From Disclosure to Blank: The Effect of Marital Status on Job Search Success

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Abstract

This paper exploits a natural experiment on a large Chinese online job platform that banned applicants from reporting their marital status to study the impact of voluntary disclosure of marital status on job search success. Prior to the ban, applicants were required to indicate their status - married, single, or conceal - and this information was prominently displayed to recruiters; afterward, the marital status field became blank for all workers. Using a difference-in-differences design with individual fixed effects, we compare changes in job search outcomes for applicants who had reported being married (or single) relative to those who had concealed their status, before and after the ban. We find that the callback rates for those applicants that choose to reveal this marital status as married declines, while those of single applicants increase, consistent with a marriage premium in the hiring process. The inability to reveal marital status as single was especially beneficial to male workers and older workers, while being unable to reveal marital status as married was especially harmful for inexperienced workers and workers in sectors with low turnover. These patterns indicate that employers previously interpreted single/married as a negative/positive signal about expected tenure with the firm and worker quality.

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1 Introduction

In the labor market, marital status serves as a potent, yet ambiguous, signal, shaping job application outcomes through multiple and often contradictory channels. On one hand, married individuals are often viewed as more responsible and stable, a perception that can translate into a "marriage premium" in hiring and promotions, particularly for men (Glauber, 2018a,b; Hodges and Budig, 2010; Ludwig and Brüderl, 2018). Married workers are also commonly perceived as less mobile and more committed long-term employees due to financial responsibilities and family ties (Ludwig and Brüderl, 2018). On the other hand, forming a household increases domestic responsibilities, and if employers assume women bear the majority of this burden, it negatively influences hiring decisions (Benard and Correll, 2010; Correll et al., 2007). More critically, marriage is often correlated with childbearing, which introduces perceived fertility costs for employers, including direct costs of maternity leave and indirect costs from reduced working hours, lower productivity, and limited flexibility (Lommerud et al., 2015; Gangl and Ziefle, 2015; Kleven et al., 2019, 2025). Consequently, workers may strategically choose not to disclose their marital status to avoid these perceptions.

The existing literature has primarily relied on audit or correspondence studies to measure marital status discrimination. These studies, which send paired fictitious resumes to employers, have found clear evidence of bias, often against married women or mothers (Krafft, 2025; Arceo-Gomez and Campos-Vazquez, 2014; Maurer-Fazio and Wang, 2018; Neumark et al., 2019; Li et al., 2022a; Bedi et al., 2022). This approach provides clean, causal evidence of employer-side bias. However, it abstracts from a crucial reality: in the actual labor market, whether to disclose marital status is an endogenous choice made by job seekers. This strategic self-disclosure is a fundamental part of the signaling process that audit studies, by design, cannot capture. They answer the question, "What is the effect of being assigned a marital status?" but fail to capture the equilibrium outcome when individuals strategically manage their information.

This paper shifts the focus from marital status itself to the act of disclosing it and the visibility of that disclosure. We exploit a unique natural experiment on a major online job platform in China, triggered by a firm-level policy change in early 2020. Prior to February 12, 2020, the platform required job seekers to indicate their marital status as "married," "single," or "conceal"

in their profiles; this information was automatically extracted and included in the resumes submitted to employers. In alignment with government regulations promoting employment equality, the platform subsequently removed the marital status field entirely, preventing recruiters from accessing this information in applicant resumes. We take advantage of this abrupt marital status removal (hereafter, MSR) to implement a difference-in-differences research design with individual fixed effects, using 866,196 applications from February 2019 to February 2021. We track the same job applicants over time and ask: How did employers' callback rates change for individuals who previously reported as "married" (or "single"), relative to those who "concealed" their marital status.

We acknowledge that reported marital status may be endogenous; however, our identification strategy exploits the clean exogenous shock introduced by the MSR, during which applicants' underlying characteristics remained constant. By controlling for individual fixed effects, our analysis effectively compares each applicant to themselves over time, before and after their marital status became unobservable to recruiters. In this setting, the same individual is re-evaluated by employers with the marital status signal removed, analogous to a blind-audition experiment (Goldin and Rouse, 2000a). This "snap-back" design enables us to detect employer bias related to the marriage premium: if an applicant receives more callbacks after the MSR, it suggests they were previously penalized based on their marital status when that information was visible to recruiters.

Our findings show a clear pattern: after marital status was removed, callback rates decline by 2.38 percentage points (8.60%) for applicants who previously reported as married, and increase by 2.13 percentage points (7.72%) for those who reported as single. These results suggest that when marital status was visible, there was both a *marriage premium* and a *single penalty* in the recruitment process. We find these effects are more pronounced among male applicants: female applicants experienced smaller marriage premiums and no evidence of a single penalty. Moreover, the impact is especially strong for older men who had reported being single – those aged 35 and above – whose callback rates increased the most following the MSR. This pattern suggests that being reported as single beyond a socially normative age may have been interpreted by employers as a negative signal, potentially implying instability or lack of social maturity.

Crucially, the single penalty is substantially mitigated among candidates with higher human capital: applicants with a master's or higher degree, elite educational backgrounds, or stable

employment experienced smaller changes after the MSR, indicating that they had faced a less pronounced single penalty beforehand. This suggests that recruiters use marital status as a supplementary signal of worker quality: when applicants provide strong indicators of productivity or employability, employers place less emphasis on marital status, thereby reducing the negative impact of being reported as single. In addition, the effects of MSR are more pronounced in lower turnover industry-occupation cells, in occupations with higher rates of marital status disclosure, in jobs that rely more on routine and social skills, and among state-owned and public-listed firms.

Our paper makes multiple contributions to the existing literature. First, we isolate employer-side preferences for marital status in the hiring process – an aspect that has received relatively limited attention in the literature. Prior research on the marriage premium has primarily emphasized supply-side mechanisms, including sorting and selection(Ginther and Zavodny, 2001; Nakosteen and Zimmer, 2001), or household specialization (Becker, 1985, 1993), with evidence drawn from wage differentials (Korenman and Neumark, 1991; Antonovics and Town, 2004; Petersen et al., 2006; McDonald, 2020). In contrast, we leverage a natural experiment to directly examine how employers respond to marital status signals in the hiring stage. Our findings of a marriage premium and single penalty, particularly among men, align with patterns documented in the wage literature, and offer a demand-side explanation that improves and complements existing supply-side accounts of the marriage wage premium.

Second, we are the first to leverage a natural experiment to identify the causal effect of marital status visibility on hiring outcomes. While previous studies rely on field experiments to study the effect of martial status in labor market, we examine real job seekers who endogenously choose whether to disclose their marital status, and the effect of exogenous intervention of job application outcomes. This approach allows us to capture not only employer-side discrimination but also strategic self-disclosure behaviors, addressing a critical gap in understanding how selective disclosure shapes labor market outcomes (Pedulla, 2016; Kuhn and Shen, 2023). Moreover, while most audit studies focus on narrow occupational or demographic segments, our data cover workers across the entire working-age spectrum (26–50 years) and a wide range of industries and occupations, enhancing the external validity of our findings and enabling us to examine nuanced interactions between gender, age, and marital status.

Third, our study join the rich literature on gender in hiring (Li et al., 2025; Kuhn et al., 2020;

Card et al., 2025) and sheds light on how marital status interacts with gender inequality in the labor market. Prior work shows persistent gender differences in recruitment due to perceived marriage-related costs. For example, although maternity and parental leave policies formally apply to both men and women, men typically return to work sooner (Bygren and Duvander, 2006; Petit, 2007; Cortés and Pan, 2019). Consistent with prior work, we document a marriage premium for men, aligning with stereotypes that married men are more stable and committed (Killewald, 2013; Glauber, 2018a; Ludwig and Brüderl, 2018; Hodges and Budig, 2010; Cha and Weeden, 2014). However, in contrast to the evidence that marriage often signals higher fertility risk and imposes a "motherhood penalty" on women (Kleven et al., 2019; Cortés and Pan, 2019; Cooke, 2014), we find that women who reported being married have a significant callback advantage over women who reported being single. This reversal likely stems from employers' perception that married women, especially those beyond peak fertility years, pose lower future fertility risk (He et al., 2023; Leng and Kang, 2022; Helleseter et al., 2020; Li et al., 2022b).

Finally, our paper contributes to a growing literature on policies that restrict the use of information in the recruitment. Prior work has examined limits on employers' access to applicant attributes such as gender (Goldin and Rouse, 2000b), name and ethnicity (Behaghel et al., 2015), criminal records (Agan and Starr, 2018; Doleac and Hansen, 2020), credit histories (Bos et al., 2018; Ballance et al., 2020), drug use (Wozniak, 2015), and salary history (Agan et al., 2025). We extend this line of research by studying the removal of marital status information at the application stage and asking whether prohibiting this early-stage signal affects job application outcomes. Consistent with the broader literature, we find that restricting access to applicant's information can meaningfully change downstream hiring decisions. We demonstrate that removing marital status significantly affect workers who previously reported being both married and single, confirming that employers previously used it as a screening criterion.

The rest of this paper is organized as follows. Section 2 outlines the institutional background and describes our dataset. Section 3 examines the effects of MSR policy on job application callbacks. Section 4 provides robustness checks and Section 5 explores heterogeneous effects across different subgroups. Section 6 concludes.

2 Background and Data

2.1 Marital Status Removal

The platform under study is Liepin.com (hereafter "the Platform"), a leading online recruitment platform in China primarily focuses on highly educated professionals in urban areas. On the platform, recruiters pay subscription fees to post detailed job advertisements and access recruiting tools, while workers can search for and apply to jobs free of charge.

