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on female employment:
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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) differentially affected states that previously implemented maternity leave laws than those states which did not. Additionally, we study whether FMLA caused an increase in the female employment and labor force participation in those states that 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, first, a positive and significant effect of FMLA on female employment and, second, a positive and significant effect on the change in female employment for some of the states that expanded the benefits and eligibility criteria of FMLA

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

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1 Introduction

Over the past decades, parental leave policies have been an important issue of debate given their potential impacts on employment, leave taking and earnings. Considering that 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 are particularly important given the recent trends in female employment. For instance, more than half of women with children under the age of one were employed in 1998 compared to only two-fifths ten years earlier (Waldfogel, 1999a).

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) enacted in 1993 is the only law in the United States at the federal level to directly address family leave issues. Hence after, some states¹ 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. In particular, the Temporary Disability Insurance (TDI) provides wage replacement for non-work connected sickness or injury, includes disabilities related with pregnancies. The TDI is implemented by five states² in different years (from 1942 to 1969). The Paid Family Leave program, implemented by California in 2004 is one of the most recent law enacted with regard to parental leave policy.

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 supported by a doctor's note³. On the other hand,

¹Connecticut, 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.

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

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

FMLA provides unpaid leave but it does not require 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. In particular, do these different policies have the same impact on female employment? We examine whether the introduction of FMLA differently affected female employment in those states with paid parental leave policy before FMLA was enacted –those which previously implemented the TDI– and those states which did not have any parental leave policy –those which neither passed TDI nor any other form of state maternity leave policy⁴. 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 uses March CPS data for the years 1992-1995 to compare the change in female employment, coverage, earnings and leave-taking between states with no job-protected maternity leave legislations before FMLA (39 states) to the 11 states and DC with prior job-protected parental leave laws. However, in this study some of the states classified as states without maternity leave legislations before FMLA (among the 39 states) had some form of maternity leave policy prevalent before FMLA. Using a difference-in-difference-in-differences estimation strategy Waldfogel's results indicate that there is an increase in coverage and leave-taking following the enforcement of FMLA, whereas there is no change in employment. Given that eligible women in some of the experimental states actually received treatment, this could potentially biased the estimates towards zero.

The difference between our work and the former paper is twofold. First, we identify those

⁴There are 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.

five 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 uniform differential impact of FMLA on female employment between those states applying TDI and those applying no state parental leave policies⁵. Second, we compare whether the impact of FMLA on female employment differs between those states which expanded its benefits and relaxed its eligibility criteria and those which did not expand them. This enables us to study whether the impact on female employment and labor force participation is different when certain states make the parental leave policy more generous. In contrast to the previous results, we find a positive and statistically significant impact of FMLA on female employment in the states which had no law prior to FMLA compared to the states which had TDI⁶.

Another important contribution to the literature is Kallaman (1998). 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 other existing policies. On the contrary, our paper focuses on comparing the relative performance of the federal and state policies on female employment and labor force participation which greatly enriches the analysis. Baum (2003a) also studies the impact of family leave legislation on female employment but find no statistically significant effect. Baum (2003b) finds that family leave legislations allows mothers to delay their return to their prechildbirth jobs but only by a couple of weeks. Using employee responses to the 2000 Survey of employees, Waldfogel (2001) find that over half of leave-takers report being concerned about financial constraints while on leave. 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.

We use a difference-in-differences (DD) and difference-in-difference-in-difference (DDD) estima-

⁵Note 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.

⁶Using the same states as the experimental and non-experimental groups considered by Waldfogel, we replicate her results, i.e.:obtain no statistically significant impact of FMLA on female employment.

tion strategy, where the first difference is between the states which received the treatment (states that had TDI) and the states which did not. The second source of difference relates to the time of the treatment, i.e.: before and after 1993, when FMLA was passed. The third difference is between the treated group and the control group, which did not receive the treatment. Some of the results indicate that, first, the impact of FMLA on female employment in those states without TDI is significantly more positive 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 states applying either the FMLA or the expanded FMLA alone.

