The Longer Term Labor Market Impacts of Paid Parental Leave

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Data Availability: The data that support the findings of this study are openly available from IPUMS.org.

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The Longer-Term Labor Market Impacts of Paid Parental Leave

ABSTRACT

Although paid family leave (PFL) has the potential to improve labor market and other outcomes for mothers, there is also concern that PFL might also lead to discrimination against women of child-bearing age. We examine the impact of California's paid family leave law on labor market outcomes over time during the post-law decade, as well as the law's effect for groups with differing levels of education. Results indicate that the law had negligible impacts on young women's labor force participation, unemployment duration, and earnings, but persistent small negative impacts on their relative employment. The negative employment impacts are concentrated among college-educated women, for whom the law is associated with a 2-3 percentage point decrease in labor force participation and a 1-2 percentage point decline in employment. The CA-PFL does not appear to have impacted the relative labor force participation, employment, unemployment duration, or earnings of less-educated young females.

I. INTRODUCTION

Despite the fact that many U.S. politicians and the majority of the American public have indicated their support for paid parental leave (PPL), the United States is unique among developed nations in that it does not have a national PPL program that grants workers paid time off after the birth or adoption of a child.[1] Although no national PPL policy exists, five states and Washington D.C. have their own PPL laws, and PPL policies are under consideration in several other states and at the federal level.[2] Access to paid leave in the U.S. has increased over time, rising from 7 to 16 percent of private industry workers from 2005 to 2018, but it differs greatly for workers with differing skill levels. Among workers in occupations requiring relatively high levels of education (e.g., management and professionals) 27 percent had access to paid leave, a rate more than three times that of workers in occupations requiring less education (e.g., production, transportation, and material moving occupations), with the implication that the marginal leave-taker with higher education is likely different from one with less education (U.S. Bureau of Labor Statistics, 2019).

In this paper, we use difference-in-difference (DD) and triple-difference (DDD) strategies applied to Current Population Survey (CPS) data to examine impacts of the 2004 California paid family leave law (CA-PFL). Implemented in 2004, the CA-PFL program is funded by employee payroll deductions to the State Disability Insurance (SDI) fund and provides men and women up to six weeks of paid leave for bonding with a new child or caring for a seriously ill relative. The program originally provided 55 percent weekly wage replacement, capped at $728 per week.[3] In

[1] See, e.g., Groden (2016), Horowitz et al. (2017), National Partnership for Women and Families (2016), Mathur, et al. (2017), and Paquette and Paletta (2017).

[2] See, e.g., Mathur, et al. (2017), Noguchi (2018), DeWitt (2018), and Wilen (2018).

[3] The wage replacement rate was raised to 60-70 percent (depending on income) and the maximum weekly benefit amount raised to $1,216 beginning January 1, 2018.

2005, just over 156,000 claims were paid, with average weekly benefits of $431 and average leave duration of 5.3 weeks. Roughly 88 percent of the claims are for taking time off to bond with a newborn child (California Employment Development Department, 2020).

Proponents of PPL policies assert that, in addition to the improvements in parent-child bonding, child education, child health, and parental health that PPL can generate, paid parental leave can help increase women's labor force attachment and economic opportunities. At the same time, however, PPL can also generate costs for employers that spillover to current and potential employees. Even when PPL is financed via employee payroll deductions, employers face costs that include increasing other employees' hours of work to cover leave-takers' job duties, temporarily (or permanently) replacing leave-taking workers, training replacement workers, and administrative and management costs to comply with the policy. As a result, PPL laws may generate negative labor market outcomes for young workers if employers substitute toward workers less likely to take paid leave.

The passage of state-level policies has generated a growing literature examining the impacts of PPL in the U.S. We add to this literature by examining longer-term impacts of PPL, by examining earnings in addition to employment and other labor market outcomes, and by assessing the differential impacts of the policy for workers with different education levels. Examining longer-term outcomes is important because the impacts of PPL are likely to evolve over time as employers and workers adjust to the policy.[4] The impact of PPL is likely to differ across education levels because firms' costs of accommodating leave for high-skill workers differ from those of low-skill workers, because high- and low-skill workers face different relative

[4] For example, Golightly (2019) finds that the CA-PFL had a significant, positive impact on childbearing, as women who were eligible for leave with their first child are more likely to have a second child.

costs and benefits of taking leave, and because research has shown that relatively disadvantaged women were least likely to have used unpaid leave before PPL was introduced (Carniero, et al., 2015). In addition, high-earning women's careers may be especially sensitive to employment interruptions and more educated women are more likely to be near the PPL maximum benefit thresholds (Bana, et al., 2020).

Our preferred estimates indicate that the CA-PFL reduced the relative labor force participation and employment of young women in California, outcomes that persist even a decade after the law's passage. The effects are concentrated among women with a bachelor's degree or more, for whom the law is associated with a 2-3 percentage point decrease in labor force participation and a 1-2 percentage point decline in employment. The CA-PFL does not appear to have impacted the relative labor force participation, employment, unemployment duration, or earnings of less-educated young females.

II. BACKGROUND

State PPL Laws. American workers seeking leave from their job because of childbirth, adoption, or serious illness can utilize private employer benefits if they have them, or unpaid leave benefits ensured by the Family and Medical Leave Act (FMLA), provided that they are eligible. Implemented in 1993, the FMLA, provides up to 12 weeks of job-protected, unpaid leave for employees to attend to their own or family member's serious health conditions, or for care of a new child. In order to be eligible for FMLA benefits, an employee must have worked for the employer for at least 12 months, worked at least 1,250 hours for the employer in the 12 months prior to the leave, work at a site within 75 miles of the employer and where the employer employs at least 50 workers (U.S. Department of Labor, 2012). Several states also provide

expanded unpaid parental leave benefits by covering smaller firms, providing longer leaves, or imposing lower firm size and work time eligibility requirements.

Only five states (California, New Jersey, New York, Rhode Island, and Washington) plus Washington D.C. have explicit paid parental leave (PPL) programs for workers, which allow for leave taking to care for children new to the family by birth, adoption, or foster care placement, and for caregiving for seriously ill family members. California's Paid Family Leave (CA-PFL) program, implemented in July 2004, was the first PPL policy in the United States.[5] Unlike FMLA, there are no minimum working tenure durations, earnings levels, or firm sizes for workers to qualify for CA-PFL benefits. Employees, independent contractors, and self-employed individuals who contribute to the SDI or Disability Insurance Elective Coverage programs are eligible to receive CA-PFL benefits if they are taking time off to care for seriously ill family members or to bond with a new child.

Because we are interested in assessing the long-term impacts of paid leave policies, our empirical analysis focuses on the CA-PFL program, which allows us to assess impacts across twelve post-policy years. One limitation of our study for assessing the potential impact of introducing paid leave where none existed before is that California offers temporary disability insurance (TDI) to pregnant women and new mothers. The policy operates such that when the TDI benefits expire, CA-PFL coverage takes over seamlessly (Ruhm, 2011). This means that we can only estimate the impacts of an extension, rather than introduction, of paid leave for new mothers. However, because California's TDI policy does not impact parental leave for young women and men more generally, our estimates are more likely to capture the full the impacts of an introduction of paid leave for them.

[5] For a summary of state laws, see National Partnership for Women and Families (2020).

Expected Impacts and Existing Research. As noted by Baum and Ruhm (2016) and Das and Polachek (2015), the predicted labor market impacts of introducing a PPL program are ambiguous. On the one hand, PPL may increase employment and earnings by incentivizing protected workers who would have otherwise quit their jobs around the time of a birth or adoption to take leave instead. This would reduce worker turnover and depreciation of earnings premiums associated with firm-specific human capital and good job matches. Alternatively, leave taking may increase the disutility of market work and thus lower employment (Bailey et al., 2019). Because they face different opportunity costs of leave taking, the supply-side responses to PPL laws likely differ among workers with different family characteristics, income, and education levels. As noted by Bana, et al. (2020), high-earning women's careers may be especially sensitive to employment interruptions and more educated women are more likely to be near the PFL maximum benefit thresholds. Stearns (2016) finds that paid leave in the UK reduced the likelihood that high-skilled women held management positions or were promoted during the five years after childbirth, while Hotchkiss, et al. (2017) find that the U.S. motherhood wage penalty is nearly double for college graduates than for mothers with only a high school diploma.

On the demand side, PPL laws raise the cost of hiring potential PPL beneficiaries because the laws increase beneficiaries' probability of leave taking, as well as their length of leave. As a result, firms may reduce their hiring of potential PPL beneficiaries (e.g., women of childbearing age) to avoid incurring these costs.[6] Alternatively, PPL laws may lower hiring and training costs for firms via reductions in job turnover among PPL beneficiaries, particularly in areas where

[6] See, e.g., Gruber (1994) for an example examining the impact of mandatory health insurance coverage for childbirth.

firms face high levels of competition in hiring and keeping the most productive or well-educated employees.[7] The sizes of the demand-side impacts of PPL laws may differ depending on how easily firms can replace workers taking leave, adjust their hiring to reduce PPL-generated costs, or increase the return rate among leave-taking workers, all of which are likely to depend on workers' education levels.

Much of the research investigating the labor market impacts of paid leave has focused on other industrialized countries - which tend to have much longer leave lengths - and on the impacts of leave on new mothers or other women of childbearing age rather than on workers more generally.[8] Findings with regard to employment and wages are somewhat mixed. Several papers find that paid leave is associated with increased employment for mothers, particularly when the leave length is relatively short (Kluve and Schmitz, 2014; Schönberg and Ludsteck, 2014; Gupta, et al., 2008; Ruhm, 1998). Lalive and Zweimuller (2009) find that expanding the length of a paid leave benefit in Australia from one to two years caused mothers' employment to fall in the short term, but not in the longer term. Kluve and Tamm (2013) find that an increase in paid leave benefit levels in Germany reduced mothers' employment in the short term, but increased it in the longer term, while Asai (2015) finds no impact of expansion of paid leave wage replacement levels on employment of mothers in Japan. In varying contexts, Ejrnæs and Kunze (2013), Lalive and Zweimuller (2009), Gupta, et al. (2006, 2008), Lai and Masters (2005), and Zveglich and Rodgers (2003) find that paid leave laws had negative earnings effects, at least in the short term. Ruhm (1998) finds that paid leave of relatively short duration (three

[7] For example, high tech companies including Reddit, Amazon, Microsoft, Netflix, and others offer employees (mothers or fathers) paid parental leave (generally ranging from 16-20 weeks, but can be up to a year at Netflix), adoption assistance, fertility treatments, child care stipends (Lotze, 2019).

[8] Livingston and Thomas (2019) report total weeks of leave across countries. Japan and Austria, for example, allow more than 40 weeks of paid leave.

months or less) had no earnings impacts, but leave benefits of longer length lowered women's wages. Alternately, Dahl, et al. (2016) find that paid leave expansions in Norway had little effect on earnings.

Studies of labor market outcomes in the U.S. have tended to focus on unpaid leave policies, particularly the impacts of the FMLA or state-level laws. These results are also mixed, but generally point to relatively small employment and earnings impacts. For example, Baum (2003b), Waldfogel (1999), and Han, et al. (2009) find no effect of the FMLA on women's employment. Although some specifications in Klerman and Leibowtiz (1997) indicate that state maternity leave mandates improved women's employment, the result is not robust.

The introduction of state-level paid leave policies in California and other states has given rise to a new set of studies examining the impact of paid leave in the U.S. Several studies focus on the impact of the laws on new parents. Baum and Ruhm (2016) and Bartel, et al. (2015) examine the impact of the CA-PFL on leave use among mothers and fathers in the period surrounding a child's birth, finding that the law increased leave taking by parents. Baum and Ruhm (2016) also find that the CA-PFL increased mothers' employment probabilities nine to 12 months after their child's birth, and increased their weeks and hours worked in the child's second year of life. Rossin-Slater, et al. (2013) find that the CA-PFL increased leave taking among mothers of young children, particularly for less educated, unmarried, and nonwhite mothers. Although they found no changes in employment stemming from the law, they did find that it increased hours of work among mothers one to three years after their child's birth. They find suggestive evidence that the law caused mothers who would have quit their jobs to stay in them after using leave (i.e., the law increased job continuity), but their estimates of this impact are not statistically significant. Byker (2016) also focuses on outcomes for mothers following birth of a

child, finding that PPL policies increased labor force attachment for mothers, particularly for those without a bachelor's degree.

Bailey et al. (2019) utilize IRS tax data to evaluate short- and long-term effects of the CA-PFL on women, finding that new mothers who took advantage of the CA-PFL experienced decreased employment and annual wages in both the short and long term. Bailey et al. suggest that these changes come from the supply side (i.e. additional leave may encourage women to invest more in their children and less in their careers), rather than from the demand side. In related work, Golightly (2019) finds that the CA-PFL had a significant, positive impact on women's childbearing, with women who were eligible for leave with their first child being more likely to have a second child.

Like the present study, several papers examine the impact of PPL laws on young women more generally (rather than focusing on mothers), or on young women and young men. Curtis, et al. (2016) use Quarterly Workforce Indicators (QWI) data to examine the impact of the CA-PFL policy on wage offers among new hires and employment flows (i.e., number of new hires, permanent separations, and extended leaves with return to work) for young women. They utilize a triple-difference framework to compare outcomes for young women in CA relative to young men and older women in CA and relative to outcome changes for these groups in states without PPL laws. They find that the CA-PFL generated increased job churn among young women (via increases in hires and separations) but had no impact on young women's net employment or earnings. In unpublished work, Sarin (2016) exploits variation in the job protections provided by the FMLA (which only covers workers at firms with more than 50 employees). Using Census Longitudinal Employer-Household Dynamics data and a triple-difference framework to compare outcomes for young women in large versus small firms relative to their counterparts in other

states, Sarin finds that paid leave policies reduce hiring of child-bearing aged women at large firms by about two percent. Also in unpublished work, Reed and Vandegrift (2016) use county-level QWI employment data to examine the impact of New Jersey's PPL policy on changes in employment for childbearing-aged men and women in New Jersey relative to their counterparts in nearby Pennsylvania counties. They find that the New Jersey PPL law reduced overall employment by about three percent, with impacts that were concentrated among women, younger workers, and workers with a college education or more.

The two papers most similar to ours are Das and Polachek (2015) and Espinola-Arrendondo and Mondal (2010), both of which utilize Current Population Survey (CPS) data and double-, triple-, or quadruple-difference methods to assess the impact of the CA-PFL. Das and Polachek (2015) examine the shorter-term (i.e., five year post-law) impacts of the CA-PFL on labor force participation, unemployment, and average duration of unemployment spells by comparing outcomes by gender and age for California relative to other states before and after CA-PFL was implemented. They find that the CA-PFL increased labor force participation among young women, but also generated increases in young women's probability of unemployment and length of average unemployment spells. They interpret these results as consistent with firms increasing their relative demand for men and older women in response to the PPL policy. In unpublished work, Espinola-Arrendondo and Mondal (2010) also use CPS data and triple-difference methods to examine the impact of the CA-PFL on young women's employment and labor force participation. They find that the policy did not result in significant changes in female labor force participation or employment. They caution, however, that their study utilizes only three post-policy years of data.

We add to the existing literature on the effects of paid leave laws by examining the longer-term, rather than shorter-term, impacts of CA-PFL on young females and males over the dozen years after the CA-PFL was passed, by examining earnings in addition to employment and other labor market outcomes, and by assessing the differential impacts of the policy for workers with different skill levels. We test the robustness of our results to using several alternative sets of comparison states and several alternative sets of treatment and comparison age groups.

III. DATA AND METHODS

We use the Current Population Survey Annual Social and Economic Supplement (ASEC) Integrated Public Use Microdata Series from 1996–2016 for our analysis (Flood, et al., 2015). This time period includes the most recent ASEC data available at the time of our study, includes years before and after the passage of CA-PFL in 2004, and begins two years after the implementation of the Family and Medical Leave Act (FMLA) to avoid confounding the impacts of the state-level policies with those of the FMLA. We eliminate New Jersey, Washington, and Rhode Island from the analyses because they passed PPL policies during our sample period. Because they have TDI programs that provide paid leave, we also exclude New York and Hawaii from the data.