Workers create profiles by entering personal and professional information, which the platform encodes into structured resumes that are submitted to recruiters upon application. Prior to February 12, 2020, workers were required to report their marital status – "married," "single," or "conceal" – and this information was displayed as a standardized field on their resumes. As shown in Figure 1, marital status appeared in a visible and fixed position in the resume layout, directly below education and adjacent to years of work experience. This standardized design ensured that recruiters observed a consistent set of attributes across applicants, with marital status presented as structured information rather than optional free text.

Admittedly, reported marital status may involve endogenous and strategic disclosure. In Figure 2, we plot the share of male and female applicants reporting each marital status category – "married," "single," and "conceal" – by age. We observe three main patterns. First, for both men and women, concealment is the dominant reporting choice at all ages, although its prevalence declines gradually as workers age, falling from nearly 90% in the early 20s to around 70% by ages 45 and above. Second, the share of applicants who report being married increases steadily with age, while the share reporting single declines; by the early 30s, the proportion reporting married exceeds that reporting single for both men and women. These smooth life-cycle patterns – closely aligned with expected age-specific marital trajectories – suggest that workers generally do not false report their marital status, even though many choose not to disclose it.[1] At the same time, workers may use concealment as the strategic margin and adjust their disclosure behavior in ways that align with prevailing social norms regarding age-appropriate marital status.

Third, gender differences are evident across the age distribution. Almost at all ages, women are

[1] If misreporting were prevalent, one would expect implausible age patterns (e.g., a large share of older applicants reporting single, or irregular jumps or reversals in the "single" and "married" shares near round-number ages). Instead, the smooth life-cycle profiles suggest that applicants who disclose their status generally do not false report.

slightly more likely than men to report being single and less likely to report being married. From around age 35 onward, women also exhibit a modestly higher propensity to conceal their marital status. This pattern is consistent with women anticipating potential marriage- or child-related penalties associated with disclosing marital status in the hiring process.

In February 2020, in line with the broader social climate and government guidance promoting employment equality, the Platform implemented a site-wide removal of marital status information from all profiles.[2] The marital status information removal (hereafter "MSR") involved three main changes. First, the marital status field was removed from profile creation for new users, so job seekers registering after the policy change were no longer asked to provide this information. Second, for existing users, previously disclosed marital status information was removed from profiles, and the option to edit this field was no longer available. Third, from the employer's perspective, resumes received after the policy change no longer displayed any marital status information. As shown in Figure 3(a), immediately after February 12, 2020 the share of applications with reported marital status drops to zero, with all resumes thereafter having no marital status information.

Figure 3(b) presents the share of total callbacks received by applicants in each marital status category over time, using weekly application data from February 2019 to February 2021. Throughout the period, applicants who chose to conceal their marital status consistently received the majority of callbacks. After the MSR, the share of callbacks for applicants who had disclosed being married dropped, while the share for applicants who had disclosed being single rose, suggesting a reversal in relative recruiter response once marital status information was no longer visible. Meanwhile, the share of callbacks for those who concealed their marital status stayed relatively stable around the MSR. Overall, this shift in callback distribution provides preliminary evidence that MSR affected the relative standing of applicants based on previously reported marital status.

[2]Beginning in 2018-2019, Chinese authorities issued a series of regulations aimed at curbing discriminatory recruitment practices. Most notably, in February 2019 the Ministry of Human Resources and Social Security, together with eight other government agencies, released the *Notice on Further Regulating Recruitment and Promoting Women's Employment*, which prohibits employers and recruitment intermediaries from inquiring about applicants' marital or childbearing status or including such requirements in recruitment processes. These measures were motivated in part by concerns about rising hiring discrimination against women of childbearing age following the relaxation of the one-child policy and the extension of maternity leave provisions. See Kuhn and Shen (2023) for a related platform change on another job board.

2.2 Data

The Platform under study is one of the largest online recruitment platforms in China. It operates in a standard way: employers post job ads, job seekers submit applications, and recruiters review and process applications to select suitable candidates. Our data consists of a 5% random sample of job advertisements posted on the Platform between February 12, 2019 and February 12, 2021, covering the one-year window before and after the MSR, and all linked applications submitted to these job ads during the 90-day window before the ads expire. Given the Platform's emphasis on high-skill jobs in major cities, the data captured from this platform are broadly representative of China's developed urban labor market.

Each job ad on the Platform provides detailed information about the position – including the offered wage, required education level, required work experience, industry, occupation, and location – as well as information about the hiring firm (such as firm size and ownership type). Job seekers create personal profiles, which the Platform encodes into structured resumes. These resumes contain rich information on worker characteristics, including each applicant's gender, age, marital status, education, years of work experience, current wage, employment status, current job title, and industry/occupation.

Job seekers can browse posted vacancies and apply by submitting their structured resumes, after which recruiters process incoming applications through a two-stage screening process. In the first stage, applications appear in the recruiter's dashboard as a compact summary card containing limited information: the applicant's name, age, gender, location, educational level, years of experience, job title, and the current employer; marital status is *not* displayed at this stage. Recruiters can scroll through and review these cards, which are ordered by submission time. If they are interested in an applicant, they can click the summary card to access their complete resume, where marital status information – reported as "single", "married" or "conceal" – is displayed. In this second stage, conditional on opening the full resume, recruiters can mark the application as a target candidate or save the applicant's resume. We define either action as a *Callback* response.

Because marital status becomes observable only in the second stage, our main analysis focuses on applications whose summary cards are clicked to examine how MSR affects callback outcomes.[3] We restrict our sample to those job seekers who submitted applications both before and

[3]First-stage screening decisions (resume reviewing) are made without access to marital status, and therefore

after the MSR and those aged under 50,[4] this allows us to perform within-individual analyses to compare callback outcomes for the same individual to isolate the effect of removing marital status information. For the main analysis, we assign each applicant the last marital status reported before the MSR.[5] The final analysis sample consists of 866,196 applications, for which the full resume was reviewed, from 138,663 job seekers.[6]

Table 1 presents summary statistics in our analysis sample. Overall, 75.9% of applications are submitted by workers who chose to conceal their marital status prior to the MSR, 14.8% are from applicants who reported being married, and 9.3% are from those who reported being single. The applicant pool is predominantly male (65.8%), with an average age of 34.6 years. Educational attainment is relatively high: 61.8% of applicants hold a Bachelor's degree as their highest qualification, and 27.5% have a Master's degree or above.

There are notable differences across marital status groups. Married applicants are the most male-dominated group (77.5% male) and are older, with substantially more work experience and higher current wages than other applicants. In contrast, applicants who report being single are the youngest group on average and earn lower wages, but they tend to have slightly higher educational attainment. Applicants who conceal their marital status closely resemble the overall sample in terms of age, gender composition, and labor market characteristics, reflecting the fact that concealment is the dominant reporting choice.

Panel B of Table 1 summarizes application-level outcomes and match quality. Overall, 27.0% of applications receive a callback, with married applicants experiencing the lowest callback rate (25.0%) and single applicants the highest (28.4%).[7] We construct a set of match indicators

provide a natural placebo setting: under this information structure, MSR should not affect summary-card screening, where marital status is never shown. We test this implication in Section 4.1.

[4]We exclude applicants older than 50 because relatively few workers in this age group search for jobs online. In China, the normal pension age is 60 for men and 50 or 55 for women, depending on occupation: 50 for blue-collar women and 55 for white-collar women.

[5]We exclude earlier applications whose reported marital status differs from the applicant's last status reported before the MSR. Only 1.21% of applicants ever changed their reported marital status.

[6]In Appendix A.1, we present the summary statistics on worker sample, and plot the distribution of applicant's job search spans, measured as the time between their first and last job applications during the analysis period.

[7]In Appendix A.2, we consider whether callback rate is associate with reported marital status when other human capital attributes are controlled. To do so, we estimate individual-level regressions examining job search behaviors and outcomes by reported marital status, prior to the removal of marital status information. Relative to applicants who concealed their marital status, those reporting as single applicants submit more applications and target higher-wage postings, while married applicants also target higher-wage jobs but do not significantly differ in number of applications submitted.

capturing alignment between applicants and job postings. Approximately 70.5% of applications are to jobs located in the applicant's current city, 37.3% are within the same industry, and 59.8% are within the same occupation category.[8] In terms of qualifications, most applicants meet or exceed job requirements: 92.2% satisfy the posted education requirement and 94.2% meet the experience requirement. Finally, 28.7% of applications are submitted using the "Batch Apply" function, which allows job seekers to apply to multiple recommended positions with a single confirmation.[9]

3 Effects of Removing Marital Status

3.1 Baseline Identification

As discussed above, on February 12, 2020, the platform implemented the Marital Status Removal (MSR), eliminating this information from workers' resumes and profile pages. This exogenous change prevents employers from directly using marital status as a screening criterion. To understand the role of disclosed marital status in hiring, we estimate the effect of the MSR on the job application outcome using the following Difference-in-Difference identification:

$$Y_{ijt} = \alpha_0 + \alpha_1 \text{Married}_i \times \text{Post}_t + \alpha_2 \text{Single}_i \times \text{Post}_t + X_{ijt} + \tau_i + \mu_t + \varepsilon_{ijt} \tag{1}$$

The dependent variable Y_{ijt} denotes the application outcome, equals 1 if the application from applicant i to job j on date t receives a callback (marked as a "Target" candidate or resume is "Saved"), and 0 otherwise. $Post_t$ is an indicator for applications submitted after February 12, 2020. Marital status disclosure is captured by two binary indicators: *Married*, which equals 1 if the applicant reports being married, and *Single*, taking 1 if the applicant discloses her marital status as single, and the applicants concealing their status is the omitted group.[10] Our primary parameters of interest are α_1 and α_2, the coefficients on the interaction terms *Post* $\times$ *Married*

[8] Industries and occupations are classified by the platform into 12 (50) main-level (sub-level) industry categories and 22 (111) main-level (sub-level) occupation categories.

