

# The effect of parental leave on female employment: evidence from state policies\*

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## Abstract

This paper analyzes the effect of federal and state maternity leave policies on female employment. We analyze if the enactment of the federal Family Medical Leave Act (FMLA) differently affected states which previously implemented maternity leave laws at the state level than those states which did not. Additionally, we study whether FMLA provoked an increase in the female employment and labor force participation in those states which expanded its benefits and relaxed the eligibility criteria. Finally, we analyze the Paid Family Leave program in California, comparing how the change in female employment and labor force participation differs from those states which have FMLA alone and those which have complemented the benefits of FMLA. Using March CPS data available from the Integrated Public Use Micro data Series (IPUMS), our results suggest in general, confirm the positive and significant effect of FMLA on female employment and that the change in female employment is positive and significant for some states when they complement the benefits and eligibility criteria of FMLA.

**Keywords:** Family Medical Leave Act, Temporary Disability Insurance, Female Employment.

**JEL Classification:** J48, K31

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# 1 Introduction

Over the past decades, parental leave policies have been an important issue of debate given their possible impacts on employment, leave taking and earnings. In particular, since 78 percent of labor force is composed of families where both parents work (Grant *et. al*, 2005), parental leave policy is a relevant topic both at the federal and state level of the government. Research on the effect of such leave policies is particularly important given the recent trends in female employment. For instance, more than half (52 percent) of women with children under the age of one were employed in 1998 compared to only two-fifths ten years earlier (Waldfogel, 1999).

In spite of the substantial increase in the percentage of women with young children in the labor force, the Family and Medical Leave Act (FMLA) is the only law in the United States at the federal level to directly address family leave. In particular, FMLA requires employers with 50 or more employees to allow twelve weeks of unpaid, job-protected leave following the birth or adoption of a child. Enacted in 1993, the legislation covers private, state and local government employees who worked at least 1250 hours in the last 12 months. Therefore, year 1993 is identified as the beginning of job-protected maternity leave policies at the federal level. In addition, given that the percentage of employees under maternity leave coverage increased dramatically after the enforcement of FMLA (86 percent in 1995 as compared to 39 percent 1991, Waldfogel (1999a)), it is worthwhile analyzing its impact on female employment.

Hence after, some states<sup>1</sup> have introduced different extensions to the FMLA which relax the employee's eligibility -such as the minimum number of hours worked and the required number of workers in the firm- covering both public and private sector employees. Although FMLA is the only law at the federal level which provides some assistance to new parents, there were laws prevalent at the state level long before the federal act came into effect, which helped new mothers. In particular, the Temporary Disability Insurance (TDI), which provides wage replacement for non-work connected sickness or injury, includes disabilities related with pregnancies. The TDI is implemented by five states<sup>2</sup>, which started to apply this law from 1942 to 1969. The Paid Family Leave program, implemented by California in 2004, has been the most recent law enacted with regard to parental leave policy. In particular, it provides partially paid leave for a period of 6 weeks.

Hence, the above policies basically differ in either their medical requirements for eligibility or the paid/unpaid leave they provide. On the one hand, TDI provides paid leave, but only if the mother's maternity is associated with medical conditions which support a doctor's decision of considering it a temporary disability<sup>3</sup>. On the other hand, FMLA provides unpaid leave but it does not require

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<sup>1</sup>Connecticut, Maine, Oregon and Vermont are the states whose FMLA expansion covers both the public as well as private sector employees. There are seven other states plus District of Columbia which also expanded FMLA but does not cover both public and private sector employees.

<sup>2</sup>California, Hawaii, New Jersey, New York and Rhode Island. Puerto Rico also has TDI law.

<sup>3</sup>After the Pregnancy Discrimination Act in 1978, every pregnancy is treated as a temporary disability.

the consideration of maternity as a temporary disability. Finally, California’s Paid Family Leave program can be considered as the most generous of these programs since it provides a paid leave (as TDI) and, in addition, it does not require the temporary disability consideration (as FMLA).

This paper analyzes the impact of the existing parental leave policies on female employment. That is, do these different policies have the same impact on female employment? In particular, we examine whether the introduction of FMLA differently affected female employment in those states having some paid parental leave policy before FMLA was enacted –those which previously implemented the TDI– and those states which did not have any kind of paid parental leave policy – those which neither passed TDI nor any other form of state leave policy<sup>4</sup>. Additionally, we examine if change in the female employment was higher in those states which expanded the benefits (and relaxed the eligibility criteria) of FMLA than in those which did not. Finally, we analyze whether California’s Paid Family Leave program has a differential impact on female employment compared to (1) states that did not expand FMLA, and (2) states which expanded FMLA. The answer to these questions provides some interesting policy recommendations about parental leave programs.

Previous studies have analyzed the impact of FMLA on female employment, coverage, leave-taking and earnings. One of the most relevant works in this respect is Waldfogel (1999a). She used March CPS data for the years 1992-1995 to compare the change in female employment, coverage and leave-taking between states which had no maternity leave legislations before FMLA to the states which had prior parental leave laws. Using a difference-in-difference-in-difference estimation strategy, her results indicate that there has been an increase in employment, coverage and leave-taking following the enforcement of FMLA. The difference between our work and the former paper is twofold. First, we identify those states that had some form of paid parental leave policy before FMLA was enacted, i.e. those states which previously implemented TDI. This specific classification allows us to work with a homogeneous group of states which have been affected by the same law, and it captures the differential impact of FMLA on female employment between those states applying TDI and those applying no state parental leave policies<sup>5</sup>. Second, we compare whether the impact of FMLA on female employment differs between those states which expanded its benefits and reduced its eligibility criteria and those which did not expand them. This enables us to analyze whether the impact on female employment and labor force participation is different when certain states make the parental leave policy more generous.

Another important contribution to the literature is Kallaman (1996). She studies the effect of the FMLA on female employment and wages. Her results show a positive (negative) and significant effect of FMLA on employment (wages). Kallaman’s work does not make any distinction between the effects of FMLA and those of other policies. On the contrary, our paper focuses on comparing

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<sup>4</sup>There were eighteen states which had no maternity leave policy before the implementation of FMLA. They are, Alabama, Arkansas, Delaware, Idaho, Indiana, Kentucky, Michigan, Mississippi, Missouri, Nebraska, Nevada, New Mexico, North Carolina, South Carolina, South Dakota, Texas, Utah and Wyoming.

<sup>5</sup>Note that California, New Jersey and Rhode Island had some maternity leave legislations before FMLA was enacted, so the differential effect on female employment cannot be attributed to TDI alone for these three states.

the relative performance of the above federal and state policies on female employment and labor force participation which greatly enriches the analysis. More recently, Hofferth and Curtin (2006) studied how implementation of the FMLA affected mothers' return to the work place and their changes in wages. However, as mentioned before, our paper is mainly focused on the effect of maternity leave policies on female employment across different states.

Using difference-in-differences (DD) and difference-in-difference-in-difference (DDD) estimation strategy, some of the results obtained in this paper suggest the following. First, the impact of FMLA in those states which did not previously enact TDI is significantly more positive on female employment than the impact of this law in those states which already had TDI. The increase in female employment and labor force participation in those states that most generously expanded the benefits and eligibility criteria of FMLA is significantly higher than in those that did not. Finally, the introduction of California's Paid Family Leave program in 2004 has not yet provoked changes in female employment which can be considered significantly different from those in states applying either the FMLA or the expanded FMLA alone.