All analyses exclude those who report being self-employed, unpaid family workers, or in the armed forces. As discussed below, we test the robustness of our findings under different assumptions regarding which age groups to assign to the treatment and comparison groups, but all analyses exclude individuals under 18 or over 64 years old.

We utilize both double- and triple-difference methods, which allow us to compare outcomes for young men and women relative to their counterparts in other states, as well as

relative to older men and women in other states and within California. Our preferred estimates are from DDD regressions that allow us to compare outcomes for young people in California relative to their counterparts in other states while simultaneously controlling for differences in outcomes among younger relative to older workers within California.

Descriptive Statistics. Appendix tables A1 through A4 present summary statistics for the variables used in the analysis of labor force participation, employment, unemployment duration, and earnings, respectively. We include means of these variables separately for younger and older males and females in California and other states before and after the passage of the CA-PFL policy, as well as comparisons of means during the pre-treatment period for the two sets of treatment and comparison groups used in our analysis (young in CA versus young in other states; young in CA versus older in CA).

The variables *in labor force* and *employed* are binary indicators for labor force participation and, for those in the labor force, employment status during the CPS reference week. For workers who are unemployed, *weeks unemployed* measures the number of weeks they were unemployed during the calendar year prior to the survey, and for employed workers, *log annual earnings* measures the log of total wa-13.ge and salary income for the calendar year prior to the survey.

Figures 1 through 4 report trends in these outcome variables over time, reported separately for younger and older females and males in California and in other states and after controlling for sociodemographic characteristics of these groups.[9] Panel A of Figure 1 reports

[9] The figures present predicted values from regressions of each outcome variable on the sociodemographic variables age, age squared, three indicators for education level (*high school or less*, *some college*, and *bachelor's degree or higher*), total household income last year, an indicator for U.S. citizenship, indicators for race (*white*, *black*, and *other race*), Hispanic ethnicity, an indicator for marital status (equal to one for currently married individuals with a spouse present or absent, and zero otherwise), an indicator for living in a metropolitan area, the number of children in the household, and an indicator for the presence of children under age five in the household and an indicator for

labor force participation rates (LFPR) from 1996–2016 for younger and older females in California and other states, while Panel B reports these outcomes for males.

As shown in Figure 1, labor force participation among women in California is lower than their counterparts in other states throughout the sample period, consistent with Das and Polachek (2015). The LFPR among young women outside California is relatively flat at about 75 percent for most of the sample period, fell slightly during the great recession, and then grew to near 80 percent afterward. The LFPR for young women in California increased between 1996 and 2007, fell relatively more than in other states during the recession, and then trended more sharply upward afterward, narrowing the gap in LFP relative to young women outside California. The LFPR among older women trended similarly their counterparts throughout most of the period and also fell more starkly during the great recession. The trends in labor force participation for men (shown in Panel B) are generally similar for men inside and outside of California throughout the sample period, with the exception the young male LFP in California fell more during the great recession than it did in other states.

Figure 2 presents trends in employment. The trends for older and younger females inside and outside California are generally similar until 2009, when employment among women in California fell more sharply than among their peers in other states during the recession but also rebounded more sharply afterward. Panel B of Figure 2 indicates generally parallel trends in employment among males inside and outside California. As in Panel A, males in California experienced larger swings in employment stemming from the recession and the subsequent recovery.

California. Earnings figures also include controls for weeks and hours worked, industry, occupation, and firm size. Figures that report trends in the raw means of these outcomes are in the appendix.

Panels A and B in Figure 3 indicate that unemployment duration tends to be higher in California than in other states, and is higher among older individuals. Unemployment duration increases for all groups during the great recession, but appears to increase by relatively more in California than in other states, particularly for young men and women.

Figure 4 presents trends in earnings. The earnings of women in California are generally higher than their peers in other states, but they exhibit similar upward trends across the pre-recession period. In the post-recession period, the gap in earnings for women inside and outside California narrowed, and earnings were generally similar to those of women outside California by 2016. The trends in earnings among older and younger males in California largely match those of their counterparts outside California over the sample period with the exception that wages for young men in California had a steeper positive trend in the pre-recession period.

Empirical Methods. We first present estimates of the impact of the CA-PFL using a difference-in-difference (DD) approach that allows us to (1) compare changes in outcomes for young women and men in California before and after the law was passed to similar changes for their counterparts in other states and (2) compare pre- and post-law changes in outcomes for young women and men in California relative to their older counterparts in California. Equations (1) and (2) present our DD equations for estimating the impact of the CA-PFL on individuals in California relative to their counterparts in other states (equation (1)), or on younger relative to older individuals in California (equation (2)).

$$(1)\quad Y_{ijt} = \beta_0 + \beta_1 (PPL_j * Post_t) + \gamma_1 X_i + \theta_1 S_j + \theta_2 T_t + e_{ijt}$$

$$(2)\quad Y_{ijt} = \beta_0 + \beta_1 (Treat_i * Post_t) + \beta_2 Treat_i + \gamma_1 X_i + \theta_1 T_t + e_{ijt}$$

The variable Y_{ijt} alternately denotes labor force participation, employment (for those in the labor force), unemployment duration, or earnings for individual *i*, in state *j*, at time *t*.[10] The variable PPL_j is equal to one for all observations in California in all years, while $Treat_i$ is equal to one for individuals in the treated age group (ages 18–34 in our baseline specification) and zero for those in the comparison age group (ages 50–64 in our baseline specification), and $Post_t$ is equal to one for all observations in years after the CA-PFL was implemented.[11] The vectors S_j and T_t represent state and year fixed effects. In some of our DD specifications, we also include state-specific time trends (when estimating equation (1)) or group-specific time trends (when estimating equation (2)). Because equation (1) involves the comparison of California to other states and the CA-PFL is a state-level policy, the standard errors are clustered at the state level. Because equation (2) involves the comparison of different groups within California, the standard errors are clustered at the age group level.[12]

The vector X_i includes the individual-level sociodemographic characteristics described above. In the earnings regressions, X_i also includes controls for weeks worked per year, hours worked per week, occupation (indicators for 10 occupation categories), industry (indicators for 12 industry categories), and firm size (indicators for firms with less than 10 employees, firms

[10] All models were estimated using OLS.

[11] The CA-PFL law was implemented in July 2004. The CPS ASEC survey is conducted in March of each year. The survey includes data on current labor force participation and employment, but prior year earnings and unemployment duration. Thus, individuals surveyed about employment and labor force participation in 2004 were not yet subject to the CA-PFL policy, so for these outcomes, *PPL* is one beginning in 2005. However, individuals surveyed in March 2005 were subject to the CA-PFL for half of the year covered by the earnings and unemployment duration questions utilized in the analysis. To deal with this issue, we set *PPL* equal to one beginning in 2006 and exclude observations in 2005 from these regressions.

[12] We also report standard errors clustered at the year level for the DDW regressions.

with 10 to 99 employees, firms with 100 to 499 employees, and firms with 1000 or more employees, using firms with 500 to 999 employees as the omitted category).[13]

The specification in equation (1) allows us to estimate differences-in-differences in outcomes across states for young women (men) in California relative to young women (men) in other states before and after the CA-PFL was passed, while controlling for time-invariant differences in outcomes across states (S_j), for changes in outcomes across time that are common to all states (T_t), and for time-invariant differences in outcomes for those in California relative to other states (PPL_j). Equation (1) also allows us to estimate separate impacts of the CA-PFL on the relative outcomes for older workers in California compared to their counterparts in other states.

Equation (2) allows us to estimate changes in outcomes for young women (men) in California relative to older women (men) within California before and after the CA-PFL was passed, while controlling for time-invariant differences in outcomes between older and younger workers ($Treat_i$) and for changes in outcomes across time in California.[14]

Because the CA-PFL can also impact labor market outcomes for older workers (e.g., via their own leave taking or via employer substitution toward older workers who are less likely to take parental leave), our preferred estimates utilize triple-difference (DDD) methods.[15] This allows

[13] We also estimate the earnings regressions separately for full-time workers, as they have may greater ability to qualify for job protected PPL under the FMLA than part-time workers. The estimates (available from the authors), are similar to our baseline results.

[14] Because equation (2) involves comparisons among workers *within* California, it also addresses the concern that states that pass PPL may be different from other states in ways that may also affect economic outcomes (e.g., they may pass relatively progressive employment laws). We also address this concern in Section V using estimates that compare outcomes in California to those in NY and WA, states that implemented PPL laws after the end of our sample period.

[15] For example, Bana, et al. (2018) examine trends in leave taking across different earnings, age, and industry groups in California and find that those who used CA-PFL to care for ill family members were more likely to be older. However, utilization of CA-PFL for caring leave is much less common than the utilization of CA-PFL to bond with a new child. (e.g., there were 173,664 (18,548) bonding (caring) leave claims in 2017).

us to examine the impact of CA-PFL on young women (men) in CA before and after the laws were passed, while controlling for changes in labor market outcomes for young women (men) in control states over the same time period, and for similar differences in changes in outcomes for older individuals in treatment and control states, as in equation (3).

$$(3)\quad Y_{ijt} = \beta_0 + \beta_1 (PPL_j{*}Treat_i{*}Post_t) + \beta_2 Treat_i + \beta_3(PPL_j{*}Treat_i) + \beta_4 (Treat_i{*}Post_t) + \gamma_1 X_i + \theta_1 S_j + \theta_2 T_t + \theta_3(S_j{*}T_t) + e_{ijt}$$

As in the earlier equations, Y_{ijt} represents the outcome for individual *i*, in state *j*, at time *t*, PPL_j is one for all observations in California in all years, $Post_t$ is one for all observations in years after the CA-PFL was implemented, and $Treat_i$ is one for young women (men). The vectors S_j and T_t again represent state and year fixed effects, while $S_j{*}T_t$ represent state-year interactions that control for state-by-year changes common to all groups in the state while still allowing for identification of the impact of the CA-PFL on young women and men. The coefficient of interest is β_1, which estimates the effect of paid leave on young women's (men's) outcomes across time in California, while also controlling for changes in their outcomes in states that did not pass PPL laws and for changes in outcomes across time for older individuals in California and in states that did not pass paid leave laws.

Our baseline estimates define young women and men as those ages18–34 and older women and men as those ages 50–64 and compare outcomes in California to outcomes in all other states. We report results using alternate definitions of young and older, and alternate groups of

comparison states in Section V.[16] The results of these alternate specifications are generally similar to the baseline.

Effects across time and by education level. To estimate potential dynamic impacts of the CA-PFL law over time, we modify equation (3) by replacing the *Post* variable with indicators for each successive two-year period after the CA-PFL law was passed.[17] Finally, because differences in labor force attachment, the costs and benefits of leave taking, and the availability of substitute workers may generate different impacts of paid leave for individuals with more versus less education, we also estimate equation (3) separately for three education groups: those with a high school diploma or less, those with some college, and those with a bachelor's degree or more education.

IV. EMPIRICAL RESULTS

Labor Force Participation. Table 1 presents difference-in-difference estimates of the impact of the CA-PFL across-states (DDA) for females (males) in California relative to their counterparts in other states (equation (1)), while Table 2 reports within-state difference-in-difference (DDW) estimates of the impact of the CA-PFL for young females (males) in California relative to their older counterparts (equation (2)). The estimates in columns 1 and 4 of the tables include state and year fixed effects, while those in columns 2–3 and 5–6 include state- or group-specific linear and quadratic time trends.[18]

[16] In particular, we utilize four definitions of young and older: 18-34 v. 50-64 (the baseline), 18-34 v. 35-64, 19-39 v. 40-64, and 25-34 v. 50-64. We also use four definitions of comparison states: neighboring states to California, large states (FL, TX, IL, PA), and synthetic control states. Finally, in some specifications we compare outcomes in California to those in Washington, which passed PFL in 2007, and to New York, which passed PFL in 2016.

[17] See Wolfers (2006) for an example of this approach for estimating dynamic impacts of no-fault divorce laws.

[18] We include state-specific trends in the DDA estimates (which compare California to other states), and group-specific trends in the DDW estimates (which compare younger to older individuals within California). We also

After controlling for state-specific quadratic or higher-order time trends, the estimates indicate that relative to their counterparts in other states, young females in California had lower rates of labor force participation after the CA-PFL was passed. The DDW estimates in Table 2 are consistent with the DDA estimates, indicating that, compared to their older counterparts, young females in California experienced lower labor force participation after the CA-PFL was passed. The DDA estimates do not indicate an effect of the CA-PFL on labor force participation among young (older) males in California relative to those other states, while the DDW estimates suggest that the law generated a decline in the labor force participation of young relative to older males in California.

Employment. The DDA estimates are indicative of a positive impact of the law on employment of both younger and older women in California relative to their counterparts in other states. For younger (older) women, the estimates suggest that the CA-PFL was associated with 1 (2) percentage point higher rates of employment among women in California relative to women in other states. As with the labor force participation effects, the DDW estimates indicate that the law generated negative employment effects for young relative to older women in California, consistent with employer substitution toward those less likely to take up paid leave. Neither the DDA nor the DDW estimates indicate a consistent impact of the CA-PFL for males.

Weeks Unemployed. The DDA estimates in columns 1–3 of Table 1 indicate that the CA-PFL generated a 0.5–3 week relative reduction in the relative unemployment duration of unemployed young women in California. The estimates in columns 4–6 indicate that the CA-PFL also generated a reduction in weeks unemployed among older women in California compared to

estimated the models while including state-specific cubic and quartic time trends. The estimated coefficients (available from the authors) are generally similar to those obtained when we included quadratic time trends.

older women in other states, with estimated impacts ranging from 2–7 fewer weeks unemployed. The DDW estimates indicate that the CA-PFL generated relatively longer spells of unemployment among younger than among older women. The larger negative DDA estimates for older women combined with the negative DDW estimates for younger women are consistent with the CA-PFL generating substitution toward older relative to younger women workers in California As with the employment results, neither the DDA nor DDW estimates indicate a consistently significant impact of the CA-PFL on unemployment duration among males.

Earnings. The DDA estimates in Table 1 suggest that the CA-PFL increased the earnings of older women and younger men in California relative to their peers in other states, but do not indicate a consistent impact of the CA-PFL on the relative earnings of young women or older men in California compared to young women or older men in other states. The DDW estimates consistently indicate that the CA-PFL was associated with a decline in the relative earnings of young women and men compared to their older counterparts in California.[19]

In sum, the difference-in-difference estimates suggest that the CA-PFL impacted labor market outcomes for younger and older women in California, both relative to their counterparts in other states and relative to one another. The estimates are generally indicative of a relative substitution toward older female workers as a result of the law, with the strongest estimated impacts on young women's relative employment, unemployment duration, and earnings. These findings are consistent with those of Bailey et al. (2019), Das and Polachek (2015), Sarin (2016), and Reed and Vandegrift (2016), all of whom find that the CA-PFL had negative impacts on labor market outcomes for young mothers or women of child-bearing age. As discussed

[19] For young women (men), the estimated coefficient of -0.029 (-0.046) in the DDW earnings regression translates to a roughly $482 ($945) based on their pre-treatment mean earnings of $16,647 ($20,537).

previously, these results may be driven by both demand and supply, with employers substituting towards employees who are less likely to take paid family leave (Das and Polachek, 2015), and employees who have access to leave being more likely to invest more heavily in children versus work (Bailey et al., 2019; Golightly, 2019).

Triple Difference Estimates. Because the DD estimates indicate that the CA-PFL impacted labor market outcomes for workers in California relative to their counterparts in other states, and for young workers relative to older workers within California, our preferred estimates utilize a triple-difference (DDD) model. The DDD model allows us to estimate impacts of the CA-PFL on young women and men in California before and after the law was passed while controlling for both changes in labor market outcomes for young women and men outside California, and for changes in outcomes for older women and men inside and outside California over time.[20]

Our baseline estimates of β_1 from equation 3 are presented in Table 3.[21] The estimates for females indicate that the CA-PFL was associated with lower average rates of relative employment among young females in the post-law period, but no average impact on their the labor force participation, weeks unemployed, or annual earnings. For males, the estimates indicate that the CA-PFL was associated with a small (0.8 week) reduction in the length of their unemployment spells.[22]

[20] We estimate the DDD model using alternative groups of comparison states (neighbor states to CA, other large states, and a set of synthetic control states) in Table A7. We also estimated the model while adding an indicator for the great recession (results available from the authors). The results are similar to the baseline.