[9] Similar features exist on other platforms, such as LinkedIn's "Easy Apply" and Indeed's "Indeed Apply." Batch applications cannot be distinguished by recruiters.

[10] We define marital status on applicant level using the status reported in their first job application after the MSR, and treat this value as fixed throughout the analysis, since workers cannot modify marital status information thereafter. We further exclude pre-MSR applications in which the reported marital status is inconsistent with this measure. As a result, our estimates do not capture effects on marital-status "switchers".

and *Post* $\times$ *Single*. These coefficients measure how MSR changes the callback probability for applicants who previously disclosed being married or single, respectively, relative to applicants who concealed their marital status.

We include a comprehensive set of controls that capture worker characteristics and match between the worker and the job, as in X_{ijt}. For worker characteristics, we control for age, education degree, whether the degree is from an elite institution, years of working experience, current wage, employment status, and the worker's registration time on the platform.[11] We also control for indicators of worker-job match, including whether the worker meets the job's stated requirements for education, age, and working experience, as well as the alignment between the worker's current location, industry, and occupation and those specified in the job. To better capture job search behavior, we control for whether the application was submitted as part of a batch, and days elapsed between job posting and application. We also include a quartic polynomial in the number of days since each worker's first application to capture dynamic patterns over the worker's search spell.

Finally, we further refine the specification by including individual fixed effects τ_i to account for unobserved heterogeneity across applicants. We leverage workers who submit applications both before and after the intervention. For a given worker, reported marital status remains unchanged, but it becomes unobservable after the intervention. This structure enables within-worker comparisons of callback probability to identify the effect of the MSR. We further incorporate fixed effects for the application date μ_t to absorb the time-varying trends on job search and hiring. Standard errors are clustered at worker level.

3.2 Estimation Results

Table 2 presents the DID estimates based on Equation (1). Column (1) first presents a two-way fixed effect model that excludes all control variables and only keeps the individual and time fixed effects. In Column (2), we add worker characteristics and worker-job match variables X_{ijt}, yielding our baseline specification. We find that after the MSR took effect, job seekers

[11] Because our data span two years, we allow these worker-level characteristics to vary over time and include them as controls even with individual fixed effects. As shown in Appendix Table B.2, our estimates are robust to excluding these controls.

who previously disclosed being married experience a 2.38 percentage point decline in callback rates, representing a 8.60% decrease relative to the baseline callback 27.64%.[12] Conversely, those who previously reported being single have a 2.13 percentage point, or 7.72% increase in the baseline probability of receiving a callback rate. This divergence in outcomes suggests that the MSR systematically affected hiring patterns by negatively affecting applicants who had previously disclosed being married while benefiting those who had previously reported being single.

The results suggest that marital status affects job application success. When marital status is no longer visible, the advantage associated with disclosing married diminishes. Prior to MSR, self-reporting as married appears to function as a positive signal, which potentially interpreted by employers as indicating higher but unobservable productivity, leading to more callbacks than the same worker would receive if they concealed this information. After MSR, this "marriage premium" disappears, as evidenced by the observed negative effects in callbacks for the group that had disclosed being married. In contrast, the group that had disclosed being single moves in the opposite direction: MSR brings a positive effect, likely because removing the "single" label eliminates a disadvantage associated with disclosing that status. Moreover, compared with the two-way fixed effects results in Column (1), these estimates are very similar to the baseline results, suggesting that the effects are not driven by changes in workersâ application behavior after the ban was removed, such as applying to jobs with different salaries or qualification requirements.

In terms of gender, Columns 3 and 4 of Table 2 present the DID estimation based on applications from male and female workers separately. We find that the effects of removing reported married and single status are more pronounced among male applicants. Following the MSR, male applicants who had previously disclosed being married experienced a 1.79 percentage point (6.65%) decline, while those who reported being single have a 2.35 percentage point (8.73%) increase in callback. For women, applicants who disclosed being married also experienced a decline of 1.49 percentage points (5.14%). The effect of removing reported single status is likewise positive, as for men, but the estimate is imprecise.[13]

These findings indicate that the MSR had asymmetric effects across gender. This pattern is consistent with prior evidence that the "marriage premium" differs for men and women (Killewald,

[12] The baseline is defined as the pre-treatment mean outcome in the three-month period before MSR (i.e., $E[Y_i \mid q = -1]$), reported in Table 1 as "Callback Pre 3 month".

[13] The baseline callback rate for male applicants is 26.93%, and 29.01% for female applicants.

2013; Glauber, 2018a). If successfully forming a match in the marriage market signals high quality attributes that may not be fully captured in a worker's resume, employers may interpret being married as a positive indicator of productivity (or negative indicator for being single) (Dougherty, 2006; Glauber, 2018b; Hodges and Budig, 2010; Ludwig and Brüderl, 2018). However, because matching processes and selection differ by gender, this signal may be stronger for men than for women, or employers may be less likely to treat disclosed marital status as a favorable productivity cue for female applicants.

In addition, marriage for women is often associated with higher expected costs related to fertility and caregiving responsibilities. To the extent that these perceived costs offset any positive inference about quality from being married, the net effect of removing the reported married status becomes smaller for women. Together, mechanisms on gender differentials of marriage premium and related cost support the evidence that MSR's effect is more pronounced for men, while the effects for women appear more muted.

3.3 Dynamic Effects

We further implement an event study design to track the dynamic effects of the MSR. We aggregate applications to quarterly date intervals and examine how the removal of marital status information affects the job application callback over time. Specifically, we estimate the following specification:

$$Y_{ijq} = \sum_{\substack{q=-4 \\ q\neq -1}}^{4} \gamma_q \text{Married}_i \cdot \mathbf{1}(t=q) + \sum_{\substack{q=-4 \\ q\neq -1}}^{4} \varphi_q \text{Single}_i \cdot \mathbf{1}(t=q) + X_{ijt} + \tau_i + \lambda_t + \varepsilon_{ijt}, \quad (2)$$

, where Y_{ijq} indicates whether the application submitted by worker i to job j in quarter q receives a callback. Applicants who concealed their marital status are the omitted group, and for the baseline quarter preceding the intervention (November 12, 2019, to February 11, 2020), we normalize the differences between married and concealed, and single and concealed groups to zero. The coefficients of interest, γ_q and φ_q ($q > 0$), capture the dynamic treatment effects of the MSR on callback rates for self-reported married and single applicants, respectively. The pre-intervention

coefficients γ_q and φ_q ($q < 0$) serve as a placebo test to verify the parallel trends assumption and examine whether any confounding factors differentially affected marital status disclosure groups prior to the MSR. The specification includes the same set of controls and fixed effects as in Equation (1).

Figure 4 shows the event study plot and highlights several key patterns. First, in the pre-intervention period, the coefficients of time indicators interacted with marital status groups are statistically insignificant from zero. This provides strong support for the parallel-trends assumption in callback outcomes across the three marital-status groups prior to the MSR. Second, the post-intervention effects diverge sharply for workers who disclosed being married and those reported as single. For workers who disclosed being married, callbacks fall immediately after the MSR: the decline appears in the first post-intervention quarter and becomes more pronounced in quarters two and three, peaking at about -3.51 percentage points (-12.71% of baseline callback rate). By the fourth quarter, the effect attenuates a little but remains sizable and statistically significant at around -2.50 percentage points (-9.03%). For workers who disclosed being single, the MSR brings a positive effect. The callback probability rise by 2.97 percentage points in the first post-intervention quarter (10.75% of the baseline callback rate). The positive effect persists in subsequent quarters, gradually declining in magnitude while remaining statistically significant even one year after the intervention; by the fourth quarter, the estimate is 1.83 percentage points (6.62%).

We observe an immediate response to the removal of marital-status information, suggesting that employers quickly noticed the policy change and adjusted their screening behavior accordingly. This pattern is consistent with employers using marital status as an input, either directly or as a proxy for otherwise unobserved characteristics, when forming beliefs about applicant quality. The rapid reweighting of callbacks once the marital status is no longer available suggests that hiring decisions are actively shaped by the presence (or absence) of this information, and the job application callback changes swiftly when it is withdrawn. Moreover, the effects remain detectable one year after the intervention, implying a persistent shift, rather than a short-term adjustment, in how employers evaluate applicants in the absence of marital status disclosure.

Appendix Figure C.1 replicates the dynamic effect analysis separately for male and female applicants, in Panel A and B, respectively. Consistent with the DID estimates, the MSR effects are sharper and more precisely estimated among men: men who disclosed being married experience a

large and persistent decline in callbacks, whereas men who reported being single see a substantial and stable increase. This pattern underscores that the marital status signal was particularly salient for male applicants, with its removal leading to a clear re-sorting within the male applicant pool based on the loss of a positive signal (for those who disclosed being married) and the removal of a potential negative signal (for those who disclosed being single). In contrast, the response among female applicants is more muted. For women, we see a pattern of positive effects for those previously reported as single and negative effects for those previously reported as married, but the estimates are less precise.

4 Robustness and Placebo Test

4.1 Removal Marital Status and Resume Viewing

As discussed in Section 2, recruiters cannot observe marital status during the first-stage screening of summary cards; this information becomes visible only after they click through to the full resume. Consequently, the removal of marital status disclosure should not affect resume view probabilities since marital status is not shown on the summary card. If we were to observe changes at this stage, it would suggest the presence of confounding factors, for example, recruiters inferring marital status from other information displayed on the summary card.

