

## **The Effect of Government-Mandated Family Leave on Employer Family Leave Policies**

Charles L. Baum II\*

*Middle Tennessee State University, Murfreesboro, TN*

### *Abstract*

The 1993 Family and Medical Leave Act (FMLA) guarantees employees 12 weeks of unpaid leave to address family issues. Twelve states and the District of Columbia passed similar legislation antedating the FMLA. However, studies in the economics literature find either small or insignificant effects of the legislation on employment, leave-taking, work, and wages. Perhaps employees are unable to use the mandated leave because it is unpaid and/or they do not need family leave because they already have the option of taking off work via vacation, sick leave, and disability leave policies. If so, then family leave legislation may have increased employer-provided family leave without corresponding effects on employment-related outcomes. This paper examines family leave legislation's effects on employers' family leave policies, finding significant positive effects.

*Key words:* labor supply, maternity leave, Family and Medical Leave Act, FMLA

*JEL category:* J1, J2, J3

## I. Introduction

In 1993, Congress passed and President Clinton signed the Family and Medical Leave Act (FMLA). Twice vetoed by President George H. W. Bush, the FMLA allows eligible employees 12 weeks of job-protected unpaid leave from work (per year) to address family issues (Crampton and Mishra, 1995). Eligible employees are those with tenure of at least a year and 1250 hours of work. Further, firms are covered by the FMLA if they employ at least 50 workers. Prior to the FMLA, 12 states and the District of Columbia passed similar legislation mandating family leave benefits.

Only a couple of studies in the economics literature have used multivariate regression analysis to examine the effects of family leave legislation passed in the United States, but they almost all find that the legislation has had either small or no effects.<sup>1</sup> For example, Klerman and Leibowitz (1997) and Baum (2003b) study the effects of family leave legislation on employment, but find no statistically significant effects. Similarly, Klerman and Leibowitz (1997) find the legislation has no effects on work, and Waldfogel (1999) and Baum (2003b) find no significant effects on wages. When the literature does find statistically significant effects, they are either small or prone to change with model specification. For example, Baum (2003a) finds that family leave legislation allows mothers to delay their return to their pre-childbirth jobs but only by a couple of weeks; Waldfogel (1999) finds that family leave legislation increases leave-taking by employees

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<sup>1</sup> Other studies have examined the effects of maternity leave coverage provided by employers as opposed to coverage that is mandated by the government (Dalto, 1989; Spalter-Roth and Hartmann, 1990; Waldfogel, 1998; and Waldfogel, 1997). Because these fringe benefits are voluntarily provided by employers, it is not clear that these studies identify exogenous variation in maternity leave benefits.

of medium-sized firms (with 100 to 500 employees) but not for those of large firms (500 or more employees); and Klerman and Leibowitz (1997) find that the legislation increases leave-taking in their difference-in-difference (DD) specifications but not in their difference-in-difference-in-difference (DDD) specifications. Thus, the literature does not provide consistent evidence that family leave legislation has affected employment, work, leave-taking, or wages.

It is not clear why family leave legislation has not had larger, statistically significant effects. One possible explanation is employees are unable to use the leave mandated by the legislation because it is unpaid. That is, employees may be bound by financial constraints instead of leave-taking limits imposed by employers. Indeed, Waldfogel (2001), using employee responses to the 2000 Survey of Employees, finds that in 2000 the average length of family leave taken (among leave-takers) was only 10 days. Further, Waldfogel (2001) finds that over half of leave-takers report being concerned about financial constraints while on leave. A second explanation is that workers do not need to use the leave mandated by family leave legislation because they already have the option of taking time off work through other means such as accumulated vacation, sick leave, or temporary disability policies. A third explanation is that the mandates only apply to “large” employers (with at least a minimum number of employees). If so, then smaller employers are not affected by the legislation. Waldfogel (2001), using employer responses to the 2000 Survey of Establishments, finds that in 2000 only 10.8 percent of employers were covered by the FMLA, though these “large” employers employed 58.3 percent of employees. A fourth explanation is that many employers (particularly the “large” ones covered by the legislation) provide their employees with sufficient family

leave regardless of family leave legislation. Indeed, the Pregnancy Discrimination Act of 1979 requires employers with temporary disability leave policies to extend such policies to cover pregnancies (Waldfogel, 2001).<sup>2</sup> If so, then the legislation may not change many firms' extant leave policies.

