

# DATING AND BREAKING UP WITH THE BOSS: BENEFITS, COSTS, AND SPILLOVERS\*

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## Abstract

While romantic relationships between coworkers are common, intimate relationships between managers and subordinates have increasingly come under scrutiny. We use administrative data covering the universe of cohabiting couples in Finland to explore the career implications of dating and breaking up with a manager and spillovers these relationships have on the wider workforce. Using an across-couples event-study research design we find that those in relationships with managers in their workplaces experience a 6% increase in their earnings compared to those in relationships with managers in different workplaces. When a manager and subordinate break up, the subordinate is 13 percentage points more likely to drop out of employment. Last, we examine the spillovers of these relationships on the broader workforce. We document a 6 percentage point decrease in retention of other workers from these relationships, with larger effects for smaller establishments and establishments where the subordinate had larger earnings gains. We conclude that these relationships impose negative externalities on colleagues, including but not limited to exit from the firm.

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# 1 Introduction

Romantic relationships between coworkers are common. According to survey evidence, over 25% of workers have engaged in an office romance, with 18% dating a superior in their workplace (SHRM, 2023). Mixing romantic relationships and work is undoubtedly complicated with potentially important economic consequences, especially for relationships between managers and subordinates. Despite this complexity, the workplace was the fourth most common place couples met each other from 2000 to 2019, surpassed only by meeting online, at a bar or restaurant, or through common friends (Rosenfeld *et al.*, 2019).

The #MeToo movement brought relationships between managers and non-managers under greater scrutiny. This movement focused on clearly inappropriate actions by managers towards other employees, such as harassment and assault, which impose immense costs on victims (Adams-Prassl, Huttunen, Nix and Zhang, 2024; Folke and Rickne, 2022). Beyond this, it also spurred an international debate on whether consensual romantic relationships between managers and non-managers have economic impacts or negative externalities that might warrant firm-level policies. Even in cases where these relationships are consensual, discerning whether they give an unfair advantage to the subordinate partner, put the subordinate at risk if the relationship doesn't work out, or impose negative externalities on the broader workplace is challenging.

Some firms ban relationships where there is a clear power discrepancy. For example, McDonald's forbids sexual relationships where one person has a direct or indirect reporting relationship with the other, justifying this position by stating "It is not appropriate to show favoritism or make business decisions based on emotions or friendships rather than on the best interests of the company" (Chaffin and Abboud, 2019). This policy resulted in the high-profile 2019 firing of McDonald's CEO Stephen Easterbrook for engaging in a consensual relationship with a subordinate. Had such a policy been in place at Microsoft or Sidley Austin Law Firm, Bill and Melinda Gates and Barack and Michelle Obama would have been barred from dating. But are there economic consequences of these relationships that might justify these firm policies?

To date, rigorous evidence is absent in the widespread and ongoing debate on workplace re-

relationships, making it difficult to have an informed discussion. In this paper, we leverage administrative data from Finland from 1988-2018 to provide empirical evidence on this topic, yielding three main results. First, we find that subordinates experience a 6% increase in their earnings from starting a relationship with a workplace manager, with the collective evidence pointing towards nepotism as a likely mechanism. Second, subordinates are 13 percentage points more likely to leave the labor force after a breakup with a workplace manager and have significantly reduced earnings. Third, these relationships impose negative externalities on colleagues. We find a 6 percentage point reduction in retention of other workers in the establishment where these relationships occur, with bigger negative impacts in establishments where subordinates saw larger pay increases after starting a relationship with a workplace manager.

To estimate the impacts of starting a relationship with a coworker, we create a sample of "workplace couples" defined as couples where both partners were employed in the same establishment in the 2 years before cohabitation. We find that approximately 10% of couples fit this definition between 1995-2016. Since most couples begin dating before cohabitation and benefits from a relationship with a manager would likely accrue in this period, we define the dating period as the 2 years before cohabitation following survey evidence indicating that over 70% of couples begin cohabiting within 2 years of meeting Rosenfeld and Falcon (2018).

We compare the earnings of female non-managers who enter relationships with male managers in their workplace to a natural control group: female non-managers who also start relationships with male managers, but the manager works in a different establishment.<sup>1</sup> A simple event study reveals parallel pre-trends and a 6% increase in earnings after the relationship begins.

To eliminate the main threats to identification in our baseline event-study estimates, we employ two additional and complementary identification strategies. First, we estimate a matched event-study design to address potential concerns of selection into relationships with a workplace manager. This approach compares couples who begin a workplace relationship to couples who begin a non-workplace relationship but are otherwise observationally identical in the years before the relationship. The results using this approach are similar to our baseline estimates: the

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<sup>1</sup>We primarily focus on women who enter or end relationships with male managers. Results are similar for men who enter or end relationships with female managers, although the sample size is much smaller.

earnings growth for women who date managers in their workplace is €3000 above and beyond the earnings growth of their matched control. This corresponds to a 9% increase in earnings for women who date managers in their workplace.

A second concern is that unexpected establishment-level shocks could cause manager/non-manager relationships to form while also increasing earnings within the establishment. To address this, we estimate a within-establishment event-study design, which compares subordinates who start relationships with a workplace manager to observationally similar workers in the same establishment who do not engage in a relationship with a manager. Our results remain with this alternative specification, mitigating concerns that workplace-level shocks drive our estimates.

We also show our results do not simply reflect a "workplace romance" effect, i.e. workplace relationships generally result in higher earnings growth. For example, male partners in the same workplace may be more supportive of their partners' careers or provide useful advice, with no added benefits from a relationship with a manager. To examine this possibility, we compare the earnings effect of engaging in a relationship with a workplace manager to the earnings effect of entering a relationship with a relative equal in the workplace, defined as couples with the same position (manager-manager or worker-worker) and below-median income gaps between the two. A matched difference-in-difference design shows that women in workplace relationships with relative equals experience an increase in their earnings of 1500 Euros. This is half the size of the earnings increase accruing to women who date managers, suggesting that dating a workplace manager has benefits over and above those of workplace relationships in general.

In our second set of results, we examine the economic impacts of breaking up with a manager. We identify breakups in the data based on the year a cohabitation spell ends, with our treatment group defined as manager/non-manager couples who worked in the same workplace in the year before the breakup. Plotting raw data, a clear pattern emerges. The subordinate's employment falls 20 percentage points and their earnings decrease over €4000 the year after breaking up with a workplace manager. In contrast, women who end a relationship with a manager at a different establishment continue to experience earnings increases. These results provide suggestive evidence of large costs borne by women who break up with a workplace manager.

Event-study estimates confirm these descriptive facts. We find that employment decreases by 13 percentage points and earnings decline by nearly €6000 (18%) the year after the breakup for women who were in relationships with workplace managers. These negative effects persist for at least 4 years after the breakup.<sup>2</sup> We find similar effects using alternative matched and within-establishment event study designs. Moreover, the negative impact on earnings from breaking up with a workplace manager is five times larger than the effect of breaking up with a relative equal in the same workplace.

To further explore the consequences of a breakup, we use a fully interacted difference-in-difference model to understand what causes the large decline in earnings. We unsurprisingly find that dropping into unemployment after a breakup has a large and significant negative impact on earnings. Beyond this, we find that those who move workplaces following a breakup experience significantly worse outcomes than those who move for other reasons. Together, these estimates indicate that breaking up with a workplace manager is problematic not only because subordinates are more likely to leave the workforce but also because subordinates make less advantageous firm-to-firm moves.

In our third and last set of results, we explore the spillover effects of these relationships on the broader firm. Workplace relationships between managers and non-managers may be harmful if they cause discomfort or disgruntlement among colleagues. For example, other workers may observe the increase in earnings accruing to a colleague dating a manager and assume these gains are due to preferential treatment. This may lead to negative spillovers such as higher turnover rates within these establishments.

We investigate this possibility by estimating the impact of workplace manager/non-manager relationships on the retention of other workers employed in the same workplace at the time the relationship formed. We find that manager/non-manager workplace relationships cause a 6 percentage point decline in the retention of these workers, representing a 14% decrease in retention compared to the average retention for control group firms. Relative to the median establishment size of 71 employees, this translates to 4 extra workers departing. We find similar

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<sup>2</sup>Results are also broadly similar if we instead require the couple to meet at work, cohabit, and then later break up, although these estimates are less precise due to a sharply reduced sample size.

impacts on male and female retention rates, consistent with these relationships leading men and women to leave the establishment at equal rates. This suggests that workers of different genders are equally pushed to exit by these relationships.

We further document heterogeneity in these spillovers by the size of the establishment and the size of the earnings gains for the subordinate dating the manager. Below-median-sized establishments experience a significantly larger decline in retention of just over 10 percentage points relative to 2.5 percentage points in above-median-sized establishments. Moreover, retention decreases by 9 percentage points in establishments where the subordinate experienced above-median earnings gains compared with a 4 percentage point decline in establishments where subordinates experienced below-median earnings gains.

The results in this paper suggest three main takeaways. First, nepotism is a potentially important factor in the earnings gains for subordinates in these relationships. A possible competing explanation is that subordinates learn skills or receive mentoring from their manager partner helping them advance based on merit. To differentiate between these two possible interpretations we explore how our estimated earnings effects differ for treated subordinates who remain in the same workplace after starting a relationship with a manager and those who move out of the workplace. We only find a statistically significant increase in earnings for those who stay, with a 50% smaller estimate for those who move. Given that those who gain benefits through outright nepotism would be less inclined to leave the establishment, this result suggests nepotism likely plays a role. Further strengthening this interpretation, we find close to zero and insignificant earnings gains for subordinates if their manager leaves the establishment. Additionally, we find no change in occupation code just before or after these relationships begin. This rules out the possibility that our results are explained by women changing roles or receiving promotions which causes both their earnings to increase and a relationship to form with their (new) manager who suddenly notices them.

Second, breaking up with a workplace manager is very costly for subordinates, well above the costs of a breakup from both non-workplace relationships and workplace relationships between equals. This result raises a potential source of bias in our getting together results. If the high

potential breakup costs are anticipated, there may be a higher bar to enter a relationship with a workplace manager, resulting in higher-quality relationships that separately generate higher earnings growth. We rule out this possibility, as we show that estimated earnings gains are indistinguishable for those who have below- versus above-median length relationships with a manager, and longer relationships should ostensibly represent higher-quality matches.

Last, relationships between managers and subordinates impose negative externalities on the firm at large by reducing the retention of other employees after these relationships begin. Moreover, we find a significantly higher decline in retention in establishments where the subordinate received above-median earnings gains from the relationship. This suggests that either the appearance or reality of nepotism caused by these relationships impose negative spillovers on the broader firm, perhaps warranting a firm-level response.

Taken together, these results demonstrate that relationships between managers and non-managers have meaningful economic impacts both on those directly involved and on the wider firm. These results provide much-needed evidence to inform the ongoing debate on whether restrictions should be placed on workplace relationships. Our findings indicate that firm policies preventing managers from having a direct influence on the workplace outcomes of their non-manager partners are likely warranted. Our results suggest two potential benefits of such policies: first, they could reduce avenues for nepotism, possibly mitigating the discontent that perceived favoritism engenders among other workers; second, they could protect subordinate partners in the event of a breakup, potentially reducing the large breakup costs we document.

This paper adds to three main strands of literature in economics. First, we contribute to a growing literature that explores how personal connections and relationships impact pay, promotions, and firm performance (Bandiera *et al.*, 2005; Bertrand *et al.*, 2008; Bandiera *et al.*, 2010; Wang, 2013; Gagliarducci and Manacorda, 2020; Fortin *et al.*, 2022). For example, Pallais and Sands (2016) and Burks, Cowgill, Hoffman and Housman (2015) find that workers hired through personal connections have longer tenure and exert more effort.

A more closely related set of papers focuses on personal ties to managers. Giorcelli (2023) shows that connections with high-quality managers help workers move to more productive firms.

Cullen and Perez-Truglia (2023) document that sharing a common trait like smoking or gender with a manager leads to promotions. Zinovyeva and Bagues (2015) show that close connections with evaluators make promotions more likely and Bandiera *et al.* (2009) show that managers favor workers with whom they are more closely connected to the detriment of firm productivity.

Second, we provide evidence that workplaces are an important environment for relationship formation and that the dissolution of these relationships have large economic consequences. Prior research in economics has mostly focused on a different but related theme, estimating the impact of relationship formation outside of the workplace on labor market outcomes, documenting the trade-off women often face between family and career (Bertrand *et al.*, 2010; Goldin, 2021). A series of more closely related papers examine the close interplay between work and family dynamics. Folke and Rickne (2020) shows that workplace promotions increase the probability of divorce for women but not men. Bertrand *et al.* (2015) document that women appear to curtail their incomes so as not to exceed their husbands' incomes. Particularly relevant for this paper, Zinovyeva and Tverdostup (2021) replicate this finding and show that this is especially relevant for coworking couples.

Third, a large literature in personnel economics indicates that managers help determine the success of the firm (Bertrand and Schoar, 2003; Bloom and Van Reenen, 2007; Bloom *et al.*, 2013, 2019; Giorcelli, 2019; Bandiera *et al.*, 2020; Gosnell *et al.*, 2020). These papers underscore the importance of manager characteristics and behavior for firm profitability. More closely related to our paper, prior research demonstrates that managerial actions play a key role in the retention, recruitment, and training of workers (Bender *et al.*, 2018; Hoffman and Tadelis, 2021), with better managers able to recruit better workers (Fenizia, 2022). Our results suggest that by mixing their personal relationships with their work, managers are less able to retain workers. This finding contributes to and is consistent with recent evidence that nepotism leads to negative selection of employees in the public sector in Colombia (Riaño, 2021) and manager bias can negatively impact firm profitability (Bennedsen *et al.*, 2007) and hiring (Hoffman *et al.*, 2018).



## 2 Data, Measurement, and Descriptive Statistics

### 2.1 Data and Measurement

To explore the impacts of workplace relationships on career trajectories we use the Finnish Linked Employer-Employee Data (FOLK) acquired from Statistics Finland. This data consists of detailed administrative tax records where we observe the demographic, education, earnings, and employment information for the entire resident population of Finland aged 15-70 for the years 1988-2018. Importantly, this data provides a unique identifier for each individual, as well as a unique identifier for their cohabiting partner, which allows us to track relationships over time. Additionally, the data contains unique identifiers for the firm and establishment where individuals work, allowing us to observe if cohabiting couples were coworkers in the same establishment before living together.

**Identifying Those Who Begin a Relationship With a Coworker** Understanding the implications of starting a relationship with a coworker requires us to identify such couples in the data. We start by identifying all couples who begin relationships. Specifically, we keep all women who start a cohabitation spell with a partner of the opposite sex between 1995 and 2016. For each couple, we create a panel dataset comprised of earnings, employment, and other relevant variables for the 5 years preceding and 2 years following the start of cohabitation. We do not require that these couples remain together, recognizing that relationship dissolution may be endogenous to dating a colleague. Due to data limitations, we exclude same-sex couples from our analysis.

We define workplace couples as those observed working at the same establishment in the two years preceding the start of cohabitation. Mechanically, this implies that both partners in workplace couples are employed in the two years before cohabitation. To obtain a comparable control group, we also require both partners in non-workplace couples to be employed during the same time frame.

There are two main challenges to using a combination of cohabitation and prior co-working history to define those who begin a relationship with a coworker. First, we do not observe indi-

viduals who begin a romantic relationship with a colleague but never move in together, nor do we observe individuals who are asked out by a coworker and decline. Understanding the economic impact of these interactions would, of course, be interesting, but they are beyond the scope of our data. In practice, this means that our results will describe the implications of "successful" relationships with coworkers, i.e. those that result in cohabitation. However, it is worth noting that our comparison group of non-workplace couples will also consist of similarly "successful" couples. Another implication of this restriction is that many more individuals in the workforce than we can identify with our data will engage in or experience a romantic overture or relationship at work, such that we will underestimate the true prevalence of romantic relationships in the workplace.

Second, while we perfectly observe the beginning of cohabitation, most couples date before moving in together. If dating a coworker impacts earnings, these effects will materialize before cohabitation. Thus, while we use cohabitation to identify couples, the year of cohabitation is not the appropriate event year of interest to estimate the impact of starting a relationship with a coworker. To address this, we follow survey evidence from Rosenfeld and Falcon (2018), which shows that over 70% of couples move in together within 2 years of dating. Motivated by this, we specify the two years before cohabitation as the "dating period", and define the first year of this period as the event year of interest when estimating the impact of forming a relationship with a coworker. Fortunately, the data should ex-post indicate if this timeline is appropriate. In particular, if workplace couples in our sample date their coworkers for more than two years before cohabitation, this would show up as differential pre-trends in the analysis if dating a coworker affects earnings.