To test this possibility, we use first-stage resume views as a placebo outcome. Specifically, we replicate the dynamic effects specification in Equation (2), replacing the dependent variable with an indicator for whether the recruiter clicks through to view the applicant's full resume. The analysis sample is applications for which the summary card is displayed to employers.[14] We also modify the controls reflecting the information only available on the summary card, including the applicant's education level, years of work experience, match between the worker's and the job's industry, occupation, and location, as well as the application date fixed effects, and individual fixed effects.

Results are presented in Figure 5. As expected, the coefficients for both applicants who reported being married and those who reported being single fluctuate around zero across all pre and post

[14]This sample includes 1,784,457 applications displayed as summary cards, and 50.97% were clicked and viewed to the full resume by recruiters.

quarters, with no statistically significant differences. These null results hold for both the lead terms ($q < 0$), which support the parallel trends assumption, and the lag terms ($q > 0$), which confirm the insignificant effect on views when marital information is not visible. This pattern reinforces the evidence that marital status does not influence recruiters' initial screening decisions when it is concealed. The absence of pre-trends also alleviates concerns that unobserved applicant characteristics correlated with reported marital status, such as underlying productivity, or signaling behavior, result in the MSR effects.

4.2 Shorter Time Window Around MSR

Our main analysis uses a two-year window, one year before and one year after the MSR intervention, so only individuals who submit applications within this period contribute to identification. This design raises a potential concern about sample selection. As shown in Appendix A.1 , the median search spell duration in our sample is roughly 400 days, which may suggest that the estimated effects are driven disproportionately by job seekers who remain active for a relatively long time.

A related concern is that employer adjustment might not be immediate. If responses unfold gradually, estimates based on a broad window could mask the timing of behavioral change, while a very narrow window might not allow sufficient time for employers to update their screening practices. Although Figure 4 indicates that the effects emerge promptly after the policy change, we further assess robustness by narrowing the sample window around the intervention date and re-estimating the policy effects.

We construct two distinct samples based on applications submitted within specific intervals relative to February 12, 2020: one including six months before and after the intervention, and another including three months before and after. Both samples are restricted to applicants who submitted at least one application in both the pre- and post-policy periods within each window. We replicate the DID specifications in Table 2 for each sample window.

We report these estimates in Table 3. Columns (1) - (3) present results using a six-month window around the intervention, while Columns (4) - (6) report the corresponding estimates for a three-month window. Within each window, we show estimates for the full sample, the male

subsample, and the female subsample, respectively. Across both narrower windows, the MSR effects closely mirror our baseline findings in Table 2: the estimated coefficients on *Post* × *Married* and *Post* × *Single* remain the significance and comparable magnitudes.

4.3 Alternative Specifications and Sample

In this section, we present more robustness tests in Appendix Table B.1, based on the DID identification in Equation (1) (Column (2) of Table 2) with alternative samples and controls.

First, we check against potential confounding from concurrent COVID-19 disruptions by excluding the period of the most severe outbreak-related interventions. Specifically, we remove observations between January 23, 2020, when Wuhan imposed a strict lockdown, and April 8, 2020, when the lockdown was officially lifted. This interval captures the peak of mobility restrictions, economic halts, and labor market instability in the region, which may have independently influenced hiring behaviors. The regression results are reported in Column (2) of Appendix Table B.1, and the estimated coefficients are largely consistent with our baseline estimates.

Second, Column (3) replaces a quartic polynomial in search spell with the fixed effects of application day gap, nonparametrically controlling for within-individual search duration, yielding quantitatively stable results. Finally, Column (4) presents the estimation without worker-level standard error clusters, and the significance does not change.

5 Heterogeneity

Recruiters may interpret marital status signals differently depending on labor market context. As the "marriage premium" can vary with underlying market conditions and employer beliefs, the effect of removing marital status information would also be different. In this section, we examine this heterogeneity, starting with the core dimensions of age and gender, and then extending the analysis to other applicant attributes, industry and occupation occupation norms, job skills, and firm level factors.

5.1 Age and Gender

As discussed in Section 2, age emerged as a readily available proxy for marital status, with its interpretation profoundly associated applicants' productivity, stability, and fertility.

We explore age-gender heterogeneity in Figure 6 by reestimating our baseline specification in Equation (1) (Column (2) of Table 2) separately for three age groups: young ($\leq$ 30), middle-aged (30-35), and older ($\geq$ 35) applicants. Panel (a) shows clear age gradients in how callbacks were reallocated following the MSR. Among applicants under 30, removing marital-status information -both "married" and "single"- has almost no effect on callback rates. This suggests that disclosed marital status is not a salient screening signal for young workers, and employers do not rely on it to infer productivity at early career stages.

The role of disclosed marital status becomes more pronounced for older applicants. For those aged 30-35, we observe a marginal positive effect for applicants who reported being single. This pattern aligns with Figure 2, where the share of applicants self-reporting as married begins to converge toward the share reporting as single in this age range; correspondingly, removing the "single" label is associated with a modest increase in callbacks.

The strongest effects appear among applicants aged 35 and above. Applicants in this group who reported being married experience the largest decline in callbacks, suggesting that the "married" label carries a sizable premium at older ages, and that this premium disappears once the label is removed. Conversely, older applicants who reported being single see an increase in callbacks. Because being reported as single after age 35 is relatively uncommon, it may have been interpreted as a negative signal prior to MSR, and concealing marital status appears to mitigate this penalty.

We further decompose these age patterns by gender in Panels (b) and (c). Consistent with the above gender results, we do not observe a clear marriage premium for women in any age group. The estimates for older women suggest a similar direction of effect: callbacks fall when a "married" label is removed and rise when a "single" label is removed, but these estimates are imprecise. In contrast, the overall age effect is driven largely by men, who appear to receive the larger share of the marriage premium. For men aged 35 and above, the effects are especially obvious: relative to the same applicants when their marital status is concealed, removing a previously disclosed "single" status increases callbacks, while removing a previously disclosed

"married" status reduces callbacks. This pattern reinforces the interpretation that marital status signals matter most for older male workers.

5.2 Worker Characteristics

Next, we examine how the effects of removing marital status information vary across different worker characteristics. The DID estimates are shown in Appendix Table C.2.

In Panel A, we see that the callback gains for applicants who reported being single following the MSR are larger among those with lower educational attainment or degrees from non-elite institutions, indicating that these groups previously faced a more pronounced single penalty. Among more highly educated applicants, who have master's degrees or graduated from elite universities, the removal of marital status information has little impact on callback rates for workers who disclosed being single. A similar pattern is observed in Panel B, where lower-wage and unemployed workers show greater improvements in callback rates after the MSR, implying that they had faced a larger single penalty prior to the policy change.

This pattern suggests that employers may rely on marital status as an additional signal of perceived productivity: when applicants present weaker observable signals of productivity, employers may place greater weight on informal cues like marital status. However, when applicants possess stronger indicators of employability, the informational value of marital status declines.

5.3 Turnover and Disclosure Norms in Insudtry-Occupation

We further examine heterogeneous effects of MSR by splitting workers according to the turnover rate of their main industry-occupation cell.[15] Because we cannot directly observe firm initiated dismissals, we proxy separation behavior using the share of employed workers who report actively searching for a new job within each industry-occupation cell. We then sort cells into turnover quartiles: low, medium, and high. In Table C.3, Columns (2)-(4), the estimated effects of MSR are driven primarily by low- and medium-turnover industry-occupation cells, where employers may place greater weight on perceived worker stability. By contrast, in high-turnover

[15] There are 342 main industry-by-main occupation cells in our sample.

industries and occupations, removing single status has no detectable effect on callbacks, and the effect of removing reported married is smaller in magnitude.

The MSR effects also vary with occupation's pre-policy disclosure culture, which proxies for how informative (and how heavily used) marital status is in screening. In Appendix Table C.3 Column (5) to (7), we split the 22 occupations into three groups using pre-MSR disclosure rates: heavy-married (the 7 occupations with the highest share reporting "married"), heavy-single (the 7 with the highest share reporting "single"), and heavy-conceal (the remaining 8).

In heavy-married occupations, marriage is the norm, so recruiters are more likely to view being single as a negative out-of-norm signal. Consistent with this, after the MSR removes the signal, applicants who reported being single gain while applicants who disclosed being married lose relative to concealers, suggesting that these jobs featured a larger single penalty before the policy. In heavy-single occupations, single is the norm, so being single is less informative and less penalized. Instead, being reported as marriage becomes the distinctive signal and is more strongly rewarded. After the MSR, that advantage disappears: applicants who reported being married lose sharply, and even applicants who disclosed being single decline modestly relative to concealers, indicating that concealers benefit most once the platform makes everyone's status blank. In heavy-conceal occupations, concealment was already common, so disclosed marital status carried little incremental information and was weakly used in screening. As a result, removing the field generates little differential change across reported statuses. Overall, the pattern suggests that the less common a disclosed marital status signal is within an occupation, the more recruiters load onto it, by rewarding the norm and penalizing the deviation.

5.4 Job Skill

Lastly, in Appendix Table C.4, we examine whether the effect associates with the type of skills a job requires. We classify skills using sub-occupation codes and the framework developed by Deming (2017) to assign jobs required levels of routine, non-routine, and interpersonal skills, and then define each job by its dominant required skill. The effects for both applicants who reported being married and those who reported being single are more pronounced in routine and social jobs, and weaker in non-routine jobs. Routine jobs tend to be more traditional and standardized,

while social-skillâintensive jobs place greater weight on perceived reliability, and interpersonal fit, making marital status cues more salient to serve as a heuristic for stability or commitment. In contrast, non-routine jobs rely more heavily on observable human capital and task-specific skills, reducing employers' use of marital status to provide additional information.