If the first and second explanations are correct, then family leave legislation may have increased the amount of family leave allowed by employers without corresponding effects on employment, work, leave-taking, and wages. If the third or fourth explanations are correct, then family leave legislation may not have had statistically significant effects on these outcomes because it has not significantly affected the amount of leave allowed by employers. Thus, the key question is how family leave legislation has affected employers' family leave policies. Theoretically, family leave legislation could increase family leave provided by employers in two ways: by requiring employers who allow no family leave in absence of the mandates to begin offering family leave benefits and by requiring employers who already offer some family leave to change existing policies to provide additional weeks of leave.

It is important to determine why family leave legislation has small effects because some are calling for the existing mandates to be extended. For example, Connecticut Senator Christopher Dodd (D-CT) has proposed legislation providing federal financial support to states with legislation mandating paid family leave (Klett, 2003). Additionally, his proposed legislation would lower the coverage threshold from firms with at least 50 employees to firms with at least 25 employees (Business Insurance, 2003; Clark, 2003). Further, California in 2004 will become the first state to provide paid family leave

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<sup>2</sup> However, if an employer did not have a disability leave policy prior to the Pregnancy Discrimination Act, then they were not required to begin offering one.

benefits (Klett, 2003). In particular, California's legislation will mandate that employers provide six weeks of family leave with a financial stipend of up to 55 percent of what leave-taking workers would otherwise have earned (with a \$728.00 maximum weekly payment).

If family leave legislation has not had substantive effects because employees are unable financially to take the mandated leave or do not need the mandated leave, then legislation mandating additional weeks of unpaid leave or extending unpaid leave benefits to employees in smaller firms would seem to have little impact. Conversely, if existing statutes have not had substantive effects because they have not significantly changed employers' family leave policies, then ambitious extensions such as those proposed by Senator Dodd and those being implemented by California could potentially have impact.

In this paper, I extend the literature by estimating the effects of family leave legislation on employers' family leave policies, with a portion of the analysis examining the effect of the legislation on employer-provided family leave separately for female and male employees. In particular, using National Longitudinal Survey of Youth (NLSY) data, I estimate the effect of family leave legislation on the probability that employed NLSY respondents have access to family leave benefits. I examine the effects of family leave legislation as a natural experiment. This is possible because, as noted above, some states passed family leave legislation prior to the 1993 FMLA and some states did not. Further, the states that passed mandated family leave benefits did so at different times. I also investigate potential bias from employees crossing state borders to work where government-mandated family leave benefits are more generous, and I explore whether

state family leave legislation and the FMLA have different effects. In addition, I examine the effect of the legislation on employees who have sufficient tenure to be eligible for family leave benefits under the legislation and on employees who work at firms large enough to be covered by the legislation. The estimates provide evidence that family leave legislation has significantly increased the incidence of employer-provided family leave. There is some evidence that the legislation has larger positive effects on male employees. Thus, I conclude that the legislation has few significant effects on employment, work, leave-taking, and wages because employees are either unable to utilize the benefits due to financial constraints or do not need family leave because they have vacation leave, sick leave, and/or disability leave.

The remainder of the paper is as follows: I present the empirical methodology in section II, I describe the data in section III, I present the results in section IV, and I conclude the paper in section V.

## **II. Estimation Methodology**

I identify the effects of family leave legislation on employer-provided family leave using variation in state family leave laws. I use three sources of variation. First, 12 states and the District of Columbia passed legislation mandating family leave prior to the 1993 FMLA (while 38 did not). Second, the 12 states that passed family leave mandates did so at different times. Table 1 lists the states that passed family leave legislation and their legislation's provisions. Because the FMLA went into effect in August of 1993, I can exploit a third source of variation: the "experimental" states that passed family leave legislation become the nonexperimental states and the states without prior family leave