As mentioned above, the effects of FMLA on employment have been shown to be positive (but small) by both theoretical and empirical literature; see Klerman and Leibowitz (1994), Ruhm (1997) and Waldfogel (1996). This paper, then, goes in the line of this literature, but provides a much richer analysis and comparison about the effects of FMLA on female employment in states with and without previously enacted TDI, examines the labor market effects of the FMLA expansions implemented by different states, and finally provides a comparison about the impact of the most recent and generous parental leave policy in California with respect to those policies currently applied in the rest of the country.

The paper is organized as follows. In the next section we develop an overview of the parental leave laws in United States. Section 3 explains the theoretical effects of mandated leave policies on female employment. Section 4 lays out the research design and methodology. In section 5, we present our results to the main questions analyzed above, and provide some intuition. Section 6 concludes and suggests further research in the analysis of parental leave policies at the federal and state level.

## 2 Overview of parental leave laws

Parental leave policy has undergone many changes during the last decades. Figure 1 illustrates the evolution of maternity leave laws in US. The first state to introduce a paid maternity leave through TDI was Rhode Island in 1942, followed by California (1946), New Jersey (1948), New York (1949) and Hawaii (1969). TDI is offered to all workers in these states by state mandate. The program provides temporary income to workers with non-work related short-term disabilities, including pregnancy and childbirth. It is funded by either employee or employer or both, and

ranges in coverage from 26 to 52 weeks<sup>6</sup>.

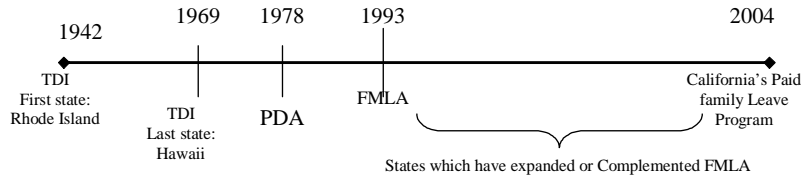


Figure 1

In particular, TDI can be understood as a form of paid maternity leave, since disability insurance policies provide paid leave at state level and benefits for disability related to pregnancy and child-birth to ensure the same treatment as other medical disabilities. The TDI coverage for the first few weeks after a birth is routine, since all mothers are considered medically disabled for a certain period of time after child-birth. A study by the University of Rhode Island (2005) suggests that about 62 percent of TDI claimants were women, and the most explanatory variable to account for such high number of women filing claims was TDI coverage for childbirth (Employment Bulletin, RI Department of Labor and Training).

The Family and Medical Leave Act (enacted in 1993) is the only law in terms of parental leave policy at the federal level. The legislation covers private, state and local government employees. However, the coverage under the Family and Medical Leave Act is not universal. FMLA guarantees parents unpaid, job-protected leave of up to 12 weeks following the birth or adoption of a child, but only if they meet certain qualifying conditions. First, they must work for a firm with 50 or more employees, which means only about 60 percent of workers in the private-sector are covered (Han and Waldfogel, 2003). Second, they must have worked at least 1,250 hours in the past year for their employers, which reduces the share of workers covered to 46 percent (Cantor et al, 2001).

Over the years a considerable number of states have relaxed as well as complemented the requirements of FMLA. This paper considers four states for whose FMLA expansion not only affected *public* but also *private* sector workers<sup>7</sup> and have made the FMLA more generous. In particular, the state of Connecticut expanded FMLA in 1997 applying it to employees who worked 1000 hours for at least 12 months prior to a request for a leave, and eligible employees are entitled 16 workweeks of leave (instead of only 12). In 1997, Maine extended the applicability of its family medical leave laws by lowering the requirements for employee eligibility to 15 employees. Oregon (1996) made FMLA more generous by applying it to employers with 25 or more employees, and established that those workers who are employed for 180 days or more are eligible for 12 weeks of leave within a 12 month

<sup>6</sup>See table 3 in the appendix for a detailed explanation about weekly benefit amounts and duration of the TDI program.

<sup>7</sup>There are eight other states which expanded the FMLA benefits, but they did not cover both private and private sector employees. In addition, the relaxations in eligibility and expansions in benefits were minimal.

period. Finally, similar to Oregon, Vermont (1998) reduced the number of minimum employees to 10, who should have worked for one year on an average of 30 hours a week to be eligible for 12 weeks of leave during any 12 month period. In addition, all of these four states allowed the possibility of substituting accrued paid leave for maternity leave purposes (see table 4 of appendix for details about the extensions of FMLA).

Finally, one of the most recent parental leave policy to be enacted is California's Paid Family Leave (PFL) program, which came into effect in July 2004. California is the first state in the country to create a comprehensive paid family leave program. It provides workers with paid leave during a period of six weeks, covering approximately 55 percent of their pre-taxed weekly wage, up to a maximum of \$840, while on leave. This insurance program is fully funded by the employees. The new mothers in California are now eligible for Paid Family Leave benefits in addition to the TDI benefits. While FMLA offers 12 weeks of unpaid leave for those working for 50 or more employers; PFL guarantees that 6 of those weeks would be paid.

### 3 Theory

The theory on mandated benefits suggest that they preserve the employers' ability to tailor arrangements to their workers and to offer more than minimum packages. In terms of their allocational effects on employment, mandated benefits represent a tax at a rate equal to the difference between the employers cost of providing the benefit and the employee's valuation of it (Summers, 1989). In other words, it is assumed that workers and firms will voluntarily agree to the provision of family leave if the expected benefits exceed the associated costs. Parental leave benefits could also increase occupational segregation, by increasing the relative cost of employing women in certain types of jobs, and lead to higher unemployment for the groups who are most likely to use it. (Ruhm and Teague, 1997). However, there are a considerable number of economic arguments that have been made favoring leave entitlements usually focus on retaining firm-specific human capital or decreasing unemployment by reducing the need for women to change jobs, if they wish to spend time at home with young children. (Trzcinski, 1991).

According to the theory (Ruhm, 1997), a mandated leave raises labor costs and so shifts the labor demand curve to the left (from  $D_1$  to  $D_2$  in Figure 2). Since employees receive benefit from the leave entitlement, the supply curve simultaneously shifts to the right (from  $S_1$  to  $S_2$ ). Hence the equilibrium wages fall while employment may either increase or decrease, depending on the relative size of the shifts. Figure 2 illustrates the case where the expenses to employers exceed the benefits to the employees, and employment decreases (from  $E_1$  to  $E_2$ ). However, there could be additional dynamic effects. For instance, labor productivity would rise if parental leave increases firm-specific human capital by allowing individuals to return to their old jobs. This causes the demand curve to shift to the right (from  $D_2$  to  $D_3$  in Figure 2), increasing employment and decreasing the wage reduction or actually leading to a rise in earnings. The proponents of leave mandates frequently

use this reasoning to anticipate increases in both wages and employment for the groups who are most likely to use parental leave.