[21] The estimated coefficients for the other variables included in this regression are reported in Appendix Table A5.

[22] Our baseline DDD estimates report standard errors clustered at the state level. Given the relatively small number of clusters (states) in the model, we also estimated wild cluster bootstrapped standard errors (Cameron and Miller, 2015). These (available from the authors) do not generate differences in the statistical significance of the coefficient estimates.

Impacts Over Time. Table 4 expands on the baseline DDD results to estimate the impact of CA-PFL over time by including separate interactions to capture the impact of the law across two-year post-law intervals. Because the law is likely to have had different impacts across time as workers and employers adjust, this approach can capture the dynamic responses to the CA-PFL. The estimates continue to indicate that the law had no statistically significant impacts on young women's labor force participation. The estimates imply conflicting impacts for young men, raising their labor force participation 3-6 years after the law passed but reducing it after nine years.

Consistent with the DDW and baseline DDD estimates, the estimates in Table 4 indicate that CA-PFL appears to generate a roughly one percentage point decline in young women's relative employment, an impact that persists over the long term. Although the negative impact of the law becomes smaller over time, young women's relative employment was lower for at least nine years after the CA-PFL law was passed. This does not appear to be the case for young males, for whom the DDD employment estimates are generally insignificant.

The estimates indicate that the law was associated with 3.7 more weeks unemployed for young women in California during the years immediately after the law's passage, but had no consistent significant impact after four years.[23] The also law appears to have reduced the number of weeks unemployed for males, particularly 5-8 years after the law passed. The estimates indicate no consistent long term effect of the law on young men's or women's earnings.

Thus, the dynamic DDD estimates indicate that the CA-PFL generated no lasting impacts on the relative labor force participation, unemployment duration, or earnings of young women in

[23] This is consistent with Das and Polachek (2015), who examine the impact of the CA-PFL through 2009 and find that the law increased young women's unemployment duration by 1.5 weeks.

California. Consistent with the results from the DD models, the DDD estimates indicate a persistent negative effect of the laws on the relative employment of young women.

Impacts By Education Level. As noted above, differences in labor force attachment, costs of leave taking, and employers' ability to adjust to workers' leave taking imply that the CA-PFL could impact individuals differently depending on their educational attainment. Table 5 presents DDD estimates of the impacts of the law estimated separately for groups with different levels of educational attainment. The estimates indicate that the small and statistically insignificant estimated impact of the PPL on female labor force participation in general masks differential impacts of the law among those with and without a bachelor's degree. The law is associated with a two-percentage point reduction in relative labor force participation among young women with at least a bachelor's degree, a one-percentage point average increase in labor force participation among young women with some college education, but had no impact on the relative labor force participation among young women with a high school diploma or less. The estimates indicate that the CA-PFL generated a roughly 1.2 percentage point decline in labor force participation among young males with only some college, but did not impact the labor force participation of other males.

In terms of employment, the estimates indicate that the negative employment effect of the CA-PFL for young women is concentrated among young women with at least a bachelor's degree, reducing their employment rate by about 2 percentage points during the post-law period. The law also generated a reduction in employment among less-educated young men, reducing their employment by an average of 1.1 percentage points over the post-law period. Alternatively, the law caused an increase in employment among young men with some college (by 0.6

percentage points) and among young men with at least a bachelor's degree (by 1.4 percentage points).

The estimates indicate no impact of the CA-PFL on the relative unemployment duration among young women without a college degree, but a positive impact on unemployment duration among those with a bachelor's degree or more, raising their unemployment duration by roughly 2 weeks. The law did not significantly impact unemployment duration among men with more than a high school education, but reduced the unemployment duration among young men with a high school diploma or less by about one week.

In terms of relative earnings, the law is associated with higher relative earnings among young men and women with some college, although the estimate for women is significant at only the 0.10 level. The law reduced the relative earnings of less educated young men by 3.8 percent, or about $700 relative to their mean earnings. The law does not appear to have impacted the relative earnings of young men and women with college degrees.

Table 6 presents estimates of the dynamic impact of the CA-PFL policy across educational groups. The estimates continue to indicate a consistent negative impact of the CA-PFL over time on labor force participation and employment among young women with at least a bachelor's degree, reducing their labor force participation by 2.2 points and their employment by 1 percentage point a decade after the law was passed.

The estimates also indicate that the positive impact of the CA-PFL on unemployment duration among young women with a bachelor's degree is relatively short-lived, with no significant impact of the law after four years. The law appears to have boosted the labor force participation and earnings among young women with some college education, but for less educated women, the estimates indicate no consistent impact of the CA-PFL on labor force

participation, employment, unemployment duration, or earnings. The estimates indicate that the CA-PFL generated longer-term increases in employment among young males with a bachelor's degree or more, but reductions in earnings among the least educated males.

Overall, the estimates are generally consistent with the law reducing the labor force participation and employment of highly educated young women for at least a decade after the law was passed, findings which are consistent with those of Reed and Vandegrift (2016). The law does not appear to have had a consistent long-term effect on the labor market outcomes of less educated young women. For young men, the estimates indicate that the law increased employment among the most educated, but reduced earnings of the least educated over the long term.

V. ROBUSTNESS

We examine the robustness of our DDD estimates across several dimensions. Overall, these sensitivity tests demonstrate the robustness of our baseline results to alternate choices of treatment and comparison group ages and to alternative comparison states.

Alternative Treatment and Comparison Group Ages. We utilize several alternate definitions of the treatment and comparison groups in our analysis. In the baseline specification, we define $Treat_i$ to include individuals ages 18–34 as this represents ages of peak female fertility and thus includes individuals most likely to utilize paid parental leave. We also exclude those ages 35–49 from the baseline sample to avoid potential contamination of the treatment group by

women in their late 30s through 40s.[24] Thus, our baseline specification compares outcomes across time for women (men) ages 18–34 relative to those for women (men) ages 50–64.

To test for the sensitivity of our baseline treatment group definition, we estimate the models using three alternate definitions of $Treat_i$. First, we alter the treatment and comparison groups to compare outcomes for those under 35 relative to those 35 and over. Second, we alter the treatment and comparison groups to compare outcomes for those under 40 to those ages 40 and over. Third, we utilize the baseline treatment and comparison group ages, but exclude individuals under age 25 from the sample as they may be less likely to utilize paid parental leave benefits.[25] The results of our baseline regression for these different treatment group specifications are presented in Table A6. Columns 1 and 5 report the baseline estimates presented earlier, while columns 2–4 and 6–8 present estimates when we use the different treatment and comparison age groups. The estimated impact of the CA-PFL using alternative treatment and comparison group ages results are generally consistent with the baseline estimates.

Alternative Comparison States. Our baseline sample uses all other states as a comparison group for California.[26] We test the robustness of our estimates to this choice by utilizing several alternative comparison state configurations, with results presented in Table A7. First, we use neighboring states to California as the comparison states, which assumes that neighboring states have generally similar populations and labor markets and thus represent reasonable

[24] Curtis, et al (2016) define their treatment group of young women as those ages 19-34 versus a comparison group of women 35-99; Espinola-Arrendondo and Mondal (2010) compare young women ages 19-45 against women 46-60; Das and Polachek (2015) compare women ages 18-41 against women ages 42-65; Sarin (2016) compares young women aged 14-45 to those aged 46-99; and Reed and Vandegrift (2016) estimate effects for those ages 19-44 relative to those of all other ages.

[25] The average age of mothers in the U.S. at the time of their first birth was 26.4 in 2015 (Central Intelligence Agency, 2015).

[26] Recall that our sample always excludes New Jersey, Washington, Rhode Island, New York, and Hawaii because they also had or passed paid leave or TDI policies during our sample period.

counterfactuals for what would have happened to individuals in California absent the policy change. Second, paralleling the work of Rossin-Slater, et al. (2013) and Byker (2016), who use Texas, New York, and Florida as comparators since these are the three largest states behind California, we include Texas, Florida, Illinois, and Pennsylvania as alternate "large" comparison states (recall that New York is excluded from our sample because it had a TDI law in place during our study period). Third, we use a set of synthetic control states following the method of Abadie, et al. (2010, 2015). The results are again generally consistent with the baseline estimates in indicating that the law had a negative impact on the relative employment of younger females but no consistent impact on their average rates of labor force participation, unemployment duration, or annual earnings.

We also examined the sensitivity of our results to our choice of comparison states by estimating our baseline regressions while using New York and Washington as comparison states. Washington enacted a PFL policy in 2007 but did not implement it until 2020.[27] New York passed a PFL policy in 2016 that became effective in 2018. Because both of these states eventually implemented PFL policies but did not yet have them during our sample period, they represent reasonable counterfactuals to California. Washington is geographically proximate to California and is also a growing West Coast state, while New York is a large state with similar political leanings to California.

The resulting estimates are presented in Table A8. For females, the estimates indicate larger negative employment effects than those in the baseline. The point estimates are consistently positive (negative) for labor force participation (earnings), and are also larger and

[27] The Washington legislature authorized PFL in 2007, but never funded the program. They passed another PFL policy in 2017 that began paying benefits in 2020. Table A8 reports estimates while limiting the sample to pre-2007. Estimates that use data through 2016 are generally similar, and available from the authors.

more highly significant than the baseline. For males, the counterfactual estimates indicate positive labor force participation and negative earnings effects relative to the baseline. Taken together, the estimates that utilize alternative comparison states are consistent with the baseline estimates in indicating negative impacts of the CA-PFL on young women's employment.

Parallel Trends. Although Figures 1-4 show that once we control for differences in sociodemographic characteristics, the trends in outcomes are generally similar for young (older) women (men) inside and outside of California before the CA-PFL was implemented. To more formally examine whether preexisting differences between women and men inside and outside California are driving our results, Table A8 reports estimates of equation (3) while also including the variables *PPL*Treat*3-4 years pre* and *PPL*Treat*1-2 years pre* to control for pre-treatment differences in the treatment and comparison groups. The estimates indicate that there are systematic differences in labor force participation and earnings for young women and men during the pre-treatment period, which suggests that our estimated impacts CA-PFL on those outcomes may be suspect. However, there are no systematic pre-treatment differences in employment or weeks unemployed, which implies that the employment results in the baseline and other models are not likely the result of preexisting differences across these groups.

Placebo Regressions. Following Das and Polachek (2015), we conduct placebo tests by re-estimating the DDD regressions while replacing California as the treatment state with each of the other states in turn (and while defining the post-law period as before). Histograms of the estimated coefficients from these regressions are presented in appendix Figures A4-A8. Although some states behave similarly to California in some of the regressions (e.g., 13 states has negative and statistically significant coefficients on *PPL*Treat*Post* in the female employment regression), in no case does a state behave comparably to California in its estimated

coefficients from the labor force participation, employment, weeks unemployed, and log annual earnings regressions. That the effects that we find for California are highly unique increases our confidence in their validity.

VI. CONCLUSION

Paid parental and family leave is an issue gaining increasing attention among policymakers and others in the United States. Although research has found positive impacts of paid leave policies on leave taking and labor force attachment among parents, as well as on parent-child bonding and children's health, other work has found that the laws may have potentially unintended impacts on young women's labor market outcomes. Our results are consistent with the latter, suggesting that young women's relative employment fell by roughly one percentage point in California because of the CA-PFL. The impact appears concentrated among college-educated women, for whom the negative employment impact of the law persists even a decade after its passage. We do not find robust evidence consistent with impacts of the CA-PFL on the relative labor force participation, employment, unemployment duration, or earnings of young women with low levels of education. Our estimates indicate that the law also generated reductions in relative earnings among less educated young males and increases in relative employment among young college-educated males in California. The increase in relative employment among college-educated males and reduction in relative employment among college educated young females is consistent with paid leave generating substitution toward employees less likely to take paid leave.

VII. REFERENCES

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Table 1: Difference-in-Difference Estimates: California v. All States

Panel A: Females						
	Young Females			Older Females		
In Labor Force						
*PPL*Post*	0.005*	0.000	-0.025***	0.000	0.001	0.014
	(0.003)	(0.004)	(0.008)	(0.005)	(0.005)	(0.010)
Number of Observations	312,834	312,834	312,834	280,533	280,533	280,533
R-squared	0.126	0.126	0.126	0.123	0.123	0.123
Employed						
*PPL*Post*	-0.003	0.006**	0.011**	0.003	0.014***	0.024***
	(0.002)	(0.002)	(0.005)	(0.002)	(0.002)	(0.007)
Number of Observations	217,997	217,997	217,997	160,957	160,957	160,957
R-squared	0.062	0.062	0.062	0.018	0.018	0.019
Weeks Unemployed						
*PPL*Post*	-0.501*	-0.894	-3.012*	-2.110***	-5.070***	-7.609***
	(0.285)	(0.743)	(1.685)	(0.693)	(0.922)	(1.607)
Number of Observations	26,780	26,780	26,780	10,433	10,433	10,433
R-squared	0.078	0.079	0.081	0.048	0.052	0.056
Log Annual Earnings						
*PPL*Post*	-0.015***	0.031***	0.029	-0.001	0.048***	0.039*
	(0.005)	(0.009)	(0.024)	(0.010)	(0.009)	(0.023)
Number of Observations	189,829	189,829	189,829	146,143	146,143	146,143
R-squared	0.671	0.671	0.671	0.619	0.620	0.620
Panel B: Males						
	Young Males			Older Males		
In Labor Force						
*PPL*Post*	0.001	0.010***	-0.001	-0.005**	-0.001	0.006
	(0.002)	(0.003)	(0.008)	(0.002)	(0.005)	(0.011)
Number of Observations	289,208	289,208	289,208	264,570	264,570	264,570
R-squared	0.064	0.064	0.064	0.169	0.169	0.170
Employed						
*PPL*Post*	0.005***	0.000	-0.002	0.002	0.005**	0.009
	(0.002)	(0.002)	(0.006)	(0.001)	(0.002)	(0.005)
Number of Observations	243,869	243,869	243,869	164,653	164,653	164,653
R-squared	0.075	0.076	0.076	0.031	0.031	0.031
Weeks Unemployed						
*PPL*Post*	-0.655***	-1.239*	-0.058	0.513*	-1.170*	-1.144
	(0.221)	(0.663)	(1.251)	(0.268)	(0.592)	(1.839)
Number of Observations	34,489	34,489	34,489	14,117	14,117	14,117
R-squared	0.081	0.082	0.084	0.054	0.058	0.060
Log Annual Earnings						
*PPL*Post*	-0.001	0.068***	0.106***	-0.028*	0.049***	-0.003
	(0.006)	(0.010)	(0.025)	(0.015)	(0.011)	(0.023)
Number of Observations	209,041	209,041	209,041	147,260	147,260	147,260
R-squared	0.647	0.648	0.648	0.645	0.646	0.646
State and Year Fixed Effects	Y	Y	Y	Y	Y	Y
State Linear Time Trend	N	Y	N	N	Y	N
State Quadratic Time Trend	N	N	Y	N	N	Y

Note: Table reports estimated coefficients for β_1 in equation (1). *PPL* = 1 for California in all years; *Post* = 1 for years after the CA-PFL was implemented. All regressions also include state and year fixed effects and demographic controls (age, age squared, education, U.S. citizenship, Hispanic, white, black, married, the presence of any children under 5 in the household, metro status, and measures of family size and the number of own children in the household). Earnings regressions also include indicators for occupation, industry, and firm size, usual hours worked per week and weeks worked last year. Standard errors are reported immediately below the coefficients and are clustered at the state level. *** = significant at the 0.01 level; ** = significant at the 0.05 level; * = significant at the 0.10 level.

