Online Appendix for

The Long-Run Effects of Taking Up Paid Leave on Women's Careers: Evidence from a Regression Discontinuity Design and U.S. Tax Data

By Martha Bailey, Tanya Byker, Elena Patel, and Shanthi Ramnath

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This appendix provides more detailed information on the construction of the data used to produce our main analysis as well as the supplemental estimates referenced in the paper. The panel dataset was constructed from two sources: (1) the Social Security Administration's Death Master File derived from applications for a Social Security Number (SSN) and (2) the Internal Revenue Service's population of federal information and tax returns. In what follows, we describe these two databases, our sample creation, and our creation of variables.

I. SSA Database

These data permit us to identify the population of mothers giving birth between 2002 and 2006. These data contain identifying information for every individual issued a Social Security Number (SSN), including exact date of birth and the SSN of an individual's birth mother and father (when available). In addition, these data can be matched to the IRS tax data using SSNs.

II. IRS Tax Data

The IRS data contain the universe of tax returns and most information returns. Tax returns are self-reported information on Form 1040 to the IRS and required to be filed each year when an individual has income above a certain threshold. Information returns include forms that another entity (e.g., an employer, bank, fiduciary) submits to the IRS by law for reporting purposes. For example, employers submit Form W-2 for each of their workers to report the worker's wage earnings to the IRS for tax purposes. A nice feature of information returns is that they are available even when an individual taxpayer does not file a tax return. Information on individual taxpayers can be linked by SSN across tax years and within tax-year across forms, allowing us to construct complete longitudinal representation of taxable earnings.

Our analysis uses data collected on the IRS Form 1040 and two informational returns, Forms W-2 and 1099-G:

1. IRS Form W-2 contains information about individual taxpayers' annual wage earnings. By law, employers must submit this form annually to the IRS for all employees; and

2. IRS Form 1099-G contains information about certain federally taxable government payments. By law, state and local government agencies must submit this form annually to the IRS. Importantly, for our study, this form includes information about benefits paid to individual taxpayers for paid leave under CPFL. Note that other taxable benefits such as unemployment insurance benefits are also reported on Form 1099-G. We exploit change in the availability of CPFL benefits in conjunction with the data that a mother gives birth to identify changes in take-up of paid leave.

III. Matching and Sample Selection Procedure

Using information about the exact date of birth for each child in the SSA database, we identify the population of mothers who gave birth between 2002 and 2006. Using information on each mother's own date of birth in the SSA database, we restrict our analysis sample to those mothers who were 21 to 50 years of age at the time they gave birth. We identify fathers for each child in a similar manner.

We stratify our sample of mothers into two groups: (1) those who gave birth for the first time between 2002 and 2006; and (2) those who experienced a higher-order birth (second, third, etc., child born to a mother) between 2002 and 2006. We combine these two groups of mothers and refer to them collectively as the sample.

Because a mother is only eligible for paid leave under CPFL if she works in California, we limit our sample to mothers who *likely* work in California. To be in our sample,

1. A mother must have a California mailing address on her IRS Form 1040 or
2. Or, if a mother does not file an IRS Form 1040 in the year in which she gave birth, California must be included in the employee mailing address on her IRS Form W-2 for the year in which she gives birth.

For each woman giving birth from 2002-2006 who has met our sample criteria on age and state, we create a longitudinal panel dataset from IRS Forms 1040, W-2, and 1099-G filings between 2001 and 2018. Note that the longitudinal dataset contains information on income earned across all employers and in *all* states (not just California).

We also report analyses regarding the labor-market outcomes for married women. Spouses are identified based on the spousal SSN reported on IRS Form 1040 and need not be the same SSN reported on the child's SSN application. Spouses' outcomes are determined in the same way as for women giving birth.

We also study the take-up of paid leave by fathers and report these outcomes in our Appendix. We identify relevant fathers as those reported on the child's SSN application. We collect information from IRS Form 1099-G for these fathers to quantify their take-up for CPFL using the same approach as we do for mothers.

Variable Description	***Definition***
Cumulative real annual wage earnings	We observe annual wage earnings on IRS Form W-2 and convert these annual earnings to 2021 dollars using the CPI-U. Data are winsorized at the 99th percentile. If a mother does not have any W-2 income, her wage earnings are recorded as $0. In the case where a mother earns wages across multiple employers, we sum wage earnings across all Form W-2s. We sum up these real wage earnings for the 12 years after the woman gives birth or for the short-run, medium-run, and long-run periods described in the text. *Source: IRS Form W-2, Box 1*
Share of years employed	We create a dummy variable equal to 1 if a mother earned at least $1000 in nominal wage earnings in a given tax year. The $1,000 cutoff is typically used to exclude W-2s with *de minimis* amounts as they are not likely meaningful employment. We sum up the years employed in the 12 years after the woman gives birth or in the short-run, medium-run, and long-run periods described in the text, and divide by the number of years in the period to obtain the share of years employed. *Source: IRS Form W-2, Box 1*
Attached to pre-birth employer	We identified pre-birth employer using the Employer Identification Number of a mother's employer in the year before she gives birth. In the case where a mother earns wages across multiple employers, we limit our attention to the employer that corresponds to her highest annual wage earnings in the year before birth. We create a dummy variable equal to 1 if a mother is employed by the same employer in any year after she gives birth and 0 if she was employed by a different employer or not employed. Mothers who were not employed in the year before birth are excluded from this analysis. *Source: IRS Form W-2, Box b*
Received taxable benefits	Dummy variable equal to 1 if a mother received Box 1 income in a tax year on a Form 1099-G issued by the state of California, including paid family leave benefits. The state issuing the Form is determined using the payer address listed on the Form. Changes in this outcome capture changes in the take-up of paid leave after the implementation of CPFL as shown in Figure 3. Importantly, CPFL benefits are subject to federal income tax, and this income is reported to the IRS on the federal 1099-G form in Box 1. Benefits paid under Temporary Disability Insurance, on the other hand, are not federally taxable and are therefore not reported on Form 1099-G. in Box 1. *Source: IRS Form 1099-G*
Cumulative childbearing	The total number of children born to a mother, measured in 2018. *Source: SSA Database*
Age at birth	Age of a mother in days on the date she gives birth, calculated by taking the difference in the exact date of birth of the mother and child. *Source: SSA Database*
Married	Dummy variable equal to 1 if a mother's filing status is either married filing jointly or married filing separately as reported on IRS Form 1040 and 0 if a mother's filing status is either single, head of household, or qualifying surviving spouse, or if she does not file Form 1040. *Source: IRS Form 1040*

Spouse's real annual wage earnings	Annual wage earnings are converted to 2021 dollars using the CPI-U. If a spouse does not have any W-2 income, their wage earnings are recorded as $0. In the case where a spouse earns wages across multiple employers, we sum wage earnings across all Form W-2s. In the case where a mother does not have a spouse reported on IRS Form 1040, spouse's wage earnings are missing. *Source: IRS Form W-2, Box 1*
Pre-Pregnancy wage earning quartiles	For the subsample of working mothers, we age adjust pre-pregnancy wage earnings measured two years before childbirth by regressing this outcome on a quartic polynomial in mother's age in days. We then rank-order mothers according to the residual of this regression to produce age-adjusted wage earning quartiles. Sample: Women working two years prior to childbirth. *Source: IRS Form W-2, Box 1*
Filed Taxes	Dummy variable equal to 1 if a mother filed a Form 1040 and 0 otherwise. *Source: US Administrative Tax Database*
Dad Received Taxable Benefits	Dummy variable equal to 1 if a father received Box 1 income in a given year on a Form 1099-G issued by the State of California based on the payer's address. Fathers are reported on the same SSA application as the mother for a particular child. See also the description for "Received taxable benefits" to understand how this information can be used to study the take-up of paid leave under CPFL. *Source: IRS Form 1099-G*