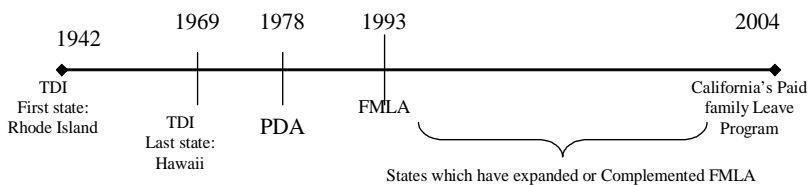
As mentioned above, the effects of FMLA on employment have been shown to be positive (but small) by both theoretical and empirical literature; see Klerman and Leibowitz (1997), Ruhm (1997) and Waldfogel (1999a). This paper, then, goes in the line of this literature, but provides a much richer analysis and comparison about the effects of FMLA on female employment in states with and without TDI, examines the labor market effects of the FMLA expansions, 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 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). 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 6 to 52 weeks⁷.



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 childbirth 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 workers⁸ and have made the FMLA more generous. In particular, the

⁷See table 3 in the appendix for a detailed explanation about weekly benefit amounts and duration of the TDI program.

⁸There are eight other states which expanded the FMLA benefits, but they did not cover both public and private

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 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 allow 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 2004⁹. 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 employers with 50 or more employees, Paid Family Leave program guarantees that 6 of those weeks are paid.

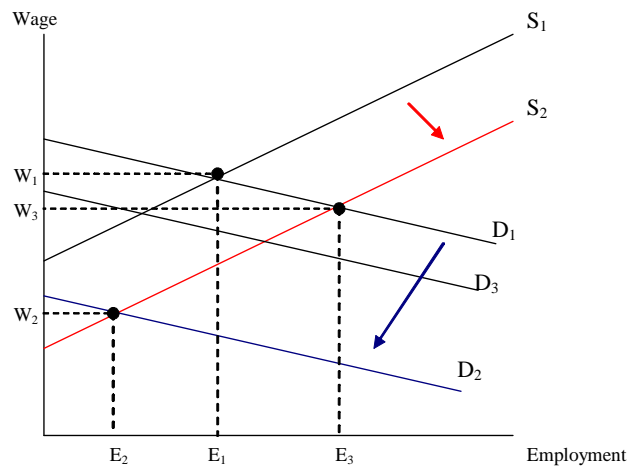
3 Theory

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 assumes that workers and firms voluntarily agree to the provision of family leave sector employees. In addition, the relaxations in eligibility and expansions in benefits were minimal.

⁹More recently, two other states adopted the Paid Family Leave program. Washington passed the Paid Family Leave law in 2007 and New Jersey's Paid Family Leave law took effect in July 2009. In this paper, we study the impact of only California's Paid Family Leave program which was amongst the first state to adopt it.

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 leading 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 favoring leave entitlements which 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 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 supporters 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.



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. Since we use a DDD estimation strategy, this requires identifying one or more treatment groups (the groups who are affected by the passage of a law) and one or more control groups (those who are not affected by the law but are otherwise affected by the same underlying factors, so that their behavior can be used to approximate how the treatment group would have acted in the absence of the policy). The different parental leave policies that we analyze are expected to primarily benefit women of

childbearing ages, therefore, we use women aged 19 to 45 with children older than one year old, or women in the same age group who are childless as our treatment group. 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. These groups of women are included in the treatment group because they are eligible and more likely to obtain the benefits of parental leave policies. Also, we focus on these women because they are the potential beneficiaries and might bear some of the costs of the law.

In order to isolate the impact of the parental leave policies from other factors (like economic shocks or other policy changes) that affect labor market outcomes, we use control groups. Ideally, a control group should be similar in characteristics to the treatment group, and hence likely to respond in the same way to a given policy change, except for the fact that it does not receive the treatment. For this purpose, we use women aged 46 to 60 as the control group, since they are the plausibly substitute for women under 45 in employment but are more likely to have reached the end of their reproductive lives and hence less likely to benefit from parental leave laws. However, comparison between younger females and older females might not be sufficient to identify the effect of parental leave policies. Older women usually have their own labor market trends which differ from that of younger women, and there could be some age-specific factors that might make their preferences towards work different from that of younger females. For this purpose (and as is customary in the literature)¹⁰, we use men between the age of 19 and 45 as an alternative control group. Men of the same age as women in the treatment group, while also potential substitutes in employment, are less likely to have been affected by changes in tastes for work as older women. However, men have their own work preferences and might face different labor market prospects compared to women (mainly due to gender discrimination in the workplace). Since each of the control groups we use are plausible but imperfect comparisons for the treatment group, we use both types of workers alternatively as control groups in order to better identify the effects of parental leave policies on female employment¹¹.