5.5 Firm Ownership

Next, we examine whether the effect of MSR varies across firms with different ownership structures and size. In Appendix Table C.5, we find that the strongest effects of MSR were concentrated in state-owned enterprises (SOEs) and public-listed companies, where marriage premium likely stems from an institutional environment that traditionally associates marriage with greater stability, responsibility, and lower employment risk. Foreign-owned and private firms showed considerably smaller responses to the MSR, implying that their hiring practices place less emphasis on marital status in general.

6 Conclusion

This paper exploits a platform-wide policy change that removed marital status from all resumes in an online job platform, allowing us to study how the visibility of marital status shapes employer screening in a real labor market setting.

Our core finding is that marital status had been actively used as a screening signal: Once the signal disappears, callback rates fall for applicants who previously disclosed being married and rise for those who disclosed being single, relative to applicants who previously concealed their status. The MSR effects are concentrated among men, indicating that employers treated marriage as a positive signal (and disclosed single status as a negative signal) particularly for male applicants. The largest callback gains accrue to older men who reported being single (35+), consistent with employers interpreting "single at older ages" as an unfavorable signal, which potentially reflects beliefs about stability, maturity, commitment, or unobservable productivity, while disclosed married served as a credential that previously boosted employer interest.

Our evidence indicates that the MSR did not simply remove discrimination; it removed an input to employer inference and thereby reallocated callbacks across applicants who had differentially

benefited from, or been harmed by disclosed marital status visibility. Because disclosure is strategic in the pre-policy environment, our results speak directly to policy evaluation in markets where job seekers manage sensitive information endogenously and employers adapt their screening rules in response to information constraints.

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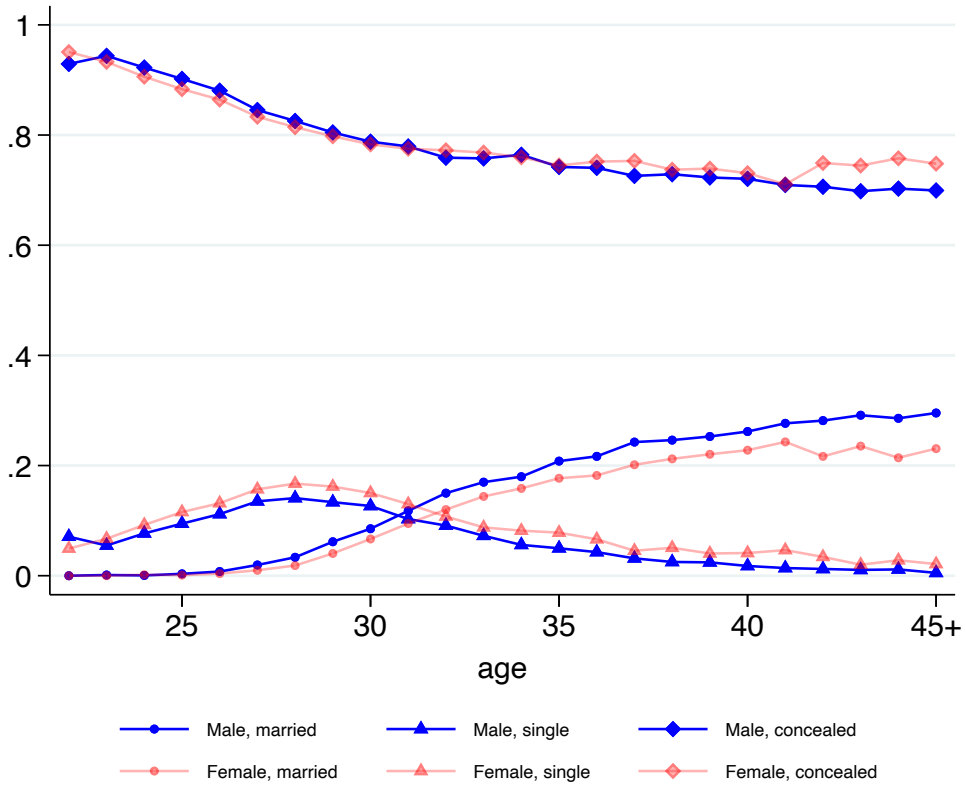
Figures and Tables

Figure 1: Example of Resume



Notes: This figure show the platform's resume template layout, illustrating where marital status appears on workers' resumes.

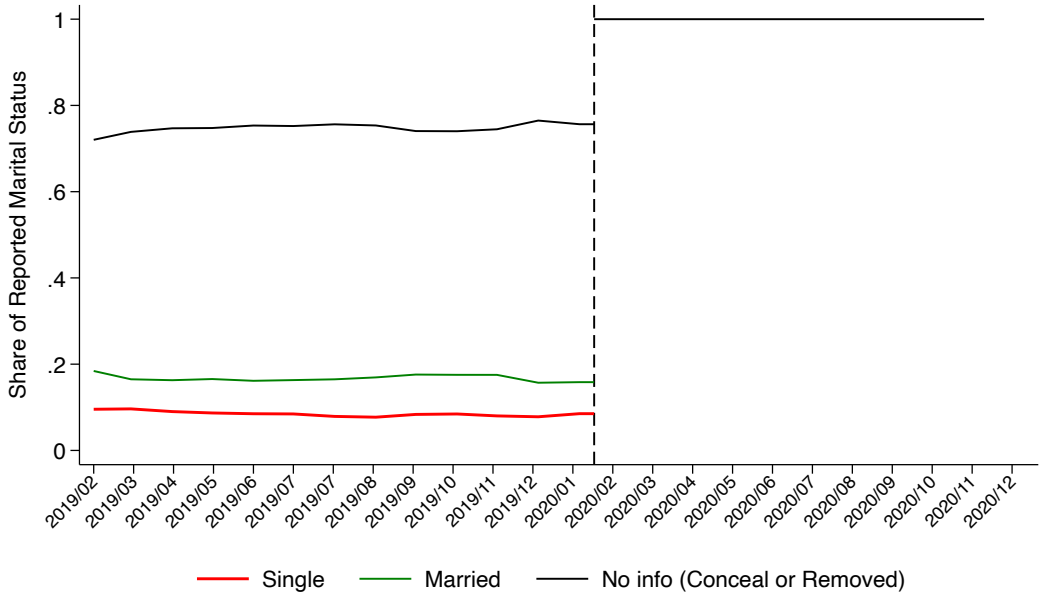
Figure 2: Share of Reported Marital Status, Pre-policy



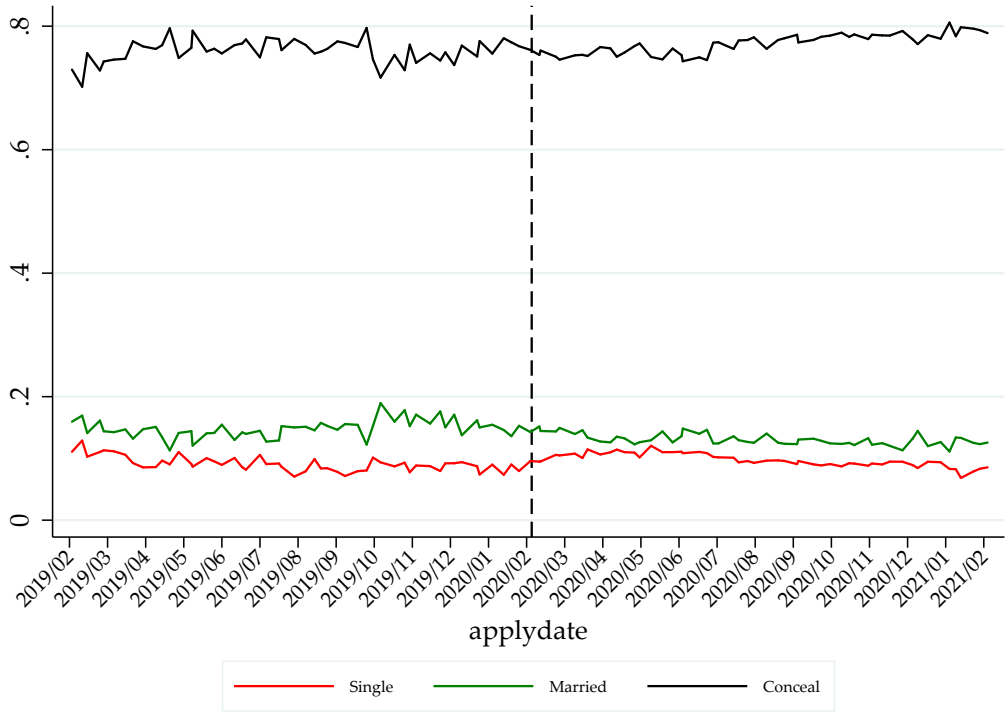
Notes: This Figure plots, by age, the share of male and female applicants who report each marital-status category – "married," "single," or "conceal."