**Identifying Those Who End a Relationship With a Coworker** To examine the repercussions of ending a relationship with a coworker, constructing the sample is more straightforward. We define a breakup as the termination of cohabitation, which we observe perfectly. Among those who break up, our treated sample of interest consists of all individuals who were in a cohabiting relationship with a coworker in the same establishment the year before the breakup. To

obtain a comparable control group, we select those who worked in different establishments the year before the breakup.<sup>3</sup>

**Defining Manager/Non-Manager Workplace Couples** Our main analysis throughout the paper focuses on workplace couples where one is a manager and the other is not. We primarily focus on women who date or break up with male managers, given these couples make up the vast majority of manager/non-manager relationships in the data. However, we show that the main takeaways remain when we instead examine the much smaller sample of men who enter a relationship with a workplace manager.

For those who start a workplace relationship, we define manager/non-manager couples as workplace couples where one is a manager and the other is not in at least one of the two years before cohabitation, i.e. in the dating period. For the breakup analysis, we define manager/non-manager workplace couples as those where one is a manager and the other is not the year before the cohabitation spell ends. The pool of potential control couples is defined similarly, requiring that the male partner is a manager in one of the two years (the year) before cohabitation begins (ends) for the dating (breakup) analysis, but they work in different establishments.

As a robustness check, we also present estimates where we proxy for power gaps through earnings differentials as opposed to one being a manager while the other is not. We define such couples as those where both partners are managers or both partners are non-managers, but there is an above-median earnings gap between the two.

We also estimate earnings impacts for equal workplace couples as an interesting comparison to aid in the interpretation of our results. We define equal workplace couples as couples where two conditions are met. First, either both partners are managers or both partners are non-managers. Second, the earnings gap between the partners is below the median among all workplace couples in our sample.

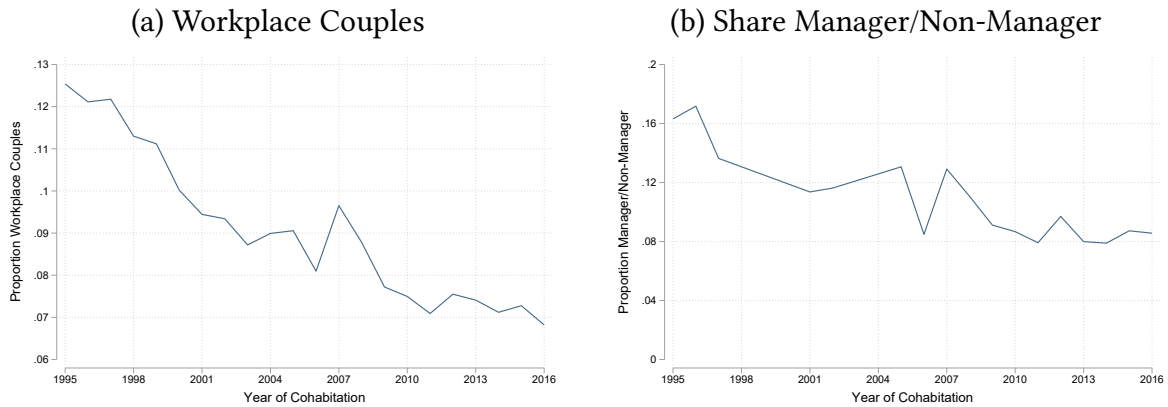
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<sup>3</sup>A potential caveat of this approach is that couples who move to different locations but remain in a relationship will mistakenly be categorized as breaking up in both our treatment and control groups. This could introduce some potential measurement error.

## 2.2 Descriptive Statistics

In Figure 1 we report workplace couples as a share of all cohabiting couples from the years 1995 to 2016. Panel (a) shows that among all couples where both members were employed the 2 years before cohabitation (a mechanical restriction for the workplace couples), just over 12% were workplace couples in 1995, although this number decreased to 7% by 2016. While these numbers indicate a nontrivial 1 in 10 cohabiting couples meet at work, this is likely an underestimate given we impose a strict definition to define those who meet at work. Panel (b) further shows that the share of these workplace couples consisting of a manager dating a non-manager also declines from 16% to just over 8% over this same period. While identifying the reason behind this decline is beyond the scope of this paper, changing norms around the perceived acceptability and potential costs of workplace relationships with power gaps may have played a role. Understanding whether and to what extent such concerns are valid is a primary goal of this paper.

**Figure 1:** Proportion of Couples Who Meet at Work, 1995-2016



*Notes:* Panel (a) reports the proportion of all couples who began cohabiting between the years 1995 and 2016 that worked in the same establishment the year before cohabitation. Panel (b) reports the share of all workplace couples in Panel (a) where one was a manager and the other was not in the year before cohabitation.

**Individual Characteristics** Table 1 reports descriptive statistics for our workplace and non-workplace couples. Column 1 reports descriptive statistics for non-manager women in relationships with a male manager in the same workplace, column 2 reports statistics for women who are in relationships with a male coworker with an above-median earnings gap between them,

and column 3 reports statistics for women in relationships with a relative equal in the workplace. Columns 4-6 report statistics imposing the same restrictions, but for those who date and cohabit with non-coworkers.

For the dating sample in Panel A, we observe that relative to non-workplace couples in Finland, workplace couples are more attached to the labor force and have higher earnings three years before cohabitation. They are also more likely to have a tertiary degree, while those who are in non-workplace couples are more likely to only have a secondary degree.

Women in relationships with a workplace manager also earn more and are more likely to be college-educated compared to women in workplace relationships with an above-median earnings gap. While this fact is somewhat mechanical, it is more interesting to note that women who date a manager earn more and are more likely to be college graduates compared with women in relationships with relative equals in the workplace. This suggests that the typical manager/non-manager workplace relationship is not between a particularly low-ranked woman in the establishment and a manager.

For the breakup sample in Panel B, we see that the workplace and non-workplace couples are largely similar on observables with the exception of education, where we observe in column 1 that female non-managers who break up with managers are just over 20 percentage points less likely to have a college degree compared with female non-managers who break up with manager partners from different establishments (column 4). This difference might reflect that some of the women who break up with managers in column 1 were originally hired into the firm by their male manager partners, possibly leading to a less qualified individual filling the role.

**Table 1:** Individual Summary Statistics in the Year Before Dating or Breakup

Women in:	Workplace Couples			Non-Workplace Couples		
	Non Manager	Lower Earner	Equal	Non Manager	Lower Earner	Equal
	(1)	(2)	(3)	(4)	(5)	(6)
<b>Panel A: Dating Sample</b>						
Earnings	33585	21639	25485	30595	16195	20042
Employment	0.897	0.770	0.870	0.875	0.733	0.806
Share High School	0.303	0.448	0.485	0.361	0.513	0.513
Share College	0.580	0.393	0.323	0.549	0.294	0.296
Age	35.52	30.94	31.79	35.69	30.68	30.54
Observations	1010	6234	7890	11506	99982	98325
<b>Panel B: Breakup Sample</b>						
Earnings	32404	23242	26123	33867	18632	24647
Employment	0.930	0.832	0.892	0.931	0.786	0.872
Share High School	0.419	0.462	0.523	0.305	0.508	0.525
Share College	0.383	0.353	0.257	0.620	0.342	0.326
Age	40.12	35.14	33.78	39.84	34.25	32.91
Observations	728	3853	7136	9273	106486	107449

*Notes:* Panel A reports sample means for women who begin a cohabitation spell with a partner between 1995 and 2016. Panel B reports sample means for women who end a cohabitation spell with a partner over the same period. In Panel A (B) statistics are measured in the year before the the dating period (breakup). Columns 1-3 report sample means for women involved in workplace relationships, and columns 4-6 report sample means for women involved in non-workplace relationships. Column headers refer to subsamples. "Non-Manager" refers to non-manager women in relationships with male managers. "Lower Earner" refers to women in relationships where there is an above-median earnings gap between the two partners. "Equal" refers to women in relationships where the partners are either both subordinates or both managers and there is a below-median earnings gap between them. Earnings consist of all taxable labor market earnings (the sum of wage, salary, and self-employment earnings) and is deflated to 2020 Euros. Share college indicates those with a bachelor's degree or higher. Note that the majority of those who go on to college in Finland also receive a master's degree. High school consists of those whose highest educational degree is either a vocational- or academic-secondary degree.

**Establishment Characteristics** Table 2 presents descriptive characteristics of the establishments in our sample. Column 1 reports characteristics for the 1,010 establishments where we observe a manager/non-manager workplace relationship. Column 2 restricts to establishments where we observe workplace couples with an above-median earnings gap, and column 3 restricts to establishments where we observe couples who are relative equals. Finally, column 4 reports the characteristics of all establishments in Finland with 2 or more employees, and column 5 reports

the characteristics of all establishments in Finland with 20 or more employees.<sup>4</sup>

Establishments where a manager dates a subordinate tend to be larger, with a median size of 71 employees. They pay higher average earnings overall and to both men and women specifically. However, raw male-female earnings gaps are larger in these establishments: men earn 40% more in establishments with manager/non-manager couples, while they only earn 29% more in all workplaces with more than 20 employees. This difference may be explained by the smaller share of women in the top 10% of earners in the establishments where manager/non-manager couples work. Establishments with manager/non-manager couples have lower turnover rates compared to all establishments in Finland.

In Appendix Table D2 we report estimates from a simple linear probability model with an indicator for whether there is a manager/non-manager couple in the establishment as the outcome in column 1 and whether there is a manager/non-manager couple in the establishment who break up in column 2. We find in column 1 that establishments in which manager/non-manager relationships occur are slightly larger, pay higher salaries, and have younger and more educated employees. However, the magnitudes of these coefficients are all very small. We also find that these establishments have a larger share of women overall, but a smaller share of women in the top 10% of earners. Results are almost identical in column 2.

Appendix Table D3 explores what type of managers engage in a relationship with a subordinate. We find that these managers are more likely to be younger, male, have a tertiary degree, and have higher average earnings. However, the magnitudes of these estimates are again very small so we hesitate to over-interpret this descriptive exercise.

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<sup>4</sup>Since we focus on spillovers during the dating period, we relegate establishment characteristics for the breakup sample to Appendix Table D1.

**Table 2: Establishment Summary Statistics**

Establishments with:	Co-Working Couples			All Couples	
	Manager/ Non-Manager	Earnings Gap	Equal	>2 Emp.	>20 Emp.
	(1)	(2)	(3)	(4)	(5)
Median Number Employees	71.50	202	184	7	38
Average Earnings	34060	31233	26598	23189	27254
Female Average Earnings	28365	26153	23145	20407	23865
Male Average Earnings	39697	35783	29812	26545	30888.7
Share Women in Top 10%	0.209	0.215	0.256	0.361	0.344
Turnover	0.216	0.205	0.214	0.323	0.317
Male turnover	0.212	0.203	0.215	0.320	0.327
Female Turnover	0.208	0.206	0.212	0.326	0.318
Share Female	0.467	0.451	0.475	0.471	0.505
Observations	1010	7062	7062	2809642	480474

*Notes:* This table reports establishment-level summary statistics. Column 1 reports summary statistics for establishments that have at least one manager/non-manager relationship over the sample period. Column 2 reports summary statistics for establishments with at least one unequal workplace couple, i.e. a workplace couple where both partners are non-managers or both are managers and the earnings gap between them is above the median earnings gap of couples in the estimation sample. Column 3 reports summary statistics for establishments where there is an equal workplace relationship, defined as couples where both partners are either managers or non-managers and the earnings gap between them is below the median earnings gap of couples in the estimation sample. Column 4 (5) reports summary statistics for all establishments in Finland with greater than 2 (20) employees. Earnings are reported in 2020 Euros.

### 3 Economic Impacts of Starting a Relationship with a Manager

**Descriptive Results and Across-Relationship Event-Study Estimates** Figure 2 Panel (a) depicts the evolution of average earnings for non-manager women in relationships with a workplace manager (red line), and non-manager women who are in relationships with a manager from a different workplace (blue line). Importantly, this figure shows remarkably parallel earnings growth between the two groups before the dating period, the start of which is depicted by the first vertical dashed line.

When the dating period begins, we observe a noticeable slope change for women who date a workplace manager. These women experience raw earnings growth of 22% between the year before the dating period begins and the year after, compared with 16% earnings growth over the



same period among women in the control group. Post-cohabitation, which is indicated by the second vertical dashed line, women in both types of relationships experience a drop in earnings. This could be consistent with a "cohabitation penalty" (Larsen, 2024), with this penalty slightly smaller for those cohabiting with a manager in their workplace. However, it could also be reversion to the mean since by definition those who begin relationships with a manager in the same workplace are working before cohabitation (and we impose the same restriction for the control group), and some natural separation from the labor force is expected.

We formally estimate the earnings effect from starting a relationship with a workplace manager using the following event-study specification:

$$Y_{it} = \sum_{j=-3, j \neq -1}^4 \delta_j D_{ij} + \alpha_i + \eta_t + \epsilon_{it}, \quad (1)$$

where  $Y_{it}$  is the earnings for a subordinate woman in relationship  $i$  in event time  $t$ , where event time is year relative to the start of the dating period.  $D_{ij}$  is an indicator that takes the value of 1 if an individual is in a workplace relationship and it is event year  $j$ . We omit this dummy for  $j = -1$ , meaning that all estimates are relative to the year just before the dating period. The coefficients of interest are the  $\delta_j$ , which identify the effect of being in a workplace relationship in event year  $j$ . Additionally, we include event-time fixed effects,  $\eta_t$ , and couple fixed effects  $\alpha_i$ . In the main analysis below, we estimate this specification by comparing the earnings of those who enter a relationship with a manager in the workplace to women who enter relationships with men who are also managers, but in a different workplace.<sup>5</sup>

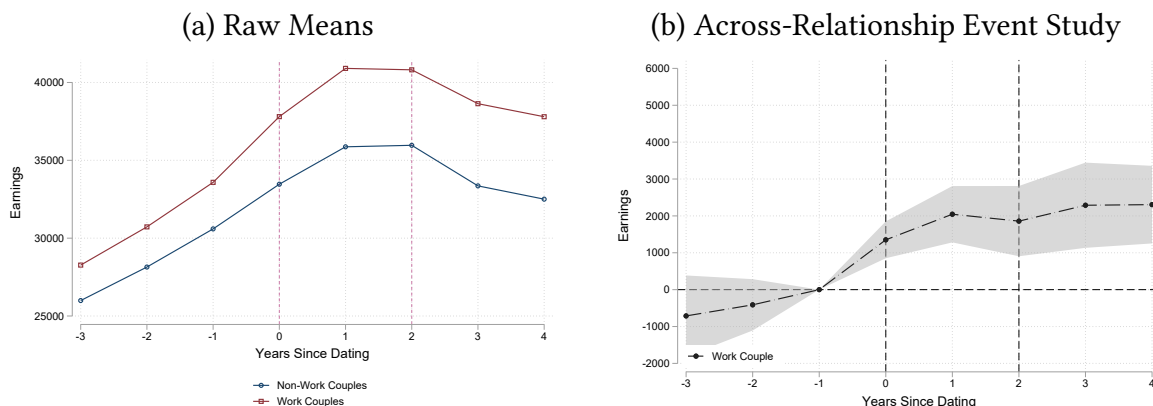
Results from estimating equation 1 are displayed in Panel (b) of Figure 2. We find that estimates in the periods before the dating period are statistically indistinguishable from zero, providing further evidence of a lack of differential trends prior to the dating period. Once the dating period begins, our estimates show that women dating workplace managers experience an earnings increase of around 2000 Euros by year 2, which corresponds to a 6% increase relative to their pre-period earnings. This effect persists until at least 3 years after cohabitation. These results

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<sup>5</sup>The event-study specifications throughout this paper always compare treated and never-treated units, estimating stacked DiD estimators as in Cengiz *et al.* (2019) to address concerns of bias in two-way-fixed-effects estimators that used staggered treatment timing (Goodman-Bacon, 2021; Sun and Abraham, 2020).

suggest that women who date a workplace manager obtain meaningful earnings gains compared to women who date managers in different workplaces.<sup>6</sup>

**Figure 2:** The Earnings Impact of Dating a Manager in the Workplace



*Notes:* Panel (a) plots the evolution of earnings of non-manager women who begin workplace relationships with managers (red line) and non-manager women who begin non-workplace relationships with managers from other establishments (blue line). Panel (b) plots event-study coefficients and their corresponding 95% confidence intervals obtained from estimating equation (1) over the same period. Event time is year relative to the beginning of the dating period. The dating period is defined as the two years before the year the couple is first observed cohabiting. The first vertical line at  $t = 0$  denotes the start of the dating period and the second vertical line at  $t = 2$  denotes the start of cohabitation. Event-study estimates are relative to year  $t = -1$ , which is omitted. Earnings are the sum of all taxable labor market earnings during a calendar year, which includes wages, salary, and self-employment income all deflated to 2020 Euros. Standard errors are clustered at the couple level.