mandates become the experimental states.<sup>3</sup> The FMLA should affect employers' leave policies in states with no prior family leave legislation, but it should have little effect in states that already had family leave mandates in force. Thus, I essentially compare employees who live in states at times when family leave legislation is in force with employees who live in states at times when no family leave has been legislated. However, comparing employees with and without family leave legislation in force will produce biased results if differences in employer-provided family leave between the two groups of employees are due to state effects that are not the result of the legislation. For example, if states with family leave legislation in force have more employers who would have offered family leave from work in absence of the statutes, then the legislation would spuriously appear to increase the incidence of employer-provided family leave. To control for such effects, I include a set of state dummy variables in the model. Similarly, estimates will be misleading if the passage of government-mandated family leave over time is correlated with but not due to time trends. For example, if more employers would have offered family leave policies over time in absence of any family leave mandates (perhaps as female labor force participation rates have increased), then passage of family leave legislation would spuriously appear to increase the incidence of family leave allowed by employers. To control for time trends, I include year dummy variables for each year covered by the model. This produces a difference-in-difference (DD) model given by

$$Y_i = \alpha_0 + \alpha_1 \mathbf{X}_i + \alpha_2(\mathit{state}_{ij}) + \alpha_3(\mathit{year}_{it}) + \alpha_4(\mathit{family\ leave\ legislation}_i) + \varepsilon_i \quad (1)$$

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<sup>3</sup> Gruber (1992, 1994) also utilized this kind of “reverse experiment”.

for observation  $i$  in state  $j$  in year  $t$ , where  $Y$  is the dependant variable (whether family leave is offered by the employer),  $\mathbf{X}$  is a vector of explanatory variables (such as demographic characteristics),  $\mathbf{state}_j$  is a vector of state dummy variables ( $\mathbf{state}_j$  equals 1 if individual  $i$  lives in state  $j$ ),  $\mathbf{year}_t$  is a vector of year dummy variables ( $\mathbf{year}_t$  equals 1 if individual  $i$  is in year  $t$ ), and *family leave legislation* equals the weeks of government-mandated family leave for individual  $i$  in state  $j$  at time  $t$ . In this specification,  $\alpha_4$  is the effect of the family leave legislation on employer-provided family leave.

Unfortunately, the family leave legislation variable will pick up the effect of the legislation and state time trends unless I include a control group from each state for whom family leave legislation has no effect. Therefore, for each state (regardless of whether that state passed its own legislation), I include a “treatment” group affected by family leave legislation and a “control” group not affected by the mandates. Then, I compare a treatment group and a control group in each state that has family leave legislation in force with a treatment group and control group in each state that does not have family leave mandates.<sup>4</sup> This produces a difference-in-difference-in-difference (DDD) estimator that will provide unbiased effects of family leave legislation assuming there are no contemporaneous shocks that are correlated with but not due to family leave legislation that affect only the treatment group in states with family leave mandates.

In the DDD portion of the analysis, I use two treatment groups. The first is “covered” employees defined as those who work for employers with the requisite number of employees to be covered by the mandates. The second treatment group is “eligible and covered” employees defined as eligible employees (employees with the requisite work

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<sup>4</sup> This follows the methodology of Gruber (1992), Gruber (1994), and Gruber and Madrian (1995).



history to be eligible for the mandated family leave) working for covered employers. The corresponding control groups are comprised of employees who work for employers not covered by the legislation and ineligible and noncovered employees, respectively.

The regression specification follows that used by Gruber (1994) and Waldfogel (1999). Specifically,

$$Y_i = \alpha_1 + \alpha_2 \mathbf{X}_i + \alpha_3(\mathit{state}_{ij}) + \alpha_4(\mathit{year}_{it}) + \alpha_5(\mathit{state}_{ij} * \mathit{year}_{it}) + \alpha_6(\mathit{family\ leave\ legislation}_i) + \varepsilon_2 \quad (2)$$

for observation  $i$  in state  $j$  in year  $t$ , where  $Y$ ,  $\mathbf{X}$ ,  $\mathit{state}_j$ ,  $\mathit{year}_t$ , and  $\mathit{family\ leave\ legislation}$  are as defined above and  $\mathit{state}_j * \mathit{year}_t$  is a vector of state-year interaction terms controlling for state time trends. In this specification,  $\alpha_6$  picks up the effect of family leave legislation on employer-provided family leave.