Figure 3: Marital Status Removal

(a) Share of Marital Status Information Over Time

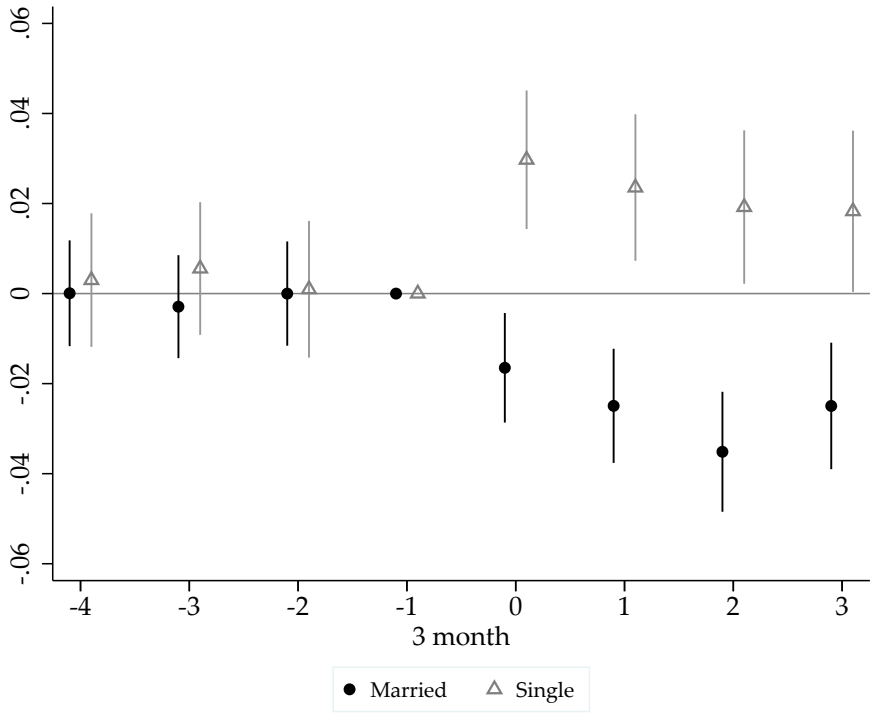


(b) Share of Marital Status Receiving Callbacks



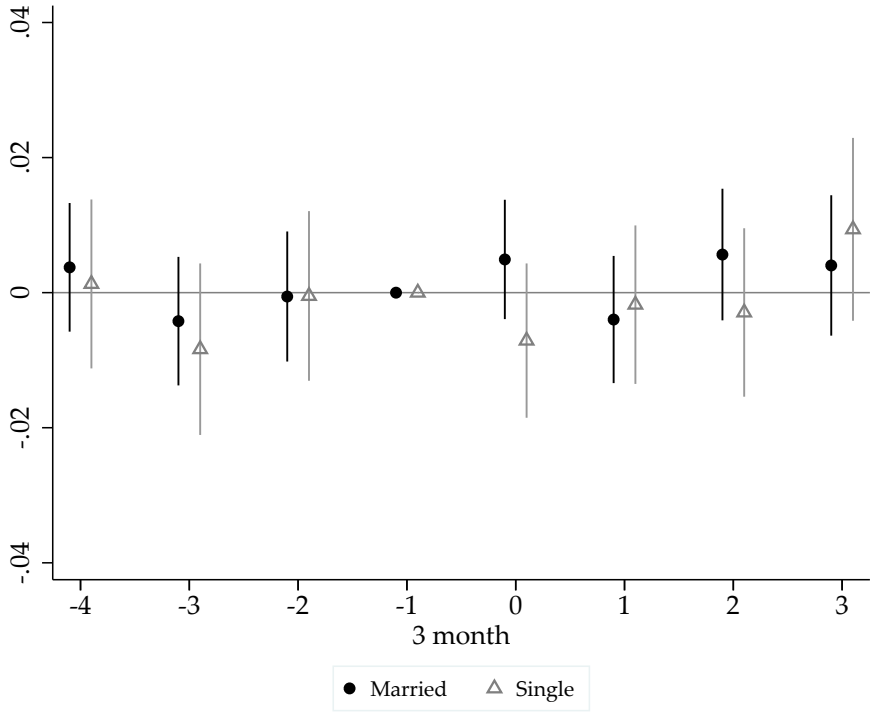
Notes: In this Figure, Panel (a) plots the share of applicants in each reported marital-status category over time, from February 2019 to February 2021. Panel (b) plots, over the same period, the share of total callbacks received by applicants in each marital-status category using weekly application data.

Figure 4: Dynamic Effects of Removal Marital Status on Job Application Success



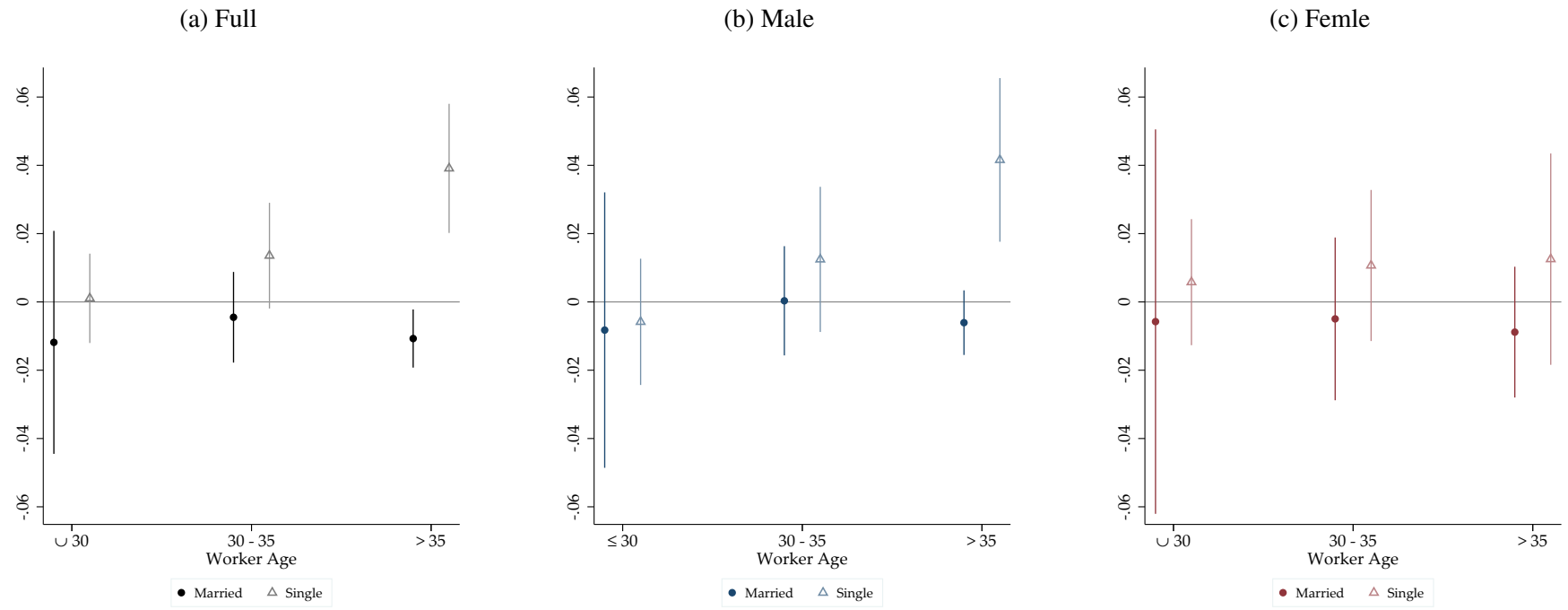
Notes: This figure shows the dynamic effects of marital status removal on application callbacks, estimated using Equation (2), with 95% confidence intervals. Applications are aggregated into three-month intervals, and the quarter before MSR is the omitted period. The regressions control for worker characteristics, worker-job match indicators, and application behavior, and include application date and worker fixed effects. Robust standard errors are clustered at the worker level.

Figure 5: The Dynamic Effects of Removal Marital Status on Resume Reviewing, Placebo Test



Notes: This figure reports a placebo test of the marital status removal by using an alternative outcome, whether the employer viewed the application, based on the sample of displayed application summary cards. The identification strategy mirrors Figure 4, and the specification controls for the information shown on the summary card, worker fixed effects, and application date fixed effects. Robust standard errors are clustered at the worker level.

Figure 6: Heterogeneous Effects of Removal Marital Status, by Age and Gender



Notes: This figure reports DID estimates with the 95% confidence intervals from Equation (1) separately for three age groups: workers younger than 30, those aged 30-35, and those aged 35 and above. Panel (a) plots the coefficients on *Post* × *Married* and *Post* × *Single* estimated in the full sample. Panel (b) reports the estimates for male workers, and Panel (c) presents the estimates for female workers.

Table 1: Descriptive Statistics on Job Applications

	(1) **All**	(2) **Single**	(3) **Married**	(4) **Concealed**
Panel A: Worker Characteristics				
Male (%)	65.80 (47.44)	54.74 (49.78)	77.49 (41.76)	64.87 (47.74)
Age (years)	34.61 (5.92)	31.72 (4.25)	38.33 (5.21)	34.24 (5.90)
Master's and above (%)	27.46 (44.63)	31.41 (46.42)	27.88 (44.84)	26.90 (44.34)
Bachelor's (%)	61.78 (48.59)	61.73 (48.61)	60.23 (48.94)	62.09 (48.52)
Associate (%)	10.00 (30.00)	6.38 (24.43)	11.03 (31.33)	10.24 (30.32)
Unified-Exam Track (%)	77.81 (41.56)	81.30 (38.99)	72.76 (44.52)	78.37 (41.18)
Elite institutions (%)	18.01 (38.42)	19.24 (39.42)	18.81 (39.08)	17.70 (38.17)
Working experience (years)	11.48 (6.30)	8.46 (4.54)	15.11 (5.85)	1.11 (6.27)
Annual wage (1,000 RMB)	289.65 (242.39)	252.50 (204.63)	349.47 (265.35)	282.53 (240.05)
Unemployed (%)	36.26 (48.07)	39.99 (48.99)	35.52 (47.86)	35.94 (47.98)
Panel B: Application and Match Variables				
Callback (%)	27.02 (44.40)	28.42 (45.10)	25.00 (43.30)	27.24 (44.52)
Callback, Pre 3 months	27.64 (44.72)	27.48 (44.64)	27.64 (44.72)	27.66 (44.73)
City match	70.51 (45.60)	77.89 (41.50)	67.78 (46.73)	70.14 (45.76)
Industry match (%)	37.26 (48.35)	38.27 (48.60)	37.09 (48.30)	37.18 (48.33)
Occupation match (%)	59.76 (49.04)	60.54 (48.88)	61.22 (48.72)	59.38 (49.11)
Under experience (%)	5.60 (23.01)	7.26 (25.97)	2.69 (16.18)	5.97 (23.70)
Over education (%)	37.16 (48.32)	36.76 (48.21)	38.62 (48.69)	36.93 (48.26)
Under education (%)	8.76 (28.27)	7.58 (26.46)	9.04 (28.67)	8.85 (28.40)
Over age (%)	0.37 (8.03)	0.37 (6.04)	1.00 (9.97)	0.61 (7.81)
Under age (%)	0.22 (4.70)	0.22 (4.69)	0.07 (2.60)	0.18 (4.22)
Batch application (%)	28.67 (45.22)	27.35 (44.58)	29.42 (45.57)	28.68 (45.23)
Days elapsed	28.25 (25.02)	27.70 (24.84)	27.46 (24.76)	28.47 (25.09)
Sample Size	866,196	80,380	128,195	657,621
Share (%)	100	9.28	14.80	75.92

Notes: This table summarizes main statistics on 866,196 applications in the analysis sample. Standard deviations are reported in parentheses. Elite institutions refer to universities included in China's Project 985 or Project 211 programs. Batch applications represent applications submitted to multiple recommended ads in one click. Match indicators are binary variables, taking a value of 1 if worker's characteristics are aligned with jobs' requirement.