**Across-Relationship Matched Event-Study Estimates** The estimates above may fail to reflect causal effects if there is selection into dating a workplace manager based on observable factors that also cause larger earnings growth. To address this concern we estimate a matched event-study design. In this approach, we compare those in a workplace relationship with a manager to those in a non-workplace relationship who have similar observable characteristics and earnings before the dating period. Formally, we find the nearest neighbor match for each treatment observation based on age, education, earnings, and employment status in the three years before the dating period. Using these matched observations we estimate the following event-study specification:

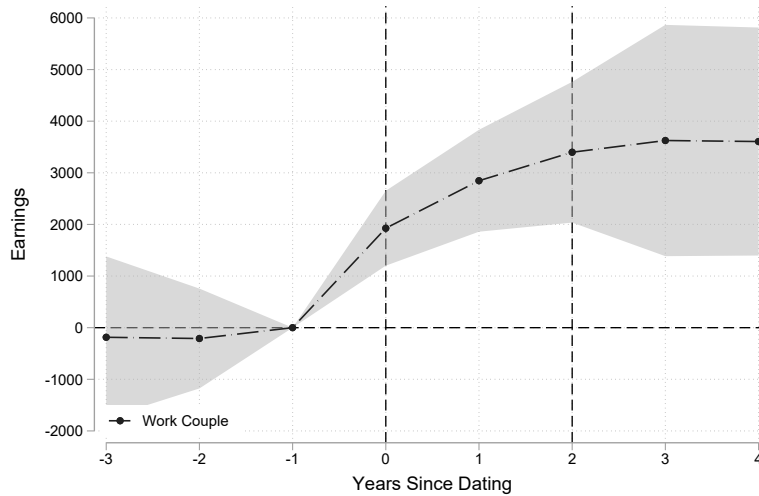
<sup>6</sup>Appendix Table D5 shows that estimates are slightly larger for below-median-sized firms than for above-median-sized firms. In below-median-sized firms the subordinate is more likely to be a direct report.

$$Y_{it} = \sum_{j=-3, j \neq -1}^4 \delta_j D_{i,j} + \alpha_i + \eta_t + \omega_{m(i)} + \epsilon_{it}, \quad (2)$$

where the terms are defined similarly to equation 1, except here we also include  $\omega_{m(i)}$  which represent match fixed effects. These ensure we compare treatment observations to their matched controls. Standard errors are clustered by couple and cohabitation year.

Figure 3 depicts the matched event-study estimates. Again, there is little evidence of differential pre-trends, suggesting that the matched counterfactual consists of observationally similar women to the treatment group, except that their partner is a manager at a different workplace.

**Figure 3:** The Earnings Impact of Dating a Workplace Manager, Matched Design



*Notes:* This figure plots matched event-study coefficients and their corresponding 95% confidence intervals obtained by estimating equation (2). This specification compares the earnings of non-manager women who begin workplace relationships with managers to a matched control of non-manager women who begin non-workplace relationships with a manager in a different establishment. Event time is year relative to the beginning of the dating period. The dating period is defined as the two years before the year the couple is first observed cohabiting. The first vertical line at  $t = 0$  denotes the start of the dating period and the second vertical line at  $t = 2$  denotes the start of cohabitation. Event-study estimates are relative to year  $t = -1$ , which is omitted. Earnings are the sum of all taxable labor market earnings during a calendar year, which includes wages, salary, and self-employment income all deflated to 2020 Euros. Standard errors are clustered at the couple level.

Once the dating period begins in year 0, we see an immediate increase in earnings among women who date workplace managers relative to their matched controls. This earnings increase is roughly €3000 by year 1 and grows to roughly €3500 by the year of cohabitation, and effects

remain positive thereafter. This corresponds to a 9% increase in earnings relative to the treatment group's average earnings of €34,000 in the year before the dating period. These results again indicate that women who date workplace managers obtain significant and economically meaningful earnings gains from doing so, relative to their matched control.

**Within-Establishment Event-Study Estimates** An alternative explanation for our results is that when times are good in an establishment this could lead to earnings gains for all employees and also causes romantic relationships between coworkers to form. Our prior identification strategy partly rules this out, since long-term success and earnings growth within establishments where workplace relationships occur should result in differential earnings pre-trends between women who date managers in these establishments and women who date managers in different establishments.

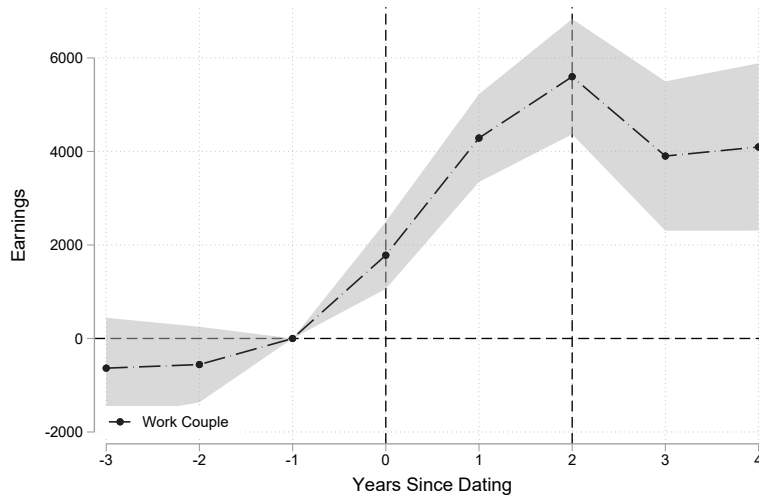
Nonetheless, there could be a sudden positive shock to the establishment that causes both relationships to form and earnings to grow, which may not show up in pre-trends. To rule out this potential bias, we estimate an event-study design using other workers in the same establishment as an alternative counterfactual. Specifically, after restricting our comparison group to consist of other employees in the same establishment of the same gender and position, we find the nearest neighbor match for our treated observation in terms of earnings, employment, education, age, and number of children in the 3 years before the dating window. We require that establishments have at least 3 other female employees to choose as potential matches for this exercise. Using these within-establishment matches, we re-estimate equation 2.

Estimated effects using this alternative counterfactual group are reported in Figure 4. We find a similar pattern of takeoff in earnings in the dating period for those who enter into a workplace relationship with a manager. The effect is even larger than our main estimates, reaching nearly €6000 by the time of cohabitation. Thus, even if positive establishment shocks result in relationship formation, those who enter into workplace relationships with managers see earnings benefits much larger than those accruing to similar workers in the same establishment.

It should be noted that this is not our preferred specification because this approach will over-

state (understate) the impacts of dating a manager in one’s workplace if there are negative (positive) spillovers on other coworkers who form the comparison group in this specification. We explore these potential spillovers in Section 5.

**Figure 4:** The Earnings Impact of Dating a Workplace Manager, Within-Establishment Design



*Notes:* This figure plots matched event-study coefficients and their corresponding 95% confidence intervals obtained from estimating equation (1). This specification compares the earnings of non-manager women who begin workplace relationships with managers to a matched control of non-manager women who work in the same establishment but do not begin a relationship with a manager. Event time is year relative to the beginning of the dating period. The dating period is defined as the two years before the year the couple is first observed cohabiting. The first vertical line at  $t = 0$  denotes the start of the dating period and the second vertical line at  $t = 2$  denotes the start of cohabitation. Event-study estimates are relative to year  $t = -1$ , which is omitted. Earnings are the sum of all taxable labor market earnings during a calendar year, which includes wages, salary, and self-employment income all deflated to 2020 Euros. Standard errors are clustered at the couple level.

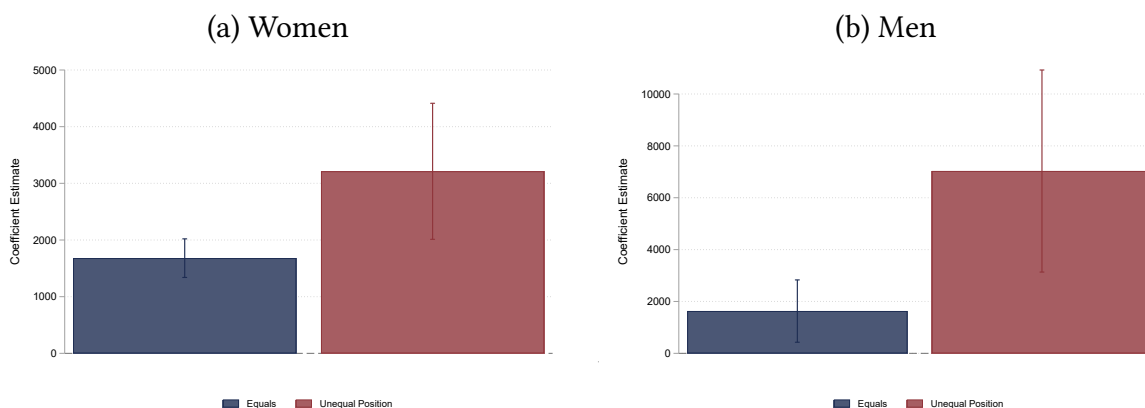
**How Much of This Is a Workplace Relationship Effect?** Perhaps dating any work colleague generates positive returns to earnings. If workplace relationships *in general* yield large earnings gains, then there is less reason to be concerned about manager/non-manager relationships *in particular* generating unfair or inefficient earnings gains.

To assess this possibility, we estimate a collapsed DiD version of equation 2 for both women in a workplace relationship with a manager, and women dating an equal in the workplace. As described in Section 2, we define equal relationships as those where either both are managers or both are non-managers and where the earnings gap between the couple is below the median among all couples in our estimation sample. As a comparison group for those who date workplace

equals, we find their closest nearest-neighbor match among women who are also in a relationship with an equal, defined in the same way, but he works in a different establishment. Note that we may misclassify some workplace couples as "equals" if there is a power difference between them that is not indicated by either occupation or income gaps.

We present these difference-in-difference estimates in Figure 5. We find that the female partner in equal couples experiences a small increase in earnings of just over €1500 per year. This is about half the size of the over €3000 earnings gain for women who date a workplace manager, and this difference is statistically significant. This suggests that relationships with a workplace manager result in earnings gains above and beyond those that may be generated by workplace relationships in general

**Figure 5:** Collapsed Matched DiD Estimates for Women and Men Who Date Managers Versus Equals



*Notes:* These figures report collapsed difference-in-differences estimates of the impact of engaging in a workplace relationship on earnings. Estimates are obtained by replacing the event time specific treatment group indicators in equation 2 with a single pre-post indicator. Panel (a) reports impacts on women who begin workplace relationships and Panel (b) reports impacts on men who begin workplace relationships. In each panel, the red bar displays the estimated impact for non-managers who start a workplace relationship with a manager and the blue bar reports the estimated impact of beginning a workplace relationship with a relative equal. Equal relationships are defined as those where both partners have the same position (both are non-managers or both are managers) and the earnings gap between the two partners is below the median earnings gap of couples in the estimation sample. Earnings are the sum of all taxable labor market earnings during a calendar year, which includes wages, salary, and self-employment income deflated to 2020 Euros. Standard errors are clustered at the couple level. 95% confidence intervals are shown in whiskers around the point estimates.

Another natural question is whether the substantial earnings gains from dating a workplace manager are unique to women or if this result replicates for men who date a manager. In Panel (b)

of Figure 5 we report results for men who date a female manager in their workplace versus men who date equals. We find that men who date managers experience an even larger gain in earnings than women who date managers. Moreover, this effect is approximately four times larger than, and statistically different from, the effect for men who date equals in the same establishment. These results suggest that the earnings gains from dating a manager are not specific to women.

**Using Earnings to Measure Power Gaps** Occupational codes will miss many couples where there is a clear power gap in the workplace, but the party with more power is not coded in our data as a manager. For example, a relationship between a doctor and a secretary has a clear power gap, but doctors are not coded as managers. To explore if our main results are an artifact of mistakenly not including these relationships, in Appendix Figure D1 we compare collapsed DiD results using earnings gaps between partners as a proxy for power differences, to our estimates using women in manager/non-manager and equal workplace relationships. We define couples with "unequal earnings" as those where the gap between the male partner's and the female partner's earnings is above the median among the couples in our estimation sample.

Appendix Figure D1 shows that estimated earnings gains using couples with an above median earnings gap are of a similar size to those obtained using our manager/non-manager couples. Moreover, the estimated earnings gains using both measures of power gaps are statistically significantly larger than the earnings gains women receive from dating a workplace equal.

**Heterogeneity and Interpretation** A natural interpretation of our results is that the earnings takeoff we find for subordinates who date workplace managers is a result of nepotism, with managers giving promotions, pay raises, or other perks to those with whom they are personally involved. Alternatively, dating a workplace manager could lead to better mentoring or help the subordinate partner gain skills, resulting in the subordinate partner advancing in the workplace based on merit. While nepotism is generally viewed negatively, this latter explanation could also be problematic. If a personal intimate relationship with a manager is the best way for employees to have their talent recognized or obtain information and skills needed to advance, this arguably reflects a broader organizational failure.

Nonetheless, to explore which of these two mechanisms is most plausible we perform three exercises. First, we estimate heterogeneity in earnings gains for those who date a workplace manager and move firms after they begin cohabitation ("Sub. Moves" in column 2 of Table 3) and those who date a manager and remain in the workplace ("Sub. Stays" in column 3). If nepotism is behind our results, we would expect the earnings gains to be larger for stayers, since skills obtained through proximity to a manager may be transferable to other firms and so earnings gains should persist for movers. We find that the estimated earnings gain for movers is approximately half the size of the gain for stayers, and is not statistically significant, pointing towards nepotism. It could be that some of the movers are dropping into unemployment and this results in their smaller estimated earnings gain. To account for this, Appendix Table D4 shows that our main heterogeneity estimates are virtually identical when we restrict the sample to those who remain employed throughout the sample period.

Second, we estimate heterogeneity in the results based on whether the *manager* leaves the workplace. If the earnings gains are primarily due to nepotism, then we would expect that earnings gains would be more likely to materialize if the manager remains in the same workplace. If, on the other hand, subordinates gain useful skills through dating a workplace manager, then we would expect earnings to remain elevated even if the manager partner moves to a different workplace. Results for this exercise are reported in columns 4 and 5 of Table 3. We find that the earnings effect is positive and comparable to the full sample effect for subordinates whose manager partner stays in the workplace. In contrast, the point estimate for those whose manager partner departs the workplace is both close to zero and statistically insignificant.

Third, we explore if the earnings gains for subordinates who date workplace managers materialize through a promotion. A promotion is more likely to be observable by colleagues than pay or other perks. As such, managers who wish to unfairly benefit their partners may be more inclined to do so through more discreet methods, such as an increase in earnings, as opposed to a more visible promotion. Consistent with this hypothesis, Appendix Figure D4 shows no statistically significant evidence that the occupation code of the subordinate who dates a manager changes during or after the dating period, suggesting that earnings gains primarily materialize



through pay raises or other perks such as preferential treatment for better-paid overtime hours.

These results suggest that nepotism is a likely mechanism driving the earnings gains accruing to women in relationships with workplace managers. That said, there are several alternative explanations to consider. First, it is possible that having a child with a manager results in a lower child penalty and this drives our results (Bertrand *et al.*, 2010; Angelov *et al.*, 2016; Kleven *et al.*, 2019; Andresen and Nix, 2022). To examine if this is another possible mechanism, we estimate the impact of dating a workplace manager restricting to female subordinates who do not have a change in fertility. The estimate using these women in column 2 of Table 4 is almost identical to our main estimate in column 1, largely ruling out this explanation.

**Table 3:** DiD Estimates by Manager and Subordinate Mobility

	Subsample Heterogeneity				
	Main (1)	Sub. Moves (2)	Sub. Stays (3)	Manager Moves (4)	Manager Stays (5)
Dating a Manager	2344.6*** (457.1)	1405.6 (816.7)	2615.3*** (485.3)	261.6 (1347.4)	2875.1*** (387.0)
Observations	100128	93856	98320	93688	98488

*Notes:* This table reports collapsed difference-in-differences estimates of the impact of beginning a workplace relationship with a manager on the earnings of non-manager women. Estimates are obtained by replacing the event time specific treatment group indicators in equation (1) with a single pre-post indicator. Column (1) reports the main effect including the full treatment group of male manager/female non-manager workplace couples. Columns (2) and (3) restrict the treatment group to couples where the subordinate moves from or stays in the establishment where the workplace relationship formed. The restrictions in columns (3) and (4) are analogous but for the manager partner. "Moves" refers to treated individuals who leave the establishment they were employed in the year before cohabitation. "Stays" are the remaining sample excluding the movers. Earnings are the sum of all taxable labor market earnings during a calendar year, which includes wages, salary, and self-employment income deflated to 2020 Euros. Standard errors are clustered at the couple level. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

A second possibility is that there is a higher bar to enter a relationship with a workplace manager, and higher-quality relationships lead to larger earnings gains in general, rather than just for manager/subordinate relationships in particular. To explore this possibility, Table 4 columns 3 and 4 separately estimate effects for those in "short" relationships, defined as those that last for less than the median relationship length of 6 years in our sample, versus those in "long" relationships lasting longer than 6 years. Under the "higher-quality relationship" explanation, we would expect much larger earnings effects for couples with longer-lasting relationships. This

is not what we find, as the two estimates are almost identical.