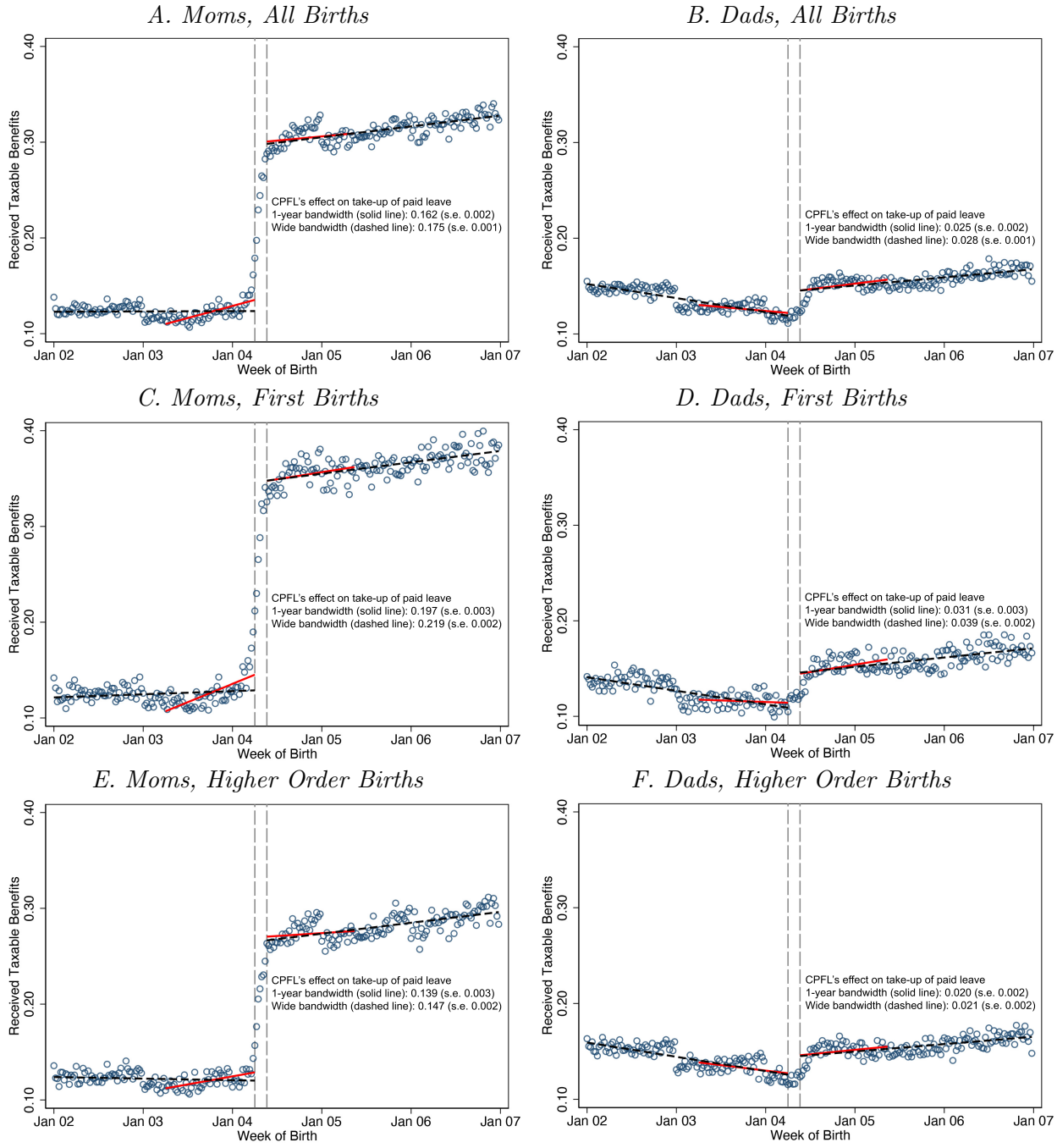
IV. Calculation of Leave Duration

We calculate the change in leave duration using a combination of tax and public data. First, we estimate the total paid leave benefits paid under CPFL using the specification in equation (2), where the outcome variable is the taxable income reported in Box 1 on Form 1099-G. We find that first birth mothers received $2,652 in benefits and all mothers received $2,427 in benefits, measured in 2021 dollars. This additional income reflects CPFL paid leave across all weeks of leave taken.

Second, we calculate the average, weekly CPFL benefits for eligible mothers in our estimation sample. We estimate the annual wage earnings for each mother in our bandwidth using Form W-2 income reported in the tax data. Then, we use the 2004 CPS ASEC to estimate the number of weeks that mothers with infants worked on average in the year before birth. Dividing annual wage earnings from the tax data by weeks worked from the CPS yields and estimate of the average weekly wage earnings for eligible mothers. To obtain their weekly benefits under CPFL, we multiply the average weekly wage earnings by 0.55, which is the wage earning replacement rate for CPFL in 2004. This value is the expected weekly CPFL benefits for mothers below the weekly benefit cap of $603 in 2004 ($865 in 2021 dollars). For women above the cap, we impose the benefit cap of $865.

Dividing the actual CPFL weekly benefits in the tax data by the expected weekly benefits gives an estimate of the number of weeks of leave each woman took. For first birth mothers, we estimate that the duration of paid leave for those taking leave increased by 5.40 weeks with the implementation of the 2004 California Paid Family Leave Act. For all mothers, we estimate that duration of paid leave increased by 5.44 weeks for those taking leave with the implementation of the Act. This aligns closely with estimates from Bedard and Rossin-Slater (2016) who use large-scale administrative CEDD, and Baum and Ruhm (2016) who estimate that the law increased the duration of leave by around five weeks for the average eligible mother in the NLSY97.

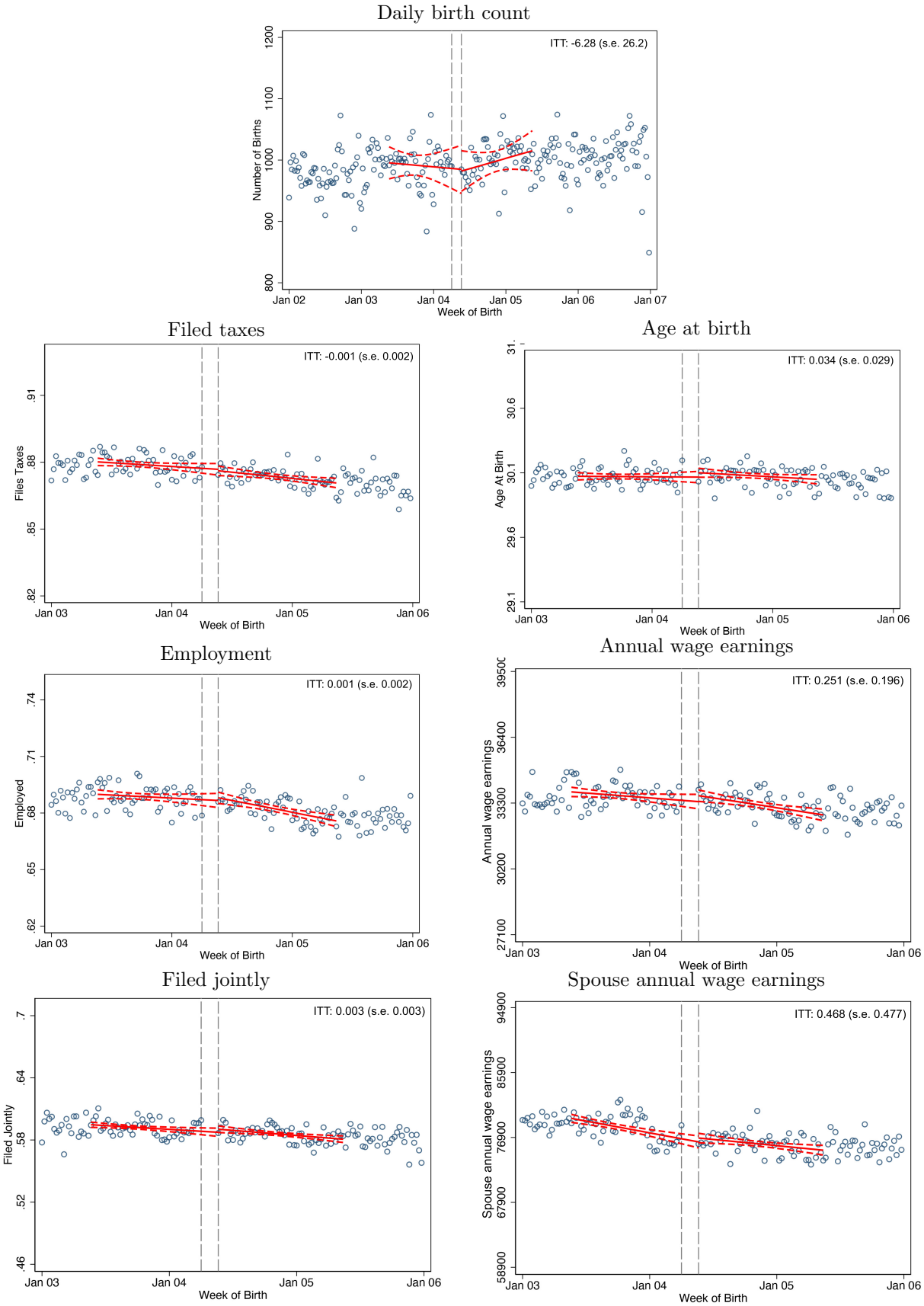
Appendix Figure 1. Share of Men and Women Taking Up CPFL's Paid Family Leave, by Parity