Table 2: Difference-in-Difference Estimates: Younger v. Older in California

	Females			Males		
In Labor Force						
*Treat*Post*	-0.050*	-0.011	-0.026**	-0.030**	0.006	-0.010**
	(0.006)	(0.003)	(0.001)	(0.002)	(0.001)	(0.000)
	[0.008][a]	[0.010]	[0.011]	[0.008]	[0.013]	[0.013]
Number of Observations	62,182	62,182	62,182	59,836	59,836	59,836
R-squared	0.138	0.138	0.138	0.119	0.120	0.120
Employed						
*Treat*Post*	-0.012**	-0.010***	-0.012***	-0.013*	-0.009	-0.002
	(0.001)	(0.000)	(0.000)	(0.002)	(0.004)	(0.002)
	[0.004]	[0.007]	[0.007]	[0.004]	[0.010]	[0.009]
Number of Observations	36,861	36,861	36,861	44,369	44,369	44,369
R-squared	0.045	0.045	0.045	0.051	0.051	0.051
Weeks Unemployed						
*Treat*Post*	0.173	2.777***	2.204***	0.190	-0.348**	-0.682
	(0.113)	(0.034)	(0.022)	(0.111)	(0.021)	(0.130)
	[0.694]	[1.583]	[1.416]	[0.872]	[2.228]	[2.299]
Number of Observations	4,124	4,124	4,124	5,955	5,955	5,955
R-squared	0.053	0.054	0.054	0.066	0.066	0.066
Log Annual Earnings						
*Treat*Post*	-0.038	-0.012**	-0.029**	-0.006	-0.022**	-0.046**
	(0.007)	(0.001)	(0.002)	(0.004)	(0.001)	(0.001)
	[0.011]	[0.019]	[0.014]	[0.021]	[0.036]	[0.047]
Number of Observations	32,164	32,164	32,164	38,221	38,221	38,221
R-squared	0.666	0.666	0.666	0.683	0.683	0.683
Year and Group Fixed Effects	Y	Y	Y	Y	Y	Y
Group-Specific Linear Time Trend	N	Y	N	N	Y	N
Group-Specific Quadratic Time Trend	N	N	Y	N	N	Y

Note: Table reports estimated coefficients for β_1 in equation (2). *Treat* = 1 for ages 18-34 and = 0 for ages 50-64 (ages 35-49 are excluded from this sample); *Post* = 1 for years after the CA-PFL was implemented. All regressions also include indicators for *Treat,* year fixed effects, and demographic and other controls (age, age squared, education, U.S. citizenship, Hispanic, white, black, married, the presence of any children under 5 in the household, metro status, and measures of family size and the number of own children in the household). Earnings regressions also include indicators for occupation, industry, and firm size, usual hours worked per week and weeks worked last year. Standard errors are reported immediately below the coefficients and are clustered at the year level. *** = significant at the 0.01 level; ** = significant at the 0.05 level; * = significant at the 0.10 level.

[a] Brackets report standard errors clustered at the year rather than group level.

Table 3: Baseline DDD Estimates: Impacts of Paid Leave on Labor Market Outcomes

Panel A: Females	In Labor Force	Employed	Weeks Unemployed	Log Annual Earnings
*PPL*Treat*Post*	0.001	-0.008***	-0.055	-0.005
	(0.004)	(0.002)	(0.357)	(0.005)
Number of Observations	593,367	378,954	37,213	335,972
R-squared	0.129	0.049	0.087	0.660
Panel B: Males				
*PPL*Treat*Post*	0.000	-0.001	-0.775***	0.002
	(0.003)	(0.002)	(0.249)	(0.005)
Number of Observations	553,778	408,522	48,606	356,301
R-squared	0.154	0.062	0.088	0.675

Note: Table reports estimated coefficients for β_1 in equation (3). *PPL* = 1 for California in all years; *Treat* = 1 for ages 18-34 and = 0 for ages 50-64 (ages 35-49 are excluded from this sample); *Post* = 1 for all years post CA-PFL implementation. All regressions also include indicators for *Treat, PPL*Treat, PPL*Post, Treat*Post*, state, year, state-by-year fixed effects, and demographic controls (age, age squared, education, U.S. citizenship, Hispanic, white, black, married, the presence of any children under 5 in the household, metro status, and measures of family size and the number of own children in the household). Earnings regressions also include indicators for occupation, industry, and firm size, usual hours worked per week and weeks worked last year. Standard errors are reported immediately below the coefficients and are clustered at the state level. *** = significant at the 0.01 level; ** = significant at the 0.05 level; * = significant at the 0.10 level.

Table 4: Impacts of Paid Leave Laws Over Time				
Panel A: Females	In Labor Force	Employed	Weeks Unemployed	Log Annual Earnings
*PPL*Treat*1-2 years post*	0.001	-0.007***	3.763***	-0.007
	(0.005)	(0.003)	(0.617)	(0.006)
*PPL*Treat*3-4 years post*	0.003	-0.011***	0.838	0.007
	(0.006)	(0.002)	(0.559)	(0.008)
*PPL*Treat*5-6 years post*	0.021***	-0.009***	-1.390**	-0.024***
	(0.005)	(0.003)	(0.522)	(0.007)
*PPL*Treat*7-8 years post*	0.001	-0.005	-0.441	0.003
	(0.005)	(0.003)	(0.589)	(0.008)
*PPL*Treat*9 or more years post*	-0.007	-0.006**	-0.616	-0.003
	(0.004)	(0.003)	(0.524)	(0.008)
Number of Observations	593,367	378,954	37,213	335,972
R-squared	0.129	0.049	0.088	0.661
Panel B: Males				
*PPL*Treat*1-2 years post*	0.002	-0.003	-0.815**	0.018**
	(0.004)	(0.003)	(0.403)	(0.008)
*PPL*Treat*3-4 years post*	0.012**	-0.005*	-0.133	-0.027***
	(0.005)	(0.003)	(0.408)	(0.006)
*PPL*Treat*5-6 years post*	0.015***	-0.006	-1.085***	-0.018**
	(0.004)	(0.005)	(0.319)	(0.008)
*PPL*Treat*7-8 years post*	-0.003	0.005	-1.654***	0.021***
	(0.003)	(0.004)	(0.440)	(0.007)
*PPL*Treat*9 or more years post*	-0.011**	0.002	-0.253	0.011
	(0.004)	(0.003)	(0.494)	(0.008)
Number of Observations	553,778	408,522	48,606	356,301
R-squared	0.155	0.062	0.088	0.675

Note: Table reports estimated coefficients for equation (3), modified to also include years post interactions. All regressions also include indicators for Treat, PPL*Treat, PPL*Post, Treat*Post, interactions of each of those variables and the years post variables, state, year, state-by-year fixed effects, and demographic controls (age, age squared, education, U.S. citizenship, Hispanic, white, black, married, the presence of any children under 5 in the household, metro status, and measures of family size and the number of own children in the household). Earnings regressions also include indicators for occupation, industry, and firm size, usual hours worked per week and weeks worked last year. Standard errors are reported immediately below the coefficients and are clustered at the state level. *** = significant at the 0.01 level; ** = significant at the 0.05 level; * = significant at the 0.10 level.

Table 5: Impacts of Paid Leave Laws by Education Level

	In Labor Force			Employed			Weeks Unemployed			Log Annual Earnings		
Panel A: Females	HS or Less	Some College	BA or More	HS or Less	Some College	BA or More	HS or Less	Some College	BA or More	HS or Less	Some College	BA or More
*PPL*Treat*Post*	0.009	0.012**	-0.024***	-0.001	0.001	-0.019***	-0.450	-1.118	2.101**	-0.008	0.017*	-0.006
	(0.005)	(0.005)	(0.007)	(0.003)	(0.003)	(0.002)	(0.499)	(0.690)	(0.920)	(0.008)	(0.009)	(0.010)
Number of Observations	264,859	169,987	158,521	146,737	115,158	117,059	18,545	11,214	7,454	125,214	102,807	107,951
R-squared	0.111	0.092	0.110	0.065	0.034	0.020	0.096	0.148	0.193	0.630	0.622	0.600
Panel B: Males												
*PPL*Treat*Post*	-0.006	-0.012***	0.006	-0.011***	0.006*	0.014***	-1.132***	0.254	-1.027	-0.038***	0.026***	-0.014
	(0.005)	(0.004)	(0.003)	(0.004)	(0.003)	(0.002)	(0.354)	(0.567)	(0.861)	(0.007)	(0.009)	(0.009)
Number of Observations	266,927	141,146	145,705	190,735	106,001	111,786	29,614	11,746	7,246	160,190	93,511	102,600
R-squared	0.176	0.140	0.117	0.072	0.045	0.028	0.099	0.143	0.190	0.626	0.628	0.640

Note: Table reports estimated coefficients for equation (3). All regressions also include indicators for Treat, PPL*Treat, PPL*Post, Treat*Post, state, year, state-by-year fixed effects, and demographic controls (age, age squared, education, U.S. citizenship, Hispanic, white, black, married, the presence of any children under 5 in the household, metro status, and measures of family size and the number of own children in the household). Earnings regressions also include indicators for occupation, industry, and firm size, usual hours worked per week and weeks worked last year. Standard errors are reported immediately below the coefficients and are clustered at the state level. *** = significant at the 0.01 level; ** = significant at the 0.05 level; * = significant at the 0.10 level.

Table 6: Impacts of Paid Leave Laws Over Time

Panel A: Females	In Labor Force			Employed			Weeks Unemployed			Log Annual Earnings		
	HS or Less	Some College	BA or More	HS or Less	Some College	BA or More	HS or Less	Some College	BA or More	HS or Less	Some College	BA or More
*PPL*Treat*1-2 years post*	0.021***	-0.006	-0.016*	0.010**	-0.009*	-0.026***	3.139***	5.564***	3.314**	-0.017*	-0.012	0.035**
	(0.007)	(0.010)	(0.008)	(0.005)	(0.004)	(0.003)	(0.739)	(1.313)	(1.421)	(0.010)	(0.012)	(0.014)
*PPL*Treat*3-4 years post*	0.013	0.021**	-0.033***	-0.020***	0.015***	-0.028***	-2.324***	-1.172	8.793***	-0.019	0.007	0.041**
	(0.008)	(0.009)	(0.009)	(0.004)	(0.005)	(0.003)	(0.844)	(0.958)	(1.323)	(0.013)	(0.012)	(0.018)
*PPL*Treat*5-6 years post*	0.026***	0.036***	-0.017**	0.004	-0.007	-0.016***	-0.109	-3.392***	-1.603	-0.036***	0.008	-0.016
	(0.008)	(0.008)	(0.007)	(0.008)	(0.005)	(0.004)	(0.800)	(0.908)	(1.373)	(0.012)	(0.014)	(0.013)
*PPL*Treat*7-8 years post*	0.006	0.021**	-0.033***	0.010	0.011**	-0.024***	0.543	-2.431*	0.810	-0.020	0.052***	-0.013
	(0.009)	(0.009)	(0.009)	(0.007)	(0.005)	(0.005)	(0.749)	(1.247)	(1.214)	(0.015)	(0.015)	(0.012)
*PPL*Treat*9 or more years post*	-0.003	0.000	-0.022**	-0.001	-0.002	-0.010***	-1.376*	-0.736	2.087*	0.034***	0.025**	-0.050***
	(0.007)	(0.006)	(0.008)	(0.005)	(0.004)	(0.003)	(0.789)	(0.940)	(1.175)	(0.012)	(0.012)	(0.015)
Number of Observations	264,859	169,987	158,521	146,737	115,158	117,059	18,545	11,214	7,454	125,214	102,807	107,951
R-squared	0.111	0.092	0.110	0.065	0.034	0.021	0.096	0.149	0.195	0.630	0.622	0.600
Panel B: Males												
*PPL*Treat*1-2 years post*	-0.008	-0.026***	0.017***	-0.006	-0.011**	0.005	0.646	-2.507**	-2.959**	-0.029**	0.023*	0.044***
	(0.006)	(0.006)	(0.006)	(0.004)	(0.004)	(0.004)	(0.614)	(1.044)	(1.324)	(0.013)	(0.013)	(0.014)
*PPL*Treat*3-4 years post*	-0.005	0.019**	0.013*	-0.007	0.008	-0.006	-1.060**	-0.169	4.176***	-0.072***	0.016	-0.050***
	(0.008)	(0.007)	(0.007)	(0.005)	(0.005)	(0.004)	(0.472)	(0.829)	(1.268)	(0.008)	(0.011)	(0.013)
*PPL*Treat*5-6 years post*	0.008	0.006	0.022***	-0.024***	-0.003	0.014***	-1.251**	1.111	-5.047***	-0.052***	0.018	-0.063***
	(0.007)	(0.006)	(0.006)	(0.007)	(0.007)	(0.005)	(0.466)	(0.909)	(1.356)	(0.014)	(0.013)	(0.014)
*PPL*Treat*7-8 years post*	-0.026***	0.019**	0.004	-0.011	0.028***	0.032***	-1.024	0.235	-4.938***	-0.025**	0.017	0.022*
	(0.006)	(0.008)	(0.005)	(0.006)	(0.007)	(0.004)	(0.699)	(1.052)	(1.197)	(0.010)	(0.012)	(0.012)
*PPL*Treat*9 or more years post*	0.002	-0.041***	-0.009**	-0.008	0.007	0.017***	-2.012***	0.720	3.341***	-0.022**	0.046***	-0.018
	(0.007)	(0.007)	(0.004)	(0.005)	(0.005)	(0.003)	(0.698)	(0.904)	(1.079)	(0.009)	(0.013)	(0.012)
Number of Observations	266,927	141,146	145,705	190,735	106,001	111,786	29,614	11,746	7,246	160,190	93,511	102,600
R-squared	0.176	0.140	0.117	0.073	0.045	0.028	0.099	0.144	0.193	0.626	0.628	0.640

Note: Table reports estimated coefficients for equation (3), modified to also include *years post* interactions. All regressions also include indicators for Treat, PPL*Treat, PPL*Post, Treat*Post, interactions of each of those variables and the *years post* variables, state, year, state-by-year fixed effects, and demographic controls (age, age squared, education, U.S. citizenship, Hispanic, white, black, married, the presence of any children under 5 in the household, metro status, and measures of family size and the number of own children in the household). Earnings regressions also include indicators for occupation, industry, and firm size, usual hours worked per week and weeks worked last year. Standard errors are reported immediately below the coefficients and are clustered at the state level. *** = significant at the 0.01 level; ** = significant at the 0.05 level; * = significant at the 0.10 level.