Table 2: Effects of Marital Status Removal on Job Application Success

	(1) Full Sample	(2) Full Sample	(3) Male	(4) Female
Post×Married	-0.0229***	-0.0238***	-0.0179***	-0.0149**
	(0.003)	(0.003)	(0.004)	(0.007)
Post×Single	0.0235***	0.0213***	0.0235***	0.0068
	(0.004)	(0.004)	(0.006)	(0.006)
Age	-	0.0041*	0.0107***	-0.0042
		(0.002)	(0.003)	(0.003)
Application & match controls	No	Yes	Yes	Yes
Individual FE	Yes	Yes	Yes	Yes
Application date FE	Yes	Yes	Yes	Yes
Obs	866,782	866,196	569,887	296,222
R-squared	0.263	0.276	0.267	0.295
Baseline outcome	0.2764	0.2764	0.2693	0.2901

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Notes: This table reports the effect of removing marital status based on Equation (1). Column (1) presents estimates from a two-way fixed-effects model without additional controls. Column (2) adds time-varying worker characteristics, as well as application and match controls, as our baseline specification. Columns (3) and (4) report estimates based on Column (2) separately for male and female workers, respectively. The baseline outcome is set as the average callback rate in the three month before MSR, (i.e., $E[Y_i|q = -1)$. All regressions control for worker characteristics, application behavior, and worker-job match indicators, and include worker fixed effects and application date fixed effects. Robust standard errors are clustered at the worker level.

Table 3: Robustness with Shorter Time Windows

	±6 months			±3 months		
	(1) Full	(2) Male	(3) Female	(4) Full	(5) Male	(6) Female
Post×Married	-0.0208***	-0.0176***	-0.0129	-0.0201**	-0.0152*	-0.0295*
	(0.005)	(0.006)	(0.010)	(0.008)	(0.009)	(0.016)
Post×Single	0.0310***	0.0413***	0.0101	0.0342***	0.0462***	0.0143
	(0.006)	(0.009)	(0.010)	(0.010)	(0.013)	(0.015)
Age	0.0096***	0.0138**	0.0025	0.0071	0.0135*	-0.0011
	(0.004)	(0.006)	(0.004)	(0.006)	(0.008)	(0.007)
Application & match controls	Yes	Yes	Yes	Yes	Yes	Yes
Individual FE	Yes	Yes	Yes	Yes	Yes	Yes
Application date FE	Yes	Yes	Yes	Yes	Yes	Yes
Obs	349,104	230,034	119,035	146,892	96,127	50,746
R-squared	0.290	0.284	0.303	0.298	0.294	0.307

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Notes: This table replicates the results in Table 2 with two shorter constructed samples. Columns (1)-(3) use applications submitted within six months before and after the intervention, and Columns (4)-(6) use applications submitted within three months. For each window, results are reported for the full sample, the male sample, and the female sample, respectively.

Appendices

A More institutional Background **36**

A.1 Applicants' Characteristics 36

A.2 Individual-Level Job Search Behaviors and Outcomes 38

B Robustness **39**

B.1 Robustness: Alternative Samples and Specifications 39

C Heterogeneity **40**

C.1 Gender Effects 40

C.2 Heterogeneous Effects by Worker Characteristics 41

C.3 Heterogeneous Effects by Industry and Occupation 42

C.4 Heterogeneous Effects by Job Skill 43

C.5 Heterogeneous Effects by Firm Characteristics 44

A More institutional Background

A.1 Applicants' Characteristics

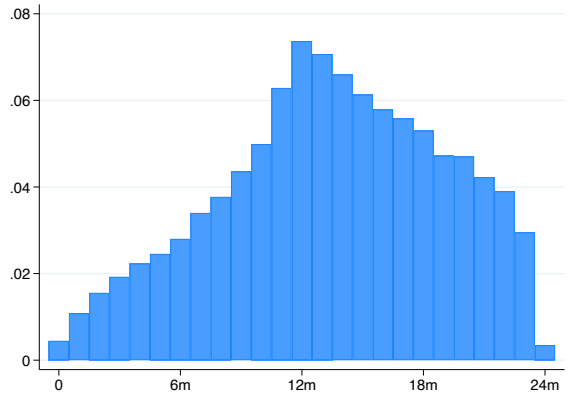
Table A.1: Descriptive Statistics: Worker Sample

	All		Single		Married		Conceal	
	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)
Demographics								
Male (%)	64.14	(47.65)	53.93	(49.85)	75.74	(42.87)	64.38	(47.89)
Age (years)	33.67	(5.89)	30.67	(4.05)	37.42	(5.14)	33.29	(5.88)
Education (%)								
Master's and above	25.21	(43.08)	29.06	(45.24)	26.24	(43.57)	24.59	(42.71)
Bachelor's	62.63	(48.38)	63.25	(48.22)	60.91	(48.80)	62.89	(48.31)
Associate	12.16	(32.68)	7.70	(26.66)	12.85	(33.47)	12.52	(33.09)
Education Track								
Unified-Exam Track (%)	78.54	(41.05)	82.82	(37.72)	73.83	(43.96)	79.06	(40.69)
Project 985/211 institutions (%)	17.55	(38.04)	18.12	(38.47)	18.77	(39.02)	17.29	(37.80)
Work Experience								
Years of working experience	10.52	(6.22)	7.45	(4.28)	14.10	(5.80)	10.18	(6.19)
Wage Information								
Annual wage (in 10,000 RMB)	25.92	(22.38)	22.54	(17.94)	32.18	(25.63)	25.11	(21.95)
Searching status (%)								
Unemployed searching	31.62	(46.50)	34.85	(47.65)	31.00	(46.25)	31.38	(46.40)
Sample Size	138,663		11,664		20,041		106,958	
Share (%)	100		8.41		14.45		77.14	

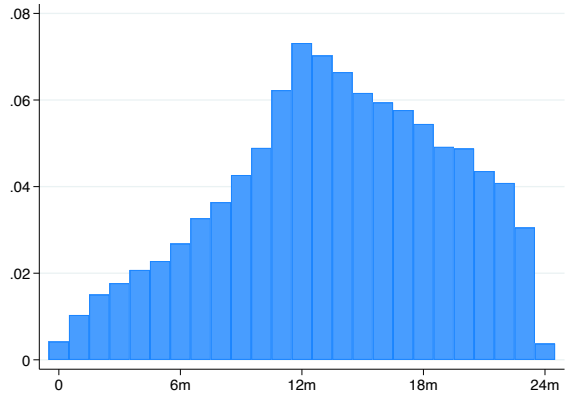
Notes: This Table summarizes main statistics on 138,663 workers in the application sample.

Figure A.1: Distribution of Applicants' Job Search Spans

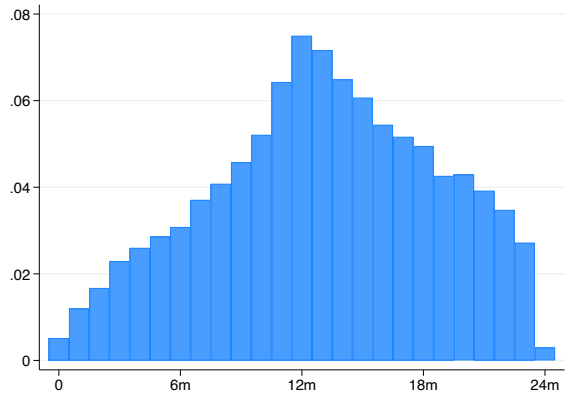
(a) All applicants



(b) Employed applicants



(c) Unemployed applicants



Notes: These figures plot the distribution of applicants' job search spans, measured as the time between their first and last job applications during the analysis period, for all workers, employed workers, and unemployed workers.

A.2 Individual-Level Job Search Behaviors and Outcomes

Table A.2: Individual-Level Job Search Behaviors/Outcomes by Reported Marital Status

	(1)	(2)
Outcome Variable:	**Num Apps Submitted**	**Job's Posted Wage**
Married	-0.0878	0.4832***
	(0.0517)	(0.0817)
Single	0.2973***	0.3080**
	(0.0463)	(0.1071)
Worker characteristics	Yes	Yes
Worker industry FEs	Yes	Yes
Worker occupation FEs	Yes	Yes
Obs	213,681	213,681

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Notes: This table reports individual-level regression estimates of job search behaviors and outcomes by reported marital status before marital status was removed. The data are collapsed to the individual level, and all regressions control for worker characteristics, worker occupation and industry fixed effects.