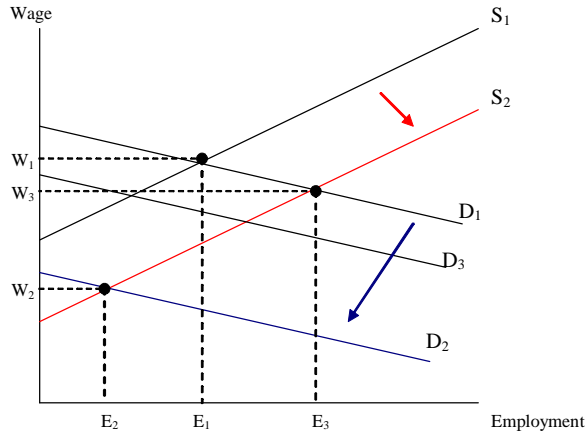


Figure 2

The theory does not provide an unambiguous prediction regarding the effects of parental leave programs on employment. On one hand, it predicts that the cost associated with the leave might be borne by women as a group, in the form of lower employment (as employers might shift away from hiring women), or in the form of lower wages (when employers pass on the cost of benefits to women). On the other hand, it also predicts that these effects might be offset by an increase in the labor force attachment of individual women.

## 4 Research design

### 4.1 Identification Strategy

The research design is based on the study developed by Waldfogel (1999a). In the first part of our analysis, the eighteen states which did not have parental leave policy prior to FMLA –those states neither applying TDI nor any other form of state parental leave policy– constitute the *experimental* states. The five states which did have TDI prior to FMLA are the *non-experimental* states. For the second part of the study, the four states which expanded or complemented FMLA are considered as the experimental states for each particular case, with the non-experimental states being the states applying only FMLA. Finally, the state of California (experimental state) is compared with those states which only have FMLA or have expanded it (non-experimental states). We could use DD analysis to compare the change in outcomes for the experimental states to the change in outcome for the non-experimental states. However, this approach may produce biased estimate if there were other differences between these two groups of states that affected both the passage of state laws and

the change in their outcome variables over time (Bertrand and Mullainathan, 2004). To overcome this problem, we use a DDD methodology.

We study the impact of state parental leave policies on the employment of women with children in their childbearing age. Therefore, we use women aged 19 to 45 with children older than one year old, or childless as our *treatment* group. We focus on these women because they are the potential beneficiaries of the law. In addition, we consider an *alternative treatment* group in our analysis, which is composed of women aged 19 to 45 with children under the age of one. This group of women are included in the treatment group because they are eligible and more likely to obtain the benefits of parental leave policies. On the other hand, women aged 46 to 60 and men between the age of 19 and 45 constitute *control* group and *alternative control* group, respectively, since they are less likely to obtain the benefits associated with the law compared to women in their childbearing years.

Our estimates of the effects of the *federal* parental leave policy on female employment is the difference between the change in female employment after the introduction of the FMLA in those states which previously applied TDI and those which did not. Another estimate of this effect is obtained from the difference in the change of the female employment between those states which expanded FMLA and those which did not. Finally, the estimate of the effect of the *state* parental leave policies on female employment measures the difference between the change in the female employment in California –after the enactment of the Paid Family Leave program– and that in those states which expanded FMLA and those which did not.

## 4.2 Data

We use IPUMS-CPS data from 1962-2007, which is an integrated set of data from the March Current Population Survey (CPS). In the second part of our study, which analyzes the effects of the FMLA expansions, we also use data from CPS where time period depends on the particular year in which the state expanded FMLA. Finally, the analysis of California uses data from the 2001-2007 CPS.

Table 1 presents the summary statistics for the period 1962-2007 (mean and standard error) of the characteristics of the treatment and control groups. Column 1 shows the characteristics of women in their childbearing age with their youngest child above the age of one or women without children. Column 2 contains women between 19-45 whose youngest child is less than one year. Column 3 shows women aged between 46-60 and column 4 shows the summary statistics of men aged between 19-45.



Table 1

Variable	Treatment	Alternative Treatment	Control	Alternative Control
Age	32.28 (0.007)	28.16 (0.013)	51.96 (0.006)	31.80 (0.007)
College Graduate	0.44 (0.001)	0.42 (0.001)	0.35 (0.001)	0.46 (0.0004)
High School Drop Out	0.17 (0.0003)	0.18 (0.0009)	0.26 (0.0006)	0.17 (0.0003)
Employed	0.74 (0.0004)	0.58 (0.001)	0.66 (0.0006)	0.91 (0.0003)
Fraction in States with no Law	0.56 (0.0006)	0.57 (0.0017)	0.55 (0.0009)	0.56 (0.0006)
Observations	1,210,503	164,265	618,343	1,269,131

There are some differences to be noted from the above summary statistics. Women with children above the age of one or without children (column 1) have, on average, the same age as men (32 years), whereas women in alternative treatment group are on average younger than men (the alternative control group). The percentage of employed in the treatment group is lower (74 versus 91 percent) than the alternative control group, and the percentage employed for the alternative treatment group is even lesser. Both treatment and alternative treatment group women on average are more educated than women aged between 46-60 (control group). Notice that, the percentage of women and men in the eighteen states which had no law prior to FMLA is fairly constant, so we can be certain that any of the results are not driven by compositional changes.

Table 2 presents the summary statistics for the case of California (2001-2007). Column 1 shows the treatment group, column 2 the alternative treatment group, while columns 3 and 4 show the control and the alternative control group, respectively.

Table 2

Variable	Treatment	Alternative treatment	Control	Alt. Control
Age	32.95 (0.053)	30.45 (0.111)	51.49 (0.043)	32.51 (0.051)
College Graduate	0.56 (0.003)	0.53 (0.009)	0.57 (0.004)	0.51 (0.003)
High School Drop Out	0.18 (0.003)	0.22 (0.008)	0.19 (0.004)	0.20 (0.003)
Employed	0.73 (0.003)	0.55 (0.009)	0.71 (0.004)	0.89 (0.002)
Fraction in States with no Law	0.61 (0.001)	0.65 (0.002)	0.61 (.002)	0.61 (0.001)
Observations	21,733	2,880	112,45	23,236

Some differences can also be pointed out from the above table. Women with children above the age of one or without children (column 1) have, on average, the same age as men (33 years), whereas women in alternative treatment group are younger (30 years); treatment group works less than the alternative control group (73 versus 89 percent), whereas alternative treatment group are less likely to be employed compared to both control groups. Both the treatment and alternative treatment group women are similarly educated compared to women and men in the control groups.