Table A1 - Descriptive Statistics for Baseline Labor Force Participation Regressions

	California								Comparison States								Pre-CA-PFL Differences in Means[a]	
	Treatment Age Group (ages 18-34)				Comparison Age Group (ages 50-64)				Treatment Age Group (ages 18-34)				Comparison Age Group (ages 50-64)				Across States	Within CA
	Pre-CA-PFL		Post-CA-PFL		Pre-CA-PFL		Post-CA-PFL		Pre-CA-PFL		Post-CA-PFL		Pre-CA-PFL		Post-CA-PFL		Ages 18-34	Ages [50-64] - [18-34]
Panel A: Females	mean	st. dev.	mean	st. dev.	mean	st. dev.	mean	st. dev.	mean	st. dev.	mean	st. dev.	mean	st. dev.	mean	st. dev.		
In Labor Force	0.67	0.47	0.68	0.47	0.59	0.49	0.62	0.49	0.75	0.43	0.73	0.44	0.63	0.48	0.66	0.47	0.084***	-0.075***
Age	27.70	4.35	27.78	4.25	55.95	4.25	56.21	4.25	27.66	4.42	27.78	4.30	56.13	4.31	56.32	4.27	-0.035	28.25***
High school or less education	0.52	0.50	0.44	0.50	0.48	0.50	0.42	0.49	0.47	0.50	0.41	0.49	0.53	0.50	0.42	0.49	-0.053***	-0.044***
Some college education	0.27	0.45	0.29	0.45	0.27	0.45	0.28	0.45	0.29	0.45	0.30	0.46	0.25	0.43	0.29	0.45	0.019***	0.001
US citizen	0.64	0.48	0.75	0.43	0.82	0.38	0.84	0.36	0.91	0.29	0.90	0.31	0.96	0.19	0.96	0.20	0.266***	0.178***
Hispanic	0.53	0.50	0.53	0.50	0.29	0.46	0.34	0.47	0.15	0.36	0.18	0.38	0.08	0.27	0.10	0.30	-0.375***	-0.236***
White	0.83	0.38	0.77	0.42	0.77	0.42	0.73	0.44	0.82	0.39	0.78	0.41	0.84	0.37	0.80	0.40	-0.011**	-0.058***
Black	0.05	0.23	0.06	0.24	0.08	0.27	0.07	0.26	0.13	0.34	0.14	0.35	0.12	0.33	0.14	0.35	0.076***	0.024***
Married	0.53	0.50	0.46	0.50	0.63	0.48	0.63	0.48	0.54	0.50	0.48	0.50	0.67	0.47	0.64	0.48	0.009*	0.0991***
Child less than age 5 in HH	0.41	0.49	0.35	0.48	0.01	0.07	0.01	0.08	0.42	0.49	0.41	0.49	0.00	0.05	0.01	0.07	0.004	-0.406***
Number of own children in HH	1.18	1.28	1.03	1.23	0.70	0.98	0.80	1.01	1.19	1.22	1.17	1.24	0.45	0.77	0.54	0.85	0.01	-0.476***
Household income	55943	53235	75676	76430	69078	67013	93181	101803	52645	47101	67222	64551	62097	60995	81873	83850	-3297***	13134***
Family size	3.75	1.96	3.73	1.93	2.78	1.62	2.92	1.64	3.33	1.58	3.37	1.60	2.38	1.21	2.48	1.28	-0.418***	-0.967***
Metro status	0.99	0.08	0.99	0.11	0.99	0.11	0.98	0.14	0.75	0.44	0.77	0.42	0.71	0.45	0.74	0.44	-0.247***	-0.007***
Observations	13,261		21,152		8,374		19,395		110,876		167,545		85,254		167,510		124,137	21,635
Panel B: Males																		
In Labor Force	0.92	0.28	0.88	0.32	0.78	0.41	0.78	0.41	0.92	0.27	0.90	0.31	0.77	0.42	0.77	0.42	0.005*	-0.133***
Age	27.63	4.41	27.46	4.40	55.84	4.24	56.15	4.27	27.49	4.53	27.45	4.46	55.99	4.26	56.25	4.24	-0.137**	28.21***
High school or less education	0.58	0.49	0.53	0.50	0.40	0.49	0.40	0.49	0.54	0.50	0.51	0.50	0.47	0.50	0.43	0.50	-0.043***	-0.180***
Some college education	0.24	0.42	0.26	0.44	0.26	0.44	0.26	0.44	0.25	0.43	0.26	0.44	0.24	0.43	0.26	0.44	0.017***	0.026***
US citizen	0.61	0.49	0.72	0.45	0.82	0.38	0.84	0.37	0.89	0.32	0.88	0.33	0.97	0.18	0.96	0.21	0.273***	0.212***
Hispanic	0.56	0.50	0.54	0.50	0.28	0.45	0.32	0.47	0.18	0.38	0.20	0.40	0.08	0.27	0.09	0.29	-0.380***	-0.274***
White	0.84	0.37	0.79	0.41	0.79	0.41	0.76	0.43	0.84	0.36	0.80	0.40	0.87	0.34	0.83	0.38	0.003	-0.051***
Black	0.05	0.21	0.05	0.22	0.06	0.24	0.06	0.24	0.10	0.30	0.12	0.32	0.10	0.30	0.12	0.33	0.055***	0.014***
Married	0.43	0.50	0.36	0.48	0.75	0.43	0.73	0.44	0.46	0.50	0.41	0.49	0.78	0.41	0.73	0.45	0.029***	0.319***
Child less than age 5 in HH	0.28	0.45	0.23	0.42	0.02	0.14	0.02	0.15	0.30	0.46	0.29	0.45	0.01	0.12	0.01	0.12	0.016***	-0.263***
Number of own children in HH	0.75	1.14	0.62	1.06	0.89	1.17	0.91	1.11	0.77	1.10	0.74	1.10	0.59	0.94	0.65	0.98	0.018	0.141***
Household income	58738	51087	81025	79455	79205	72017	102907	108690	56274	46776	72614	65688	71977	66605	90518	88421	-2464***	20466***
Family size	3.54	2.06	3.52	2.00	3.01	1.67	3.06	1.65	3.09	1.65	3.12	1.66	2.58	1.26	2.63	1.34	-0.449***	-0.532***
Metro status	0.99	0.08	0.99	0.12	0.98	0.12	0.98	0.15	0.74	0.44	0.77	0.42	0.70	0.46	0.74	0.44	-0.251***	-0.009***
Observations	12,925		20,976		7,833		18,102		101,253		154,054		80,122		158,513		114,178	20,758

[a] *** = statistically significant difference at the 0.01 level; ** = 0.05 level; * = 0.10 level.

Table A2 - Descriptive Statistics for Baseline Employment Regressions

	California								Comparison States								Pre-CA-PFL Differences in Means[a]	
	Treatment Age Group (ages 18-34)				Comparison Age Group (ages 50-64)				Treatment Age Group (ages 18-34)				Comparison Age Group (ages 50-64)				Across States	Within CA
	Pre-CA-PFL		Post-CA-PFL		Pre-CA-PFL		Post-CA-PFL		Pre-CA-PFL		Post-CA-PFL		Pre-CA-PFL		Post-CA-PFL		Ages 18-34	Ages [50-64] - [18-34]
Panel A: Females	mean	st. dev.	mean	st. dev.	mean	st. dev.	mean	st. dev.	mean	st. dev.	mean	st. dev.	mean	st. dev.	mean	st. dev.		
Employed	0.92	0.28	0.89	0.31	0.95	0.23	0.93	0.25	0.93	0.25	0.92	0.28	0.97	0.18	0.96	0.21	0.016***	0.029***
Age	27.66	4.31	27.71	4.23	55.06	3.91	55.55	4.01	27.60	4.40	27.76	4.26	55.14	3.97	55.62	4.03	-0.058	27.40***
High school or less education	0.44	0.50	0.37	0.48	0.39	0.49	0.35	0.48	0.43	0.49	0.35	0.48	0.46	0.50	0.37	0.48	-0.018**	-0.049***
Some college education	0.31	0.46	0.31	0.46	0.32	0.46	0.30	0.46	0.30	0.46	0.32	0.46	0.27	0.45	0.30	0.46	-0.007	0.004
US citizen	0.73	0.45	0.82	0.39	0.86	0.34	0.88	0.33	0.93	0.25	0.93	0.26	0.97	0.17	0.96	0.19	0.207***	0.136***
Hispanic	0.49	0.50	0.50	0.50	0.26	0.44	0.32	0.47	0.13	0.34	0.15	0.36	0.07	0.25	0.09	0.28	-0.355***	-0.226***
White	0.82	0.39	0.75	0.43	0.77	0.42	0.72	0.45	0.82	0.39	0.78	0.42	0.84	0.37	0.81	0.40	0.001	-0.044***
Black	0.06	0.24	0.06	0.24	0.08	0.28	0.07	0.26	0.14	0.35	0.15	0.36	0.12	0.33	0.14	0.35	0.077***	0.023***
Married	0.45	0.50	0.39	0.49	0.58	0.49	0.60	0.49	0.49	0.50	0.43	0.50	0.64	0.48	0.64	0.48	0.037***	0.126***
Child less than age 5 in HH	0.32	0.47	0.28	0.45	0.00	0.06	0.01	0.08	0.35	0.48	0.35	0.48	0.00	0.05	0.01	0.07	0.031***	-0.311***
Number of own children in HH	0.92	1.16	0.83	1.13	0.69	0.96	0.81	0.99	1.01	1.14	1.01	1.15	0.49	0.79	0.58	0.85	0.087***	-0.237***
Household income	62726	53946	84676	78868	78146	65985	105897	101652	56085	46043	72757	64521	69642	59222	92185	82635	-6641***	15420***
Family size	3.45	1.91	3.50	1.89	2.62	1.49	2.85	1.55	3.12	1.52	3.15	1.54	2.36	1.18	2.47	1.23	-0.328***	-0.822***
Metro status	0.99	0.08	0.99	0.11	0.99	0.11	0.98	0.13	0.76	0.43	0.78	0.41	0.73	0.44	0.75	0.43	-0.237***	-0.007***
Observations	8,386		13,695		4,304		10,476		78,965		116,951		47,304		98,873		87,351	12,690
Panel B: Males																		
Employed	0.91	0.28	0.88	0.33	0.94	0.24	0.92	0.28	0.92	0.27	0.90	0.30	0.96	0.21	0.94	0.24	0.010***	0.024***
Age	27.61	4.38	27.53	4.34	55.13	3.94	55.50	4.06	27.47	4.49	27.50	4.41	55.16	3.94	55.59	4.02	-0.137**	27.52***
High school or less education	0.58	0.49	0.52	0.50	0.38	0.49	0.39	0.49	0.53	0.50	0.49	0.50	0.43	0.50	0.39	0.49	-0.057***	-0.201***
Some college education	0.24	0.42	0.26	0.44	0.28	0.45	0.25	0.43	0.26	0.44	0.27	0.44	0.25	0.43	0.26	0.44	0.020***	0.040***
US citizen	0.61	0.49	0.71	0.46	0.81	0.40	0.83	0.38	0.88	0.32	0.87	0.33	0.96	0.20	0.95	0.22	0.277***	0.201***
Hispanic	0.58	0.49	0.56	0.50	0.31	0.46	0.35	0.48	0.18	0.39	0.20	0.40	0.08	0.28	0.10	0.30	-0.398***	-0.266***
White	0.85	0.36	0.80	0.40	0.79	0.40	0.76	0.43	0.85	0.35	0.82	0.39	0.87	0.34	0.84	0.37	0.002	-0.058***
Black	0.04	0.21	0.05	0.21	0.06	0.23	0.05	0.22	0.10	0.30	0.11	0.31	0.09	0.29	0.11	0.31	0.052***	0.013***
Married	0.45	0.50	0.38	0.49	0.78	0.42	0.77	0.42	0.47	0.50	0.42	0.49	0.81	0.40	0.76	0.43	0.0272**	0.333***
Child less than age 5 in HH	0.29	0.46	0.25	0.43	0.02	0.15	0.02	0.16	0.31	0.46	0.30	0.46	0.02	0.12	0.02	0.13	0.014**	-0.268***
Number of own children in HH	0.77	1.14	0.66	1.08	0.97	1.20	1.01	1.14	0.77	1.09	0.76	1.10	0.67	0.97	0.74	1.02	0.005	0.199***
Household income	59315	49092	83528	78572	85773	69252	113403	110858	57517	45601	74705	63447	79363	63324	101796	87661	-1798***	26458***
Family size	3.57	2.07	3.52	1.99	3.10	1.68	3.18	1.66	3.06	1.62	3.09	1.64	2.67	1.28	2.72	1.35	-0.506***	-0.467***
Metro status	0.99	0.08	0.99	0.11	0.99	0.09	0.98	0.13	0.75	0.43	0.78	0.42	0.73	0.45	0.76	0.43	-0.244***	-0.002
Observations	11,058		17,186		4,822		11,303		86,896		128,729		49,008		99,520		97,954	15,880

[a] *** = statistically significant difference at the 0.01 level; ** = 0.05 level; * = 0.10 level.

Table A3 - Descriptive Statistics for Baseline Unemployment Duration Regressions

	California								Comparison States								Pre-CA-PFL Differences in Means[a]	
	Treatment Age Group (ages 18-34)				Comparison Age Group (ages 50-64)				Treatment Age Group (ages 18-34)				Comparison Age Group (ages 50-64)				Across States	Within CA
	Pre-CA-PFL		Post-CA-PFL		Pre-CA-PFL		Post-CA-PFL		Pre-CA-PFL		Post-CA-PFL		Pre-CA-PFL		Post-CA-PFL		Ages 18-34	Ages [50-64] - [18-34]
Panel A: Females	mean	st. dev.	mean	st. dev.	mean	st. dev.	mean	st. dev.	mean	st. dev.	mean	st. dev.	mean	st. dev.	mean	st. dev.		
Weeks Unemployed	18.55	13.55	20.18	13.54	20.92	14.04	22.25	13.86	16.44	12.74	19.13	13.73	18.07	12.56	20.43	13.76	-2.105***	2.373**
Age	26.78	4.76	26.97	4.48	54.96	3.84	55.35	3.98	26.10	4.70	26.47	4.53	54.92	3.82	55.55	4.04	-0.676***	28.18***
High school or less education	0.57	0.50	0.46	0.50	0.49	0.50	0.46	0.50	0.57	0.50	0.48	0.50	0.52	0.50	0.41	0.49	0.001	-0.084**
Some college education	0.26	0.44	0.31	0.46	0.27	0.45	0.28	0.45	0.27	0.44	0.32	0.47	0.28	0.45	0.33	0.47	0.007	0.008
US citizen	0.68	0.47	0.78	0.41	0.78	0.42	0.80	0.40	0.93	0.26	0.92	0.27	0.95	0.22	0.95	0.23	0.247***	0.096***
Hispanic	0.52	0.50	0.56	0.50	0.33	0.47	0.40	0.49	0.14	0.35	0.17	0.37	0.09	0.28	0.10	0.30	-0.376***	-0.192***
White	0.81	0.39	0.77	0.42	0.77	0.42	0.73	0.45	0.76	0.43	0.72	0.45	0.83	0.38	0.78	0.41	;-0.054***	-0.048*
Black	0.09	0.28	0.09	0.29	0.07	0.26	0.08	0.27	0.18	0.38	0.20	0.40	0.12	0.33	0.16	0.36	0.093***	-0.012
Married	0.44	0.50	0.34	0.48	0.51	0.50	0.55	0.50	0.37	0.48	0.31	0.46	0.55	0.50	0.54	0.50	-0.074***	0.072*
Child less than age 5 in HH	0.35	0.48	0.30	0.46	0.01	0.12	0.00	0.07	0.35	0.48	0.35	0.48	0.00	0.05	0.00	0.07	0.001	-0.332***
Number of own children in HH	1.06	1.30	0.88	1.20	0.79	1.10	0.86	1.02	1.04	1.20	1.04	1.21	0.49	0.79	0.57	0.87	-0.019	-0.277***
Household income	49345	50168	64822	64996	56201	50771	75948	80325	41246	38629	53923	53832	50425	49500	64417	58773	-8100***	6855*
Family size	3.63	1.82	3.61	1.88	2.77	1.78	2.92	1.69	3.24	1.60	3.31	1.62	2.32	1.22	2.43	1.31	-0.390***	-0.859***
Metro status	0.99	0.12	0.98	0.14	0.99	0.11	0.98	0.15	0.73	0.45	0.77	0.42	0.71	0.45	0.75	0.44	-0.260***	0.003
Observations	1,079		1,812		354		879		9,973		13,916		2,786		6,414		11,052	1,433
Panel B: Males																		
Weeks Unemployed	18.12	12.45	20.58	13.14	19.65	12.59	21.99	13.58	16.98	12.31	19.47	13.10	18.88	12.48	20.48	13.27	-1.134***	1.531*
Age	26.64	4.67	26.57	4.57	55.03	4.07	55.49	3.97	25.89	4.77	26.20	4.60	55.04	3.88	55.56	4.02	-0.747***	28.39***
High school or less education	0.66	0.47	0.64	0.48	0.43	0.50	0.50	0.50	0.68	0.47	0.63	0.48	0.53	0.50	0.51	0.50	0.015	-0.230***
Some college education	0.21	0.41	0.23	0.42	0.26	0.44	0.26	0.44	0.21	0.41	0.25	0.43	0.25	0.44	0.28	0.45	0.001	0.053*
US citizen	0.62	0.49	0.70	0.46	0.76	0.43	0.74	0.44	0.90	0.30	0.88	0.32	0.94	0.24	0.93	0.25	0.277***	0.141***
Hispanic	0.58	0.49	0.59	0.49	0.31	0.46	0.43	0.50	0.18	0.39	0.22	0.41	0.10	0.30	0.13	0.33	-0.397***	-0.273***
White	0.85	0.35	0.81	0.40	0.80	0.40	0.80	0.40	0.82	0.39	0.78	0.42	0.86	0.35	0.82	0.38	0.037***	-0.058**
Black	0.05	0.22	0.06	0.24	0.07	0.26	0.06	0.23	0.12	0.33	0.14	0.35	0.09	0.29	0.12	0.33	0.072***	0.023
Married	0.38	0.49	0.29	0.45	0.73	0.44	0.72	0.45	0.33	0.47	0.28	0.45	0.72	0.45	0.65	0.48	-0.051***	0.355***
Child less than age 5 in HH	0.27	0.45	0.22	0.42	0.04	0.20	0.03	0.17	0.24	0.43	0.24	0.43	0.02	0.13	0.02	0.13	-0.027*	-0.228***
Number of own children in HH	0.71	1.15	0.58	1.05	1.03	1.35	0.99	1.14	0.65	1.09	0.63	1.07	0.63	0.99	0.63	0.96	-0.068*	0.316***
Household income	47485	40231	68209	68977	67162	64183	73357	77770	45529	38987	59982	55655	54592	46436	65227	63716	-1956	19677***
Family size	3.60	2.07	3.71	2.05	3.11	1.82	3.19	1.81	3.17	1.70	3.23	1.71	2.60	1.37	2.56	1.38	-0.428***	-0.494***
Metro status	0.99	0.11	0.98	0.14	0.98	0.15	0.97	0.17	0.71	0.45	0.75	0.43	0.69	0.46	0.74	0.44	-0.279***	-0.012
Observations	1,515		2,793		436		1,211		12,025		18,156		3,887		8,583		13,540	1,951

[a] *** = statistically significant difference at the 0.01 level; ** = 0.05 level; * = 0.10 level.