Notes: Take-up of paid leave is reported by the state of California as taxable benefits in Box 1 of Form 1099-G. Each point represents the share of either women or men receiving any Box 1 income on Form 1099-G by week the mother gave birth. The solid red line presents the estimates from equation (1) using a 365-day bandwidth on either side of the omitted region; and the dashed black lines present the estimate using all data from January 2002 to December 2006 excluding the April 1-May 20 period (wide bandwidth). Sources: SSA database and IRS tax data.

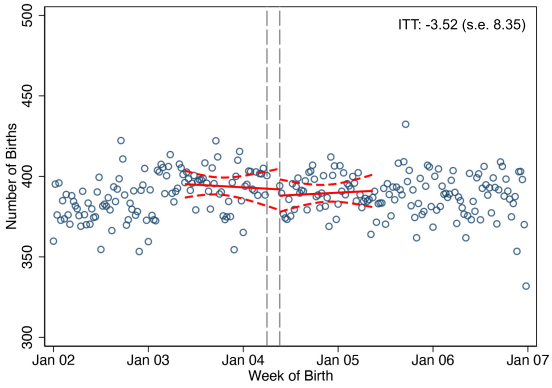
Appendix Figure 2. Balance in Childbearing and Pre-Pregnancy Characteristics by Parity

A. All births

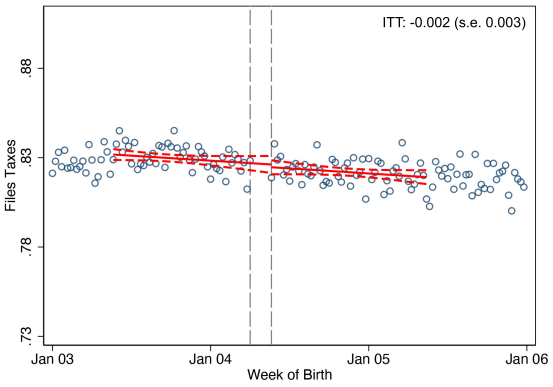


B. First births

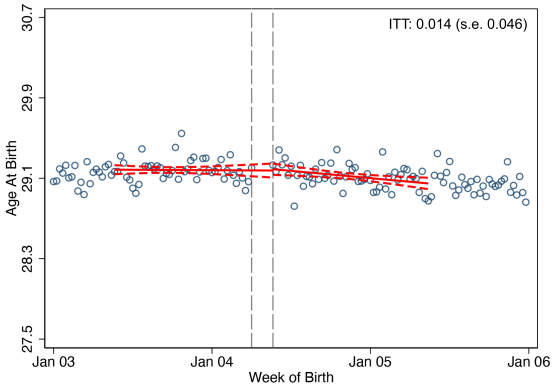
Daily birth count



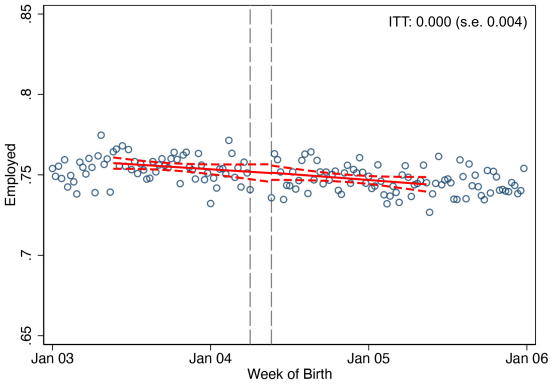
Filed taxes



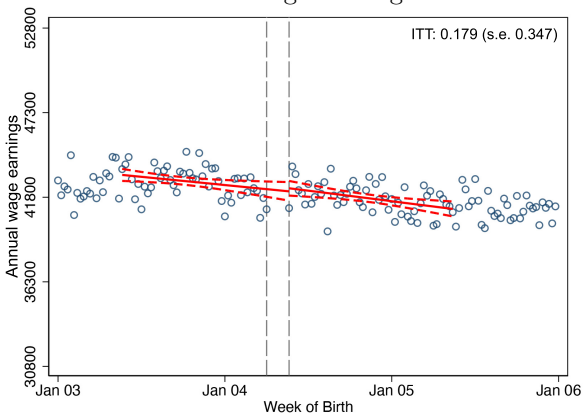
Age at birth



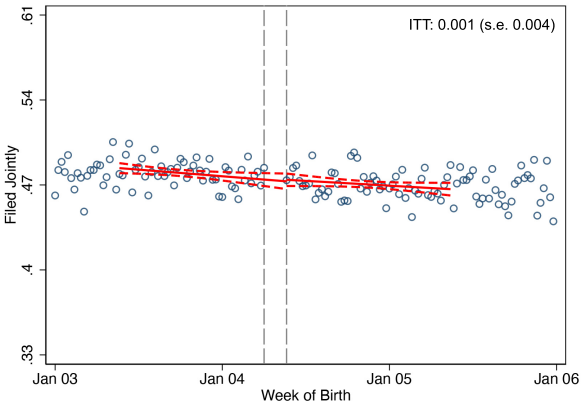
Employment



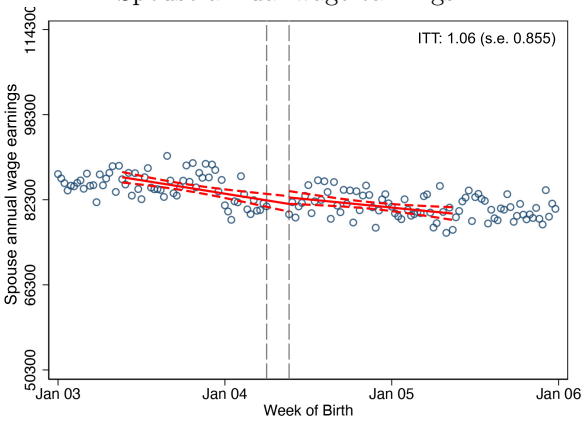
Annual wage earnings



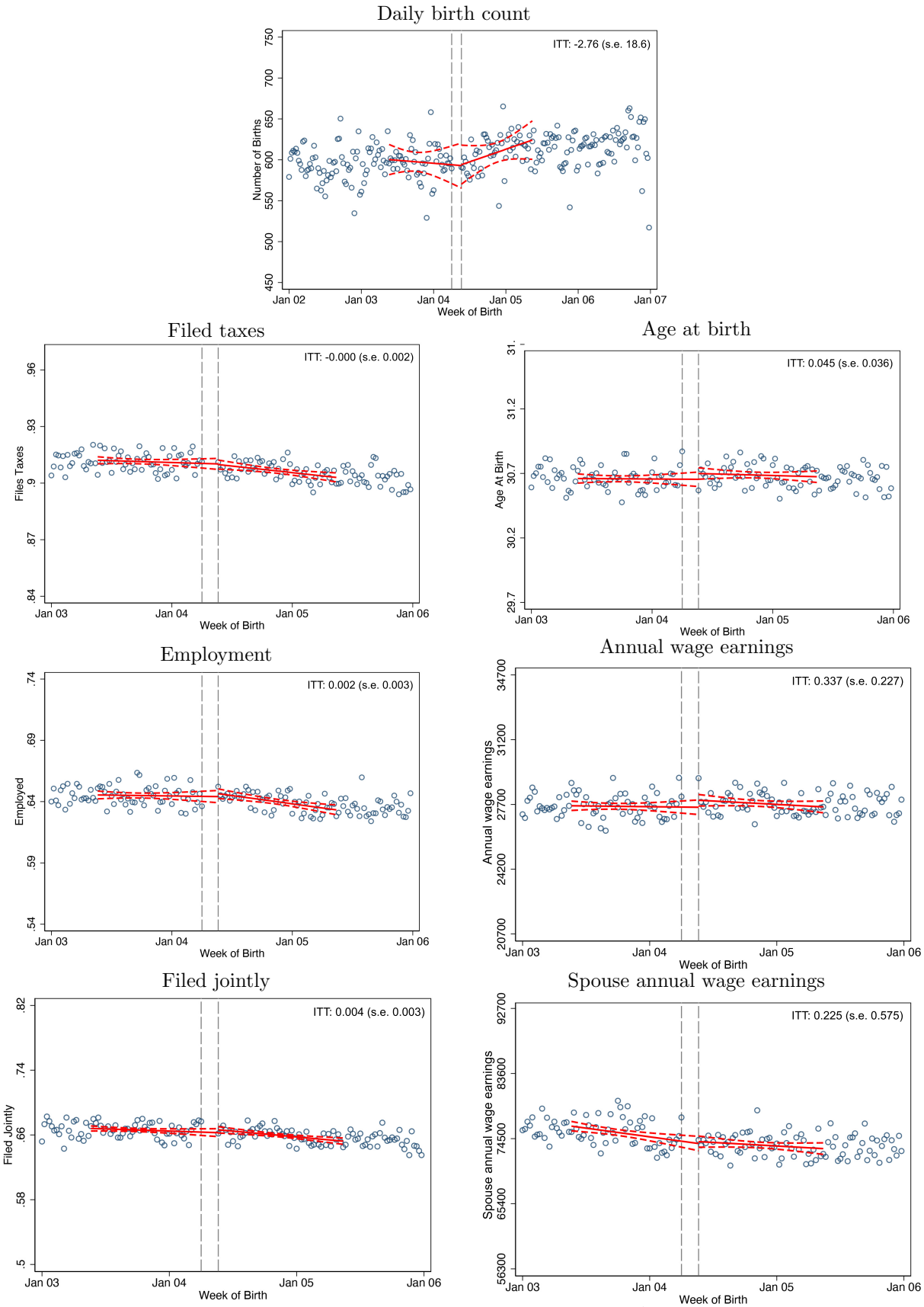