A third possibility is simultaneity bias, i.e. a female subordinate may suddenly find themselves on an upward trajectory in the workplace, which also leads a manager to notice and start dating them. While it is not possible to fully rule out this alternative explanation, we view it as unlikely for a few reasons. First, this explanation could only explain our results if there is almost no lag between the increased productivity of the subordinate woman and the manager taking notice of them and initiating a relationship. In other words, for this to be the operative explanation both of these must happen precisely during the dating period, and then the subordinate continues this upward trajectory with no assistance from her manager partner. If, instead, women who enter relationships with managers are on better earnings trajectories in general, this should materialize in significantly different pre-trends in Figure 2, which we do not observe.

One potential way this particular bias could arise is if the subordinate partner receives a promotion causing them to switch to the manager's department, and this closer proximity leads the manager to notice and start dating her precisely when the earnings gains from the promotion begin. This explanation seems unlikely in our context as Table 2 shows that the establishments where these relationships form are relatively small, with a median size of 71 workers. It seems implausible that a manager would fail to notice a given worker prior to such a promotion in establishments this small. To strengthen this point, Appendix Table D5 columns 2 and 3 show that there is little difference in earnings gains from entering a relationship with a workplace manager in below-median-sized versus above-median-sized establishments. We would expect much larger effects for above-median-sized establishments if the earnings gain we estimate results from managers becoming newly aware of the subordinate.

Furthermore, if the subordinate moves to a new position that both gives her larger earnings gains and closer proximity to a new manager whom she starts to date, we would expect to see a change in occupation code just before or at the point of dating. As discussed above, Figure D4 shows no change in occupation code for women in these relationships. To further bolster this result, Appendix Table D5 reports that the event-study coefficients for this figure are close to zero in the year before the dating period starts in column 4 and the year the dating period starts in

column 5, suggesting that the subordinate is not changing positions either just before or at the beginning of the dating period.

**Table 4:** DiD Estimates by Relationship Outcomes

	Subsample Heterogeneity			
	Main Result (1)	Ex. $\Delta$ in Fertility (2)	Short Relationship (3)	Long Relationship (4)
Dating a Manager	2344.6*** (457.1)	2485.6*** (486.1)	2292.0*** (656.4)	2374.9*** (702.6)
Observations	100128	98928	95000	97176

*Notes:* This table reports collapsed difference-in-differences estimates of the impact of beginning a workplace relationship with a manager on the earnings of non-manager women. Estimates are obtained by replacing the event time specific treatment group indicators in equation (1) with a single pre-post indicator. Column (1) reports the main effect including the full treatment group of male manager/female non-manager workplace couples. Column (2) restricts the treatment group to couples where the female partner has a change in fertility. Columns (3) and (4) restrict the treatment group to short versus long relationships. "Short (Long) Relationship" refers to relationships that last below (above) the median relationship length in the estimation sample. Earnings are the sum of all taxable labor market earnings during a calendar year, which includes wages, salary, and self-employment income deflated to 2020 Euros. Standard errors are clustered at the couple level. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

Although the collective evidence points towards nepotism as the main driver of the earnings gains from dating a workplace manager, we cannot fully rule out some of the alternative mechanisms outlined above, particularly that the subordinate acquires firm-specific mentoring or firm-specific skills from the relationship. That said, in Section 5 we document significant negative externalities on other coworkers when these relationships form, with larger negative spillovers in establishments where the subordinate partner experiences an above-median pay increase. Thus, these relationships have meaningful broader economic impacts tied to the subordinate's earnings gains. These spillovers on colleagues highlight that these relationships carry costs regardless of whether the benefit to the subordinate comes from actual favoritism or perceived favoritism.

**Firm Attachment and Relationship Longevity** To explore other potential consequences of workplace relationships between managers and non-managers we perform several descriptive exercises presented in Appendix B. First, we find that both the subordinate and the manager in these relationships are more likely to stay at the same workplace when compared to relationships between managers and subordinates who do not work in the same firm. However, there

is striking heterogeneity in this result. While women subordinates are just over 10 percentage points more likely to be in the same establishment 5 years post-cohabitation, the male managers they enter a relationship with are less than 5 percentage points more likely to be in the same establishment five years post-cohabitation. We also find that workplace relationships between managers and non-managers last significantly longer than similar non-workplace relationships. Five years after cohabitation, these couples are 6 percentage points more likely to still be together than their non-workplace counterparts. This could indicate that workplace relationships are better matches, but could also reflect that the cost of breakup from these relationships may be high causing individuals to stay in their relationships longer than is optimal.

## 4 Economic Impacts of Breaking Up with A Manager

**Descriptive Results and Across-Relationship Event-Study Estimates** We now turn to the impact of breaking up with a workplace manager. We define a breakup as occurring in the first year we no longer observe a couple cohabiting with each other in the data. We focus on cohabiting couples who worked in the same establishment and the male partner was a manager while the female partner was a non-manager in the year before the breakup. These sample restrictions mean that the treatment couples for our breakup analysis do not necessarily meet in the workplace, making the treatment group somewhat different than in the previous section. For example, the breakup treatment group also includes couples where the manager hires his cohabiting partner to his workplace and they later break up. In Appendix C we show that our results are similar if we exclusively focus on the smaller sub-sample of manager/subordinate couples who meet at work and later break up.

Figure 6 reports raw average labor market earnings and employment around breakup for women who break up with a manager. Panel (a) shows that women who break up from a workplace relationship with a manager experience an immediate decrease in earnings of €4000 in the year after the breakup, which amounts to just over 12% of their pre-breakup earnings. This decline in earnings persists for at least 4 years after the breakup. In contrast, women who break up with a manager from a different establishment do not experience a decline in earnings, but

rather, a subtle decrease in the amount of earnings growth after the breakup.

Turning to employment in Panel (b), we again see a stark and immediate decline for women who break up with a workplace manager. This figure shows that women are 20 percentage points less likely to remain employed after the breakup. In contrast, women who break up with a manager at a different workplace experience a less dramatic decline in employment of 9 percentage points after their break up, which could reflect that breakups are costly in general, but could also reflect mean reversion, as we mechanically restrict everyone to be employed in the year before breakup and some natural separation from the workplace is expected. Again, we see little evidence of a recovery in employment for women who break up from a relationship with a manager in their workplace five years after the event.

To more formally capture the causal effect of breaking up from a workplace relationship with a manager on earnings and employment, we estimate a simple event study specification:

$$Y_{it} = \sum_{j=-3, j \neq -1}^4 \delta_j D_{ij} + \alpha_i + \eta_t + \epsilon_{it}, \quad (3)$$

where  $Y_{it}$  is the outcome of interest for the subordinate partner in couple  $i$  at time  $t$  relative to breakup.  $D_{ij}$  is an indicator that takes the value of 1 for individuals we observe in a workplace relationship and it is event year  $j$ . Event time is the year relative to breakup, where breakup is defined as the first year we no longer observe couples cohabiting together in the data. Event time runs between -3 to 4, with  $D_{ij}$  omitted for event year -1. The coefficients of interest are the  $\delta_j$  which identify the effect of breaking up from a workplace relationship with a manager relative breaking up with a non-workplace manager in event year  $j$ .  $\eta_t$  are time fixed effects, and  $\alpha_i$  are couple fixed effects. Standard errors are clustered by couple.

Figure 6 presents estimates from this event-study design for earnings in panel (c) and employment in panel (d). In both figures we find no effect in the pre-period, indicating a clear lack of differential pre-trends between our treatment and control observations. In the post period, we find that breaking up with a workplace manager causes a €6000 decline in earnings the year after the breakup occurs, and this effect persists for at least 4 years after the breakup. This represents a

substantial 18% loss in earnings for these women, relative to their pre-breakup average earnings of €32,500. We further find that breakup leads to a 10 percentage point drop in employment the year the breakup occurs, an effect that also persists for the whole post period. These results highlight that women who break up from a relationship with a workplace manager face significant economic losses over and above the costs experienced by women who break up with a partner who is a manager, but in a different workplace.

**Figure 6: Earnings and Employment Impacts of Breaking Up with a Workplace Manager**



*Notes:* Panel I plots the evolution of (a) earnings and (b) employment of non-manager women who break up from workplace relationships with a manager (red line) and non-manager women who break up from non-workplace relationships with managers who work in different establishments (blue line). Panel II plots event-study coefficients and their corresponding 95% confidence intervals for the same outcomes obtained from estimating equation (3) over the same period. Event time is year relative to breakup. Breakup is defined as occurring in the first year a couple is no longer observed cohabiting and is denoted by the vertical line at year  $t = 0$ . Event-study estimates are relative to year  $t = -1$ , which is omitted. Earnings are the sum of all taxable labor market earnings during a calendar year, which includes wages, salary, and self-employment income all deflated to 2020 Euros. Employment is measured at the end of each calendar year. Standard errors are clustered at the couple level.

To explore how the earnings losses from breaking up with a workplace manager differ for those who stay in the workplace versus those who become unemployed or change workplaces after the breakup we estimate a fully interacted difference-in-differences design that takes the form:

$$\begin{aligned}
 Y_{it} = & \beta_1 D_{it} + \beta_2 \text{SameEstab}_{it} + \beta_3 \text{SameEstab}_{it} \times D_{it} \\
 & + \beta_4 \text{Unemployed}_{it} + \beta_5 \text{Unemployed}_{it} \times D_{it} + \alpha_i + \eta_t + \epsilon_{it}
 \end{aligned}
 \tag{4}$$

where  $Y_{it}$  is the subordinate partner  $i$ 's earnings in event year  $t$ .  $D_{it}$  is an indicator equal to one if couple  $i$  is a workplace couple and the couple has broken up ( $t \geq 0$ ).  $\text{Unemployed}_{it}$  is an indicator equal to 1 if the individual is unemployed in period  $t$ , and  $\text{SameEstab}_{it}$  is an indicator equal to 1 if the individual is in the same establishment they were in the year before the breakup.  $\alpha_i$  and  $\eta_t$  are couple and event time fixed effects. In this regression, we are interested in three effects of breaking up with a workplace manager relative to those who break up from a non-workplace relationship with a manager and remain in the same establishment: first, breaking up and moving to a new establishment ( $\beta_1$ ); second, breaking up and remaining in the same establishment ( $\beta_1 + \beta_2 + \beta_3$ ); and last, breaking up and moving to unemployment rather than another workplace ( $\beta_4 + \beta_5$ ).

Estimates from this interacted model are reported in column 3 of Table 5. For comparison, we report the results of a collapsed difference-in-differences specification for earnings in column 1 and employment in column 2. In these columns, we observe a €5,859 decrease in earnings and a 13.1 percentage point decline in employment for women who break up with a workplace manager. The latter result is striking, as these women previously had a very strong attachment to the labor market as shown in panel (b) of Figure 6.

Unsurprisingly, the estimates in column 3 show that those who move into unemployment after the breakup experience a substantial decline in earnings, although these unemployment spells are not worse in terms of earnings losses for those who enter unemployment after breaking up with a workplace manager. More surprisingly, we find that those who change workplaces after

the breakup experience a non-negligible decline in earnings of €5155 ( $p < 0.01$ ). Last, we find that those who break up with a manager but remain in the same establishment experience no statistically significant change in their earnings. These results show that the cost of breaking up with a manager who works in the same establishment is driven by those who leave the firm after the breakup: these workers not only are more likely to exit the labor force but also make less advantageous firm-to-firm transitions.

**Table 5:** The Impacts of Breaking Up with a Workplace Manager

Dependent Variable:	Earnings (1)	Not Employed (2)	Earnings (3)
Treatment	-5859.4*** (649.4)	0.131*** (0.0137)	-5155.8*** (744.3)
Same Establishment			665.8*** (162.6)
Same Establishment X Treatment			4555.6*** (820.3)
Unemployed			-19638.5*** (376.9)
Unemployed X Treatment			1575.8 (1115.1)
Observations	80008	80008	80008

*Notes:* Columns (1) and (2) report collapsed difference-in-differences estimates of the impact of breaking up from a workplace relationship with a manager on the labor market outcomes of non-manager women. Estimates are obtained by replacing the event time specific treatment group indicators in equation (2) with a single treatment-by-post-period indicator. Outcome variables are earnings and employment in columns (1) and (2) respectively. Column (3) reports estimates from equation (4). Earnings are the sum of all taxable labor market earnings during a calendar year, which includes wages, salary, and self-employment income all deflated to 2020 Euros. Employment is measured at the end of each calendar year. Standard errors are clustered at the couple level. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

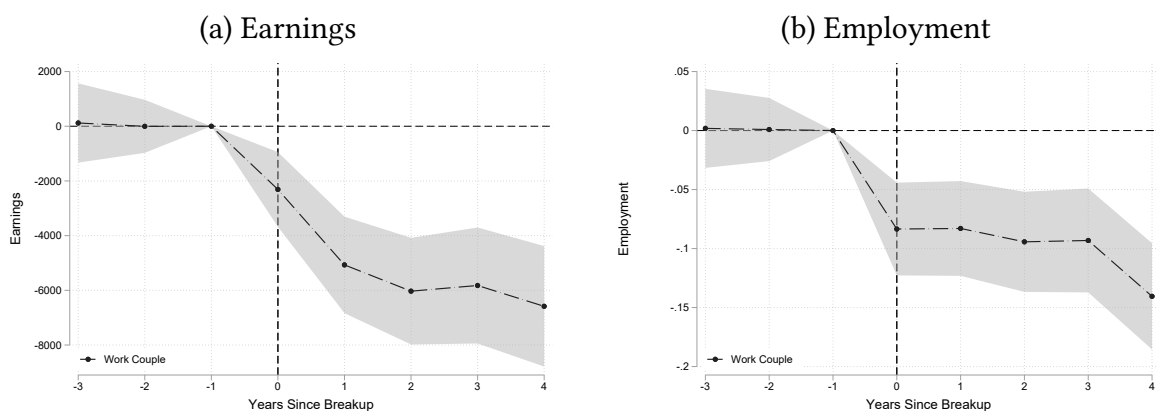
**Across-Relationship Matched Event-Study Estimates** There may be selection into breaking up with a workplace manager based on observable factors that also cause more costly breakups, leading to bias in the previous estimates. To account for this potential bias we employ an alternative matched specification analogous to that used previously for the getting together results in Section 3.

Specifically, we find the nearest-neighbor match for our treatment observations based on



earnings, age, education, and employment in the 3 years before the breakup, and estimate a matched event study using this observation as the control. The estimating equation is identical to equation (2), with the coefficient estimates relative to the year just before the breakup. Figure 7 shows these estimates for earnings and employment. In the 3 periods before breakup (-3 to 0) we observe no evidence of differential pre-trends between women who break up with a workplace manager and their matched control. After a breakup, we observe a clear and persistent drop in both earnings and employment for women who break up with a workplace manager. The size of these effects are nearly identical to our unmatched results.

**Figure 7:** The Earnings and Employment Impacts of Breaking Up with a Workplace Manager, Matched Design



*Notes:* This figure plots matched event-study coefficients and their corresponding 95% confidence intervals obtained from an estimating equation analogous to equation (2). This specification compares the earnings of non-manager women who break up from workplace relationships with a manager to a matched control of non-manager women who break up from non-workplace relationships with a manager from a different establishment. The outcome variables are earnings in Panel (a) and employment in Panel (b). Event time is year relative to breakup. Breakup is defined as the first year a couple is no longer observed cohabiting, and is denoted by the vertical line at year  $t = 0$ . Event-study estimates are relative to year  $t = -1$ , which is omitted. Earnings are the sum of all taxable labor market earnings during a calendar year, which includes wages, salary, and self-employment income all deflated to 2020 Euros. Employment is measured at the end of each calendar year. Standard errors are clustered at the couple level.

**Within-Establishment Event-Study Estimates** An alternative explanation for the breakup results is that when times are bad for establishments this could lower wages and employment, and also result in the breakup of worker’s relationships due to the related stress. This possibility is at least partially ruled out already, as we would expect such shocks to result in differential pre-trends in our unmatched event-study estimates in Figure 6, but the pre-trends are remarkably

parallel for both outcomes.