### III. Data

I use National Longitudinal Survey of Youth (NLSY) data to estimate government-mandated family leave's effects on employer-provided family leave. In 1979, the NLSY began annually collecting information on the employment experiences and individual characteristics of a cohort of youths aged 14 through 21 in 1979. In 1994, the NLSY switched to biennial surveying and continues on that basis today. The original NLSY sample contained 6,283 women and an oversample of blacks, Hispanics, low-income whites, and military personnel. The military sample was dropped in 1984 and the low-income white sample was dropped in 1990, and I do not include respondents from either sample in my analysis. My sample consists of annual observations from respondents employed at the time of the 1985 through 2000 surveys. I exclude self-employed respondents as well as respondents that do not provide the information required to create

the covariates. This provides 75,570 observations from 9,121 NLSY respondents for my sample. I control for correlation among observations that come from the same respondent because such observations are not independent from one another.<sup>5</sup> Otherwise, such correlation would lead to underestimated standard errors and overestimated significance levels. When weighted, my sample will be a nationally representative sample of employees surveyed annually from 1985 through 2000 who were between the ages of 20 and 27 in 1985. However, this sample is limited in that employees younger than 20 and older than 42 (in 2000) whose employers are potentially affected by family leave legislation are not represented in my sample.

The NLSY surveys respondents about their employment status at the time of the interview. Beginning with the 1985 survey, the NLSY identifies whether employed respondents who typically work more than 20 hours per week have access to various employer-provided nonwage benefits. (Thus, employed respondents who work less than 20 hours per week are not included in my sample). One such benefit is family (maternity/paternity) leave from work. However, prior to the 1985 survey, the NLSY did not identify whether employed respondents had access to employer-provided family leave. I only include observations responding to post-1984 surveys so that I can identify the incidence of employer-provided family leave. The key outcome variable is whether employers provide family leave, which equals 1 if employers provide family leave benefits. Shown in table 2, 61 percent of the employees in my sample are provided family leave by their employers. This figure is higher for female employees than male

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<sup>5</sup> This is done using the “cluster” command in STATA. This command relaxes the assumption of error independence between observations from the same person, instead defining an error structure where only errors between observations with different person ids are independent.

employees with averages (not shown in table 2) of 73 percent and 49 percent, respectively.

The key covariate of interest is the family leave legislation variable, which equals the weeks of leave mandated by the legislation (measured at the time of the survey). If an employee resides in a state with family leave legislation in force and the FMLA is also in force, then the family leave legislation variable equals the amount of leave provided by the more generous statute. If the FMLA is not yet in force and an employee is living in a state without family leave mandates or lives in a state prior to passage of that state's family leave legislation, then the family leave legislation variable equals zero. Of the 75,570 employees used in my analysis, 33,447 work with family leave legislation in force.

Table 2 shows how family leave legislation is correlated with employer-provided family leave. The probability that employers allow leave is only slightly larger if family leave legislation is in force: 61.2 percent of employees with government-mandated family leave benefits are allowed family leave compared to 60.8 percent of employees without family leave legislation in force.

To acquire family leave benefits, employees may leave their state of residence to work in bordering states with government-mandated family leave in force. If border crossing occurs, then the effect of family leave legislation (in the state of residence) will be biased toward zero. Fortunately, the NLSY also identifies each respondent's county of residence. Therefore, I am able to investigate potential bias from border crossing. I do so by estimating three alternative specifications. First, I include a border dummy variable in the model that equals one if the employee resides in a county that borders another state. Second, I average the length of leave mandated by the state of residence family leave

legislation with the maximum family leave mandated from neighboring states, where a neighboring state is one that borders the employee's county of residence. Third, I specify the family leave mandates variable to equal the most generous mandates among the state of residence and neighboring states (if a bordering state exists as defined above).

The family leave legislation variable does not account for whether the employee has the tenure to be eligible for the family leave or whether their employer is of sufficient size to be covered because eligibility and employer coverage potentially depend on previous employment decisions – whether and where to work. If such decisions are determined by the same factors as the probability of being allowed employer-provided family leave, then eligibility and employer coverage are endogenous. Instead, the family leave legislation variable serves as an instrument for eligibility and coverage because it exogenously assigns employees mandated family leave based on state of residence.