Our estimates of the effects of the *federal* parental leave policy on female employment is the

¹⁰See Baker and Milligan (2008), Rodgers and Zveglich (2003)

¹¹Similar to Waldfogel (1999a) we consider these two control groups, in order to develop meaningful comparison.

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 the states which expanded FMLA and those which did not.

4.2 Data

We use IPUMS-CPS data from 1979-2007, 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 1979-2007 (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

Notes: Treatment refers to the women aged 19 to 45 with children older than one year old, or childless women; Alternative Treatment refers to women aged 19 to 45 with children under the age of one. Control refers to women aged 46 to 60 and Alternative Control refers to men aged 19 to 45. Data are from IPUMS-CPS for the years 1979-2007.

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 (column 4). 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. Since there are no significant differences in educational attainments, the summary statistics indicate that any differences in the labor force participation among the groups are not likely to be driven by differences in the demographic characteristics of those groups. The only difference between the treatment (and alternative treatment) and control (and alternative control) groups are that the former have been affected by changes in parental leave laws whereas the latter have not been affected by such 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

Notes: Treatment refers to the women aged 19 to 45 with children older than one year old, or childless women; Alternative Treatment refers to women aged 19 to 45 with children under the age of one. Control refers to women aged 46 to 60 and Alternative Control refers to men aged 19 to 45. Data are from IPUMS-CPS for the years 2001-2007.

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 apriori. 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 policies 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 if the state had TDI. 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. The parameter of interest is β_3 , which reports the DDD estimates. Intuitively, β_3 measures how female employment in treated states, treated groups and the relevant years differ from the employment in the non-treated groups.

5.1 Analysis of FMLA in states with and without TDI

Table 5a in the appendix reports the differential impact of FMLA on female employment between states that had no law prior to FMLA and states which had TDI before FMLA. 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, before and after 1993. 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, we restrict the sample for the pre-FMLA period from 1978 through 1992.

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 positive and significant. This result 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 further analyze by the educational attainment, table 5b shows 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 differentially affected by the implementation of FMLA. The results indicate (tables not reported) that there is no impact of FMLA on the employment of higher educated women in states with no law compared to the TDI states, when women in childbearing ages are compared to men. In addition, the estimates are statistically indistinguishable from zero when these women are compared to the control group, i.e. older women.

On the one hand, the positive and significant results can be explained using the theoretical predictions of mandated leave policies described in section 3 (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’s 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 positive and significant for women in their childbearing ages (when compared to men).

On the other hand, the above insignificant results could be rationalized 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. In order to overcome this problem we repeat the analysis by separately taking each of the years after 1993, however, this new approach did not change the results.

Regarding our results related to labor force participation, table 6a shows that the DDD estimates are positive and significant when we compare treatment group to the alternative control group. Hence, the change in female labor force participation after the FMLA was enacted (between

experimental and non-experimental states) is significantly higher for those women potentially benefiting from the law (in the treatment group) than for men (in the alternative group). Therefore, the change in female labor force participation after the FMLA was higher for women in states with no maternity leave laws prior to FMLA compared to women in states with TDI

Table 6b analyzes the possibility of a different impact of FMLA, depending on the woman's educational attainment. Indeed, we also observe a positive and significant DDD estimates for high-school dropout women, when the employment of female are compared to men. There is a positive effect on the female labor force participation when we analyze by the high educated group of women. Hence, the aforementioned shift in female labor supply can be mainly explained by a change in willingness to work for low-educated women, and also a change in incentives for higher educated women.