Nonetheless, an unexpected and sudden negative shock to the establishment may not be captured in pre-trends. To further rule out this possible source of bias, we again estimate a within-establishment event study design where we compare a woman who breaks up with a workplace manager to another female employee in the same establishment who is her nearest neighbor match on observable characteristics in the pre-period. This is not our preferred specification because the dissolution of manager/non-manager relationships within the establishment may have spillover effects on other workers in the establishment. That said, finding similar effects using this approach would be reassuring that our main results are not driven by sudden establishment level shocks.

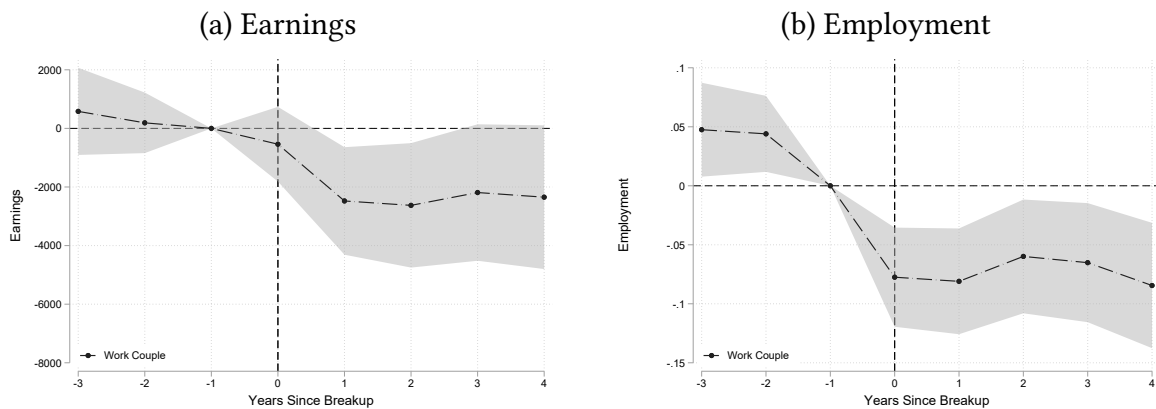
Figure 8 reports estimates from this exercise. Like our other specifications, Panel (a) demonstrates an absence of pre-trends and a significant decline in earnings following a breakup. Panel (b) also shows a clear drop in employment at the time of the breakup, though estimates are significant in the pre-period indicating potential pre-trends. In Appendix Figure D3 we present the raw employment means related to these estimates. These figures suggest that the differential pre-trends in employment are due to higher employment rates for women who are in relationships with a workplace manager in years -2 and -3 before breakup and this interacts with the mechanical restriction that those in the control group must be employed in the year before breakup.

**How Much of This Is a Workplace Relationship Effect?** Breaking up with a colleague at work may result in a decrease in earnings in general, with no added cost from breaking up with a manager. To explore this possibility, we compare collapsed DiD estimates of the impact of breakup for those dating a workplace manager and those who break up with a colleague who is a relative equal in the workplace.

Figure 9 reports the results from this exercise. Panel I (a) reports estimates for earnings post-breakup and panel (b) reports results for employment. We find that the impact of breaking up with a workplace colleague who is an equal is also negative and significant for both earnings and employment. However, we find that the estimated negative impact on earnings is over five

times as large for women who break up with a workplace manager, and the estimated negative employment effect for these women is over twice as large. In both cases these differences are statistically significant. These results are consistent with there being a much larger cost to the dissolution of a relationship with a workplace manager, highlighting the potentially precarious position subordinates in relationships with managers may find themselves in if the relationship is not successful.

**Figure 8:** The Impact of Breaking Up With a Workplace Manager, Within Establishment Design



*Notes:* This figure plots matched event-study coefficients and their corresponding 95% confidence intervals obtained from an estimating equation analogous to equation (2). This specification compares the earnings of non-manager women who break up from workplace relationships with a manager to a matched control group consisting of non-manager women who work in the same establishment but do not break up from a relationship with a manager. The outcome variables are earnings in Panel (a) and employment in Panel (b). Event time is year relative to breakup. Breakup is defined as the first year a couple is no longer observed cohabiting, and is denoted by the vertical line at year  $t = 0$ . Event-study estimates are relative to year  $t = -1$ , which is omitted. Earnings are the sum of all taxable labor market earnings during a calendar year, which includes wages, salary, and self-employment income all deflated to 2020 Euros. Employment is measured at the end of each calendar year. Standard errors are clustered at the couple level.

In Panel II of Figure 9 we perform the same exercise for men who date managers and relative equals within the establishment. Panel (d) finds that employment decreases by over 4 percentage points for men who break up with a female manager in their workplace. That said, these estimates are not statistically significant at conventional levels. In contrast, we find a relatively precise null effect on the employment of men who break up from relationships with relative equals in the same establishment, where we can rule out effect sizes larger than 1 percentage point based on the 95% confidence interval. Panel (c) shows that the estimated decline in earnings is twice as large for

men who break up with a workplace manager but these estimates are also very noisy likely due to the very small sample size. The direction and pattern of these earnings and employment effects are consistent with the conclusions that emerged for women.

**Figure 9:** The Impact of Breaking up with a Manager Versus Breaking Up with an Equal, Collapsed DiD Estimates



*Notes:* This figure reports collapsed difference-in-differences estimates of the impacts of breaking up from a workplace relationship. Estimates are obtained by replacing the event time specific treatment group indicators in equation (3) with a single pre/post indicator. Panel I reports impacts on women who begin workplace relationships and Panel II reports impacts on men who begin workplace relationships. The outcome variables are earnings in sub-figures (a) and (c) and employment in sub-figures (b) and (d). In each sub-figure, the red bar displays the estimated impact for non-managers who break up from a workplace relationship with a manager, and the blue bar reports the estimated impact of breaking up from a workplace relationship with a relative equal. Equal relationships are defined as those where both partners have the same position (both are non-managers or both are managers) and the earnings gap between the two partners is below the median earnings gap of couples in the estimation sample. Earnings are the sum of all taxable labor market earnings during a calendar year, which includes wages, salary, and self-employment income deflated to 2020 Euros. Standard errors are clustered at the couple level. 95% confidence intervals are shown in whiskers around the point estimates.

## 5 Spillovers on the Broader Workforce

One way workplace relationships could be harmful to the firm at large is if they cause discomfort or disgruntlement among other workers. This could be especially true for relationships between a manager and a non-manager. Other workers may think a subordinate dating a manager is receiving unfair advantages, a belief which would not be inconsistent with our findings in prior sections. This disgruntlement could lead to measurable negative externalities on coworkers in the broader establishment.

To investigate this possibility, we estimate a matched event-study design which compares outcomes in establishments where manager/non-manager relationships form to matched control establishments where we do not observe one of these relationships. Formally, we find an establishment’s nearest neighbor match based on establishment size, average male and female income, gender composition, and employee retention in the periods before the dating period begins. With the matched and control establishments, we then estimate the following event-study specification:

$$Y_{ft} = \sum_{j=-3, j \neq -1}^4 \delta_j D_{fj} + \alpha_f + \eta_t + \omega_{m(f)} + \epsilon_{ft}, \quad (5)$$

where  $Y_{ft}$  represents the outcome of interest for establishment  $f$  at time  $t$ .  $D_{fj}$  indicates if we observe a manager/non-manager relationship within the establishment and it is year  $j$  relative to the start of the dating period.  $\delta_j$  are the coefficients of interest, identifying the effects of a manager/non-manager relationship on establishment outcomes relative to the matched counterfactual. We omit  $D_{fj}$  for year  $j = -1$ , which means that all estimates of  $\delta_j$  are relative to the year before a workplace couple’s dating period.  $\omega_{m(f)}$  are match fixed effects, ensuring we are comparing establishment  $f$  to their matched control. Additionally, we include establishment-by-base-year fixed effects,  $\alpha_f$  and event time fixed effects,  $\eta_t$ . Standard errors are clustered at the establishment level.

As with the previous sections, we always compare treated and never-treated establishments to address concerns of bias in event studies (Goodman-Bacon, 2021; Sun and Abraham, 2020),

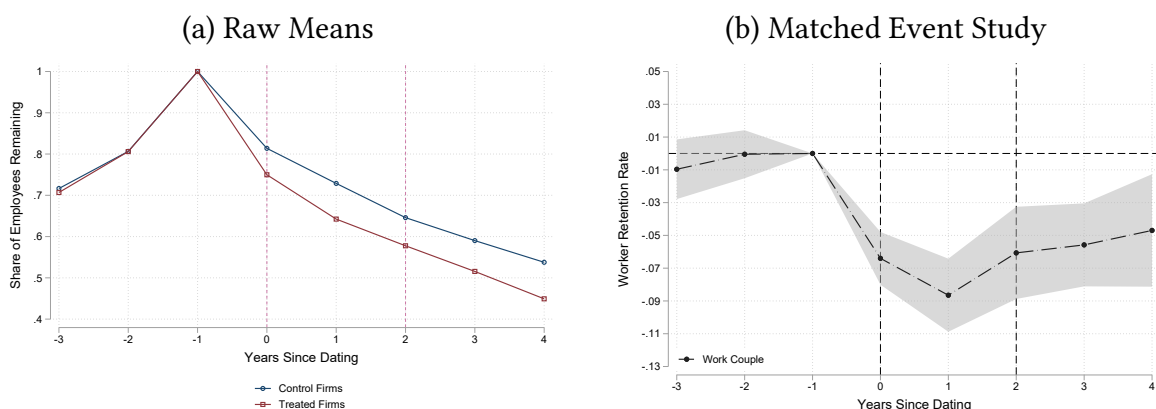
meaning we estimate a stacked DiD exercise (Cengiz *et al.*, 2019). To interpret our establishment estimates causally, we assume that the outcomes of the establishment where manager/non-manager relationships form would have evolved similarly to the matched counterfactual control establishment in the absence of such a relationship.

We report the effects of these relationships forming on worker retention in Figure 10. Retention is defined as the share of workers who were employed in the workplace the year before the dating period begins, who are still employed in each event year. When calculating the retention variable, we remove the manager and subordinate who are in a relationship. As documented in Section 3 and Appendix B both are more likely to be retained, but for this exercise, we are only interested in the spillovers on other employees.

Figure 10 Panel (a) reports mean retention for treatment and control establishments. This figure shows a distinct absence of differential trends in the pre-period. In the post period, we see a clearly larger drop in retention in treated establishments starting in the first year of the dating period. This drop is immediate and sustained over 5 years. After  $t=1$ , the gap in retention does not continue to grow over time. This suggests that treated firms lose more employees at the start of these relationships, but then there is not an additional exodus from the establishment in subsequent years. The event-study results in Panel (b) confirm that there is a significant decline in the retention of other workers in treated firms. In the second year of the dating period we observe just under a 9 percentage point decline in retention. By five years later, these firms retain approximately 5 percentage points fewer workers.

In Appendix Table D6 we report collapsed DiD results for retention in column (1), retention by gender of workers in columns (2) and (3), and the share of workers who are female in column (4). We find that establishments where a manager dates a subordinate retain 6 percentage points fewer workers than counterfactual establishments overall in the post period. We find a small, but marginally significant, positive effect on share female, which is likely an artifact of statistical noise. On the other hand, the estimated effects on male and female retention are both comparable to the pooled estimate, suggesting that men and women are equally likely to leave the establishment due to these relationships.

**Figure 10:** The Impact of Managers Dating Subordinates on the Retention of Other Employees



*Notes:* Panel (a) plots the evolution of employee retention in establishments where a relationship between a non-manager women and a manager begins (red line) and matched control establishments where manager/non-manager relationships do not form over the same time period (blue line). Panel (b) plots corresponding matched event-study coefficients and their 95% confidence intervals obtained from estimating equation (5). Event time is year relative to the beginning of the dating period. The dating period is defined as the two years before the year the workplace couple is first observed cohabiting. The first vertical line at  $t = 0$  denotes the start of the dating period and the second vertical line at  $t = 2$  denotes the start of cohabitation. Event-study estimates are relative to year  $t = -1$ , which is omitted. Employee retention is defined as the share of all workers employed in an establishment in period  $t = -1$  who remain employed in the establishment in each of the other years. Standard errors are clustered at the establishment level.

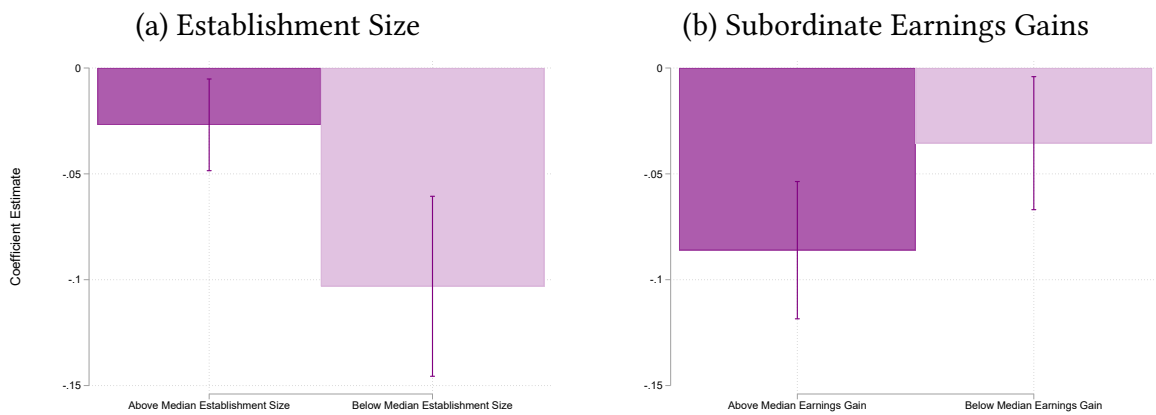
To interpret the size of the decline in employee retention, we consider two benchmarks. First, a 6 percentage point decrease in retention implies that establishments where a manager dates a subordinate lose approximately 4 more workers than control firms, given the median establishment size of 71 employees. Second, we compare the reduction in retention in treated firms to the average retention in control firms over the post-period. Panel (a) of Figure 10 shows that control firms lose, on average, 42% of the workers who were employed in  $t = -1$  over the post period, perhaps consistent with these being small establishments with lots of workforce churn. Relative to this baseline, a 6 percentage point decrease in retention corresponds to a 14% decline in retention for treated firms.

**Heterogeneity by Establishment Size and Subordinate’s Earnings Gain** We might expect retention effects to be more pronounced in smaller establishments. With fewer employees, it is more likely that they all interact with each other and this could lead more coworkers to perceive and/or experience negative spillovers from a colleague dating a manager. We explore this

possibility in Figure 11 Panel (a) and find that this is indeed the case. Below-median-size establishments experience a drop in retention of just over 10 percentage points, roughly four times the estimated drop in retention of 2.5 percentage points in above-median-size establishments, and this difference is statistically significant.

Next, in Figure 11 Panel (b) we estimate the impact on retention but split the sample into those establishments where the earnings gains accruing to the subordinate during the dating period are above versus below the median. We find that while retention falls by almost 9 percentage points in establishments where subordinates receive above-median percent earnings gains, it falls by only 3.5 percentage points in establishments where subordinates experience below-median percent earnings gains. This difference is significant at the 10% level.

**Figure 11:** Heterogeneity in Retention Effects by Establishment Size and Subordinate Earnings Gains



*Notes:* This figure reports heterogeneity in the impact of manager/non-manager relationships forming in an establishment on the retention of other workers in the same establishment. Collapsed difference-in-differences estimates are obtained by replacing the event-time-specific treatment group indicators in equation (5) with a single pre-post indicator. This specification compares retention in establishments where manager/non-manager relationships form to establishments where manager/non-manager relationships do not form that are observationally equivalent in terms of observable characteristics of the establishment. Panel (a) reports heterogeneity based on whether the size of the establishment is above the median (dark purple bar on left) versus below the median (light purple bar), where the median establishment size is 71 workers. Panel (b) reports heterogeneity based on whether the percentage gain in earnings received by the subordinate in the manager/non-manager relationship was above the median (dark purple bar) versus below the median (light purple bar). Retention is defined as the share of all workers employed in an establishment in period  $t = -1$  who remain employed in the establishment in each of the other years. Standard errors are clustered at the establishment level. Each bar displays the 95% confidence interval for the reported point estimate.