For comparison purposes, I create two additional family leave legislation variables to pick up the effects of the mandates on employees who are eligible for the benefits and/or who work for covered employers. The first of these additional variables identifies whether each employee is employed at a firm covered by the mandates. In particular, this variable equals the weeks of mandated leave if the employee lives in a state at a time when family leave legislation is in force and if the employee works for an employer who employs at least the minimum number of workers required to be covered by the legislation. It is possible to determine employer coverage status for most employees because the NLSY asks respondents for the number of employees who work for their current employer. Unfortunately, some NLSY respondents do not know how many workers their employer employs, and these respondents are not included in this

portion of the analysis. Table 1 lists the firm size required to be covered by each state's leave mandate. Of the 33,447 employees who work with family leave legislation in force, 16,332 are known to be covered. The second additional family leave legislation variable is a variant of the first one – it equals the weeks of leave mandated for employees working with family leave legislation in force who are eligible and work for covered employers. Exactly 13,170 employees are eligible and known to be covered.

Table 2 shows that employees of covered employers are more likely to have employer-provided family leave than employees of employers not covered – 76.7 versus 55.6 percent, respectively. The association is somewhat stronger for employees who are both eligible and covered. In fact, almost 81 percent of eligible and covered employees have access to employer-provided family leave compared to 55.7 percent who are not both eligible and covered.<sup>6</sup> Similarly, other statistics (not shown in table 2) indicate that eligible and covered female employees are more likely (than females who are not eligible and covered) to have access to employer-provided family leave (87 versus 69 percent, respectively), but this gap for males is somewhat larger (73 percent for eligible and covered males versus 43 percent of ineligible or noncovered males).

While informative, these descriptive statistics do not reveal whether employees with employer-provided family leave would have been offered that benefit absent family leave legislation. In an attempt to estimate the causal effects of the legislation, I use multivariate regression analysis. This analysis controls for state and year effects with state and year dummy variables described in section II. In addition, I control for

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<sup>6</sup> Perhaps we would expect 100 percent of eligible and covered employees to have access to employer-provided family leave. However, Waldfogel (2001), using employer responses to the 2000 Survey of Establishments, finds similar results. Specifically, she finds that in 2000 only 83.7 percent of covered employers provided the benefits mandated by the FMLA.

demographic characteristics such as race (with black and Hispanic dummy variables), age, education, marital status, children present in the household, and weeks of work experience. The specifications that estimate the effect of the legislation on employees who are eligible and/or work for covered employers also include covariates to control for tenure and/or firm size. Otherwise, the family leave legislation variable would serve as a proxy for the effects of the legislation and the effects of tenure and/or firm size. Table 2 also presents descriptive statistics for the demographic variables, as well as their descriptive statistics for subsamples of employees with and without family leave legislation in force.

#### **IV. Results**

On separate samples of all employees, females, and males, I first estimate the effects of government-mandated family leave on whether employers allow family leave. The family leave legislation variable's results from these models are presented in table 3. Then, I re-estimate the models using various methods to control for potential border crossing. The relevant results from these models are also presented in table 3. Next, I estimate models that investigate whether state family leave legislation has different effects than the FMLA. Key results from these models are presented in table 4. Finally, I re-estimate the models identifying employee eligibility and employer coverage. Results from these models are presented in tables 5 and 6. Tables 3 through 6 also show the predicted probability of being allowed employer-provided leave with government-mandated family leave of 0 and 12 weeks. This essentially shows the marginal effect of mandating 12 weeks of family leave.

Shown in table 3, family leave legislation's effect on the probability that employers offer family leave (specification 1) is positive and statistically significant for the full sample of employees and the subsample of females. For example, in model 1, mandating 12 weeks of family leave increases the incidence of employer-provided family leave from 60.3 to 61.8 percent, which is a 2.5 percent increase. Similarly, mandating 12 weeks of family leave increases the portion of females with employer-provided leave from 71.9 to 74.1 percent, which is a 3.0 percent change (model 2). However, family leave legislation does not have a statistically significant effect on males (model 3).