Filed jointly



Spouse annual wage earnings

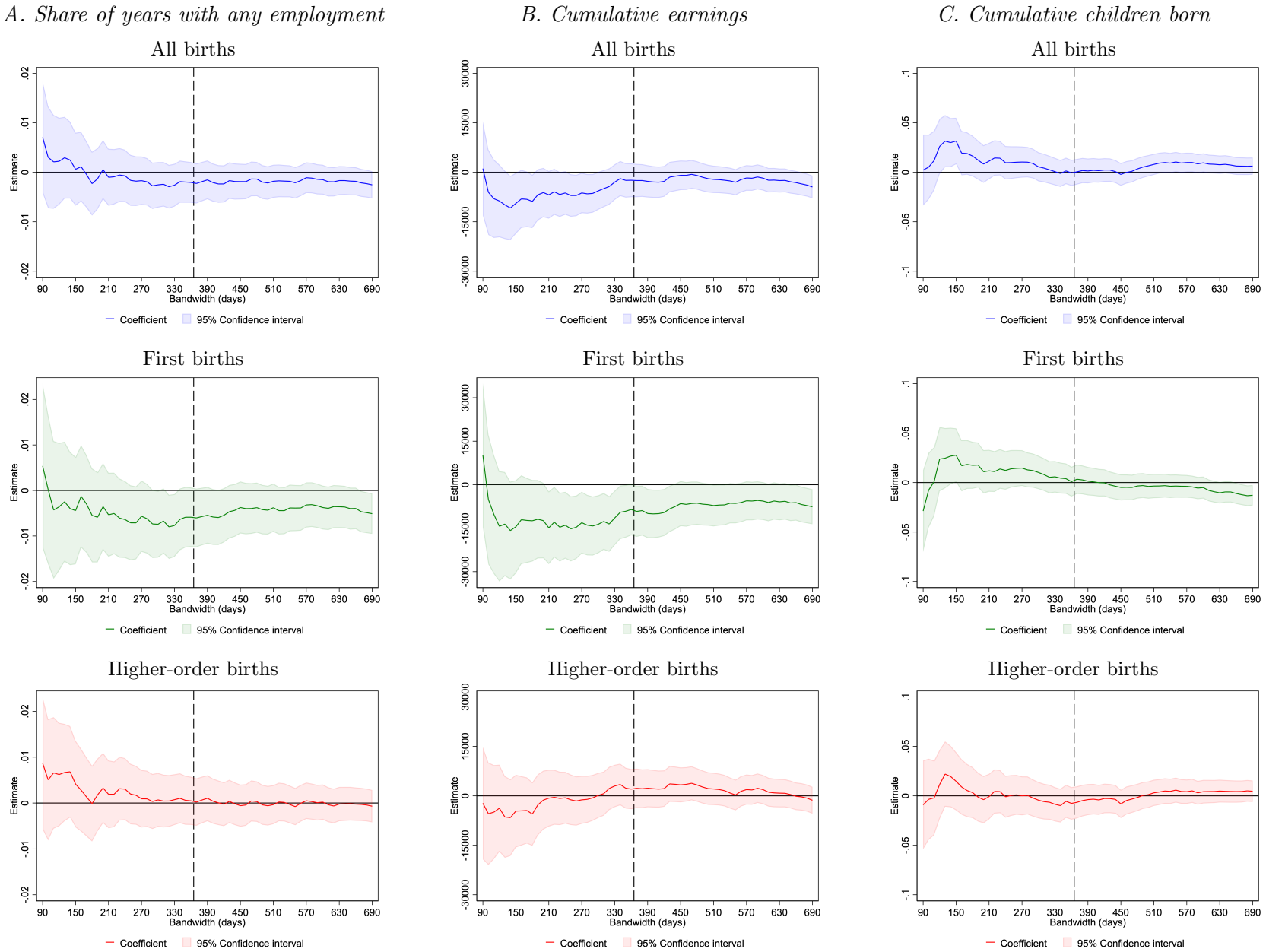


C. Higher-order births



Notes: These figures correspond to the estimates reported in Table 1. Panel A, B, and C present results for all births, first births, and higher-order births, respectively. See Table 1 notes for more information. Sources: SSA database and IRS tax data.

Appendix Figure 3. Robustness to Bandwidth Selection

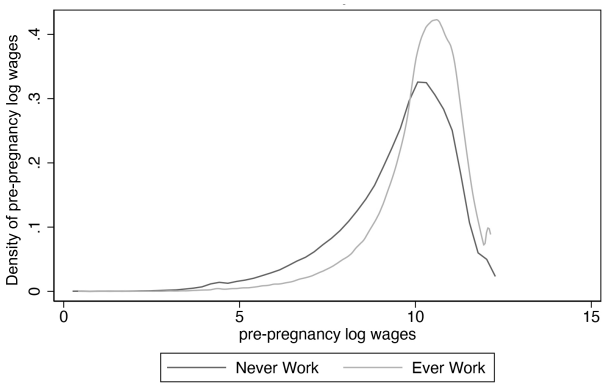


Notes: The x-axis measures the bandwidth used to estimate equation (2), and the y-axis captures the resulting estimates of LATE of CPFL. Rows 1—3 present results for all births, first births, and higher-order births, respectively. The solid line gives the point estimates on the treatment effect from equation (2), and the shaded area shows the 95-percent confidence interval. The vertical black dashed line represents the bandwidth used in our preferred estimation (365 days). See also Figure 4 notes for information about outcomes shown in Panel A, B, and C. Sources: SSA database and IRS tax data.