## 6 Conclusion

This paper provides the first large-scale evidence of the impacts of romantic relationships between managers and non-managers in the same workplace on both the parties directly involved and the broader workforce. We find that dating a workplace manager leads to a 9% increase in earnings, which persists over time. A series of heterogeneity tests point towards nepotism as a likely explanation for these earnings gains. Next, we find that breaking up with a manager is very costly to subordinates. They experience an 18% decrease in earnings and are 13 percentage points more likely to exit employment by the year after the breakup. We further show that the decline in earnings is not only driven by subordinates moving out of employment altogether but also results in worse firm-to-firm transitions.

Third, we find that these relationships impose negative spillovers on the broader firm. We find a 6 percentage point decline in retention of other workers in establishments after a manager enters a relationship with a subordinate in that establishment. Moreover, we show this decline in retention is larger for smaller firms and firms where subordinates in these relationships experienced a larger gain in earnings. The latter indicates that other workers view the upward trajectory of those in relationships with managers negatively enough to potentially leave the firm. Therefore, whether the earnings gains result from nepotism or not, our results suggest that merely the appearance of nepotism resulting from these relationships may impose significant costs on the broader firm.

We conclude that workplace relationships between managers and subordinates have important consequences, not only for those directly involved but also for the broader workforce. As such, this paper demonstrates that romantic relationships in the workplace—which are common—are an important organizational issue, perhaps warranting some of the restrictions imposed across a range of companies such as Walmart, General Electric, and The World Bank (Boyd, 2010).

One of the main implications of our results is that a potentially useful firm-level policy on workplace relationships with power differentials is to prevent the superior partner from having a direct influence on the career trajectory of their subordinate partner. Our findings suggest

that other employees dislike these relationships, particularly when they are associated with the upward trajectory of the subordinate partner. This means that regardless of whether the earnings gains obtained by subordinate partners are due to favoritism or not, the appearance of favoritism should be curtailed as it can lead other workers to leave the firm. Further, the large costs to subordinate partners after a breakup suggest that protections may be warranted. Restricting the manager ex-partner's influence on the subordinate's outcomes could help mitigate these costs. It is likely that a neutral party could more fairly assess if the subordinate's pay and productivity are in sync with each other and determine if the worker should be retained or let go after a breakup. The subordinate may also be more comfortable staying in the firm if their future is determined by a neutral party rather than their former partner.

In practice, this policy may require the subordinate to be moved to a different department, team, or establishment within the firm. An implication of this may be that some relationships in a workplace may need to be prohibited altogether if there is no way to rule out the direct influence the superior partner has on the subordinate. However, bans are potentially very costly, as they could prevent some good relationships from forming. Preventing someone from starting a relationship with the best possible partner may constitute a significant societal cost of firm-level regulations on these relationships. CEOs across the corporate world should carefully weigh the costs we document against the potential benefits of these relationships when deciding their policies on romantic relationships in the workplace. However, this paper provides concrete evidence to guide these decisions, filling an important gap in the literature.

Absent from our results are the potential implications of allowing consensual relationships in the workplace for workplace harassment. There can be a very fine line between pursuing a subordinate and harassing a subordinate. Anecdotal accounts from #MeToo demonstrate that the costs of spurning the advances of a superior can be large, including retribution in the form of lost career opportunities and increasingly aggressive advances. Moreover, the costs of non-consensual attacks and harassment in the workplace are enormous, as documented in Adams-Prassl, Huttunen, Nix and Zhang (2024) and Folke and Rickne (2022). While exploring the link between allowing relationships between managers and subordinates and workplace harassment is beyond the scope

of this paper, this possibility must be examined alongside the results we document when considering what type of policies should be in place regarding romantic relationships at work. Given this, an important avenue for future research is exploring the impact of workplace environments permissive of consensual relationships between coworkers on workplace harassment.

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## For Online Publication: Appendix

### A Data Appendix

This section describes in detail the data sets and variables used in this paper, as well as construction of our analysis sample. The data is held securely by Statistics Finland. The data we access is stripped of all personally identifying information, replacing names with a unique identifying number to protect individual privacy. We only access and link data after approval from the relevant statistical agencies.

**FOLK Data Sets** Labor market and demographic characteristics are obtained from Statistics Finland's FOLK data sets. These data are comprehensive, covering the years 1988-2018 and including everyone in Finland between the ages 15 and 70. Each individual in the data has a unique identifying number (anonymized national person number), and we discuss how we use this to link below. FOLK data provides rich information on annual labor market outcomes for each individual (such as labor earnings, taxable income, and employment status in December). Beyond labor market information, the data set also includes detailed demographic information, such as age, gender, number of children, municipality of residence, marriage, and cohabitation status. Last, key for our analysis is the fact that this data includes unique identifying codes for each individual's cohabiting partner as well as the plant and firm where each individual is employed. This allows us to link and identify co-working couples in the data and to pull a large array of variables on their colleagues, which we use to estimate spillovers from these relationships.

**Linking** To conduct the linking we use the fact that each data set includes unique identifying numbers for each individual (anonymized national identity numbers). This allows us to perfectly link across all data sets. In our setting, this consists of linking the information on individual's workplace and their labor market outcomes contained in separate FOLK data sets to each other to create a panel data set. Given FOLK covers the universe of all people living in Finland aged 15-70, the only way we will not link to someone is if they have aged out of the data, passed away

or moved out of Finland.

**Identifying Co-Working Couples and Defining Managers** We provide a detailed description of how we identify co-working couples in the data in Section 2 of the main draft. However, we note a few extra details here. First, because FOLK provides unique plant identifying numbers, we are able to observe if two members of a couple work together in any year of their relationship and in any of the years preceding or following their relationship.

Second, we define managers using the occupation codes from the FOLK työssäkäynti data module. Finnish occupation codes are structured such that the one-digit occupation code "1" stands for managers. We code couples where one spouse has the one-digit occupation code "1" and the other any other occupation code, as manager/non-manager couples. The occupation codes in the data are taken from Statistics Finland's occupation code classifications. It is worth noting that in the early years of our sample (pre 1994), the classification is slightly different, and includes some non-managerial occupations (like secretaries) under the 1-digit code "1", which we do not code as managers. For example, in 1990 these codes are: 119, 1202, 121, 122, 129, 130, 131, 140, 141, 150, 151, 1522, 1532, 154, 155, 1562, 1563, 1582, and 159. In 1993, these codes are: 119, 1202, 121, 122, 129, 130, 131, 140, 141, 150, 151, 1522, 1532, 154, 155, 1562, 1563, 1582, and 159.

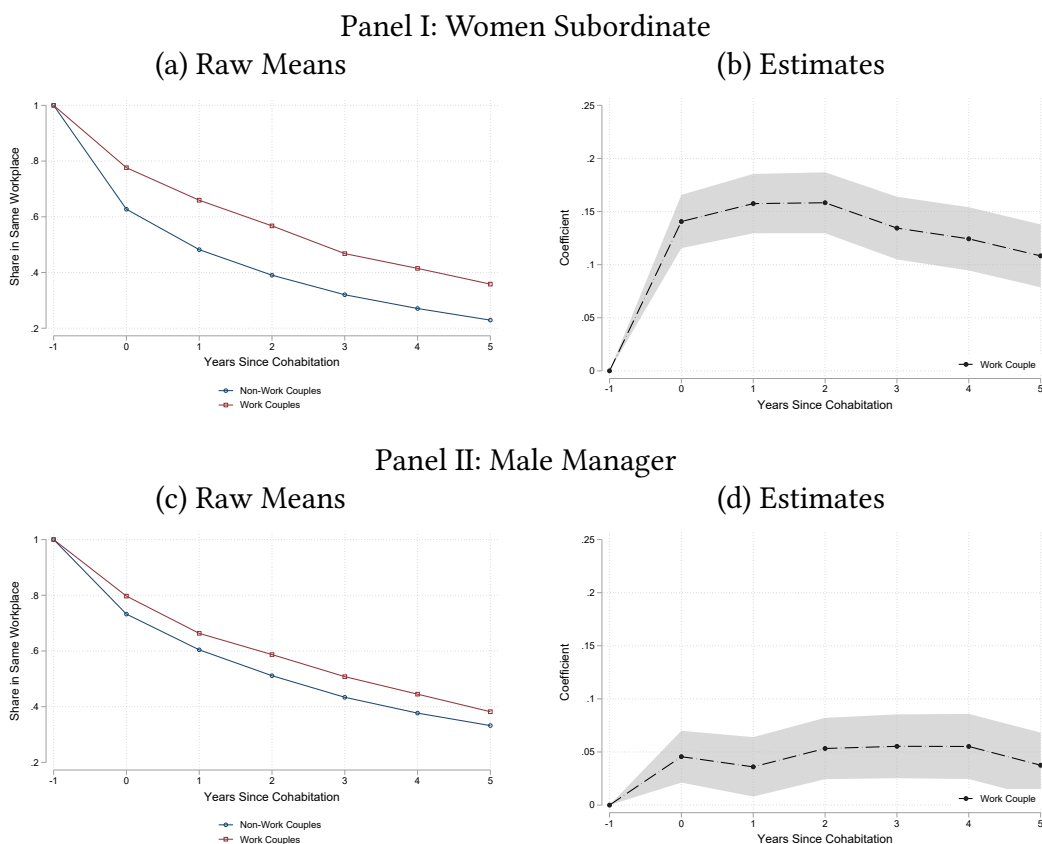
Third, we define a couple as having met at the workplace if they work in the same plant during the two years leading up to cohabitation (when the spouse variable changes). The two-year restriction is a minimum threshold, i.e. we also include couples that have worked at the same workplace for more than two years before cohabitation.

## **B Firm Attachment and Relationship Longevity**

**Workplace Relationships and Firm Attachment** Are individuals who date a manager in their workplace more likely to remain in the same establishment? By construction, we require both partners in workplace couples to be in the same establishment the two years before cohabitation, so for this exercise, we focus just on the year of cohabitation and five years post-cohabitation. We report raw means for female subordinates in workplace couples and non-workplace couples

in Figure B1 in Panel (a) and raw means for their male managers in Panel (c). We find that both managers and subordinates in workplace relationships are more likely to remain in the firm.

**Figure B1:** Probability of Remaining in the Same Establishment for Manager/Subordinate Relationships



*Notes:* Panel I (II) compares the proportion of women non-managers (male managers) in workplace versus non-workplace relationships with a male manager (female non-manager) who remain in the same establishment in the five years after cohabitation. In sub-figures (a) and (c) the red line corresponds to workplace couples and the blue line corresponds to couples who work in different establishments. Panels (b) and (d) report estimates and 95% confidence intervals of the difference in the proportion of individuals in workplace and non-workplace couples who remain in the same establishment in each year. These estimates are obtained by regressing a dummy variable that denotes if the relevant partner is still in the same establishment in each year on a set of indicators equal to 1 if a couple met in the workplace and it is year  $t$  after cohabitation, controlling for the earnings, age, and education of both partners five years before cohabitation and period fixed effects. Year 0 denotes the year cohabitation begins. Standard errors are clustered at the couple level.

We supplement these raw means with descriptive estimates of the differences between workplace and non-workplace couples, including controls for education, age, and earnings five years before cohabitation. We report estimates from these regressions for women subordinates in Panel (b) and male managers in Panel (d) of Figure B1. These results again suggest that managers and



their subordinate partners are both more likely to remain in the same establishment.

However, there is striking heterogeneity in the effect sizes. While women subordinates are just over 10 percentage points more likely to be in the same establishment 5 years post-cohabitation, the male managers they enter a relationship with are less than 5 percentage points more likely to be in the same establishment five years post-cohabitation. That women subordinates are more likely to remain in the establishment is not simply an artifact of women being less likely to switch jobs overall, since these regressions compare women who date and move in with a manager in their own workplace to women subordinates who date and move in with a non-colleague manager.

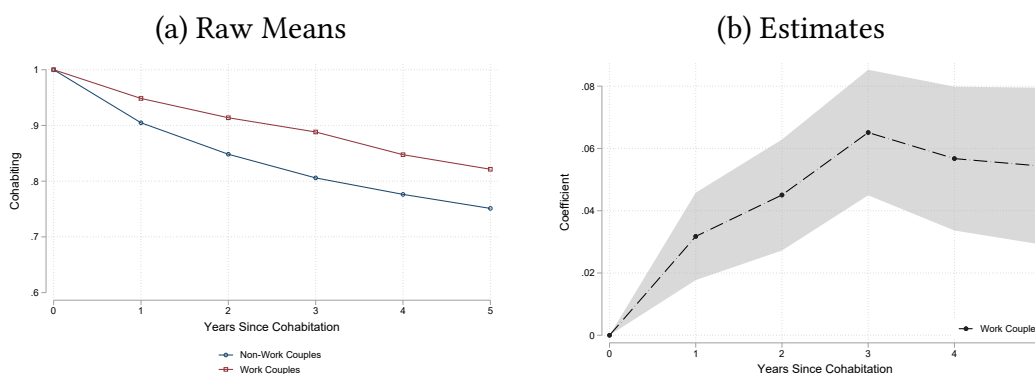
**Longevity of Workplace Relationships** We also examine whether relationships between managers and subordinates from the same establishment last longer than relationships between a manager and subordinate who do not work in the same establishment. For these descriptive results, the years before cohabitation are irrelevant because we wish to see how long the cohabitation spell lasts once it begins. In Figure B2 Panel (a) we plot raw means of the proportion of couples who are still cohabiting with each other in each of the 5 years after the beginning of cohabitation (year 0) for both manager/non-manager workplace couples and manager/non-manager non-workplace couples. This figure reveals that by 5 years post-cohabitation, the manager/non-manager workplace relationships have a 10 percentage point higher likelihood of remaining together.

When we estimate the difference in longevity controlling for education, age, and earnings five years before cohabitation in Panel (b), we still find that workplace relationships last significantly longer than similar non-workplace relationships, although the estimated effect size is slightly smaller at just under 6 percentage points. We find a broadly similar result for female manager/male non-manager couple longevity in Appendix Figure D5, although estimates are noisier due to the smaller number of men who date a manager in their workplace.

There are two possible interpretations of these results. First, having more information and opportunities to get to know one's partner before cohabitation could lead to better matches and

longer-lasting relationships. This potential benefit of allowing workplace relationships would be lost if any restrictions were placed on them. Alternatively, subordinate workers might anticipate that if the romantic relationship breaks up, it will become untenable to remain in the same establishment with an ex-partner who also holds a position of power over them as a manager. This additional cost of break up may push individuals to stay in relationships longer than they optimally would.

**Figure B2: Longevity of Manager/Non-Manager Relationships**



*Notes:* Panel (a) reports the proportion of male manager/female subordinate couples that are still cohabiting in the 5 years after they are first observed cohabiting. The red line corresponds to workplace couples and the blue line corresponds to couples who work in different establishments. Panel (b) reports estimates and 95% confidence intervals of the difference in the proportion of workplace and non-workplace couples who are still cohabiting in each year. These estimates are obtained by regressing a dummy variable that denotes if a couple is still cohabiting on a set of indicators equal to 1 if a couple met in the workplace and it is year  $t$  after cohabitation, controlling for the earnings, age, and education of both partners five years before cohabitation and period fixed effects. Year 0 denotes the year cohabitation begins. Standard errors are clustered at the couple level.

## C Breakup Impacts for Couples Who Met At Work

In this section, we replicate our main breakup results but restrict to the much smaller subset of couples who meet their partner at work and then later break up with them, although we do not require that they remain in the same workplace for the duration of the relationship. Unlike our main analysis, this excludes those who were in cohabiting relationships before they worked in the same establishment. For example, this excludes cases where a manager hires his cohabiting girlfriend to work at his establishment and then later breaks up with her.

Theoretically, the impact of a breakup for this group could be smaller or larger than our main

breakup results. On the one hand, someone who is hired by their romantic partner who is a manager might be in an even more precarious position than someone who had worked at the establishment before they started dating a manager, resulting in smaller breakup effects. On the other hand, by meeting and dating a manager at work, subordinates may have incurred resentment from coworkers, making it even more difficult to stay in the workplace in the event of a breakup and loss of protection from a manager’s romantic partner.

We first report the simple raw means of earnings and employment around breakup for the subsample of women who dated and cohabited with a manager from their workplace and then later break up in Figure C1 Panels (a) and (b), although we do not require that they continue to work in the same establishment for the entire relationship. Breakup occurs in year 0. We again primarily focus on women who break up with workplace managers, given the small sample size of men who date a manager and then break up with them, that said, our results are similar when we pool the two groups together.

We find that women who break up from a workplace relationship with a manager experience an immediate decrease in earnings of just over 15% of their pre-breakup earnings. This puts them back on a similar earnings trajectory as women who date managers at different establishments. Their earnings remain depressed relative to before the break up for at least 4 years afterward.