These results may be biased due to border crossing. To investigate this possibility, I re-estimate the models (models 1 through 3) controlling for living on a state border with a border dummy variable (specification 2). However, the results are virtually unchanged: family leave legislation continues to have a statistically significant positive effect on employer-provided family leave in the full sample (model 1) and the subsample of females (model 2). Specification 3 re-estimates the models using the average weeks of leave mandated by family leave legislation. This variable reflects the average weeks mandated among the state of residence and bordering states, if any. The results are again left virtually unchanged. Marginal effects show that family leave legislation still increases the incidence of leave allowed by 2.5 percent for all employees and 3.0 percent for females. The legislation continues to have a statistically insignificant effect on males. However, these effects are muted somewhat in specification 4, which uses the maximum weeks of mandated family leave among the state of residence and any border states. In particular, the legislation's effects are no longer statistically significant in models 1 and 2. This is the opposite of what we might have expected: if border crossing had occurred to

gain enhanced mandated family leave benefits, then identifying the effect of more generous legislation in neighboring states should have had a larger effect on the probability that employer-provided leave is allowed. Since the significant effects of family leave legislation found in the first three specifications disappear when using the maximum weeks of mandated family leave, I conclude that border crossing to gain enhanced government-mandated family leave benefits is rare. If anything, using weeks of leave mandated by neighboring states' legislation introduces noise, making the estimates less precise.

Next, I examine whether state family leave legislation's effects are different than those from the FMLA. To do this, I first re-estimate specification 1 (as specification 5 in table 4) including an additional variable that equals the weeks of leave mandated by the FMLA. The "weeks of mandated family leave" variable still equals the weeks of state and federal government-mandated family leave, but the "FMLA mandated family leave" variable allows the FMLA to have an additional marginal effect. However, results in table 4 show that the "FMLA mandated family leave" variable does not have statistically significant effects. This means the effects of the FMLA are significantly captured by the "weeks of mandated family leave" variable. Further, in specification 5, the "weeks of mandated family leave" variable has an effect that is similar to that in specification 1 (whose results are re-displayed in table 4 for comparison purposes). In fact, the marginal effects of mandating 12 weeks of family leave are almost the same in specifications 1 and 5. Thus, specification 5 indicates that state and federal family leave legislation have effects that are not statistically different.



In specification 6, I re-estimate specification 1 using pre-FMLA data. Specification 6 shows the effects of state family leave legislation (without the effects of the FMLA). The effects of state mandated family leave are comparable to those in specification 1. For example, in the full sample, mandating 12 weeks of family leave increases the incidence of employer-provided family leave from 60.2 to 62.4 percent, which is a 3.7 percent increase (compared to a somewhat smaller 2.5 percent change in specification 1). In specification 6, a 12-week increase in mandated family leave for females increases the incidence of leave allowed from 71.9 to 74.7 percent, which is a 3.9 percent change (compared to a somewhat smaller 3.0 percent change in specification 1). Also, the effect of the legislation on males remains statistically insignificant.

It is possible that the family leave legislation variables incorrectly assigns ineligible or uncovered employees weeks of mandated family leave. Therefore, I next re-estimate the models identifying the effects of mandated family leave among employees of covered firms (specification 7 in table 5). The legislation has statistically significant positive effects on employer-provided family leave for all three samples. For example, in the full sample, mandating 12 additional weeks of family leave increases the incidence of employer-provided family leave from 59.3 to 66.3 percent, which is an 11.8 percent increase. The increases for subsamples of females and males are 7.2 percent and 17.3 percent, respectively. These increases are noticeably larger than those found in table 3, and the increase is now statistically significant for males. Family leave legislation also has larger positive effects on family leave provided by employers in specification 8, which identifies the effects of family leave legislation among eligible employees who work for covered employers. The marginal effects of mandating 12 weeks of family

leave increase the incidence of employer-provided family leave by 10.5 percent in model 1, 4.1 percent in model 2, and 16.9 percent in model 3.