## 5 Empirical results for female employment

The likely direction of the effects of maternity leave policies on female employment is not clear a priori. On the one hand, if women are more inclined to take leave and return to their previous jobs, then we expect to find a positive effect on employment. On the other hand, if employers pass on the costs of mandated benefits to those potentially benefitting from it (women of childbearing age), then we might observe a decrease in employment. Further, if these two effects offset each other, we might find no impact on employment at all. Therefore, the direction of the effect of maternity leave on female employment is an empirical question. This section, given the above research design, estimates the following equation

$$\begin{aligned}
 Y_{ilt} = & \alpha_0 + \alpha_1 t + \alpha_2 NS_l + \alpha_3 TG_i + \alpha_4 NS_l \times TG_i + \beta_0 POST_t + \beta_1 NS_l \times POST_t \\
 & + \beta_2 TG_i \times POST_t + \beta_3 NS_l \times TG_i \times POST_t
 \end{aligned} \tag{1}$$

where  $i$  indexes the individual,  $l$  the state and  $t$  the year. The outcome variable of interest,  $Y_{ilt}$ , is a dummy equal to one if a woman worked for at least one week during the previous year, and zero otherwise.  $NS_l$  is a dummy equal to one if the  $l^{th}$  state has no state parental leave policy before 1993, and zero otherwise.  $TG_i$  is a dummy taking a value one if individual  $i$  belongs to the treatment group and zero otherwise. Finally,  $POST_t$  is a year dummy taking value one after FMLA was enacted (i.e after 1993) and zero otherwise. Since FMLA was enacted in 1993, we conduct our analysis pre and post 1993, in order to capture the impact of the law on female employment. We define employment as working for a positive number of weeks during the year. In alternate specifications, we use labor force participation rate as the outcome variable, where it is defined as participation in the labor force during the preceding week.

### 5.1 Analysis of FMLA in states with and without TDI

Female employments rates for the treatment and control group are presented in Table 5a. Column (3) shows the difference between the change in female employment for experimental states –those with no previous laws– and non-experimental states –those with TDI. Column (4) represents the change of female employment between the treatment and control group, i.e. DDD. Finally, DDD adjusted 1 controls for marital status –i.e. dummy variable married takes a value of one if the individual is married and zero otherwise–, DDD adjusted 2 includes a time trend since the data contains more pre than post years, and DDD adjusted 3 controls for both marital status and time trend. Notice that the Treatment group represents women aged 19-45 with their youngest child above age one or childless women, while control group are women aged 46-60 years and alternative control group are men aged 19-45 years.

In order to analyze the possibility of a different impact of FMLA depending on the woman’s educational attainment, we differentiate our sample by education levels. In particular, the dummy variable  $Educ_i$  is one when individual  $i$  has less than 12 years of schooling, and zero otherwise.

We divide our sample into two groups, one represents high school dropouts and the second group contains the individuals who have a high school degree, a college degree or are college dropouts. In this case, equation 1 can be rewritten as,

$$\begin{aligned}
Y_{ilt} = & \alpha_0 + \alpha_1 t_l + \alpha_2 NS_l + \alpha_3 TG_i + \alpha_4 NS_l \times TG_i + \beta_0 POST_t + \beta_1 NS_l \times POST_t + \beta_2 TG_i \times POST_t \\
& + \beta_3 NS_l \times TG_i \times POST_t + \alpha_5 Educ + \alpha_6 NS_l \times Educ_i + \alpha_7 TG_i \times Educ_i + \alpha_8 NS_l \times TG_i \times Educ_i \\
& + \beta_4 POST_t \times Educ_i + \beta_5 NS_l \times POST_t \times Educ_i + \beta_6 TG_i \times POST_t \times Educ_i \\
& + \beta_7 NS_l \times TG_i \times POST_t \times Educ_i
\end{aligned} \tag{2}$$

The results obtained from both equations (with and without the dummy variable *Educ*) are shown in tables 5a and 5b in the appendix. In addition, the same analysis is conducted for labor force participation, where  $Y_{ilt}$  is a dummy equal to one if a woman participated in the labor force during the preceding week and zero otherwise (tables 6a and 6b contain the results obtained for labor force participation).

According to the PDA in 1978, the TDI should treat every pregnancy as a temporary disability, hence the coverage of the TDI extended to cover pregnancy as mandatory after the passage of the PDA. In order to analyze the possibility of a differential impact of FMLA on female employment and labor force participation rates depending on the implementation of the PDA, which ensures that the coverage of TDI includes pregnancy, we restrict the sample for the pre-FMLA period from 1978 through 1992. The results from this specification are reported in tables 7 through 8.

### 5.1.1 Analysis of the results

Table 5a suggests that when the treatment group is compared to the control group as observed in column 4, the introduction of FMLA has an effect on female employment which is indistinguishable from zero. However, when the treatment group is compared to the alternative control group, i.e. men, the DDD estimates are negative and significant. This suggests female employment decreased in states which had no law compared to the TDI states after the implementation of FMLA, when women in their childbearing ages are compared to men. When we further analyze by the educational attainment, table 5b shows insignificant DDD estimates for high-school dropout women. However, when we restrict the time period of our analysis from 1978 until 1992 for the pre FMLA period, the results are positive and significant when we compare treatment group to the alternative control group (table 7a). This suggests that female employment increased in states which had no law compared to the TDI states after the implementation of FMLA, when women in their childbearing ages are compared to men, when we look at the time period where the PDA mandated pregnancy to be considered as any other temporary disability. When we further analyze by the educational attainment, table 7b shows positive and significant DDD estimates for high-school dropout women, when the employment of female are compared to men.

We further check whether the high educated women (having more than a high school degree)

are differently affected by the implementation of FMLA. The results indicate (tables not reported) that there is a negative impact of FMLA on the employment of high educated women in the states which had no law compared to the TDI states, when women in childbearing ages are compared to men. However, the estimates are statistically indistinguishable from zero when these women are compared to the control group, i.e. older women.

One reason for the insignificant results for the time period 1962-2007 could be explained by the fact that the paper considers a long period of time and hence on average the effects are obscured although there might be a different impact for some of the years compared to others. However, repeating the analysis, and separately taking each of the years after 1993 did not change the results.

A possible explanation for the above results can be obtained from the literature analyzing the theoretical predictions of mandated leave policies (Ruhm, 1997). In particular, this literature suggests that, after the introduction of maternity leave policies, labor demand shifts downwards, decreasing employment level. However, as women awareness of the policy increases, we should expect a downward shift in the labor supply curve, raising employment level as a consequence. Nonetheless, in the long run, women are more likely to return to their original jobs (reducing the employer adjustment costs) and work more hours to be eligible for the benefits. The former effects may increase the employer's labor demand—due to the higher productivity levels of female employees—shifting it upwards, what is referred by the literature as the dynamic effect of mandated leave policies. In this context, our results reflect that the dynamic effect of FMLA is slightly negative and significant for women in their childbearing ages (when compared to men).

Regarding our results with respect to labor force participation, table 6a shows that the DDD estimate is negative but insignificant when we consider the pre FMLA period as 1962-1992. Hence, the change in female labor force participation after the FMLA was enacted (between experimental and non-experimental states) was not significantly different for those women potentially benefiting from the law (in the treatment group) than for men (in the alternative group). In this case, these results support no shift in female labor supply, reflecting their willingness to work is unaffected given the benefits included in FMLA. However, restricting the time period of our analysis from 1978 until 1992 for the pre FMLA period, the results are positive and significant when we compare treatment group to the alternative control group (table 8a). Hence the change in female labor force participation after the implementation of the FMLA was higher for women in states which had no maternity leave laws prior to FMLA compared to women in states which have TDI.