Turning to employment, we again see a decrease in employment post-breakup for the female subordinate. Descriptively, these women are 9 percentage points less likely to remain employed after the breakup. In contrast, we see a very different pattern for women who break up with a manager at a different establishment. These women have a much less dramatic drop in employment of 5 percentage points after their break up. Again, we see little evidence of a recovery in employment for women who break up from a relationship with a manager in their workplace four years after the event.

To more formally capture the causal impact of breaking up from a workplace relationship with a manager on earnings and employment, we estimate a simple event study equation:

$$Y_{it} = \sum_{j=-2, j \neq 0}^4 \delta_j D_{ij} + \alpha_i + \eta_t + \epsilon_{it}, \quad (6)$$

where  $Y_{it}$  is the outcome of interest for the non-manager partner in couple  $i$  at time  $t$  relative to breakup. Event time is the year relative to breakup, defined as the last year we observed couples cohabiting in the data. Event time runs between -3 to 3, with year -1 dropped as the reference year.  $D_{ij}$  is an indicator that takes the value of 1 if we observe the individual in a workplace relationship and it is event year  $j$ . We omit this dummy for  $j = -1$ , making all estimates relative to the year just before breakup.  $\eta_t$  are time fixed effects, and  $\alpha_i$  are couple fixed effects. The  $\delta_j$  are the coefficients of interest, which identify the effect of breaking up from a workplace relationship in event year  $j$ . Standard errors are clustered by couple. For this exercise, we use the same matched observations from Section 3 as our counterfactual group, although results are similar if we take all manager/subordinate non-workplace couples as the counterfactual.

Figure C1 Panel (c) reports the estimates from equation 6 with earnings as the outcome, which captures the causal impact of breaking up from a workplace relationship with a manager relative to women who also break up with male managers, but where the male manager works in a different establishment. In the 3 periods before breakup (-3 to 0) we observe an absence of pre-trends, consistent with the fact that most of the gains accrue to these women in the dating period (see Figure 2) and our pre-period in these graphs is generally at least a few years post-cohabitation. After the breakup we observe a clear drop in earnings for women who break up with a manager at the same establishment, although we struggle with precision in the post period given the much smaller sample size. However, by year 3 post-breakup women who break up with managers they met at work experience just under €4,000 lower earnings, a roughly 10% decline in earnings relative to their pre-breakup earnings of €40,000. The patterns for employment reported in Panel (d) are similar, showing a clear drop in employment for women who break up with a workplace manager, although we again struggle with precision.

We conclude from these results that for this subsample of couples, breakups are also costly, although perhaps to a lesser degree than our main estimates. However, the confidence intervals overlap in all years post-breakup for this subsample and our main estimates, such that we cannot reject that the effect sizes are the same.

**Figure C1:** Earnings and Employment Impacts of Breaking Up with a Workplace Manager, Meet at Work Subsample



*Notes:* This figure reports the effect of breaking up from a workplace relationship with a manager, with the treatment group restricted to workplace couples that also worked together in the establishment before cohabitation and then later breakup. Panel I plots the evolution of (a) earnings and (b) employment of non-manager women who break up from workplace relationships with managers (red line) and non-manager women who break up from non-workplace relationships with managers who work in different establishments (blue line). Panel II plots event-study coefficients and their corresponding 95% confidence intervals for the same outcomes obtained from estimating equation (3) over the same period. Event time is year relative to breakup. Breakup is defined as occurring in the first year a couple is no longer observed cohabiting and is denoted by the vertical line at year  $t = 0$ . Event-study estimates are relative to year  $t = -1$ , which is omitted. Earnings are the sum of all taxable labor market earnings during a calendar year, which includes wages, salary, and self-employment income all deflated to 2020 Euros. Employment is measured at the end of each calendar year. Standard errors are clustered at the couple level.

Next, we estimate the impact of a breakup on earnings and employment using a collapsed difference-in-differences specification. This approach allows us to improve precision in our estimates by pooling the post-breakup years together. We report results for earnings in column 1 of Table C1 and again see a negative point estimate that is still not statistically significant. Turning to unemployment in column 2, we find that women who break up with a manager in their

workplace experience a 4.2 percentage point increase in unemployment post-breakup. This is a striking result, as these women previously had a strong attachment to the labor market before the breakup.

To explore the interaction between unemployment and breakup on earnings we estimate a fully interacted difference-in-differences design that takes the form:

$$Y_{it} = \beta_1 D_{it} + \beta_2 SameEstab_{it} + \beta_3 SameEstab_{it} \times D_{it} + \beta_4 Unemployed_{it} + \beta_5 Unemployed_{it} \times D_{it} + \alpha_i + \eta_t + \epsilon_{it} \quad (7)$$

where  $Y_{it}$  is the subordinate partner's earnings.  $D_{it}$  is an indicator equal to one if couple  $i$  is a workplace couple and the couple has broken up ( $t > 0$ ).  $Unemployed_{it}$  is an indicator equal to 1 if the individual is unemployed in period  $t$ , and  $SameEstab_{it}$  is an indicator equal to 1 if the individual is in the same establishment they were in at the time of break up in year  $t$ .  $\alpha_i$  and  $\eta_t$  are couple and time fixed effects. In this regression, we are primarily interested in the coefficients on the interaction terms.  $\beta_3$  gives us the difference-in-difference estimate of breaking up from a workplace couple with a manager and remaining in the same establishment on a woman's earnings, and  $\beta_5$  gives the impact of breaking up from this kind of relationship and becoming unemployed on a woman's earnings.

Estimates from our interacted model are reported in column 3 of Table C1. Unsurprisingly, remaining in the same workplace increases earnings by €958, and unemployment decreases earnings by €18559. However, we find that those who enter unemployment after a breakup with a manager they met in the workplace experience an €8205 larger decline in earnings, and this effect is statistically significant. These estimates indicate that it is especially problematic to break up with a manager in the workplace, both because it causes the subordinate to enter unemployment, and, for this subsample, because it also leads to costlier unemployment spells. In Panel B, we show the same regression results using the matched control group made up of non-workplace couples who are observationally similar to our workplace couples in the years prior to the dating period. These estimates are quite similar to the unmatched case.

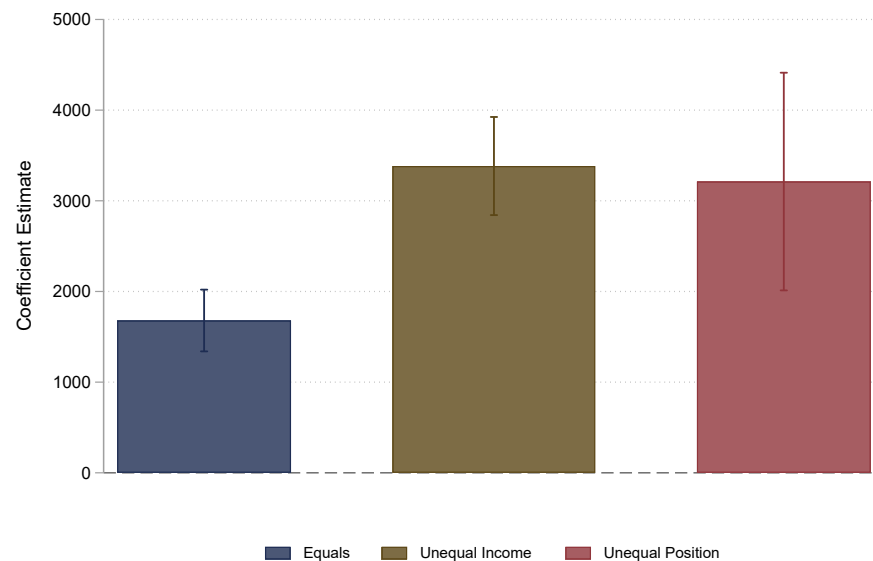
**Table C1:** The Impact of Breakup on the Earnings and Employment of Female Subordinates

Dependent Variable:	Earnings (1)	Unemployed (2)	Earnings (3)
Treatment	-2203.6 (1913.2)	0.0628* (0.0350)	1259.0 (1758.2)
Same Establishment			1618.4* (886.6)
Same Establishment X Treatment			-2380.7 (1937.9)
Unemployed			-18914.4*** (1834.5)
Unemployed X Treatment			-7530.8* (3926.8)
Observations	4455	4455	4455

*Notes:* Columns (1) and (2) report collapsed difference-in-differences estimates of the impact of breaking up from a workplace relationship with a manager on the labor market outcomes of non-manager women. Estimates are obtained by replacing the event-time-specific treatment group indicators in equation (2) with a single treatment-by-post-period indicator. Outcome variables are earnings and employment in columns (1) and (2) respectively. Column (3) estimates the effect of the interaction between breaking up with a workplace manager and leaving the workplace on earnings using equation (4). Results are reported for the matched specification, results estimated using a specification analogous to equation 1 are similar. Earnings are the sum of all taxable labor market earnings during a calendar year, which includes wages, salary, and self-employment income all deflated to 2020 Euros. Employment is measured at the end of each calendar year. Standard errors are clustered at the couple level. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

## D Additional Results

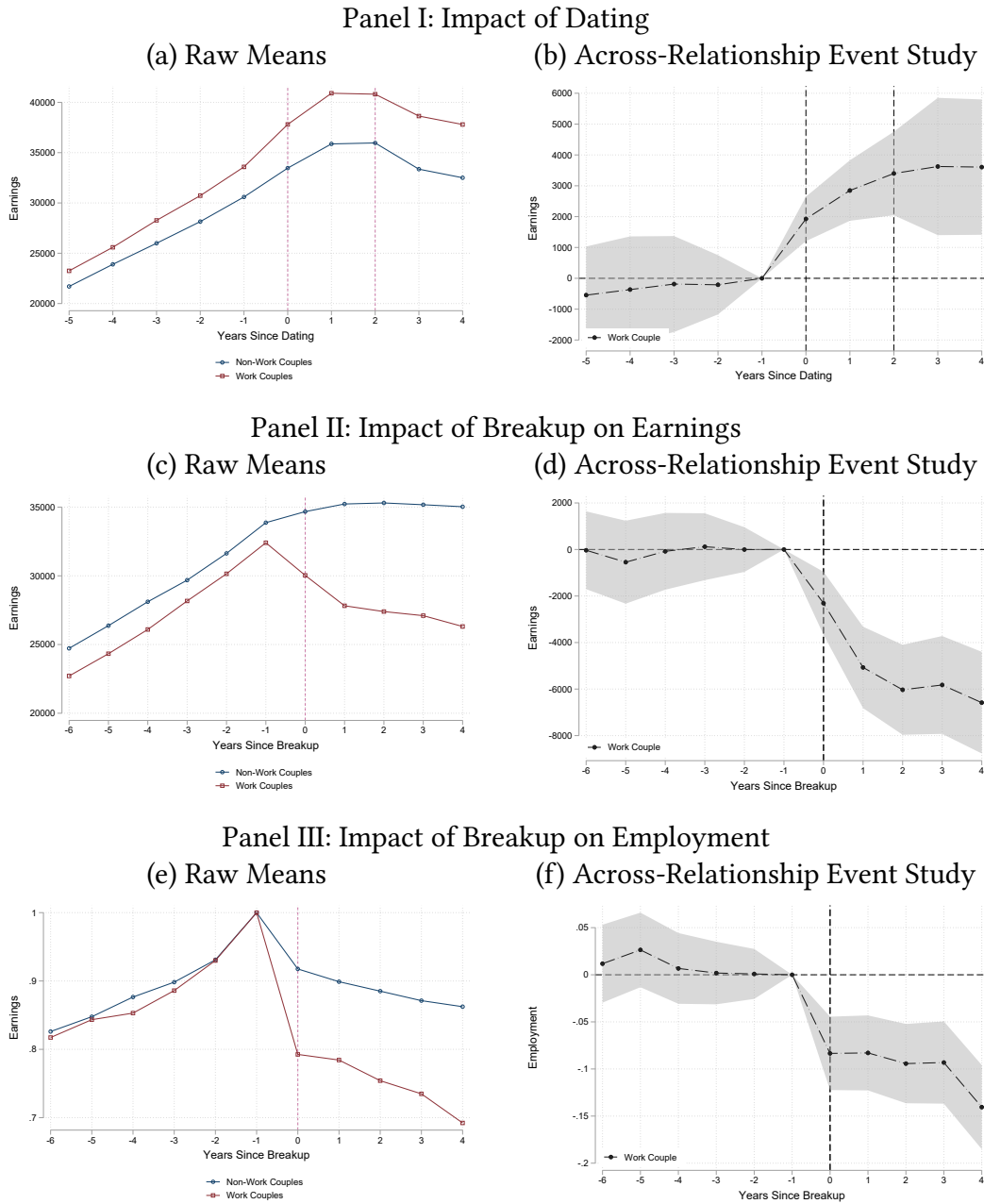
**Figure D1:** Collapsed Matched DiD Estimates for Women Who Date Equals, Colleagues with Higher Earnings, and Managers



*Notes:* This figure reports collapsed matched difference-in-differences estimates of the impact of engaging in a workplace relationship on the earnings of women. Estimates are obtained by replacing the event time specific treatment group indicators in specification 2 with a single pre-post indicator. The red bar displays the estimated impact for non-manager women who who start a workplace relationship with a manager. The green blue bar reports the estimated impact on women who begin a workplace relationship with a partner where the male-female earnings gap is above the median earnings gap of workplace couples in the sample. The blue bar reports the estimated impact on women who begin a workplace relationship with an equal. Equal relationships are defined as those where both partners have the same position (both are non-managers or both are managers) and the earnings gap between the two partners is below the median earnings gap of couples in the estimation sample. Earnings are the sum of all taxable labor market earnings during a calendar year, which includes wages, salary, and self-employment income deflated to 2020 Euros. Standard errors are clustered at the couple level. 95% confidence intervals are shown in whiskers around the point estimates.



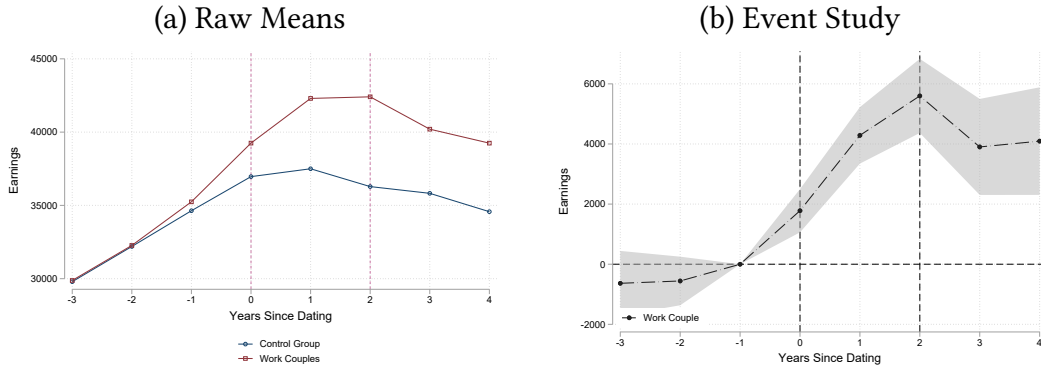
**Figure D2: Robustness to Longer Pre-periods**



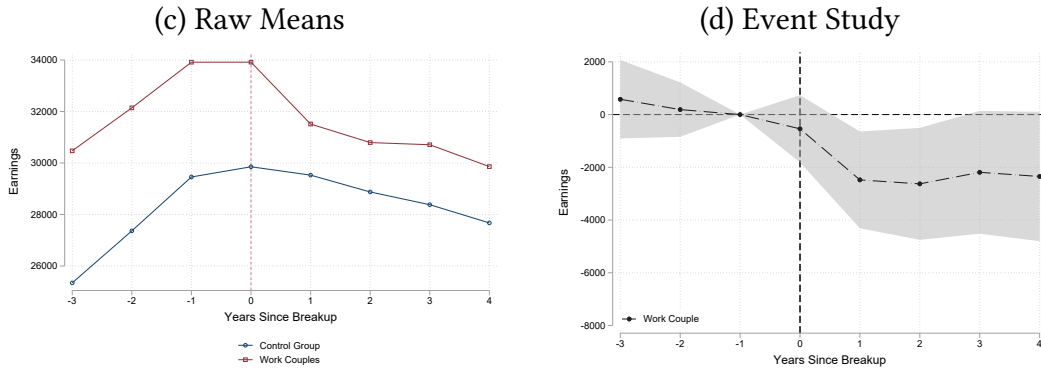
*Notes:* This figure displays unmatched event-study results with the number of pre-periods extended. Panel I displays the effect of beginning a workplace relationship with a manager relative to beginning a relationship with a manager in a different establishment on the earnings of non-manager women. Panels II and III display the effect of breaking up from a workplace relationship with a manager relative to breaking up from a non-workplace relationship with a manager employed in another establishment on the earnings and employment of non-manager women respectively. Event time and reference period is defined analogously to Figure 4 for Panel I, and Figure 8 for Panels II and III. Earnings are defined as the sum of all taxable labor market earnings during a calendar year, which includes wages, salary, and self-employment income all deflated to 2020 Euros. Employment is measured at the end of each calendar year. Standard errors are clustered at the couple level.