Table 13 analyzes the results from a falsification exercise pretending that FMLA was adopted in 1981 instead of the actual year 1993 of its implementation. Hence pretending that treatment occurred several years before it actually did, we find that none of the estimates are statistically significant. As reported in table 13, the DDD estimates are positive but insignificant when we compare the treatment group both to the control group (older women) and to the alternative control group (men). Therefore, the change in female labor force participation after the implementation of the FMLA (pretending it was adopted in 1981) was not statistically different for women in states which had no maternity leave laws prior to FMLA compared to women in states with TDI

5.2 Analysis of extensions of FMLA

Using equation (1) we study the effects of the expansions of FMLA that the aforementioned four states introduces in their jurisdiction. The results obtained for each state are presented in tables 7 through 10 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 it with both the control and the alternative control group. We do not discuss our findings for the treatment group since they are insignificant and statistically indistinguishable from zero.

The DDD estimates are positive and statistically significant for Oregon (table 9a in the appen-

dix). In particular, the labor force participation rates for the alternative treatment group are higher by 18.84 and 11.04 percentage points in Oregon compared to states which did not expand FMLA, when we consider the control and alternative control group respectively. This result indicates that making the FMLA more generous in terms of eligibility and leave options encourages 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 marital status 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 significant¹².

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 9b 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 any value 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. Second, a 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 8 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 consider the alternative 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

¹²The DDD estimates for the two different educational groups are not reported.

for female employment, and when we divide the sample into groups based on their educational attainment.

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. Finally, the state of Vermont has the smallest sample size of all groups in this analysis, hence it is not surprising that none of the results are significant for this state.

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 has affected the change in female employment and labor force participation rates. We compare California’s Paid Family Leave program with those states applying the expanded and non-expanded FMLA. Table 11a 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 11a 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 12a and 12b in the appendix.

We observe 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 comparing it to the labor force participation of women in states which had no law before FMLA as well as states which expanded FMLA. Similar results are obtained for female employment. The findings are also the same when considering women with young infants (alternative treatment group) as our treatment group. When we further carry out the analysis dividing the women in the sample into two different educational groups, the results are

still statistically insignificant¹³. Following section 3, in the context of changes in supply and demand curves, these results would suggest that the decrease in labor demand offsets the increase in female labor supply in the three-year period following the implementation of the law, and future years of data are needed to observe whether 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 its benefits and hence a certain period of time and learning are 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 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.

Another possible explanation for the insignificant results of the Paid Family Leave program in California could be the low take-up rates. According to the statistics reported by the Employment Development Department of California, the percentage claim of PFL benefits was only 1.01% in 2005 and 1.07% in 2006. A study by Rothschild (2007) suggests the possible reasons for the low take-up rates¹⁴. The most important of them is that a significant portion of California's workforce is undocumented, due to the high percentage of immigrant population in this specific state. Also, workers use available sick leave, vacation leave instead of parental leave and hence no claims are filed. The surveys conducted support the lack of worker awareness of the available benefits provided by the Paid Family Leave program, which further adds to the ineffectiveness of such parental leave policies.

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, we shows that the introduction of the Family and Medical Leave

¹³The results for the different educational groups are not reported.

¹⁴Jesse Rothschild and Rothschild-Landry Holding Inc.(November 2007). This study predicts the take-up rates for Washington's recent Paid Family Leave law based on the findings for California's Paid Family Leave program.

Act (FMLA) has a significantly positive impact on the employment of women in those states with no law providing parental leave benefits than in those applying the Temporary Disability Insurance (TDI). However, the estimated effects are quite small. 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 by a substantial amount.

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 relaxing the 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 effect) on female employment and labor force participation is based on the previous adjustments in California's female labor market prior to the passage of this leave program. The previous implemented policies reduce the possibility of further changes in the labor market behavior of both female workers and their employers. Furthermore, the low take-up rates of the policy plays a crucial role in explaining its lack of effectiveness.