Table 6b analyzes the possibility of a different impact of FMLA, depending on the woman's educational attainment. Indeed, we also observe an insignificant DDD estimate. There is also no effect on the female labor force participation when we analyze by the high educated group of women. Hence, the aforementioned no shift in female labor supply can be mainly explained by no change in willingness to work for low-educated women, and also unchanged incentives for highly-educated women. In particular, incentives to work for low-educated women do not become higher than their

reservation utility (their opportunity cost from working), whereas it was already higher than such minimum utility level for highly-educated women before FMLA was enacted. However, as in the case of female employment, when we look at the time period where the PDA mandated pregnancy to be considered as any other temporary disability, table 8b shows positive and significant DDD estimates for high-school dropout women, when the employment of female are compared to men.

## 5.2 Analysis of extensions of FMLA

Using equation (1) we study the expansions of FMLA that the aforementioned four states introduces in their jurisdiction. The results obtained for each state are presented in tables 9 through 12 in the appendix. Specifically, in this section we report the estimates of the alternative treatment group, which is composed of women aged 19 to 45 with children under the age of one, comparing with both the control group and the alternative control group. The results using the treatment group are very similar that of the alternative treatment group, with the only difference being that none of the results are statistically indistinguishable from zero when we use the treatment group.

The DDD estimates are positive and statistically significant for Oregon, (table 11a in the appendix). In particular, the labor force participation rates are higher by 18.84 percentage points in Oregon compared to states which did not expand FMLA, when we compare women with young children to women in the control group. The labor force participation rates for women with young children in Oregon are higher by 11.04 percentage points when compared with men in the same age group. This result indicates that making the FMLA more generous in terms of eligibility and leave options are encouraging more women in the childbearing age with young infants to participate in the labor force, compared to similar women in states which offer no such generosity. The results are very similar if we control for the marital status of the individual and include a linear time trend. However, when we further divide the sample into two groups based on their educational attainment, the difference in the employment growth of women with infants between Oregon and states that had no law before FMLA is not significant<sup>8</sup>.

The women in the childbearing age with young infants are also 17.15 percentage points more likely to be employed in Oregon compared to similar women in states which do not complement the FMLA (table 11b in appendix) and 10.01 percentage points more likely to be employed when compared to men. Similar to the result for labor force participation, exploring the possibility of a differential impact depending on the educational attainment, we do not find anything statistically indistinguishable from zero. Note that Oregon is the state offering the most generous benefits and eligibility criteria in its expansion of FMLA. In particular, this state reduced the minimum number of firm employees from 50 to 25, and the number of days worked for the same firm to 180. Intuitively, the positive effect of such generous expansion may come from two sources. First, women may increase their willingness to work, which shifts the female labor supply downwards.

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<sup>8</sup>The DDD estimates for the two diferent educational groups are not reported.

Second, a very generous FMLA expansion raises the opportunity cost from losing the job, which increases worker’s effort and productivity, ultimately leading to a greater employer’s demand for female workers.

The DDD estimates are positive and statistically significant at the 5-percent level for female labor force participation rates, for Maine (table 10 in the appendix). The female labor force participation rates are higher by 14.57 percentage points in Maine compared to states which did not expand FMLA, when we compare women with young children to women in the control group. The labor force participation rates for women with young children in Maine are higher by 13.38 percentage points when compared with men in the same age group. The results are very similar if we control for the marital status of the individual and include a linear time trend. However, the estimates are not statistically significant for female employment, and when we divide the sample into groups based on their educational attainment<sup>9</sup>.

One of the reasons of not observing any significant impact on female employment and female labor force participation in the other two studied states might be that the expansions are not effective enough to invoke any change in the employment behavior of women in these states. With a more relaxed eligibility criteria and greater complementarity to the FMLA, the states might be able to initiate an increase in female labor force participation rate as well as in female employment.

### 5.3 Analysis of California’s Paid Family Leave program

In this subsection, we use equation (1) to examine how California’s Paid Family Leave program (CPFL) has affected the change in female employment and labor force participation rates. We compare CPFL with those states applying the expanded and non-expanded FMLA. Table 13a in the appendix analyzes how the female labor force participation changed in California before and after the enactment of the Paid Family Leave program in 2004. In particular, Column 3 (DD estimates) in table 13a in the appendix compares the change in the female labor force participation with respect to that in states which only had FMLA (non-expanded), and the four states which have expanded FMLA programs. Finally, Column 4 (DDD estimates) compares the change in female labor force participation between the treatment and control groups. The results for the change in female employment are given in tables 14a and 14b in the appendix.

From these tables we can see that the DDD estimates are both economically and statistically insignificant. Hence the introduction of the Paid Family Leave program did not initiate an increase in female labor force participation, when we compare them with the labor force participation of women in states which had no law before FMLA as well as states which expanded FMLA. This is true for female employment as well. The results are very similar if we consider women with young infants (alternative treatment group) as our treatment group. Also, when we further carry out the

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<sup>9</sup>The results for female employment and two different educational groups are not reported.

analysis dividing the women in the sample into two different educational groups, the results are still statistically insignificant<sup>10</sup>. In the context of changes in supply and demand curves as commented above, these results would suggest that the decrease in labor demand offsets the increase in female labor supply in the three-year period since the law was enacted, and more future data is needed to observe if the dynamic effect on labor demand finally raises female employment. Whenever a new policy is implemented at the state level, people are not immediately aware of that and hence a certain period of time is required before we can observe the full effects of such a policy. It should also be noted that California is a state where women having children can utilize the benefits of TDI and FMLA. Hence it might not be possible for Paid Family Leave program to initiate any further changes to the employment behavior of women, especially when such a parental leave policy is fully funded by the employees themselves. A relevant policy recommendation would be to implement such a policy where there could be equal contributions on part of the employer in addition to that of an employee.

## 6 Conclusions

This paper examines the effect of federal and state parental leave policies on female employment and labor force participation, analyzing the interaction of these laws when more than one coexists in the same labor market. First, this study shows that the introduction of the Family and Medical Leave Act (FMLA) has no significantly positive impact on the employment of women in those states which had no state law providing parental leave benefits than in those applying the Temporary Disability Insurance (TDI). Since the FMLA is granting unpaid leave, one implication of this result is that the FMLA is not really affecting the employment decisions of women in childbearing ages since most of them cannot afford to take leave which provides no payment. In general, the results suggest that the benefits associated with the FMLA are not enough to alter the labor force participation decisions of women who are the potential beneficiaries of the law.

Second, we find that the impact of FMLA expansion on female employment and labor force participation in those states with the most generous expansions (in terms of improving the benefits and eligibility criteria of FMLA) is significantly higher than in those states which did not expand FMLA. In particular, the higher opportunity cost from losing the job and its consequences on productivity may explain these interesting results.

Finally, in order to get an intuitive understanding of the effects of further increases in the generosity levels of parental leave policies, we consider the recent enactment of California's Paid Family Leave program. Specifically, we obtain that there is no impact of the introduction of this law, which may be due to the short time period of its application. Additionally, another explanation for the limitation of this policy (neither positive nor negative) on female employment and labor force participation is based on the previous adjustments in California's female labor market prior to

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<sup>10</sup>The results for the different educational groups are not reported.

the passage of CPFL, which reduces the possibility for further changes in the labor market behavior of both female workers and their employers.