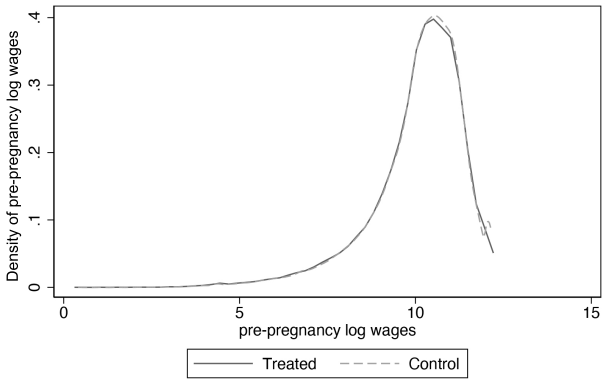
Appendix Figure 4. Density Plots of Pre-Pregnancy Log Wage Earnings, by Parity

A. All births

A1. Worked and did not work after childbirth

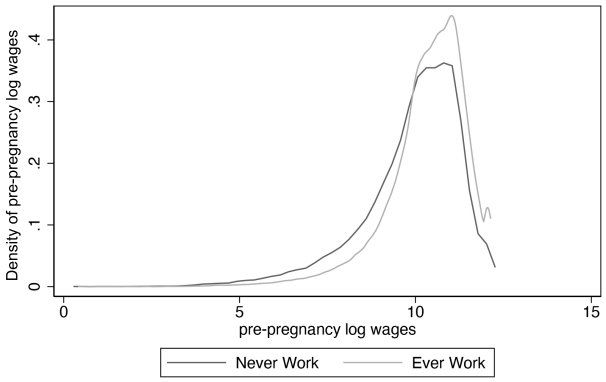


A2. Treatment and control

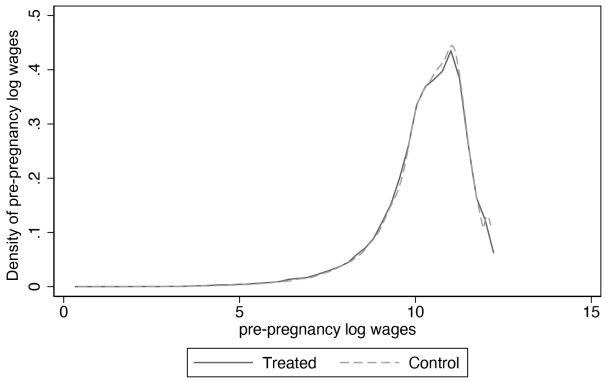


B. First births

B1. Worked and did not work after childbirth

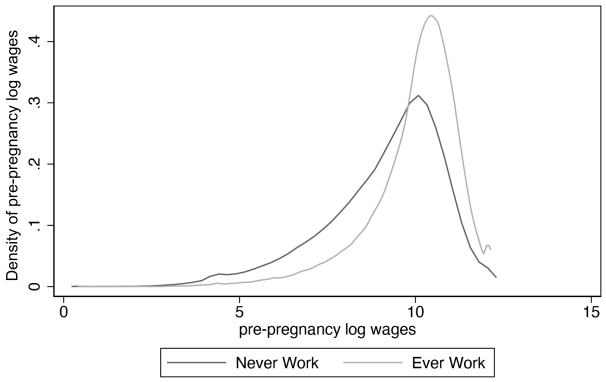


B2. Treatment and control

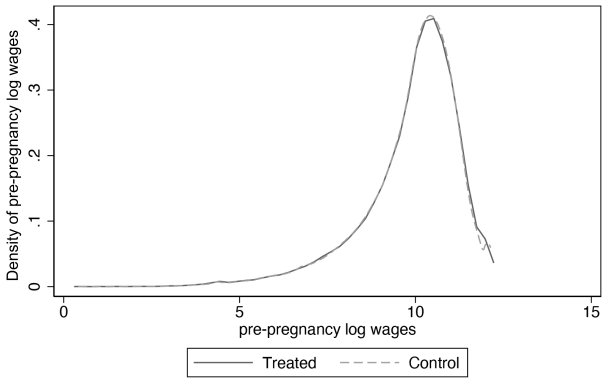


C. Higher-order births

C1. Worked and did not work after childbirth



C2. Treatment and control



Notes: Panels A1, B1, and C1 plot the density of pre-pregnancy log earnings for those women that did not work in the first three years after giving birth (dark grey line) and women who worked at least one year in the first three years after birth (light grey line). Panels A2, B2, and C2 plot the density of pre-pregnancy log earnings for moms in our primary specification in the treatment and control groups. See Tables 1 and 2 for sample sizes and descriptive statistics. Sources: SSA database and IRS tax data.

Appendix Table 1. US Paid Leave Literature

Study	Data	Sample Size	Results	Design
Appelbaum & Milkman (2011)	2009-2010 screening survey	500 employees (throughout 253 establishments)	PFL users had higher levels of wage replacement, able to take longer leaves, and were more satisfied with the lengths of their leaves; using PFL enhanced worker ability to care for their children/ill family members; for those in low- quality jobs, PFL increased likelihood of returning to work with same employer	Survey
Rossin-Slater, Ruhm, & Waldfogel (2013)	March CPS data from 1999-2010	Treatment group: 1,422 women with an infant; primary control group is 13,555 working women with a youngest child age 5-17 years	CA-PFL more than doubled the use of maternity leave among mothers with infants (increased it from 3 weeks to 6 or 7 weeks); CA-PFL increased the usual weekly work hours of employed mothers of 1-3 year old children by 6- 9%, and their wage incomes may have risen by a similar amount	Differences-in-differences (DD) Treatment: California mothers with infants or young children Control: older children, childless women, or new mothers in other states
Das & Polachek (2015)	March CPS data for entire population (1996- 2009)	34,270 observations at state, gender, age group, year average value level	Relative increase in unemployment between 0.3-1.5 percentage points and an increase in unemployment duration of 4-9%	DD Treatment: young women in California Control: The remaining population in California and in the other states
Huang & Yang (2015)	Infant Feeding Practices Study; 1993-1994 and 2005-2006	1,844-2,028 women	After PFL, breastfeeding rates through the first 3, 6, and 9 months of infancy increased by 10-20 percentage points after PFL; 3-5 percentage point increase for exclusive breastfeeding	DD Treatment: breastfeeding women in California Control: breastfeeding women in other states (excluding Alaska and Hawaii)

Appendix Table 1. US Paid Leave Literature (cont.)

Baum & Ruhm (2016)	1997 cohort of the NLSY-97	2,187 births to mothers (including 261 mothers in California) and 1,926 births to mothers in other states	CA-PFL raised leave use by almost 5 weeks for the average covered mother and 2-3 days for the corresponding father	DD Treatment: California, starting in 2004 Control: all other states, or in California before 2004
Byker (2016)	Monthly longitudinal data from Survey of Income and Program Participation (SIPP); California AND New Jersey; 1996-2008	1,259 California women and 1,557 NJ women	Short-duration paid leave increases labor force attachment of women who otherwise would've left the work force temporarily in the months around birth	Event study & DD Treatment: compare NJ/CA women giving birth after the PFL law Control: compare same NJ/CA women giving birth before PFL law
Oloomi (2016)	National Center for Health Statistics (NCHS)		PFL reduces birth delay by 2 years for women over 35; improves infant health outcomes for new mothers at delayed childbearing by reducing incidence of low birth weight by 1%, premature by 1.5%, and C- section infants by 3.1%; no significant impact on infant health for new mothers under 35 years old; CA- PFL associated with 5% increase in likelihood of employment after childbirth for older women	DD Treatment: Mothers in California after 2004 Control: Synthetic control states (all states except Alaska, Idaho, Indiana, Louisiana, Mississippi, Oklahoma, South Dakota, Utah, West Virginia, and Wyoming.)
Lichtman-Sadot (2017)	National Vital Statistics System (NVSS) for 2001, 2002, and 2004	429,710- 5,789,509 births	Women strategically time their pregnancies in order to be eligible for monetary benefits; after PFL was implemented, there was a 1.7% increase in the probability of a birth occurring during the second half of 2004 in California	DD Treatment: children in California (in kindergarten) Control: children in other states (in kindergarten)

Appendix Table 1. US Paid Leave Literature (cont.)