Table A4 - Descriptive Statistics for Baseline Earnings Regressions

	California								Comparison States								Pre-CA-PFL Differences in Means[a]	
	Treatment Age Group (ages 18-34)				Comparison Age Group (ages 50-64)				Treatment Age Group (ages 18-34)				Comparison Age Group (ages 50-64)				Across States	Within CA
	Pre-CA-PFL		Post-CA-PFL		Pre-CA-PFL		Post-CA-PFL		Pre-CA-PFL		Post-CA-PFL		Pre-CA-PFL		Post-CA-PFL		Ages 18-34	Ages [50-64] - [18-34]
Panel A: Females	mean	st. dev.	mean	st. dev.	mean	st. dev.	mean	st. dev.	mean	st. dev.	mean	st. dev.	mean	st. dev.	mean	st. dev.		
Log annual earnings	9.72	0.98	10.00	0.97	10.05	0.92	10.38	0.96	9.66	0.95	9.97	0.93	9.94	0.88	10.30	0.86	-0.057***	0.330***
Age	27.77	4.23	27.87	4.12	55.04	3.91	55.58	4.01	27.74	4.34	27.92	4.17	55.14	3.96	55.66	4.04	-0.026	27.28***
High school or less education	0.42	0.49	0.34	0.47	0.38	0.49	0.33	0.47	0.41	0.49	0.33	0.47	0.46	0.50	0.36	0.48	-0.015**	-0.037***
Some college education	0.32	0.47	0.32	0.46	0.32	0.47	0.30	0.46	0.31	0.46	0.32	0.47	0.27	0.45	0.30	0.46	-0.009	0.001
US citizen	0.74	0.44	0.83	0.38	0.87	0.34	0.89	0.32	0.94	0.25	0.93	0.26	0.97	0.17	0.96	0.19	0.197***	0.132***
Hispanic	0.48	0.50	0.49	0.50	0.25	0.44	0.31	0.46	0.13	0.34	0.15	0.36	0.07	0.25	0.09	0.28	-0.346***	-0.221***
White	0.81	0.39	0.75	0.43	0.77	0.42	0.72	0.45	0.83	0.38	0.79	0.41	0.84	0.36	0.81	0.39	0.012**	-0.043***
Black	0.06	0.23	0.06	0.23	0.08	0.28	0.07	0.26	0.13	0.34	0.14	0.35	0.12	0.33	0.14	0.34	0.071***	0.026***
Married	0.46	0.50	0.40	0.49	0.58	0.49	0.61	0.49	0.50	0.50	0.44	0.50	0.64	0.48	0.64	0.48	0.042***	0.125***
Child less than age 5 in HH	0.31	0.46	0.27	0.44	0.00	0.06	0.01	0.08	0.34	0.48	0.35	0.48	0.00	0.05	0.01	0.07	0.037***	-0.303***
Number of own children in HH	0.90	1.14	0.80	1.11	0.68	0.95	0.81	0.98	1.00	1.13	0.99	1.14	0.49	0.79	0.58	0.85	0.101***	-0.214***
Household income	64873	54606	89411	82100	79400	65815	109961	104777	57494	46193	76317	66372	70289	59244	94714	84083	-7378***	14527***
Family size	3.39	1.90	3.45	1.87	2.62	1.48	2.85	1.52	3.09	1.50	3.11	1.52	2.36	1.18	2.48	1.23	-0.299***	-0.769***
Metro status	0.99	0.08	0.99	0.11	0.99	0.12	0.98	0.14	0.76	0.43	0.79	0.41	0.73	0.44	0.76	0.43	-0.234***	-0.008***
Weeks worked last year	46.68	11.42	47.13	10.93	48.99	8.43	49.51	7.61	46.71	11.18	47.36	10.63	49.13	8.03	49.61	7.46	0.029	2.313***
Average hours per week	37.77	9.54	36.77	9.77	38.13	10.05	37.81	10.38	37.62	9.76	37.24	9.73	38.06	10.26	38.43	9.99	-0.145	0.363
Observations	7,662		11,328		4,058		9,116		73,443		97,396		45,758		87,211		81,105	11,720
Panel B: Males																		
Log annual earnings	9.93	0.88	10.20	0.91	10.51	0.91	10.79	0.89	10.02	0.86	10.24	0.89	10.50	0.83	10.76	0.83	0.085***	0.577***
Age	27.79	4.28	27.78	4.21	55.08	3.91	55.50	4.05	27.65	4.41	27.72	4.30	55.15	3.94	55.62	4.02	-0.142**	27.29***
High school or less education	0.57	0.50	0.50	0.50	0.37	0.48	0.38	0.49	0.51	0.50	0.46	0.50	0.42	0.49	0.39	0.49	-0.064***	-0.200***
Some college education	0.24	0.43	0.26	0.44	0.28	0.45	0.25	0.44	0.26	0.44	0.27	0.45	0.25	0.43	0.26	0.44	0.023***	0.039***
US citizen	0.60	0.49	0.71	0.46	0.82	0.39	0.84	0.37	0.88	0.33	0.87	0.34	0.96	0.20	0.95	0.22	0.278***	0.213***
Hispanic	0.58	0.49	0.56	0.50	0.31	0.46	0.34	0.48	0.18	0.39	0.21	0.41	0.08	0.28	0.10	0.30	-0.397***	-0.270***
White	0.85	0.35	0.80	0.40	0.80	0.40	0.77	0.42	0.86	0.35	0.83	0.38	0.87	0.33	0.84	0.37	0.008*	-0.057***
Black	0.04	0.20	0.04	0.20	0.06	0.23	0.05	0.22	0.09	0.29	0.10	0.30	0.09	0.29	0.11	0.31	0.048***	0.014***
Married	0.46	0.50	0.40	0.49	0.78	0.41	0.77	0.42	0.49	0.50	0.44	0.50	0.81	0.39	0.77	0.42	0.030***	0.322***
Child less than age 5 in HH	0.30	0.46	0.26	0.44	0.02	0.15	0.02	0.16	0.31	0.46	0.31	0.46	0.02	0.12	0.02	0.13	0.015**	-0.277***
Number of own children in HH	0.78	1.13	0.68	1.08	0.95	1.19	1.02	1.15	0.79	1.09	0.77	1.10	0.67	0.97	0.75	1.02	0.007	0.174***
Household income	60512	49247	87513	82292	87652	69636	118634	113829	58525	45751	77822	65246	80598	63584	105504	89357	-1987***	27139***
Family size	3.53	2.06	3.47	1.97	3.08	1.65	3.18	1.64	3.03	1.61	3.05	1.63	2.67	1.27	2.74	1.35	-0.498***	-0.450***
Metro status	0.99	0.08	0.99	0.11	0.99	0.09	0.98	0.13	0.75	0.43	0.79	0.41	0.73	0.45	0.76	0.43	-0.240***	-0.002
Weeks worked last year	48.46	9.23	47.95	10.05	50.09	6.76	50.11	6.78	48.48	9.19	48.36	9.44	50.21	6.50	50.27	6.48	0.02	1.629***
Average hours per week	40.87	8.59	39.99	9.00	42.33	8.82	42.14	9.07	42.35	9.42	41.37	9.95	43.38	9.58	43.23	9.71	1.484***	1.463***
Observations	10,087		13,912		4,515		9,707		80,131		104,911		46,765		86,273		90,218	14,602

[a] *** = statistically significant difference at the 0.01 level; ** = 0.05 level; * = 0.10 level.

Table A5: Estimated Coefficients from Baseline DDD Regressions

	In Labor Force		Employed		Weeks Unemployed		Log Annual Earnings	
Panel A: Females	coeff.	s.e.	coeff.	s.e.	coeff.	s.e.	coeff.	s.e.
*PPL*Treat*Post*	0.001	(0.004)	-0.008***	(0.002)	-0.055	(0.357)	-0.005	(0.005)
Post*Treat	-0.048***	(0.004)	-0.002	(0.002)	0.199	(0.366)	-0.026***	(0.005)
Post*PPL	-0.010*	(0.006)	-0.017***	(0.001)	-160.301***	(5.013)	3.353***	(0.067)
Treat*PPL	-0.014***	(0.004)	0.009***	(0.002)	-0.551	(0.331)	0.004	(0.005)
Treat	-0.135***	(0.006)	0.063***	(0.003)	-0.674	(0.648)	0.179***	(0.009)
Age	0.028***	(0.001)	0.012***	(0.001)	-0.072	(0.051)	0.048***	(0.002)
Age squared	-0.000***	(0.000)	-0.000***	(0.000)	0.002**	(0.001)	-0.000***	(0.000)
High school or less education	-0.123***	(0.005)	-0.039***	(0.002)	2.289***	(0.193)	-0.230***	(0.007)
Some college education	-0.030***	(0.003)	-0.009***	(0.001)	0.815***	(0.191)	-0.135***	(0.006)
US citizen	0.130***	(0.008)	0.013**	(0.005)	-0.203	(0.463)	0.059***	(0.011)
Hispanic	0.006	(0.009)	0.000	(0.002)	0.382	(0.303)	-0.028***	(0.009)
White	0.032***	(0.012)	0.016***	(0.005)	-1.273***	(0.329)	-0.005	(0.005)
Black	0.034**	(0.013)	-0.021***	(0.006)	1.555***	(0.406)	-0.017**	(0.007)
Married	-0.068***	(0.006)	0.022***	(0.001)	-0.982***	(0.154)	-0.010***	(0.003)
Child less than age 5 in HH	-0.111***	(0.004)	-0.006**	(0.002)	0.056	(0.187)	0.084***	(0.005)
Number of own children in HH	0.001	(0.002)	-0.001	(0.001)	-0.462***	(0.086)	0.029***	(0.003)
Household income	0.000***	(0.000)	0.000***	(0.000)	-0.000***	(0.000)	0.000***	(0.000)
Family size	-0.026***	(0.002)	-0.010***	(0.001)	0.870***	(0.050)	-0.063***	(0.002)
Metro status	0.005	(0.005)	0.002	(0.002)	-0.571***	(0.203)	0.073***	(0.005)
Weeks							0.038***	(0.000)
Hours							0.029***	(0.000)
Panel B: Males								
*PPL*Treat*Post*	0.000	(0.003)	-0.001	(0.002)	-0.775***	(0.249)	0.002	(0.005)
Post*Treat	-0.029***	(0.003)	-0.010***	(0.002)	1.085***	(0.252)	0.004	(0.005)
Post*PPL	0.010***	(0.003)	0.028***	(0.001)	-10.102***	(1.288)	1.587***	(0.049)
Treat*PPL	-0.010**	(0.004)	0.012***	(0.002)	0.132	(0.227)	0.016***	(0.005)
Treat	-0.178***	(0.006)	0.054***	(0.004)	-1.777***	(0.594)	0.108***	(0.007)
Age	0.018***	(0.001)	0.011***	(0.001)	-0.171***	(0.045)	0.055***	(0.001)
Age squared	-0.000***	(0.000)	-0.000***	(0.000)	0.003***	(0.001)	-0.001***	(0.000)
High school or less education	-0.058***	(0.003)	-0.043***	(0.002)	1.302***	(0.194)	-0.171***	(0.007)
Some college education	-0.019***	(0.003)	-0.010***	(0.002)	-0.094	(0.197)	-0.109***	(0.004)
US citizen	-0.038***	(0.004)	-0.027***	(0.004)	1.808***	(0.158)	0.083***	(0.010)
Hispanic	0.024***	(0.007)	0.007**	(0.003)	-0.126	(0.199)	-0.042***	(0.007)
White	0.051***	(0.007)	0.020***	(0.005)	-2.249***	(0.427)	0.016***	(0.004)
Black	-0.018**	(0.008)	-0.034***	(0.006)	0.386	(0.517)	-0.054***	(0.005)
Married	0.077***	(0.002)	0.043***	(0.002)	-1.478***	(0.179)	0.117***	(0.004)
Child less than age 5 in HH	-0.004*	(0.002)	0.007***	(0.001)	-1.238***	(0.169)	0.079***	(0.003)
Number of own children in HH	0.036***	(0.003)	0.012***	(0.002)	-0.704***	(0.127)	0.075***	(0.006)
Household income	0.000***	(0.000)	0.000***	(0.000)	-0.000***	(0.000)	0.000***	(0.000)
Family size	-0.023***	(0.002)	-0.016***	(0.002)	0.875***	(0.093)	-0.077***	(0.005)
Metro status	0.011***	(0.004)	0.006***	(0.002)	-0.321*	(0.190)	0.044***	(0.005)
Weeks							0.036***	(0.000)
Hours							0.020***	(0.001)

Note: Table reports estimated coefficients for equation (3). All regressions also include state, year, and state-by-year fixed effects. Earnings regressions also include indicators for occupation, industry, and firm size. Standard errors are clustered at the state level. Bolded coefficients are statistically significant at the 0.10 level or better.

Table A6: Baseline DDD Estimates Using Alternate Treatment and Comparison Group Ages

	Females				Males			
	Baseline				Baseline			
Treatment v. Comparison Group Ages	18-34 v. 50-64	18-34 v. 35-64	18-39 v. 40-64	25-34 v. 50-64	18-34 v. 50-64	18-34 v. 35-64	18-39 v. 40-64	25-34 v. 50-64
In Labor Force								
*PPL*Treat*Post*	0.001	0.007**	0.002	-0.002	0.000	-0.008***	-0.005**	0.002
	(0.004)	(0.003)	(0.003)	(0.004)	(0.003)	(0.002)	(0.002)	(0.003)
Number of Observations	593,367	995,880	995,880	517,225	553,778	923,892	923,892	475,756
R-squared	0.129	0.107	0.108	0.127	0.154	0.137	0.138	0.167
Employed								
*PPL*Treat*Post*	-0.008***	-0.005***	-0.004**	-0.007***	-0.001	-0.005***	-0.004**	-0.007***
	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.002)	(0.001)	(0.002)
Number of Observations	378,954	661,481	661,481	325,005	408,522	661,481	661,481	325,005
R-squared	0.049	0.040	0.040	0.032	0.062	0.040	0.040	0.032
Weeks Unemployed								
*PPL*Treat*Post*	-0.055	-0.684***	0.180	-0.711*	-0.775***	-0.583***	-0.996***	-0.790***
	(0.357)	(0.231)	(0.236)	(0.395)	(0.249)	(0.204)	(0.238)	(0.251)
Number of Observations	37,213	58,704	58,704	27,243	48,606	74,500	74,500	34,907
R-squared	0.087	0.074	0.074	0.087	0.088	0.079	0.079	0.090
Log Annual Earnings								
*PPL*Treat*Post*	-0.005	-0.007*	-0.000	-0.004	0.002	-0.005	-0.007**	-0.003
	(0.005)	(0.004)	(0.004)	(0.005)	(0.005)	(0.004)	(0.003)	(0.005)
Number of Observations	335,972	589,947	589,947	291,799	356,301	616,056	616,056	304,260
R-squared	0.660	0.655	0.655	0.639	0.675	0.676	0.676	0.640

Note: Table reports estimated coefficients for equation (3). All regressions also include indicators for Treat, PPL*Treat, PPL*Post, Treat*Post, state, year, state-by-year fixed effects, and demographic controls (age, age squared, education, U.S. citizenship, Hispanic, white, black, married, the presence of any children under 5 in the household, metro status, and measures of family size and the number of own children in the household). Earnings regressions also include indicators for occupation, industry, and firm size, usual hours worked per week and weeks worked last year. Standard errors are reported immediately below the coefficients and are clustered at the state level. *** = significant at the 0.01 level; ** = significant at the 0.05 level; * = significant at the 0.10 level.