More extensive analysis should be conducted specially in the case of California, in order to test the hypothesis. In addition, further research can be carried out to examine the impact of additional increases in the generosity levels of federal and state parental leave policies on female employment and labor force participation, as well as the interaction of these policies in the same labor market, as is suggested in this paper.



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## 7 Appendix

Table 3: Weekly Benefit amount and Duration of Benefits in TDI

State	Status	Weekly Benefit Amount	Duration
CA	All workers	\$50-\$336 based on schedule of high quarter wage	6 – 52 weeks, \$300 - \$14,472, computed as lesser of 52 x weekly benefit amount or the total of base period wages.  Duration separate from UI
HI	Employed workers	\$14-\$357. For an average weekly wage of less than \$26, weekly benefit amount is the average weekly wage up to a maximum of \$14. If average weekly wage is \$26 or more, weekly benefit amount is 58% of average weekly wage with a maximum of 66-2/3 percent of average weekly wage.	Uniform 26 weeks in benefit year
	Unemployed worker	Same as UI	Balance of weeks claimant would have been eligible for benefits in his UI benefit year but not more than 26 weeks.
NJ	Employed workers	\$68-\$470 (based on schedule of average weekly wage). Average weekly wage determined by dividing wage from 1 employer during base weeks in weeks. If less than average using all employment during last 8 weeks, use earnings from all employers.	Computed as lesser of 26 x weekly benefit amount or 1/3 base period wages. Limit applies to benefits in any 12 consecutive month periods. Duration separate from UI and from benefits as an unemployed disable worker.
	Unemployed worker	\$61-\$475 (based on schedule of average weekly wage). Average weekly wage determined by dividing wage from 1 employer in all base weeks by numbers of base weeks. If not 20 base weeks with any 1 employer, average base weeks with all employers.	15-26 weeks, \$1,095-\$9,464 computed as 3/4 weeks, but not more than 26 x weekly benefit amount. Duration under UI and disability during employment limited to 150% of duration for either program separately.
NY	All workers	\$20 - \$170 on basis of one-half average weekly wage in last 8 weeks, or portion thereof, in covered employment prior to commencement of disability. If average is less than \$20, weekly benefit is average wage.	Uniform potential 26 weeks in any 52 consecutive weeks or for any single period of disability, \$520 (or less if weekly benefit amount is less than \$20 - \$4,420). Duration separate from UI.
RI	All workers	\$53 - \$588 (4.62% of high quarter wages up to 85% of state's average weekly wage in preceding calendar year, plus the greater of \$10 or 7% of the individual's benefit rate for each dependent up to 5 dependents).	12 - 30 weeks \$636 - \$17,640 computed as 36% of total base period wages plus dependent allowance if any.

Source: Institute for Women's Policy Research, May 1993

Table 4: Classification of the States

States	TDI	FMLA only	Expa. FMLA	N° weeks	N° Hours	N° Workers	Others
Alabama		✓					
Alaska							
Arizona							
Arkansas		✓					
California	X		▪				
Colorado							
Connecticut			▪	16	1000	75 or more	accrued sick leave
Delaware		✓					
Florida							
Georgia							
Hawaii	X		▪				
Idaho		✓					
Illinois							
Indiana		✓					
Iowa							
Kansas							
Kentucky		✓					
Louisiana							
Maine			▪	12	1250	15 or more	accrued sick leave
Maryland							
Massachusetts							
Michigan		✓					
Minnesota			▪			21 or more	
Mississippi		✓					
Missouri		✓					
Montana							
Nebraska		✓					
Nevada		✓					
New Hampshire							
New Jersey	X		▪				
New Mexico		✓					
New York	X						
North Carolina		✓					
North Dakota							
Ohio							
Oklahoma							
Oregon			▪	12	1250	25 or more	accrued sick leave
Pennsylvania							
Rhode Island	X		▪				
South Carolina		✓					
South Dakota		✓					
Tennessee							
Texas		✓					
Utah		✓					
Vermont			▪	12		10 or more	accrued sick leave
Virginia							
Washington			▪				
West Virginia							
Wisconsin			▪				
Wyoming		✓					
District of Columbia			▪				

Source: U.S. Department of Labor: Employment Standards Administration.

Table 5a: The estimates of Female Employment between states with no law and states with TDI before FMLA.

		NoLaw(1)	TDI(2)	DD(3)	DDD(4)	DDD.adj1	DDD.adj2	DDD adj3
Treat	Pre'93	0.71	0.68					
	Pos'93	0.65	0.61	0.002				
Control Obs. 874,523 standard errors	Pre'93	0.60	0.58					
	Pos'93	0.74	0.72	0.002	-0.0001 (0.004)	-0.0004 (0.004)	-0.003 (0.004)	-0.003 (0.004)
Alt. Control Obs.1,227,475 standard errors	Pre'93	0.92	0.90					
	Pos'93	0.92	0.89	0.012	-0.0104* (0.00279)	-0.0105* (0.00279)	-0.0107* (0.00279)	-0.0107* (0.00279)
marital status?					no	yes	no	yes
linear time trend?					no	no	yes	yes

Table 5b The estimates of Female Employment between states with no law and states with TDI before FMLA, by education groups

		NoLaw(1)	TDI(2)	DD(3)	DDD(4)	DDD adj1	DDD adj2	DDD adj3
Treat	Pre'93	0.83	0.78					
	Pos'93	0.82	0.76	0.009				
Control Obs. 874,523 F-statistic	Pre'93	0.68	0.67					
	Pos'93	0.77	0.73	0.019	-0.009 (2.49)	-0.012 (3.64)	-0.013 (4.25)	-0.014 (5.41)
Alt. Control Obs. 1,227,475 F-statistic	Pre'93	0.79	0.77					
	Pos'93	0.77	0.75	0.007	0.002 (0.34)	0.002 (0.33)	0.003 (0.54)	0.003 (0.57)
marital status?					no	yes	no	yes
linear time trend?					no	no	yes	yes

Notes: Robust Standard errors are reported. DDDadj 1 reports estimates controlling for marital status, DDDadj2 reports estimates controlling for a linear time trend and DDDadj3 reports estimates controlling for both.

Table 6a The estimates of FLFP rates between states with no law and states with TDI before FMLA.

		NoLaw(1)	TDI(2)	DD(3)	DDD(4)	DDD adj1	DDD adj2	DDD adj3
Treat	Pre'93	0.67	0.63					
	Pos'93	0.63	0.58	0.007				
Control	Pre'93	0.55	0.55					
	Pos'93	0.71	0.70	0.012	-0.0042 (0.0044)	0.0045 (0.0044)	-0.007 (0.004)	-0.0074 (0.0044)
Alt. Control	Pre'93	0.92	0.91					
	Pos'93	0.91	0.89	0.013	-0.0055 (0.00288)**	-0.0054 (0.00288)**	-0.0057 (0.00287)**	-0.00557 (0.00287)**
marital status?					no	yes	no	yes
linear time trend?					no	no	yes	yes

Notes: Robust Standard errors are reported. \*\* Statistically significant at the 5-percent level. DDDadj 1 reports estimates controlling for marital status, DDDadj2 reports estimates controlling for a linear time trend and DDDadj3 reports estimates controlling for both.