B Robustness

B.1 Robustness: Alternative Samples and Specifications

Table B.1: Robustness Using Alternative Samples and Specifications

	(1) **Baseline**	(2) **Drop COVID**	(3) **Search Spell Days FEs**	(4) **Without Cluster**
Post×Married	-0.0238***	-0.0281***	-0.0238***	-0.0238***
	(0.003)	(0.004)	(0.003)	(0.003)
Post×Single	0.0213***	0.0204***	0.0213***	0.0213***
	(0.004)	(0.005)	(0.004)	(0.004)
Age	0.0041*	0.004	0.0041**	0.0041**
	(0.002)	(0.003)	(0.002)	(0.002)
Application & match controls	Yes	Yes	Yes	Yes
Applicant FE	Yes	Yes	Yes	Yes
Application date FE	Yes	Yes	Yes	Yes
Obs	866,196	705,967	866,196	866,196
R-squared	0.276	0.278	0.277	0.276

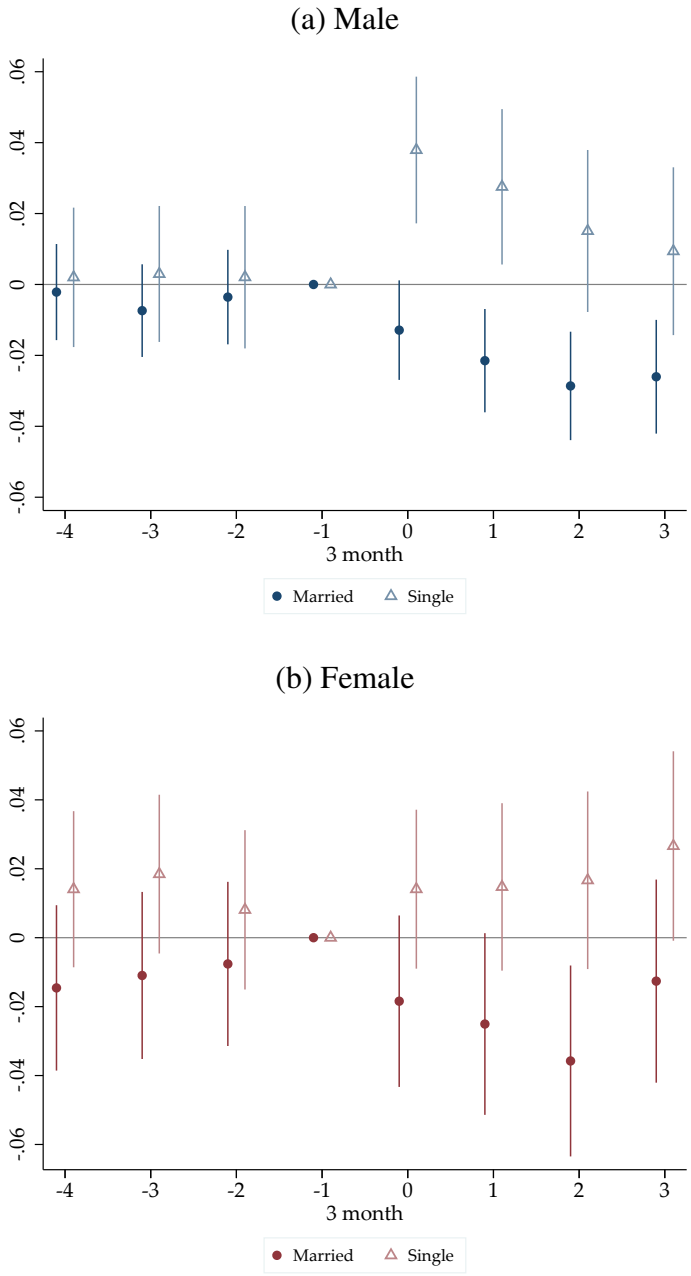
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Notes: This table presents a robustness check of our main results on the effect of MSR, using various samples and specifications. Column (1) reproduces the results from Column (1) in Table 2 based on Equation (1). Column (2) excludes applications submitted during the lockdown period (January 23, 2020 to April 8, 2020). Column (3) replaces the quartics of job search duration with fixed effects for the number of job search days. Column (4) reports results without clustering standard errors.

C Heterogeneity

C.1 Gender Effects

Figure C.1: The Dynamic Effect of Removal Marital Status on Job Application Success, by Gender



Notes: This figure replicates the patterns shown in Figure 4, estimated using Equation (2) separately for male and female applicants.

C.2 Heterogeneous Effects by Worker Characteristics

Table C.2: Heterogeneous Effects by Worker Characteristics

Panel A: Education Backgrounds

	(1) Baseline	(2) Associate Degree	(3) Bachelor's Degree	(4) Master's Degree	(5) Non-Elite Institute	(6) Elite Institute
Post×Married	-0.0238***	-0.0090	-0.0265***	-0.0257***	-0.0260***	-0.0156**
	(0.003)	(0.010)	(0.004)	(0.006)	(0.004)	(0.008)
Post×Single	0.0213***	0.0492***	0.0181***	0.0114	0.0231***	0.0080
	(0.004)	(0.015)	(0.005)	(0.007)	(0.005)	(0.010)
Obs	866,196	85,678	533,674	243,686	709,265	155,501

Panel B: Experience, Wage and Employment

	(1) Inexperienced	(2) Experienced	(3) Low Wage	(4) High Wage	(5) Unemployed	(6) Employed
Post×Married	-0.0550**	-0.0169***	-0.0248***	-0.0144***	-0.0203***	-0.0255***
	(0.023)	(0.003)	(0.005)	(0.005)	(0.006)	(0.004)
Post×Single	-0.0075	0.0239***	0.0274***	0.0126*	0.0311***	0.0146**
	(0.011)	(0.005)	(0.006)	(0.007)	(0.008)	(0.006)
Obs	113,220	744,132	469,438	325,844	303,938	540,287

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Notes: This table reports heterogeneous effects of removing marital status across subgroups of worker's characteristics, based on Equation (1). In Panel A, Column (1) reproduces Column (1) in Table 2. Columns (2)-(4) report results for workers with an associate degree, a bachelor's degree, and a master's degree or above, respectively. Columns (5) and (6) report results for applicants who graduated from non-elite and elite institutions. Elite institutions are universities included in China's Project 985 or Project 211 programs. In Panel B, Columns (1) and (2) report estimates for workers with fewer than five years of working experience and with more than five years of experience, respectively. Columns (3) and (4) report results for low-wage and high-wage workers, defined by whether the worker's current wage is below or above the posted wage for the job applied to. Columns (5) and (6) report results separately for unemployed and currently employed workers.

C.3 Heterogeneous Effects by Industry and Occupation

Table C.3: Heterogeneous Effects by Industry and Occupation

	(1) **Baseline**	(2) **Low-turnover**	(3) **Medium-turnover**	(4) **High-turnover**	(5) **Heavy-married**	(6) **Heavy-single**	(7) **Heavy-conceal**
Post×Married	-0.0238***	-0.0297***	-0.0183***	-0.0172**	-0.0133***	-0.0218***	-0.0110
	(0.003)	(0.007)	(0.005)	(0.007)	(0.004)	(0.008)	(0.008)
Post×Single	0.0213***	0.0334***	0.0196***	-0.0021	0.0208***	-0.0130*	0.0128
	(0.004)	(0.010)	(0.006)	(0.008)	(0.006)	(0.007)	(0.012)
Obs	866,196	180,318	363,940	216,715	471,007	202,307	129,083

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Notes: This table reports heterogeneous effects of removing marital status across industries and occupations, based on Equation (1). Column (2) to (4) replicate Column (1) in Table 2 based on turnover in worker's main industry-occupation cells, and Column (5) to (7) are based on the prevalence of reported marital status in the main occupations.

C.4 Heterogeneous Effects by Job Skill

Table C.4: Heterogeneous Effects by Job Skill

	(1) **Baseline**	(2) **Routine**	(3) **Non-routine**	(4) **Social**
Post×Married	-0.0238***	-0.0326***	-0.0177**	-0.0241***
	(0.003)	(0.009)	(0.008)	(0.004)
Post×Single	0.0213***	0.0346***	0.0106	0.0210***
	(0.004)	(0.012)	(0.008)	(0.006)
Obs	866,196	109,693	229,132	535,242

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Notes: This table reports heterogeneous effects of removing marital-status information across jobs with different dominant skill requirements, based on Equation (1). We classify skills using sub-occupation codes and the framework developed by Deming (2017) to assign jobs required levels of routine, non-routine, and interpersonal skills. Each job is then defined by its dominant required skill.

C.5 Heterogeneous Effects by Firm Characteristics

Table C.5: Heterogeneous Effects by Firm Ownership

	(1) **Baseline**	(2) **Foreign**	(3) **Private**	(4) **State-Owned**	(5) **Public-Listed**
Post×Married	-0.0238***	-0.0244***	-0.0079*	-0.0519***	-0.0480***
	(0.003)	(0.009)	(0.005)	(0.014)	(0.012)
Post×Single	0.0213***	0.0010	0.0153***	0.0370**	0.0592***
	(0.004)	(0.011)	(0.006)	(0.015)	(0.015)
Obs	866,196	127,067	423,812	60,548	81,944

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Notes: This table reports heterogeneous effects of removing marital status across subgroups of firm's ownership, based on Equation (1), by replicating Column (1) in Table 2 based on firm ownership: foreign-invested enterprises, private-owned enterprises, state-owned enterprises, and publicly-listed firms.