Table A7: Baseline DDD Estimates Using Alternate Comparison Group States

	Females				Males			
Comparison States	All	Neighbor	FL, TX, IL, PA	Synthetic Control[a]	All	Neighbor	FL, TX, IL, PA	Synthetic Control[a]
In Labor Force								
*PPL*Treat*Post*	0.001	0.019*	0.001	-0.001	0.000	-0.018	-0.000	-0.010
	(0.004)	(0.007)	(0.009)	(0.001)	(0.003)	(0.021)	(0.003)	(0.007)
Number of Observations	593,367	92,798	172,931	134,570	553,778	89,025	162,626	127,555
R-squared	0.129	0.137	0.133	0.138	0.154	0.130	0.134	0.125
Employed								
*PPL*Treat*Post*	-0.008***	0.002	-0.010**	-0.017***	-0.001	0.006	-0.003	-0.008**
	(0.002)	(0.003)	(0.003)	(0.001)	(0.002)	(0.004)	(0.004)	(0.002)
Number of Observations	378,954	55,438	106,572	74,799	408,522	66,240	120,908	96,274
R-squared	0.049	0.043	0.044	0.045	0.062	0.055	0.053	0.053
Weeks Unemployed								
*PPL*Treat*Post*	-0.055	-1.291**	0.895*	1.391*	-0.775***	-0.742	-0.921	-0.210
	(0.357)	(0.339)	(0.355)	(0.648)	(0.249)	(0.686)	(0.750)	(1.152)
Number of Observations	37,213	6,307	10,587	9,661	48,606	8,944	14,614	11,923
R-squared	0.087	0.077	0.065	0.057	0.088	0.079	0.066	0.071
Log Annual Earnings								
*PPL*Treat*Post*	-0.005	-0.010	-0.001	-0.003	0.002	0.018	0.012	0.007
	(0.005)	(0.026)	(0.006)	(0.005)	(0.005)	(0.009)	(0.011)	(0.021)
Number of Observations	335,972	48,505	94,163	78,456	356,301	57,088	105,447	83,633
R-squared	0.660	0.658	0.657	0.661	0.675	0.678	0.677	0.679

Note: Table reports estimated coefficients for equation (3). All regressions also include indicators for Treat, PPL*Treat, PPL*Post, Treat*Post, state, year, state-by-year fixed effects, and demographic controls (age, age squared, education, U.S. citizenship, Hispanic, white, black, married, the presence of any children under 5 in the household, metro status, and measures of family size and the number of own children in the household). Earnings regressions also include indicators for occupation, industry, and firm size, usual hours worked per week and weeks worked last year. Standard errors are reported immediately below the coefficients and are clustered at the state level. *** = significant at the 0.01 level; ** = significant at the 0.05 level; * = significant at the 0.10 level.

[a] The synthetic control states (weights) for the female *In Labor Force*, *Employed, Weeks Unemployed*, and *Log Annual Earnings, respectively,* are CT(0.244), MA(0.041), NV(0.214), TX(0.500); DC(0.013), MA(0.318), TX(0.668); CT(0.154), FL(0.466), MA(0.277), MS(0.050), TX(0.052); and DE(0.383), FL(0.116), IN(0.128), TX(0.073). The synthetic control states (weights) for the male *In Labor Force, Employed, Weeks Unemployed*, and *Log Annual Earnings*, respectively, are IL(0.423), NV(0.299), TX(0.278); IL(0.267), MA(0.060), NV(0.235), TX(0.438); CT(0.460), IN(0.209), MT(0.011), KY(0.320); and FL(0.225), TX(0.775).

Table A8: DDD Estimates for California relative to New York and Washington

Panel A: Females	In Labor Force	Employed	Weeks Unemployed	Log Annual Earnings
Baseline				
*PPL*Treat*Post*	0.001	-0.008***	-0.055	-0.005
	(0.004)	(0.002)	(0.357)	(0.005)
Number of Observations	593,367	378,954	37,213	335,972
R-squared	0.129	0.049	0.087	0.660
CA & NY Only[a]				
*PPL*Treat*Post*	0.011*	-0.018**	-0.986*	-0.006**
	(0.001)	(0.000)	(0.092)	(0.000)
Number of Observations	95,308	57,396	5,975	50,423
R-squared	0.133	0.045	0.056	0.656
CA & WA Only[b]				
*PPL*Treat*Post*	0.019**	-0.046***	2.479*	-0.048**
	(0.000)	(0.000)	(0.325)	(0.002)
Number of Observations	36,472	21,585	2,171	18,226
R-squared	0.155	0.036	0.063	0.657
Panel B: Males				
Baseline				
*PPL*Treat*Post*	0.000	-0.001	-0.775***	0.002
	(0.003)	(0.002)	(0.249)	(0.005)
Number of Observations	553,778	408,522	48,606	356,301
R-squared	0.154	0.062	0.088	0.675
CA & NY Only[a]				
*PPL*Treat*Post*	0.019***	-0.006**	0.288	-0.022*
	(0.000)	(0.000)	(0.086)	(0.002)
Number of Observations	89,603	65,663	8,408	56,747
R-squared	0.125	0.053	0.058	0.677
CA & WA Only[b]				
*PPL*Treat*Post*	0.018**	-0.000	-4.697**	-0.036**
	(0.001)	(0.001)	(0.229)	(0.001)
Number of Observations	34,914	26,383	3,000	22,138
R-squared	0.130	0.037	0.078	0.674

Note: Table reports estimated coefficients for β_1 in equation (3). *PPL* = 1 for California in all years; *Treat* = 1 for ages 18-34 and = 0 for ages 50-64 (ages 35-49 are excluded from this sample); *Post* = 1 for all years post CA-PFL implementation. All regressions also include indicators for *Treat, PPL*Treat, PPL*Post, Treat*Post*, state, year, state-by-year fixed effects, and demographic controls (age, age squared, education, U.S. citizenship, Hispanic, white, black, married, the presence of any children under 5 in the household, metro status, and measures of family size and the number of own children in the household). Earnings regressions also include controls for occupation, industry, firm size, usual hours worked per week and weeks worked last year. Standard errors are reported immediately below the coefficients and are clustered at the state level. *** = significant at the 0.01 level; ** = significant at the 0.05 level; * = significant at the 0.10 level.

[a] Regressions include only California and New York. In 2018, New York implemented a PFL policy that was enacted in 2016 (the latest year included in this study).

[b] Regressions include only California and Washington and only years prior to 2007. Washington enacted a PFL in 2007, but it has not yet been implemented. With the exception of the unemployment duration, the estimated coefficients for females are similar when we use data through 2016.

Table A9: Tests of Parallel Trends

Panel A: Females	In Labor Force	Employed	Weeks Unemployed	Log Annual Earnings
*PPL*Treat*3-4 years pre*	0.027***	0.006*	0.138	0.045***
	(0.005)	(0.004)	(0.657)	(0.008)
*PPL*Treat*1-2 years pre*	0.035***	0.004	1.316*	0.052***
	(0.006)	(0.003)	(0.717)	(0.008)
*PPL*Treat*Post*	0.019***	-0.005*	0.361	0.021***
	(0.005)	(0.003)	(0.460)	(0.006)
Number of Observations	593,367	378,954	37,213	335,972
R-squared	0.129	0.049	0.087	0.660
Panel B: Males				
*PPL*Treat*3-4 years pre*	0.014***	0.004	1.123**	0.084***
	(0.004)	(0.003)	(0.517)	(0.008)
*PPL*Treat*1-2 years pre*	0.039***	0.006**	0.208	-0.001
	(0.004)	(0.003)	(0.490)	(0.008)
*PPL*Treat*Post*	0.014***	0.002	-0.454	0.021***
	(0.003)	(0.002)	(0.370)	(0.007)
Number of Observations	553,778	408,522	48,606	356,301
R-squared	0.155	0.062	0.088	0.675

Table reports estimated coefficients for equation (3), modified to also include *years pre* interactions. Comparison time period is 5 or more years pre-PPL. All regressions also include indicators for Treat, PPL*Treat, interactions of each of those variables and the years pre variables, state, year, state-by-year fixed effects, and demographic controls (age, age squared, education, U.S. citizenship, Hispanic, white, black, married, the presence of any children under 5 in the household, metro status, and measures of family size and the number of own children in the household). Earnings regressions also include indicators for occupation, industry, and firm size, usual hours worked per week and weeks worked last year. Standard errors are reported immediately below the coefficients and are clustered at the state level. *** = significant at the 0.01 level; ** = significant at the 0.05 level; * = significant at the 0.10.