Table 6b The estimates of FLFP rates between states with no law and states with TDI before FMLA, by education

		groups						
		NoLaw(1)	TDI(2)	DD(3)	DDD(4)	DDD adj1	DDD adj2	DDD adj3
Treat	Pre'93	0.78	0.72					
	Pos'93	0.78	0.72	0.013				
Control	Pre'93	0.67	0.67					
	Pos'93	0.78	0.76	0.027	-0.014 (5.24)	-0.017 (7.1)	-0.018 (7.84)	-0.019** (9.65)
Alt. Control	Pre'93	0.75	0.74					
	Pos'93	0.72	0.70	0.012	0.002 (0.27)	0.002 (0.33)	0.003 (0.41)	0.003 (0.53)
marital status?					no	yes	no	yes
linear time trend?					no	no	yes	yes

Notes: \*\* Statistically significant at the 5-percent level. DDDadj 1 reports estimates controlling for marital status, DDDadj2 reports estimates controlling for a linear time trend and DDDadj3 reports estimates controlling for both.

Table 7a: The estimates of Female Employment between states with no law and states with TDI before FMLA.

		NoLaw(1)	TDI(2)	DD(3)	DDD(4)	DDD.adj1	DDD.adj2	DDD adj3
Treat	Pre'93	0.79	0.74					
	Pos'93	0.72	0.66	0.016				
Control Obs.675,816 standard errors	Pre'93	0.63	0.63					
	Pos'93	0.74	0.72	0.02	-0.0035 (0.004)	-0.0004 (0.004)	-0.004 (0.004)	-0.004 (0.004)
Alt. Control Obs.963,726 standard errors	Pre'93	0.92	0.90					
	Pos'93	0.92	0.89	0.012	0.006* (0.003)	0.007* (0.003)	0.006* (0.003)	0.007* (0.003)
marital status?					no	yes	no	yes
linear time trend?					no	no	yes	yes

Notes: The Pre '93 period consists of the years 1978 - 1992. Robust Standard errors are reported. \* denotes significance at one-percent level.

Table 7b The estimates of Female Employment between states with no law and states with TDI before FMLA, by education groups

		NoLaw(1)	TDI(2)	DD(3)	DDD(4)	DDD adj1	DDD adj2	DDD adj3
Treat	Pre'93	0.91	0.86					
	Pos'93	0.88	0.81	0.017				
Control Obs.675,816 F-statistic	Pre'93	0.77	0.78					
	Pos'93	0.84	0.81	0.031	-0.013 (3.76)	-0.015 (4.92)	-0.013 (3.96)	-0.015 (5.12)
Alt. Control Obs.963,726 F-statistic	Pre'93	0.81	0.80					
	Pos'93	0.79	0.78	0.001	0.0162* (12.11)	0.0165* (12.66)	0.0161* (12.08)	0.0065* (12.65)
marital status?					no	yes	no	yes
linear time trend?					no	no	yes	yes

Notes: The Pre '93 period consists of the years 1978- 1992. Robust Standard errors are reported. \* denotes significance at one-percent level.

Table 8a: The estimates of FLFP between states with no law and states with TDI before FMLA.

		NoLaw(1)	TDI(2)	DD(3)	DDD(4)	DDD.adj1	DDD.adj2	DDD adj3
Treat	Pre'93	0.74	0.71					
	Pos'93	0.69	0.62	0.024				
Control Obs.675,816 standard errors	Pre'93	0.58	0.59					
	Pos'93	0.71	0.70	0.026	-0.002 (0.005)	-0.003 (0.005)	-0.002 (0.005)	-0.003 (0.005)
Alt. Control Obs.963,726 standard errors	Pre'93	0.92	0.91					
	Pos'93	0.91	0.88	0.010	0.036* (0.003)	0.014* (0.003)	0.014* (0.003)	0.014* (0.003)
marital status?					no	yes	no	yes
linear time trend?					no	no	yes	yes

Notes: The Pre '93 period consists of the years 1978 through 1992. Robust Standard errors are reported. DDDadj 1 reports estimates controlling for marital status, DDDadj2 reports estimates controlling for a linear time trend and DDDadj3 reports estimates controlling for both.

\* denotes significance at one-percent level.

Table 8b The estimates of FLFP between states with no law and states with TDI before FMLA, by education groups

		NoLaw(1)	TDI(2)	DD(3)	DDD(4)	DDD adj1	DDD adj2	DDD adj3
Treat	Pre'93	0.86	0.81					
	Pos'93	0.83	0.76	0.021				
Control Obs.675,816 F-statistic	Pre'93	0.73	0.75					
	Pos'93	0.82	0.81	0.035	-0.014 (4.22)	-0.016 (5.64)	-0.015 (4.63)	-0.014 (4.22)
Alt. Control Obs.963,726 F-statistic	Pre'93	0.77	0.76					
	Pos'93	0.74	0.74	0.001	0.0198* (17.92)	0.0204* (19.09)	0.0199* (18.09)	0.0198* (17.92)
marital status?					no	yes	no	yes
linear time trend?					no	no	yes	yes

Notes: The Pre '93 period consists of the years 1978 through 1992. Robust Standard errors are reported. DDDadj 1 reports estimates controlling for marital status, DDDadj2 reports estimates controlling for a linear time trend and DDDadj3 reports estimates controlling for both.

\* denotes significance at one-percent level.



Table 9: The estimates of Female Labor Force Participation rates between Connecticut and states with no

		law.before FMLA				
		Connecticut	Only FMLA	DD	DDD	DDD adj. 1
Alt. Treat	Pre 1997	0.5821148	0.5953417			
	Pos 1997	0.6836355	0.5881375	0.1087249		
Control Obs. 27,884 standard errors	Pre 1997	0.7003155	0.6847291			
	Pos 1997	0.7583548	0.7028986	0.0398698	0.0688551 (0.0793)	0.0681732 (0.0797)
Alt. Control Obs. 56,190 standard errors	Pre 1997	0.8848239	0.9121699			
	Pos 1997	0.8834809	0.9130889	-0.002262	0.1109869 (0.0736)	0.112187 (0.0731)
Control for marital status?					no	yes
Includes linear time trend?					no	no

Notes: Robust Standard errors are reported. DDDadj 1 reports estimates controlling for marital status. Pre\_97 years are '94-'96. Post\_97 years are '97-'99.

Table 10: The estimates of Female Labor Force Participation rates between Maine and states with no law.before

		FMLA.				
		Maine	Only FMLA	DD	DDD	DDD adj. 1
Alt. Treat	Pre 1997	0.6191603	0.5953417			
	Pos 1997	0.7482881	0.5881375	0.136332		
Control Obs. 27,886 standard errors	Pre 1997	0.7155689	0.6847291			
	Pos 1997	0.7243108	0.7028986	-0.0094276	0.1457596** (0.0795)	0.1418643** (0.0796)
Alt. Control Obs. 56,213 standard errors	Pre 1997	0.8972692	0.9121699			
	Pos 1997	0.9007194	0.9130889	0.0025312	0.1338008** (0.0737)	0.1372962** (0.0740)
Control for marital status?					no	yes
Includes linear time trend?					no	no

Notes: Robust Standard errors are reported. \*\* Statistically significant at the 5-percent level. DDDadj 1 reports estimates controlling for marital status. Pre\_97 years are '94-'96. Post\_97 years are '97-'99.