Thunnel (2017)	March CPS; Annual Social and Economic (ASEC) supplement; 1999- 2009	117,031 observations - women 25-40	CA-PFL had positive effects on birth likelihood for women ages 25-40 years old, equivalent to a 6.0% increase in birth likelihood after the policy enactment	DD Treatment: women ages 25-40 living in California Control: women ages 25-40 living in non- California states
Bartel, Rossin- Slater, Ruhm, Stearns, & Waldfogel (2018)	2000 Census data and 2000-2013 waves of the American Community Survey (ACS)	400 fathers 16- 54 years old; 251,685 all parents sample	Fathers of infants in California are 46% more likely to be on leave when CA- PFL is available; in households when both parents work, PFL increases both father-only leave- taking and joint leave-taking	DD Treatment: California fathers of infants Control: fathers of infants in other states Triple differences (DDD) Treatment: fathers with infants to fathers of older children in California Control: fathers of infants to fathers of children in others states
Bana, Bedard, & Rossin-Slater (2019)	California administrative datasets; Universe of PFL claims from 2005-2014; quarterly earnings over 2000-2014 for universe of employes working for an employer that reports to EDD tax branch	50,802-240,541 women who make a bonding claim	A 10% increase in WBA raises the likelihood of return to the pre-leave firm by (0.3-5%); an additional 10% in the benefit received during a mother's first period is associated with a 3-7% likelihood increase of having another PFL claim within the following three years	Regression kink method

Appendix Table 1. US Paid Leave Literature (cont.)

Bullinger (2019)	2003, 2007, 2011- 2012 National Survey of Children's Health (NSCH)	389 - 18,569 fathers	PFL is associated with improvements in parent-reported overall child heatlh and suggestive improvements in maternal mental health status	DD Treatment: parents and infants in California Control: parents and infants in (a) neighboring states (Arizona, Oregon, Nevada, and Washington), (b) other large states (Florida, New York, Pennsylvania, and Texas), and (c) all states other than California plus Washington D.C DDD Treatment: infants in California compared to children ages 2-17 in California Control: infants in other states to children ages 2-17 in other states
Pihl & Basso (2019)	California hospitalization data (OSHPD) from 2000-2007; hospitalization data from AZ, WA, and NY (HCUP)	84-336 state- month cells; 3,696,020- 6,536,506 total infant hospitalizations	After PFL introduction, hospitalization among infants declined by 3-6%	DD Treatment: Control: hospitalizations in California hospitalizations in Arizona, Washington, New York
Stanczyk (2019)	2000-2013 American Community Survey data	993,247 mothers	CA-PFL decreases risk of poverty in the prior year by 10.2% and increases household income by 4.1%	DDD Treatment: California mothers of 1-year-olds to California mothers of older children Control: Other state mothers of 1-year-olds to other state mothers of older children

Appendix Table 1. US Paid Leave Literature (cont.)

Trajkovski (2019)	1999-2000 National Survey of Parents and 2003-2012 American Time Use Survey	65 CA births from 1999-2000 and 198 CA births from 2003-2012 (22 to 32 CA births per year)	Paid leave increases time mothers spend in childcare activities by 34% (6 hours) per week	DD Treatment: mothers in California Control: mothers in non-California states
Chen (2020)	National Vital Statistics System (NVSS) from 2000-2008	31,995,915 total births (aggregate universe of birth records in the U.S. into birth- year/state/mother-education/etc.)	CA-PFL reduces rate of premature births by 2.8%	DD Treatment: children born in California Control: children born in other states
Doran, Bartel, Ruhm, Waldfogel (2020)	2000-2010; 11 waves of the National Health Interview Survey (NHIS)	7,379 mothers with children under 12 months	Access to PFL associated with 0.636-point decrease in postpartum psychological distress (27.6% decrease from the pre-treatment mean); also associated with 9.1 percentage point reduction in mild postpartum distress (38.4% reduction from pre-treatment mean)	Synthetic control models (SC) Treatment: mothers with infants in California Control: mothers with infants not in California
Lee, Modrek, White, Batra, Collin, Hamad (2020)	1993-2017 Panel Study of Income Dynamics (PSID)	6,690 parents	Parents were 11 percentage points more likely to be in very good or excellent health; had 0.79 percentage point reduction in psychological distress; and 12 percentage points decreased overweight risk	DD Treatment: Parents in California Control: Parents in non-PFL states
Montoya- Williams, Passarella, Lorch (2020)	Live birth and death certificates from all in- hospital deliveries from 1999-2008	6,164,203 observations	Postneonatal mortality rates decreased by 12% in CA	DD Treatment: live birth and death certificates from all in-hospital deliveries in California Control: live birth/death certificates from 2 unexposed states (Missouri and Pennsylvania)

Appendix Table 1. US Paid Leave Literature (cont.)

Saad-Lessler (2020)	SIPP 1998, 2003, 2006, 2011	170,286 individuals ages 20-65	CA-PFL increased likelihood of being an unpaid care provider in the labor force by 1% among women and the higher educated	DD Treatment: unpaid caregivers in the labor force in California Control: unpaid caregivers in the labor force in non-California states
Bartel, Kim, Ruhm, Waldfogel (2021)	2001-2008 American Community Survey	45-64 year old individuals	PFL increased employment of 45- 64 year old women and have disabled spouse by 0.9 percentage points; for men with disabled spouse, employment increased by 0.7 percentage points	DDD Treatment: 45-64 year old adults with a disabled spouse in California - post Control: 45-64 year old adults with disabled spouse in non- California states - pre
Golightly & Meyerhofer (2021)	Universe of birth certificate data from U.S. Vital Statistics Natality Data (NVSS); July 1999-June 2008 (analysis restricted to births to women ages 20-39 years)	5,508 state-birth month-birth year cells	Access to leave increases fertility by 2.8% (13,000 more births per year to women ages 20-39 in California)	DD Treatment: California, starting in 2004 Control: all other states
Lenhart (2021)	1999-2007 Food Security Supplement (CPS- FFS)	2,073 individuals with children (treatment); 1,606-23,077 (control)	CA-PFL reduced incidence of low food security by 2.29 (DD) and 1.98 (DDD) percentage points	DD Treatment: households with child ¡1 year old in California Control: households with child ¡1 year old in all states other than California DDD Treatment: households with infants in California vs. households with older children in California Control: households with infants in non- California states vs. households with older children in non- California states

Appendix Table 1. US Paid Leave Literature (cont.)

Schenck (2021)	NLSY		Average mother increased her leave by 30%	DD
Coile, Rossin-Slater, & Su (2022)	1996-2019 Medical Expenditure Panel Survey (MEPS); restricted-use version	Employed survey respondents aged 25 to 64 in the first round of the Household Component survey; all states except Rhode Island	PFL lead to a 7% decrease in the probability of the healthy wife of an individual with a medical condition or limitation taking up time off from work to care for family; PFL increased job continuity most among caregivers with 12 or fewer years of education.	Event study & DD

Appendix Table 2. Consecutive Weeks of Paid and Unpaid Leave, by Week of Delivery

	No birth complications				Cesarean			
Week of birth	TDI	CPFL	Unpaid	**Total paid leave**	TDI	CPFL	Unpaid	**Total paid leave**
April 1, 2004	6	0	6	**6**	8	1	5	**9**
April 8, 2004	6	0	6	**6**	8	2	4	**10**
April 15, 2004	6	1	5	**7**	8	3	3	**11**
April 22, 2004	6	2	4	**8**	8	4	2	**12**
April 29, 2004	6	3	3	**9**	8	5	1	**13**
May 6, 2004	6	4	2	**10**	8	6	0	**14**
May 13, 2004	6	5	1	**11**	8	6	0	**14**
May 20, 2004	6	6	0	**12**	8	6	0	**14**

Notes: The table reports the number of consecutive weeks of paid and unpaid leave available based on the date a mother gives birth. TDI references leave taken under California's Temporary Disability Insurance (TDI) program, CPFL references leave taken under California's Paid Family Leave program, and unpaid leave reflects the additional amount of leave for a mother to take 12 consecutive weeks of leave (for uncomplicated childbirth) or 14 weeks of leave (for Cesarean birth).