More extensive analysis should be conducted specially in the case of California, in order to test the hypothesis. 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 states

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			▪	12	1250	25 or more	accrued sick leave
Oregon							
Pennsylvania			▪				
Rhode Island	X						
South Carolina		✓					
South Dakota		✓					
Tennessee		✓					
Texas		✓					
Utah			▪	12		10 or more	accrued sick leave
Vermont			▪				
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	0.790	0.740					
	Pos'93	0.720	0.660	0.016				
Control	Pre'93	0.630	0.630					
	Pos'93	0.740	0.720	0.020	-0.004	-0.004	-0.004	-0.004
Obs.675,816					(0.004)	(0.004)	(0.004)	(0.004)
standard errors								
Alt. Control	Pre'93	0.920	0.900					
	Pos'93	0.920	0.890	0.012	0.006***	0.007***	0.006***	0.007***
Obs.963,726					(0.003)	(0.003)	(0.003)	(0.003)
standard errors								
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 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	0.910	0.860					
	Pos'93	0.880	0.810	0.017				
Control	Pre'93	0.770	0.780					
	Pos'93	0.840	0.810	0.031	-0.013	-0.015	-0.013	-0.015
Obs.675,816					(3.76)	(4.92)	(3.96)	(5.12)
F-statistic								
Alt. Control	Pre'93	0.810	0.800					
	Pos'93	0.790	0.780	0.001	0.016***	0.017***	0.016***	0.007***
Obs.963,726					(12.11)	(12.66)	(12.08)	(12.65)
F-statistic								
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 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	0.745	0.706					
	Pos'93	0.686	0.623	0.024				
Control	Pre'93	0.581	0.595					
	Pos'93	0.712	0.699	0.026	-0.002	0.003	-0.003	-0.003
Obs.675,816					(0.005)	(0.005)	(0.005)	(0.005)
standard errors								
Alt. Control	Pre'93	0.919	0.907					
	Pos'93	0.908	0.886	0.010	0.012***	0.014***	0.014***	0.014***
Obs.963,726					(0.003)	(0.003)	(0.003)	(0.003)
standard errors								
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. DDDadj1 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 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	0.860	0.808					
	Pos'93	0.836	0.763	0.021				
Control	Pre'93	0.732	0.753					
Obs.675,816	Pos'93	0.821	0.807	0.035	-0.014	-0.017	-0.015	-0.042
F-statistic					(4.22)	(5.64)	(4.63)	(4.22)
Alt. Control	Pre'93	0.774	0.769					
Obs.963,726	Pos'93	0.746	0.740	0.001	0.019***	0.020***	0.019***	0.021***
F-statistic					(17.92)	(19.09)	(18.09)	(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. DDDadj1 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 7: 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	0.582	0.595			
	Pos 1997	0.684	0.588	0.109		
Control Obs. 27,884 standard errors	Pre 1997	0.700	0.685			
	Pos 1997	0.758	0.703	0.039	0.069 (0.079)	0.068 (0.0797)
Alt. Control Obs. 56,190 standard errors	Pre 1997	0.885	0.912			
	Pos 1997	0.883	0.913	-0.002	0.111 (0.074)	0.112 (0.073)
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 8: 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	0.619	0.595			
	Pos 1997	0.748	0.588	0.136		
Control Obs. 27,886 standard errors	Pre 1997	0.716	0.684			
	Pos 1997	0.724	0.703	-0.009	0.146** (0.079)	0.142** (0.079)
Alt. Control Obs. 56,213 standard errors	Pre 1997	0.897	0.912			
	Pos 1997	0.901	0.913	0.002	0.134** (0.073)	0.137** (0.074)
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 9a: 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	0.417	0.592			
	Pos 1996	0.527	0.570	0.131		
Control Obs. 28,463 standard errors	Pre 1996	0.747	0.668			
	Pos 1996	0.720	0.699	-0.057	0.188*** (0.075)	0.188*** (0.075)
Alt. Control Obs. 58,817 standard errors	Pre 1996	0.909	0.913			
	Pos 1996	0.929	0.913	0.021	0.110* (0.069)	0.105* (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 9b: 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	0.554	0.661			
	Pos 1996	0.686	0.661	0.131		
Control Obs. 28,463 standard errors	Pre 1996	0.785	0.706			
	Pos 1996	0.768	0.729	-0.040	0.172*** (0.069)	0.171*** (0.069)
Alt. Control Obs. 58,817 standard errors	Pre 1996	0.916	0.931			
	Pos 1996	0.949	0.932	0.031	0.100* (0.063)	0.100* (0.063)
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 10: 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	0.575	0.599			
	Pos 1998	0.666	0.587	0.104		
Control Obs. 27,672 standard errors	Pre 1998	0.750	0.692			
	Pos 1998	0.771	0.708	0.005	0.099 (0.081)	0.099 (0.076)
Alt. Control Obs. 54,698 standard errors	Pre 1998	0.899	0.912			
	Pos 1998	0.915	0.915	0.013	0.091 (0.076)	0.088 (0.076)
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 11a 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	0.761	0.778			
	Pos 2004	0.736	0.756	-0.002		
Control Obs. 143,023 standard errors	Pre 2004	0.718	0.718			
	Pos 2004	0.721	0.719	0.001	-0.007 (0.013)	-0.006 (0.013)
Alt. Control Obs. 193,978 standard errors	Pre 2004	0.899	0.908			
	Pos 2004	0.888	0.899	-0.001	-0.005 (0.008)	-0.005 (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 11b The estimates of FLFP rates between California and states with which expanded FMLA.