Figure 1: Labor Force Participation

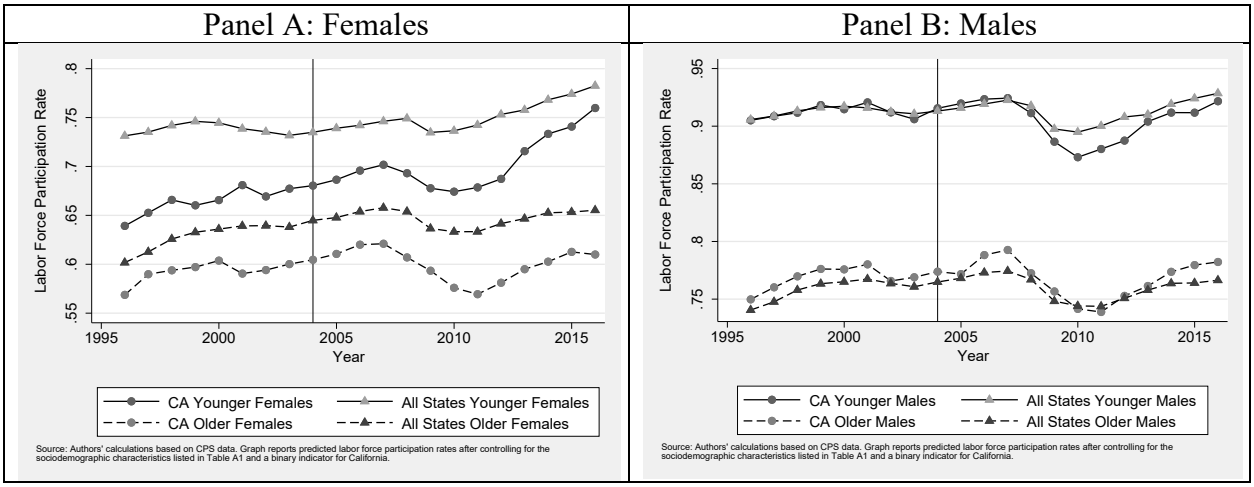

Figure 2: Employment

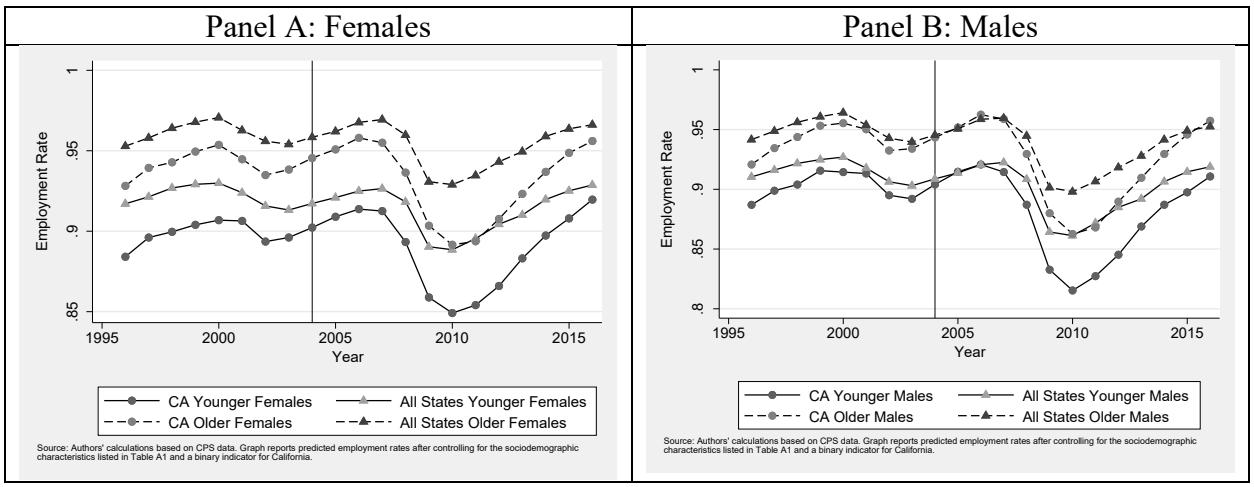

Figure 3: Unemployment Duration

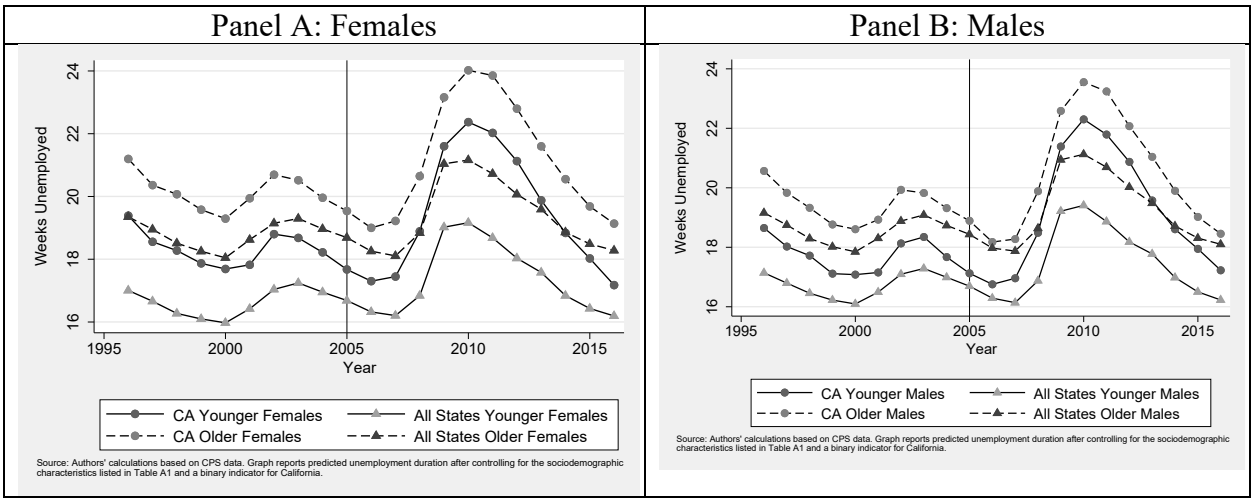

Figure 4: Earnings

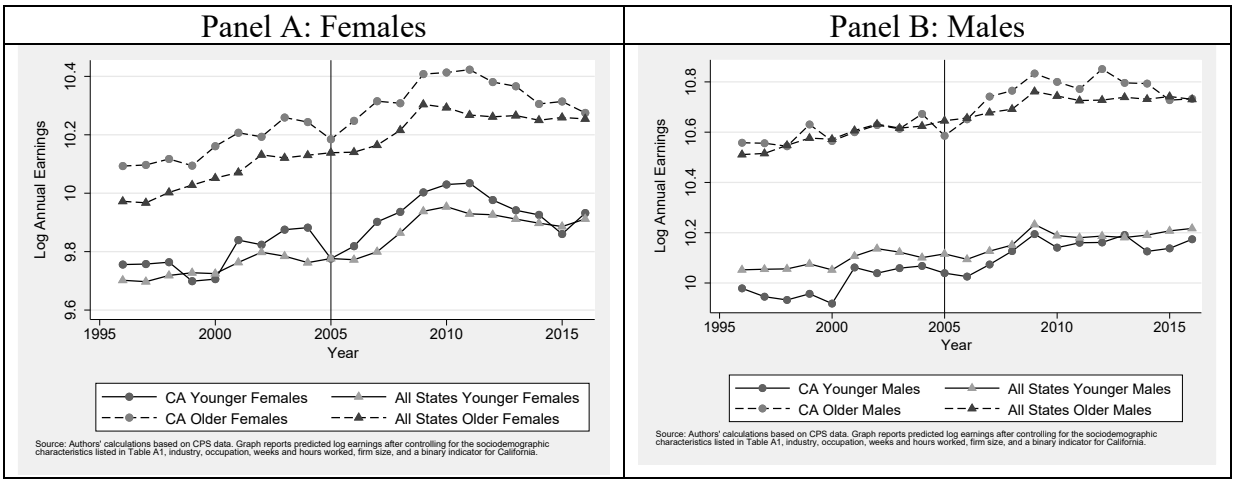

Figure A1: Labor Force Participation

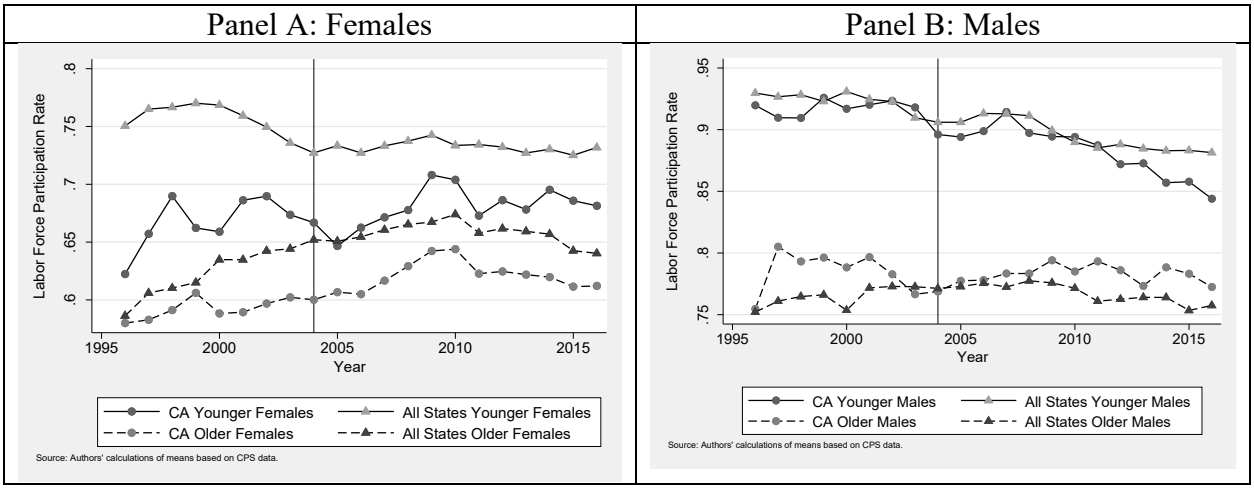

Figure A2: Employment

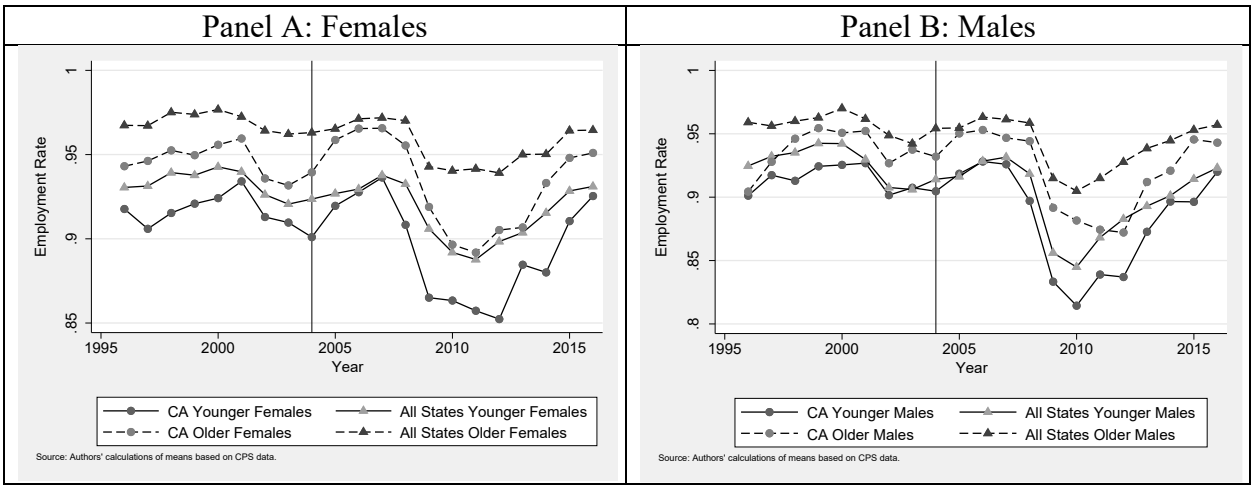

Figure A3: Unemployment Duration

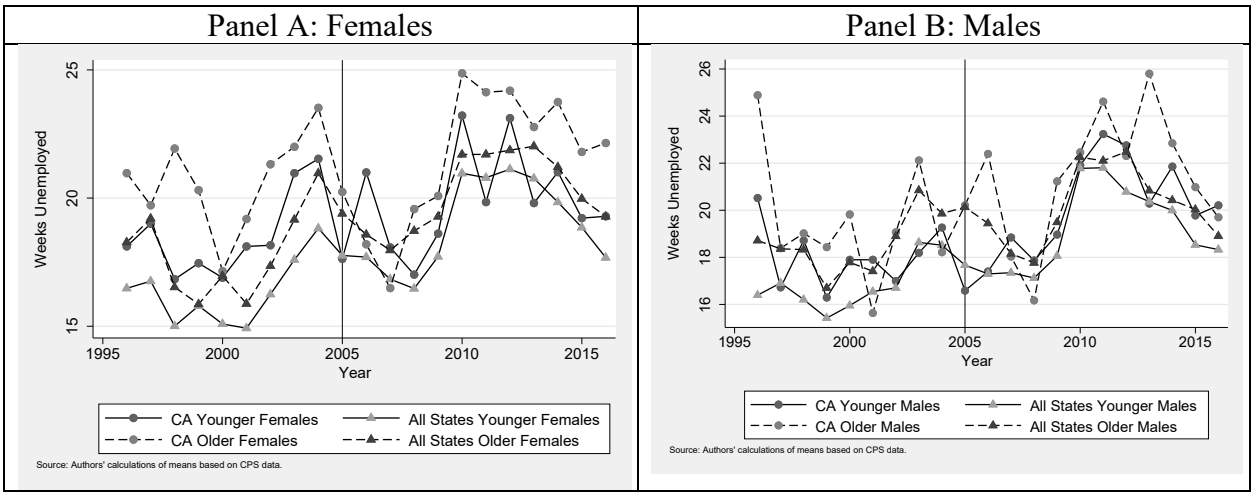

Figure A4: Earnings

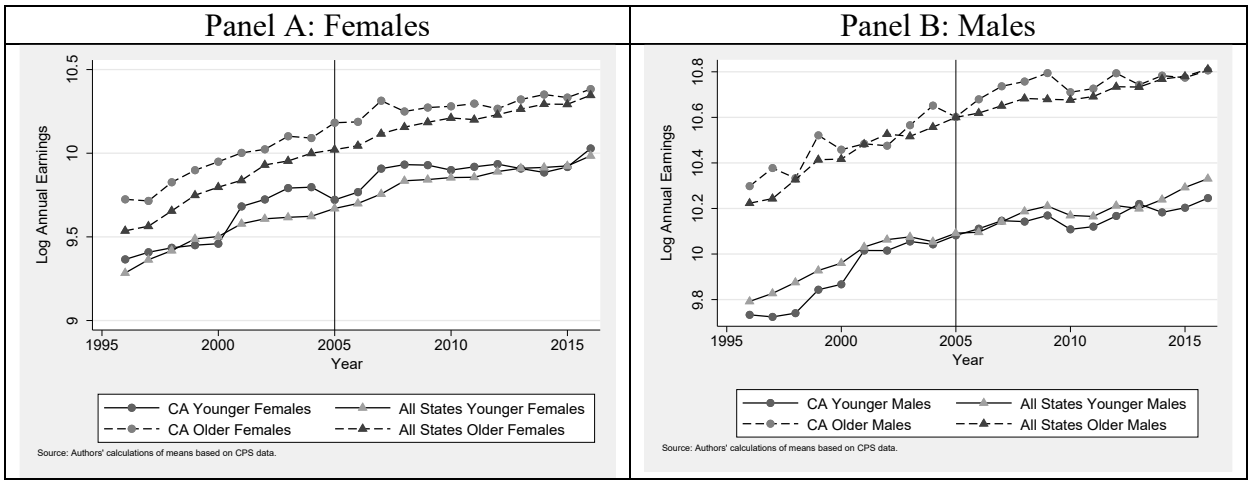

Figure A5: Distribution of Coefficients from In Labor Force Regressions

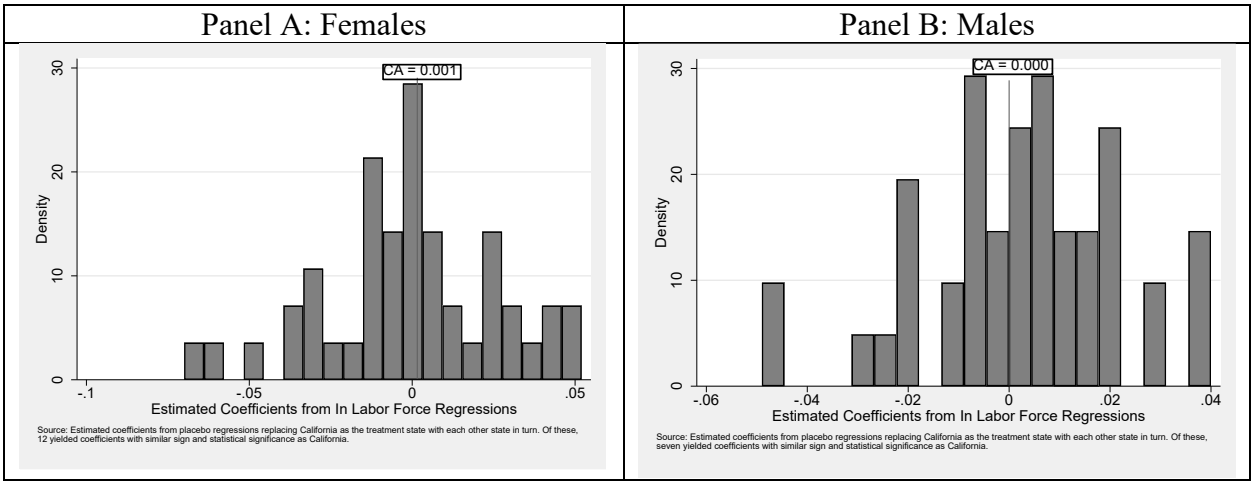

Figure A6: Distribution of Coefficients from Employment Regressions

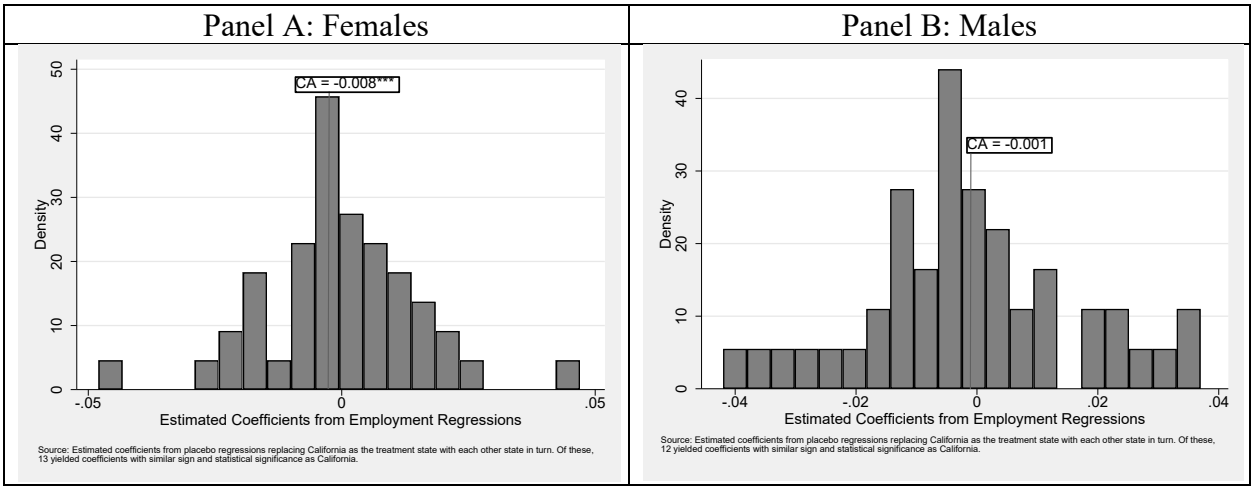

Figure A7: Distribution of Coefficients from Weeks Unemployed Regressions

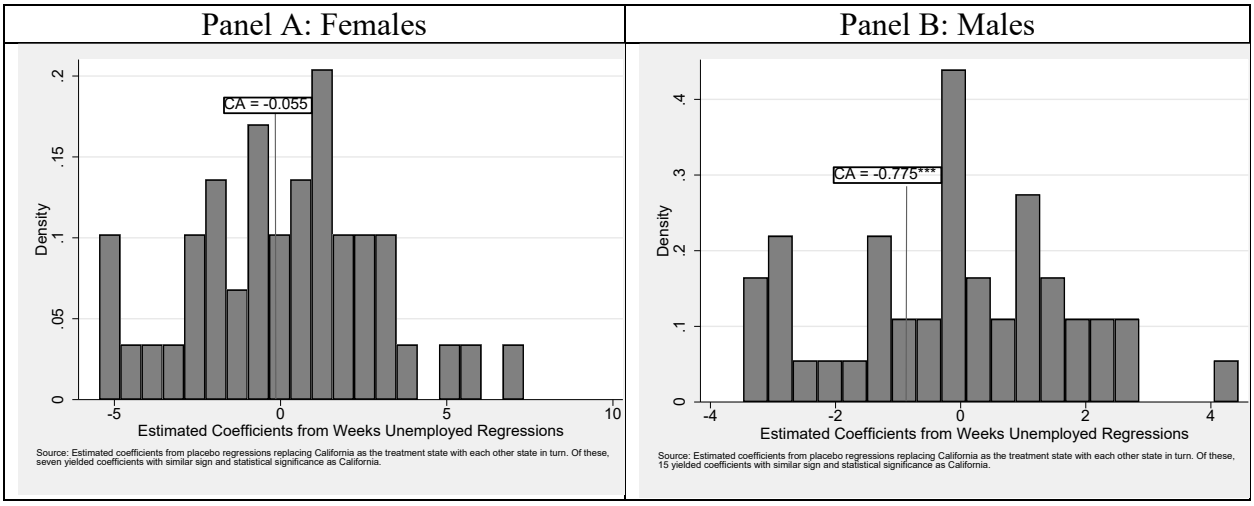

Figure A8: Distribution of Coefficients from Log Annual Earnings Regressions