Appendix Table 3. Robustness of Results to Seasonality adjustments, RD polynomial, and Bandwidth Choice

A. Cumulative wage earnings in thousands of 2021 dollars

	All births			First births			Higher-order births		
	Treatment effect (ITT)	Control mean	Observations	Treatment effect (ITT)	Control mean	Observations	Treatment effect (ITT)	Control mean	Observations
Panel A: Seasonality adjustment									
Month f.e.	-2.24	359	725,183	-8.84	413	283,594	2.48	323	441,589
	(2.59)	(478)		(4.50)	(525)		(3.07)	(441)	
Cubic	-2.54	359	725,183	-8.33	413	283,594	1.84	323	441,589
	(2.59)	(478)		(4.50)	(525)		(3.07)	(441)	
Quartic	-2.27	359	725,183	-8.77	413	283,594	2.40	323	441,589
	(2.59)	(478)		(4.50)	(525)		(3.07)	(441)	
Quintic	-2.47	359	725,183	-8.85	413	283,594	2.07	323	441,589
	(2.59)	(478)		(4.50)	(525)		(3.07)	(441)	
Panel B: RD polynomial order									
Linear	-2.27	359	725,183	-8.77	413	283,594	2.40	323	441,589
	(2.59)	(478)		(4.50)	(525)		(3.07)	(441)	
Quadratic	-12.1	359	725,183	-20.1	413	283,594	-5.95	323	441,589
	(4.78)	(478)		(8.31)	(525)		(5.70)	(441)	
Panel C: Bandwidth									
185 days	-7.08	359	367,442	-11.8	416	144,250	-2.99	322	223,192
	(4.03)	(480)		(7.02)	(530)		(4.81)	(441)	
275 days	-6.64	357	547,893	-14.0	412	214,914	-1.19	320	332,979
	(3.08)	(477)		(5.37)	(525)		(3.66)	(438)	
365 days	-2.27	359	725,183	-8.77	413	283,594	2.40	323	441,589
	(2.59)	(478)		(4.50)	(525)		(3.07)	(441)	
455 days	-0.846	359	902,078	-6.38	413	352,100	3.36	323	549,978
	(2.27)	(478)		(3.93)	(525)		(2.68)	(441)	
545 days	-3.00	355	1,082,827	-6.83	409	423,041	0.486	320	659,786
	(2.02)	(473)		(3.51)	(520)		(2.39)	(436)	

B. Share of years with any employment

	All births			First births			Higher-order births		
	Treatment effect (ITT)	Control mean	Observations	Treatment effect (ITT)	Control mean	Observations	Treatment effect (ITT)	Control mean	Observations
Panel A: Seasonality adjustment									
Month f.e.	-0.002	0.592	725,183	-0.006	0.603	283,594	0.000	0.584	441,589
	(0.002)	(0.391)		(0.003)	(0.392)		(0.003)	(0.390)	
Cubic	-0.002	0.592	725,183	-0.005	0.603	283,594	0.001	0.584	441,589
	(0.002)	(0.391)		(0.003)	(0.392)		(0.003)	(0.390)	
Quartic	-0.002	0.592	725,183	-0.006	0.603	283,594	0.000	0.584	441,589
	(0.002)	(0.391)		(0.003)	(0.392)		(0.003)	(0.390)	
Quintic	-0.002	0.592	725,183	-0.006	0.603	283,594	0.000	0.584	441,589
	(0.002)	(0.391)		(0.003)	(0.392)		(0.003)	(0.390)	
Panel B: RD polynomial order									
Linear	-0.002	0.592	725,183	-0.006	0.603	283,594	0.000	0.584	441,589
	(0.002)	(0.391)		(0.003)	(0.392)		(0.003)	(0.390)	
Quadratic	-0.000	0.592	725,183	-0.007	0.603	283,594	0.004	0.584	441,589
	(0.004)	(0.391)		(0.006)	(0.392)		(0.005)	(0.390)	
Panel C: Bandwidth									
185 days	-0.001	0.592	367,442	-0.006	0.604	144,250	0.002	0.583	223,192
	(0.003)	(0.391)		(0.005)	(0.392)		(0.004)	(0.391)	
275 days	-0.002	0.592	547,893	-0.006	0.604	214,914	0.001	0.583	332,979
	(0.002)	(0.391)		(0.004)	(0.391)		(0.003)	(0.390)	
365 days	-0.002	0.592	725,183	-0.006	0.603	283,594	0.000	0.584	441,589
	(0.002)	(0.391)		(0.003)	(0.392)		(0.003)	(0.390)	
455 days	-0.002	0.592	902,078	-0.004	0.603	352,100	-0.001	0.584	549,978
	(0.002)	(0.391)		(0.003)	(0.392)		(0.002)	(0.390)	
545 days	-0.002	0.591	1,082,827	-0.004	0.602	423,041	-0.001	0.583	659,786
	(0.002)	(0.390)		(0.003)	(0.391)		(0.002)	(0.389)	

C. Cumulative childbearing

	All births			First births			Higher-order births		
	Treatment effect (ITT)	Control mean	Observations	Treatment effect (ITT)	Control mean	Observations	Treatment effect (ITT)	Control mean	Observations
Panel A: Seasonality adjustment									
Month f.e.	0.003	2.64	725,183	0.004	1.93	283,594	-0.003	3.11	441,589
	(0.007)	(1.24)		(0.008)	(0.908)		(0.008)	(1.21)	
Cubic	0.004	2.64	725,183	0.003	1.93	283,594	-0.003	3.11	441,589
	(0.007)	(1.24)		(0.008)	(0.908)		(0.008)	(1.21)	
Quartic	0.001	2.64	725,183	0.002	1.93	283,594	-0.006	3.11	441,589
	(0.007)	(1.24)		(0.008)	(0.908)		(0.008)	(1.21)	
Quintic	0.002	2.64	725,183	0.003	1.93	283,594	-0.004	3.11	441,589
	(0.007)	(1.24)		(0.008)	(0.908)		(0.008)	(1.21)	
Panel B: RD polynomial order									
Linear	0.001	2.64	725,183	0.002	1.93	283,594	-0.006	3.11	441,589
	(0.007)	(1.24)		(0.008)	(0.908)		(0.008)	(1.21)	
Quadratic	0.023	2.64	725,183	0.029	1.93	283,594	0.008	3.11	441,589
	(0.012)	(1.24)		(0.014)	(0.908)		(0.015)	(1.21)	
Panel C: Bandwidth									
185 days	0.016	2.64	367,442	0.018	1.92	144,250	0.002	3.11	223,192
	(0.010)	(1.25)		(0.012)	(0.908)		(0.013)	(1.22)	
275 days	0.011	2.64	547,893	0.013	1.93	214,914	0.002	3.11	332,979
	(0.008)	(1.25)		(0.009)	(0.910)		(0.010)	(1.22)	
365 days	0.001	2.64	725,183	0.002	1.93	283,594	-0.006	3.11	441,589
	(0.007)	(1.24)		(0.008)	(0.908)		(0.008)	(1.21)	
455 days	-0.001	2.65	902,078	-0.006	1.94	352,100	-0.006	3.11	549,978
	(0.006)	(1.25)		(0.007)	(0.907)		(0.007)	(1.22)	
545 days	0.010	2.65	1,082,827	-0.003	1.95	423,041	0.006	3.11	659,786
	(0.005)	(1.25)		(0.006)	(0.909)		(0.006)	(1.22)	

Notes: Panels show the robustness of our estimates for our main outcomes to different seasonality adjustments (residuals from a regression of each outcome on a fixed effects or polynomial in month of child's birth to correct for seasonality), polynomial specification of the running variable (quadratic or linear), and bandwidth selection. Our preferred specification choices are highlighted in bold. Sources: SSA database and IRS tax data.