**Figure D3: Within-Establishment Comparison with Raw Means**

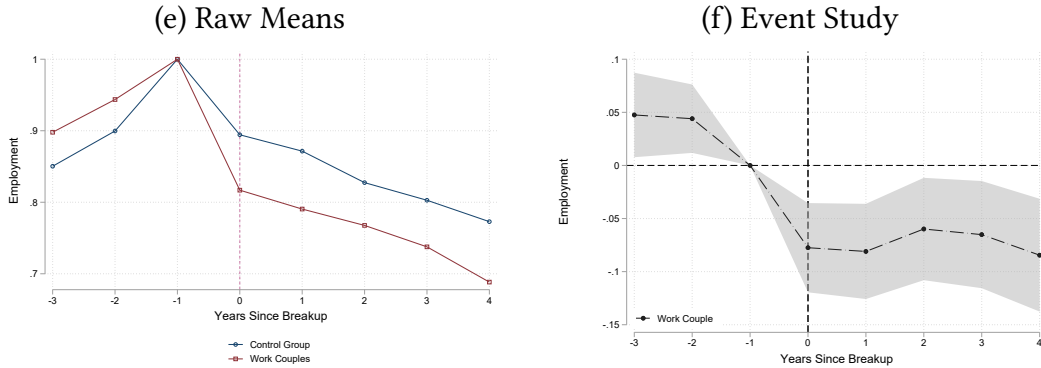
**Panel I: Dating, Earnings**



**Panel II: Breakup, Earnings**

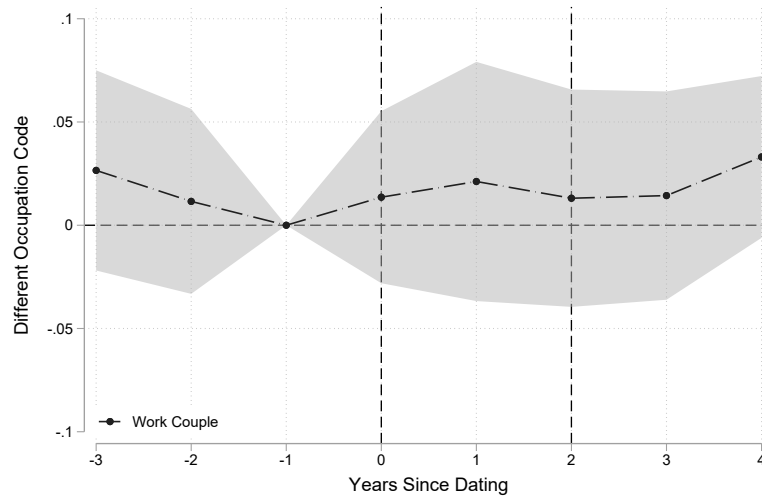


**Panel III: Breakup, Employment**



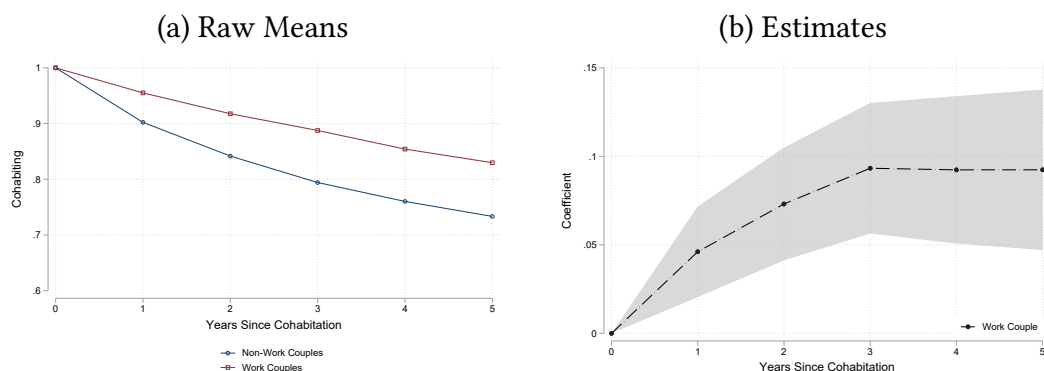
*Notes:* These figures compare the evolution of mean outcomes to event study estimates when the comparison group is a matched-control group of women who work in the same establishment who did not engage in a workplace relationship with a manager. Panel I displays the effect of beginning a workplace relationship with a manager relative to the matched control on earnings. Panels II and III display the effect of breaking up from workplace relationship with a manager relative to the matched control on earnings and employment respectively. In each panel (a) depicts the evolution of mean outcomes and (b) plots event-study coefficients and their corresponding 95% confidence intervals. Event-study figures were also presented in Figure 4 for Panel I, and Figure 8 for Panels II and III. Event time and the reference period is defined identically as in the original figure referenced for each panel. Earnings are the sum of all taxable labor market earnings during a calendar year, which includes wages, salary, and self-employment income all deflated to 2020 Euros. Employment is measured at the end of each calendar year. Standard errors are clustered at the couple level.

**Figure D4:** Impact of Dating a Workplace Manager on Switching Occupations, Matched Design



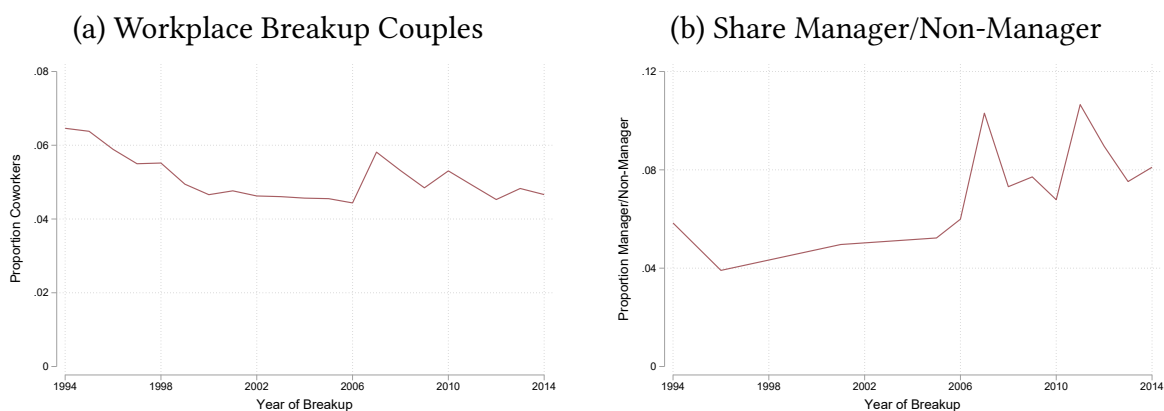
*Notes:* This Figure plots event-study coefficients and their corresponding 95% confidence intervals obtained using estimating equation (2). This specification compares the rate of occupation switching of non-manager women who begin workplace relationships with managers to a matched control of non-manager women who begin non-workplace relationships with a manager in a different establishment. Event time is year relative to the beginning of the dating period. The dating period is defined as the two years before the year the couple is first observed cohabiting. The first vertical line at  $t = 0$  denotes the start of the dating period and the second vertical line at  $t = 2$  denotes the start of cohabitation. Event-study estimates are relative to year  $t = -1$ , which is omitted. Occupation switching is measured by a dummy variable equal to 1 if an individual is coded as having a different occupation than they had in period  $t = -1$ .

**Figure D5:** Longevity of Workplace Relationships Between Female Managers and Male Subordinates



*Notes:* Panel (a) reports the proportion of female manager/male subordinate couples that are still cohabiting in the 5 years after they are first observed cohabiting. The red line corresponds to workplace couples the blue line corresponds to couples who work in different establishments. Panel (b) reports estimates and 95% confidence intervals of the difference in the proportion of these workplace and non-workplace couples who are still cohabiting in each year. These estimates are obtained by regressing a dummy variable that denotes if a couple is still cohabiting on a set of indicators equal to 1 if a couple met in the workplace and it is year  $t$  after cohabitation, controlling for the earnings, age, and education of both partners five years before cohabitation and period fixed effects. Year 0 denotes the year cohabitation begins. Standard errors are clustered at the couple level.

**Figure D6: Proportion of Breakup Couples Who Are Workplace Couples, 1995-2010**



*Notes:* These figures report the proportion of couples we observe breakup (defined as their cohabitation spell ending) in our sample that worked together the year before cohabitation ended. Panel (a) includes all couples in the population who breakup in a given year. Panel (c) reports the share of all workplace couples who breakup where one is a manager and the other is not a manager.

**Table D1:** Establishment Summary Statistics for Breakup Sample

Establishments with:	Co-Working Couples			All Couples	
	Manager/ Non-Manager (1)	Earnings Gap (2)	Equal (3)	>2 Emp. (4)	>20 Emp. (5)
Median Number Employees	12.50	131	137	7	38
Average Earnings	28482	28104	23595	23189	27254
Female Average Earnings	23894	22759	20665	20407	23865
Male Average Earnings	31971	32576	26293	26545	30888
Share Women in Top 10%	0.206	0.180	0.245	0.361	0.344
Turnover	0.295	0.257	0.279	0.323	0.317
Male Turnover	0.263	0.242	0.266	0.320	0.327
Female Turnover	0.366	0.292	0.304	0.326	0.318
Share Female	0.399	0.431	0.471	0.471	0.505
Observations	728	5648	5315	2809642	480474

*Notes:* This table reports establishment-level summary statistics. Columns (1)-(3) restricts to establishments where a workplace relationship breaks up. Column 1 reports summary statistics for establishments where at least one manager/non-manager relationship breaks up over the sample period. Column 2 reports summary statistics for establishments where at least one workplace couple with unequal incomes breaks up. Unequal incomes is defined as those that have an above-median earnings gap between the male and female partner. Column 3 reports summary statistics for establishments where at least one equal workplace couple breaks up. Equal couples are defined as those where both partners have an equal position (both non-managers or both managers) and have a below-median earnings gap between the male and female partner. Column 4 (5) reports summary statistics for all establishments in Finland with greater than 2 (20) employees. Earnings are reported in 2020 Euros. Tenure is the average number of years workers are employed within an establishment.

**Table D2: Firms with Manager/Non-Manager Relationships**

	Dating Sample (1)	Breakup Sample (2)
Average age	-0.0000295*** (0.00000312)	-0.0000283*** (0.00000304)
Number employees	0.0000176*** (0.000000112)	0.0000154*** (0.000000109)
Average earnings	3.22e-08*** (1.93e-09)	9.99e-09*** (1.87e-09)
Average secondary	-0.000271** (0.000117)	-0.000546*** (0.000114)
Average tertiary	0.000122 (0.000115)	-0.000834*** (0.000112)
Share women in Top 10%	-0.00348*** (0.000926)	-0.00685*** (0.000900)
Share Female	0.000117* (0.0000681)	-0.0000312 (0.0000663)
Observations	1239189	1239189

*Notes:* This table reports estimates from a simple regression where the dependent variable is equal to one if there is a manager/non-manager relationship in the establishment. Estimates are restricted to all establishments in Finland with two or more employees. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

**Table D3: Managers Who Date/Breakup with a Subordinate**

	Dating Sample (1)	Breakup Sample (2)
Age	-0.00000750*** (0.000000433)	-0.00000667*** (0.000000421)
Female	-0.000160*** (0.00000941)	-0.000177*** (0.00000916)
Earnings	1.05e-09*** (8.80e-11)	3.73e-10*** (8.56e-11)
Secondary Degree Only	-0.00000437 (0.0000146)	-0.0000296** (0.0000142)
Tertiary Degree	0.0000268** (0.0000132)	-0.000137*** (0.0000128)
Observations	6807324	6807324

*Notes:* This table reports estimates from a simple regression where the dependent variable is equal to one if a manager engages in a relationship with a subordinate. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$



**Table D4: Heterogeneity in Dating a Manager, Unemployed Omitted**

	Main Result (1)	Subsample Heterogeneity				
		Fertility (2)	Short (3)	Long (4)	Movers (5)	Stayers (6)
Dating a Manager	2344.6*** (457.1)	2485.6*** (486.1)	2292.0*** (656.4)	2374.9*** (702.6)	1366.1 (816.4)	2559.2*** (505.0)
Observations	100128	98928	95000	97176	94128	98540

*Notes:* This table reports collapsed difference-in-differences estimates of the impact of beginning a workplace relationship with a manager on the earnings of non-manager women. Estimates are obtained by replacing the event time specific treatment group indicators in specification 1 with a single pre-post indicator. For all results, women who date managers and become unemployed during the post period are excluded from the sample. Column (1) reports the main effect including the full treatment group of male manager/female non-manager workplace couples. Column (2) restricts the treatment group to couples where the female partner has a change in fertility. Columns (3) and (4) restrict the treatment group couples that had short versus long relationships. "Short (Long) Relationship" refers to relationships that last below (above) the median relationship length in the estimation sample. Columns (5) and (6) restrict the treatment group to couples where the subordinate moves from or stays in the establishment where the workplace relationship formed. Earnings are the sum of all taxable labor market earnings during a calendar year, which includes wages, salary, and self-employment income deflated to 2020 Euros. Standard errors are clustered at the couple level. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

**Table D5: Dating a Manager, Reverse Causality**

Dependent variable:	Earnings			Change Occupation Code	
	Main Result (1)	Size<Median (2)	Size>Median (3)	Year -1 (4)	Year 0 (5)
Dating a Manager	2344.6*** (457.1)	2695.3*** (571.8)	1851.9*** (495.8)	-0.00246 (0.0360)	0.0287 (0.0296)
Observations	100128	50072	50056	37548	50064

*Notes:* Columns (1)-(3) report collapsed difference-in-differences estimates of the impacts of beginning a workplace relationship with a manager on the earnings of non-manager women. Estimates are obtained by replacing the event time specific treatment group indicators in specification 1 with a single pre-post indicator. Column (1) reports the main effect including the full treatment group of male manager/female non-manager workplace couples. Columns (2) and (3) restrict the treatment group to couples who work in establishment that are above and below the median establishment size of 71 employees respectively. Earnings are the sum of all taxable labor market earnings during a calendar year, which includes wages, salary, and self-employment income deflated to 2020 Euros. Columns (4) and (5) report event-study estimates obtained from 1 of the impact of dating a manager on if non-manager women change occupations. Event time is year relative to the start of the dating period ( $t = 0$ ) and all event-study estimates are relative to  $t = -3$ , which is omitted. Column (4) and (5) report the event-study coefficient specific to periods  $t = -1$  and  $t = 0$  respectively. Standard errors are clustered at the couple level. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

**Table D6: Establishment Spillovers**

	Retention (1)	Male Retention (2)	Female Retention (3)	Share Female (4)
Date Manager	-0.0596*** (0.0129)	-0.0481** (0.0159)	-0.0622*** (0.0157)	0.00951* (0.00480)
Observations	7527	7423	7358	7527

*Notes:* This table reports collapsed difference-in-differences estimates of the impact of manager/subordinate relationships in the workplace on establishment level personnel outcomes. Estimates are obtained by replacing the event time specific treatment group indicators in specification 5 with a single pre-post indicator. Dependent variables are: the retention of other workers in column 1; male retention and female retention in columns 2 and 3; and the share of workers who are female in column 4. Estimates compare establishments where a manager begins a relationship with a subordinate to establishments that are observationally equivalent in terms of covariates without such relationships. Retention is defined as the share of employees in period -1 still employed in the establishment in each event year. Standard errors are clustered by establishment. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

**Table D7: Heterogeneity in Retention**

Heterogeneity by:	Establishment Size		Subordinate Earnings Gains	
	Above Median (1)	Below Median (2)	Above Median (3)	Below Median (4)
Date Manager	-0.0269** (0.0110)	-0.103*** (0.0217)	-0.0861*** (0.0165)	-0.0355* (0.0160)
Observations	4235	3260	5846	5311

*Notes:* This table reports heterogeneity in collapsed difference-in-differences estimates of the impact of manager/subordinate relationships in the workplace on employee retention. Estimates are obtained by replacing the event time specific treatment group indicators in specification 5 with a single pre-post indicator. Columns (1) and (2) restricts to treatment firms that are above and below the median firm size of 71 employees respectively. Columns (3) and (4) restricts to treatment firms where estimated increase in earnings to non-manager women is above and below the median earnings gain respectively. Retention is defined as the share of all employees employed in an establishment in period  $t = -1$  employed in the same establishment in each of the other years. Standard errors are clustered at the establishment level. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$