Table 11a: The estimates of FLFP rates between Oregon and states with no law before FMLA.

		Oregon	Only FMLA	DD	DDD	DDD adj. 1
Alt. Treat	Pre 1996	0.4171946	0.5919459			
	Pos 1996	0.5265565	0.5702434	0.1310644		
Control Obs. 28,463 standard errors	Pre 1996	0.746594	0.6680621			
	Pos 1996	0.7204545	0.6993373	-0.0574147	0.1884791* (0.075)	0.1883844* (0.075)
Alt. Control Obs. 58,817 standard errors	Pre 1996	0.9093687	0.9133512			
	Pos 1996	0.9294119	0.9128017	0.0205927	0.1104718*** (0.069)	0.1048242*** (0.069)
Control for marital status?					no	yes
Includes linear time trend?					no	no

Notes: Robust Standard errors are reported. \*\*\* Statistically significant at the 10-percent level. DDDadj 1 reports estimates controlling for marital status. Pre\_96 years are '93-'95. Post\_96 years are '96-'98.

Table 11b: The estimates of Female Employment between Oregon and states with no law before FMLA. Female Employment.

		Oregon	Only FMLA	DD	DDD	DDD adj. 1
Alt. Treat	Pre 1996	0.5540358	0.660659			
	Pos 1996	0.6858361	0.6611146	0.1313447		
Control Obs. 28,463 standard errors	Pre 1996	0.7847412	0.7062983			
	Pos 1996	0.7681819	0.7298982	-0.0401592	0.1715039* (0.0686)	0.1714273* (0.0686)
Alt. Control Obs. 58,817 standard errors	Pre 1996	0.9164969	0.9307689			
	Pos 1996	0.9486631	0.9317216	0.0312135	0.1001312*** (0.0628)	0.0956951*** (0.0629)
Control for marital status?					no	yes
Includes linear time trend?					no	no

Notes: Robust Standard errors are reported. \* Statistically significant at the 1-percent level. \*\*\* Statistically significant at the 10-percent level. DDDadj 1 reports estimates controlling for marital status. Pre\_96 years are '93-'95. Post\_96 years are '96-'98.

Table 12: The estimates of FLFP rates between Vermont and states with no law before FMLA.

		Vermont	Only FMLA	DD	DDD	DDD adj. 1
Alt. Treat	Pre 1998	0.5746277	0.5995378			
	Pos 1998	0.6657098	0.586932	0.1036879		
Control Obs. 27,672 standard errors	Pre 1998	0.75	0.6924437			
	Pos 1998	0.771261	0.7089037	0.004801	0.0988869 (0.0814)	0.0992808 (0.0759)
Alt. Control Obs. 54,698 standard errors	Pre 1998	0.8991826	0.9117365			
	Pos 1998	0.91528	0.9148375	0.0129964	0.0906915 (0.0756)	0.0876602 (0.0759)
Controls for marital status?					no	yes
Includes linear time trend?					no	no

Notes: Robust Standard errors are reported. DDDadj 1 reports estimates controlling for marital status. Pre\_98 years are '95-'97. Post\_98 years are '98-'00.

Table 13a The estimates of FLFP rates between California and states with no law before FMLA.

		California	Only FMLA	DD	DDD	DDD adj. 1
Treat	Pre 2004	0.7611351	0.7779542			
	Pos 2004	0.7375626	0.7563467	-0.001965		
Control Obs. 143,023 standard errors	Pre 2004	0.7180958	0.7180958			
	Pos 2004	0.7212016	0.7193163	0.0018853	-0.0068 (0.01266)	-0.0062 (0.01265)
Alt. Control Obs. 193,978 standard errors	Pre 2004	0.8988145	0.9081122			
	Pos 2004	0.8888651	0.8992521	-0.0010893	-0.00452 (0.0083)	-0.0052 (0.083)
Controls for marital status?					no	yes
Includes linear time trend?					no	no

Notes: Robust Standard errors are reported. DDDadj 1 reports estimates controlling for marital status. Pre\_04 years are '01-'03. Post\_04 years are '04-'07.

Table 13b The estimates of FLFP rates between California and states with which expanded FMLA.

		California	Exp. FMLA	DD	DDD	DDD adj. 1
Treat	Pre 2004	0.8159905	0.7953404			
	Pos 2004	0.7902312	0.7696753	-0.00009		
Control Obs. 54,838 standard errors	Pre 2004	0.6820881	0.7729511			
	Pos 2004	0.6851939	0.7763584	-0.0003015	-0.00326 (0.0164)	-0.00246 (0.0164)
Alt. Control Obs. 74,235 standard errors	Pre 2004	0.8988145	0.8997479			
	Pos 2004	0.8888651	0.8854144	0.0043841	-0.00747 (0.1149)	-0.00759 (0.1147)
Controls for marital status?					no	yes
Includes linear time trend?					no	no

Notes: Robust Standard errors are reported. DDDadj 1 reports estimates controlling for marital status. Pre\_04 years are '01-'03. Post\_04 years are '04-'07.

Table 14a The estimates of Female Employment between California and states with no law before FMLA.

		California	Only FMLA	DD	DDD	DDD adj. 1
Treat	Pre 2004	0.786795	0.807285			
	Pos 2004	0.7644326	0.7834756	0.001447		
Control Obs. 143,023 standard errors	Pre 2004	0.7454574	0.7454574			
	Pos 2004	0.7439411	0.7390277	0.0049134	-0.00455 (0.1243)	-0.00399 (0.0124)
Alt. Control Obs. 193,978 standard errors	Pre 2004	0.9214572	0.9214572			
	Pos 2004	0.9032705	0.9053068	-0.0020363	0.00366 (0.0082)	-0.00025 (0.0082)
Controls for marital status?					no	yes
Includes linear time trend?					no	no

Notes: Robust Standard errors are reported. DDDadj 1 reports estimates controlling for marital status. Pre\_04 years are '01-'03. Post\_04 years are '04-'07.

Table 14b The estimates of Female Employment between California and states which expanded FMLA.

		California	Exp. FMLA	DD	DDD	DDD adj. 1
Treat	Pre 2004	0.8426698	0.8314299			
	Pos 2004	0.8197798	0.8143309	-0.005791		
Control Obs. 54,838 standard errors	Pre 2004	0.7039918	0.8013322			
	Pos 2004	0.7024754	0.79543	0.0043858	-0.01310 (0.01586)	-0.0122 (0.0158)
Alt. Control Obs. 74,235 standard errors	Pre 2004	0.9039071	0.9267388			
	Pos 2004	0.8857204	0.9103433	-0.0017912	-0.0047 (0.0108)	-0.0047 (0.0108)
Controls for marital status?					no	yes
Includes linear time trend?					no	no

Notes: Robust Standard errors are reported. DDDadj 1 reports estimates controlling for marital status. Pre\_04 years are '01-'03. Post\_04 years are '04-'07.