Appendix Table 4. ITT and LATE Estimates for Share of Years Attached to Pre-Birth Employer

	LATE				ITT			
	All	**Short run**	**Medium run**	**Long run**	**All**	**Short run**	**Medium run**	**Long run**
	Years 1-12	Years 1-3	Years 4-8	Years 9-12	Years 1-12	Years 1-3	Years 4-8	Years 9-12
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A: All births								
Treatment effect	-0.016	-0.016	-0.022	-0.010	-0.004	-0.004	-0.005	-0.002
	(0.010)	(0.013)	(0.011)	(0.010)	(0.002)	(0.003)	(0.003)	(0.002)
Control mean	0.246	0.381	0.226	0.171	0.246	0.381	0.226	0.171
	(0.359)	(0.436)	(0.392)	(0.363)	(0.359)	(0.436)	(0.392)	(0.363)
Observations	494,330	494,330	494,330	494,330	494,330	494,330	494,330	494,330
Panel B: First births								
Treatment effect	-0.027	-0.026	-0.030	-0.024	-0.007	-0.006	-0.007	-0.006
	(0.014)	(0.017)	(0.015)	(0.014)	(0.003)	(0.004)	(0.004)	(0.003)
Control mean	0.231	0.366	0.209	0.157	0.231	0.366	0.209	0.157
	(0.349)	(0.431)	(0.380)	(0.351)	(0.349)	(0.431)	(0.380)	(0.351)
Observations	216,813	216,813	216,813	216,813	216,813	216,813	216,813	216,813
Panel C: Higher-order births								
Treatment effect	-0.007	-0.009	-0.014	0.003	-0.002	-0.002	-0.003	0.001
	(0.015)	(0.018)	(0.017)	(0.016)	(0.003)	(0.004)	(0.003)	(0.003)
Control mean	0.259	0.393	0.240	0.181	0.259	0.393	0.240	0.181
	(0.366)	(0.440)	(0.400)	(0.372)	(0.366)	(0.440)	(0.400)	(0.372)
Observations	277,517	277,517	277,517	277,517	277,517	277,517	277,517	277,517

Notes: Attachment to pre-birth employer is analyzed for the subgroup of mothers who were employed in the year before they gave birth. See variable definition in the data appendix. The LATEs, reported in columns (1)-(4), are estimated using the specification in equation (2) and 365-day bandwidth on either side of the omitted region. The ITTs, reported in columns (5)-(8), are estimated using the specification in equation (1) and 365-day bandwidth on either side of the omitted region. See also Table 2 notes. Sources: SSA database and IRS tax data.

Appendix Table 5. Intention to Treat Effects of Paid Leave

A. Effects on employment, wage earnings, and childbearing

	All (1)	**First births** (2)	**Higher-order births** (3)
Panel A: Share of years with any employment			
ITT effect	-0.002	-0.006	0.000
	(0.002)	(0.003)	(0.003)
Percent change over control mean	-0.370%	-0.955%	0.027%
Control mean	0.592	0.603	0.584
Control standard deviation	(0.391)	(0.392)	(0.390)
Observations	725,183	283,594	441,589
Panel B: Cumulative real wage earnings in thousands of 2021 dollars			
ITT effect	-2.27	-8.77	2.40
	(2.59)	(4.50)	(3.07)
Percent change over control mean	-0.633%	-2.12%	0.744%
Control mean	359	413	323
Control standard deviation	(478)	(525)	(441)
Observations	725,183	283,594	441,589
Panel C: Cumulative childbearing			
ITT effect	0.001	0.002	-0.006
	(0.007)	(0.008)	(0.008)
Percent change over control mean	0.023%	0.085%	-0.195%
Control mean	2.64	1.93	3.11
Control standard deviation	(1.24)	(0.908)	(1.21)
Observations	725,183	283,594	441,589

Notes: These ITT estimates correspond to the LATE estimates Table 2 in the main text. See Table 2 notes for more information.

B. ITT effects of CPFL in different periods

	First births			Higher-order births		
	Short run Years 1-3	Medium run Years 4-8	Long run Years 9-12	Short run Years 1-3	Medium run Years 4-8	Long run Years 9-12
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Share of years with any employment						
ITT effect	-0.008	-0.003	-0.007	-0.002	0.001	0.001
	(0.004)	(0.004)	(0.004)	(0.003)	(0.003)	(0.003)
Percent change over control mean	-1.26%	-0.537%	-1.23%	-0.346%	0.134%	0.160%
Control mean	0.613	0.592	0.609	0.564	0.579	0.605
Control standard deviation	(0.435)	(0.433)	(0.446)	(0.445)	(0.430)	(0.444)
Observations	283,594	283,594	283,594	441,589	441,589	441,589
Panel B: Cumulative real wage earnings in thousands of 2021 dollars						
ITT effect	-2.29	-2.44	-4.04	-0.046	1.59	0.861
	(1.04)	(1.92)	(1.80)	(0.718)	(1.30)	(1.21)
Percent change over control mean	-2.50%	-1.45%	-2.64%	-0.065%	1.20%	0.715%
Control mean	91.8	169	153	70.3	132	120
Control standard deviation	(121)	(225)	(209)	(103)	(189)	(173)
Observations	283,594	283,594	283,594	441,589	441,589	441,589

Notes: These ITT estimates correspond to the LATE estimates Table 3 in the main text. See Table 3 notes for more information.

Appendix Table 6. Heterogeneity in the Effects of Paid Leave, by Subgroup

	All first/higher-order births	Under 30	Over 30	Unmarried	Married	Wage quartile 1	2	3	4
Panel A: First births									
Take-up of CPFL	0.197	0.183	0.216	0.177	0.221	0.145	0.190	0.274	0.291
	(0.003)	(0.005)	(0.005)	(0.005)	(0.005)	(0.010)	(0.009)	(0.008)	(0.007)
LATE on share of years with any employment	-0.048	-0.057	-0.039	-0.080	-0.042	-0.321	0.012	-0.003	-0.048
	(0.028)	(0.039)	(0.039)	(0.041)	(0.038)	(0.128)	(0.057)	(0.031)	(0.025)
LATE on cumulative real wage earnings	-0.107	-0.121	-0.092	0.092	-0.085	-0.466	0.005	-0.006	-0.033
	(0.055)	(0.077)	(0.071)	(0.084)	(0.069)	(0.259)	(0.118)	(0.059)	(0.047)
LATE on cumulative child-bearing	0.004	0.015	-0.011	0.052	-0.054	0.055	-0.022	-0.012	-0.005
	(0.020)	(0.029)	(0.024)	(0.033)	(0.024)	(0.082)	(0.051)	(0.030)	(0.023)
Observations	283,594	156,706	126,888	150,386	133,208	32,655	51,186	61,745	73,571
Panel B: Higher-order births									
Take-up of CPFL	0.139	0.126	0.150	0.147	0.134	0.121	0.171	0.240	0.262
	(0.003)	(0.004)	(0.003)	(0.005)	(0.003)	(0.006)	(0.007)	(0.007)	(0.008)
LATE on share of years with any employment	0.002	-0.005	0.011	0.009	-0.017	-0.030	-0.115	-0.002	-0.045
	(0.033)	(0.051)	(0.042)	(0.043)	(0.046)	(0.074)	(0.043)	(0.027)	(0.026)
LATE on cumulative real wage earnings	0.053	-0.130	0.108	0.085	0.059	-0.003	-0.156	-0.088	-0.028
	(0.068)	(0.098)	(0.084)	(0.091)	(0.091)	(0.153)	(0.088)	(0.056)	(0.053)
LATE on cumulative child-bearing	-0.014	-0.007	-0.012	-0.041	-0.005	0.056	-0.083	0.008	0.019
	(0.019)	(0.032)	(0.023)	(0.031)	(0.024)	(0.047)	(0.035)	(0.026)	(0.025)
Observations	441,589	190,287	251,302	151,043	290,546	97,260	78,623	67,717	56,316

Notes: These LATE estimates correspond to Figure 6 in the main text. All outcomes are reported as a percent change from the control mean. See text and Figure 6 notes for more information. Sources: SSA database and IRS tax data.