		California	Exp. FMLA	DD	DDD	DDD adj. 1
Treat	Pre 2004	0.816	0.795			
	Pos 2004	0.790	0.769	-0.001		
Control Obs. 54,838 standard errors	Pre 2004	0.682	0.773			
	Pos 2004	0.685	0.776	-0.003	-0.003 (0.016)	-0.002 (0.016)
Alt. Control Obs. 74,235 standard errors	Pre 2004	0.899	0.900			
	Pos 2004	0.888	0.885	0.004	-0.007 (0.115)	-0.008 (0.115)
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 12a 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	0.787	0.807			
	Pos 2004	0.764	0.783	0.001		
Control Obs. 143,023 standard errors	Pre 2004	0.745	0.745			
	Pos 2004	0.744	0.739	0.005	-0.005 (0.124)	-0.004 (0.012)
Alt. Control Obs. 193,978 standard errors	Pre 2004	0.921	0.921			
	Pos 2004	0.903	0.905	-0.002	0.001 (0.008)	-0.001 (0.008)
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 12b The estimates of Female Employment between California and states which expanded FMLA.

		California	Exp. FMLA	DD	DDD	DDD adj. 1
Treat	Pre 2004	0.843	0.831			
	Pos 2004	0.819	0.814	-0.006		
Control	Pre 2004	0.704	0.801			
	Pos 2004	0.702	0.795	0.004	-0.013	-0.012
Obs. 54,838					(0.016)	(0.016)
standard errors						
Alt. Control	Pre 2004	0.904	0.927			
	Pos 2004	0.886	0.910	-0.002	-0.005	-0.005
Obs. 74,235					(0.011)	(0.011)
standard errors						
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 13: Falsification: The estimates of Female Employment between states with no law and states with TDI

		before FMLA.assuming FMLA adopted in 1981						
		NoLaw(1)	TDI(2)	DD(3)	DDD(4)	DDD.adj1	DDD.adj2	DDD adj3
Treat	Pre'81	0.686	0.680					
	Pos'81	0.684	0.674	0.005				
Control	Pre'81	0.539	0.543					
	Pos'81	0.552	0.568	-0.011	0.015	0.017	0.016	0.017
Obs.675,816					(0.012)	(0.011)	(0.012)	(0.012)
standard errors								
Alt. Control	Pre'81	0.924	0.912					
	Pos'81	0.919	0.908	-0.001	0.005	0.006	0.005	0.006
Obs.963,726					(0.007)	(0.007)	(0.007)	(0.007)
standard errors								
marital status?					no	yes	no	yes
linear time trend?					no	no	yes	yes

Notes: The Pre '81 period consists of the years 1978 - 1980. Robust Standard errors are reported.