(5)
Female	-0.542***	-0.582***	-0.495**	-0.297**	-0.691***
	(-4.08)	(-4.15)	(-1.98)	(-2.41)	(-3.56)
Age	-0.032***	-0.038***	-0.068***	-0.029***	-0.038***
	(-3.42)	(-4.42)	(-5.40)	(-4.06)	(-3.11)
Tenure	0.013	-0.001	0.015	-0.015	-0.010
	(0.78)	(-0.05)	(0.70)	(-1.09)	(-0.45)
Retained by Acquirer	-0.005	0.082	0.707***	0.580***	0.277
	(-0.03)	(0.50)	(2.80)	(3.77)	(1.00)
Time between Jobs	0.352*	0.310	0.071	0.190	0.376
	(1.78)	(1.64)	(0.24)	(1.26)	(1.58)
Hired by Private Firm	0.911***	1.062***	1.400***	0.540***	1.245***
	(7.39)	(8.97)	(7.76)	(5.38)	(8.75)
Master's Degree	0.050	-0.058	-0.159	0.059	-0.171
	(0.32)	(-0.38)	(-0.65)	(0.48)	(-0.82)
MBA	0.065	0.054	0.014	0.124	-0.079
	(0.56)	(0.47)	(0.09)	(1.41)	(-0.50)
PH. D	0.092	0.212	0.538	0.205	0.025
	(0.35)	(0.79)	(1.08)	(0.93)	(0.07)
No. of Certificates	-0.038	-0.195	-0.286	-0.003	-0.113
	(-0.27)	(-1.47)	(-1.61)	(-0.03)	(-0.64)
No. of Firms prior M&A	-0.072**	-0.100***	-0.063	-0.060**	-0.114***
	(-2.15)	(-3.55)	(-1.64)	(-2.37)	(-2.79)
No. of Boards prior M&A	0.081	0.115**	0.084	0.019	0.060
	(1.26)	(2.46)	(1.47)	(0.45)	(0.83)
Female x Toehold		-0.156			
		(-0.26)			
Year	Yes	Yes	Yes	Yes	Yes
Target Fixed Effects	Yes	Yes	Yes	Yes	Yes
Function x Rank (Coarse)	Yes	Yes	Yes	Yes	Yes
N	2801	3671	2057	3671	2399
Adj. R-sq	0.183	0.441	0.423	0.258	0.419