In table 6, I present results from models that re-estimate specifications 7 and 8 (as specifications 9 and 10) including the state-year interactions terms. The results are similar to those displayed in table 5, suggesting that those estimates are not biased by state time trends. For example, the effect on employees of covered employers (specification 9) with controls for state time trends produces statistically significant effects similar to those found in specification 7: for the full sample, increasing government-mandated family leave by 12 weeks increases the incidence of employer-provided family leave from 59.2 to 66.6 percent compared to an increase from 59.3 to 66.3 in specification 7 without state-year interaction terms. The effects of the legislation in specification 10, which examines eligible employees of covered firms, produces results similar to those in specification 8 without state-year interaction terms.

## **VI. Conclusions**

The evidence presented in this paper suggests that government-mandated family leave has statistically significant positive effects on the incidence of employer-provided family leave. This is particularly true for specifications identifying the effects of the legislation on eligible employees of covered firms. For example, marginal effects indicate that mandating 12 weeks of family leave increases the incidence of employer-provided leave by as much as 11.8 percent for the full sample (specification 7). Thus, employers' family leave policies have been significantly affected by the legislation. In addition, the specifications that identify eligible and covered employees find that the effects of family leave legislation are larger for male than female employees.

Specifically, while mandating 12 weeks of family leave increases the incidence of employer-provided family leave for females by as much as 7.2 percent (specification 7), the effect on males is as large as a 16.9 percent increase (specification 8). This makes sense: if employers were less likely to provide paternity leave (than maternity leave) in absence of the mandates, then family leave legislation has the potential to have a larger impact on employer family leave benefits offered to males.

The significant positive effects of family leave legislation on employer-provided leave found in this paper are different than the small or statistically insignificant effects of the legislation on other outcomes found in the literature. While the literature finds no effect on employment (Klerman and Leibowitz, 1997; Baum, 2003b), work (Klerman and Leibowitz, 1997), and wages (Baum, 2003b; Waldfogel, 1999), family leave legislation does seem to increase the portion of employers offering family leave. This suggests that though family leave legislation has significantly changed employers' family leave policies, employees have largely not taken advantage of the increased benefits. I believe the primary explanations for this are that many *(i)* employees are unable (or unwilling) to bear the financial costs of utilizing the family leave because it is unpaid and *(ii)* many workers do not need family leave because they already have employer-provided vacations, sick leave, and disability leave. Other explanations for family leave legislation's small effects in the literature, such as many employers providing family leave in absence of the mandates, are not supported by this paper's results. Instead, the results indicate that employers would not provide mandated amounts of family leave absent the legislation. Further, without the legislation, employers are even less likely to

provide family leave benefits to male employees. This is a new result because the literature has largely ignored the effects of family leave legislation on males.

It is also possible that the small or insignificant effects of family leave legislation found in the literature are due to a failure to identify eligible and covered employees. Certainly in this paper the legislation has larger effects in specifications that identify eligible employees who work at covered firms. For example, the effect of family leave legislation on males is statistically insignificant unless eligible and covered males are identified. Consequently, research that does not account for eligibility and coverage status potentially produces misleading results.

This study is limited in that the key outcome variable measures *whether* employers provide family leave rather than the *length* of leave provided. Family leave legislation may prompt employers with existing family leave policies to provide additional weeks of leave to satisfy mandate requirements. Such an effect would not change *whether* employers allow leave, though the legislation would clearly impact such employers. If the legislation changes *existing* employer-provided family leave policies, then the legislation may have additional effects on employers not found in this paper. To corroborate these results and to fully explore the other potential effects of family leave legislation, more research is clearly needed on this topic as the merits of FMLA extensions are debated.



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**Table 1: Characteristics of State and Federal Family Leave Legislation**

<u>State</u>	<u>Weeks of Leave</u>	<u>Employer Size</u>	<u>Tenure Required</u>	<u>Date of Enforcement</u>	<u>Work Requirement</u>
California <sup>a</sup>	17	No Minimum	1 year	1/92	No Minimum
Connecticut <sup>b</sup>	12	75 employees	1 year	7/90	1000 hrs in prior yr.
District of Col.	16	50 employees	1 year	4/91	1000 hrs in prior yr.
Federal FMLA	12	50 employees	1 year	7/93	1250 hrs in prior yr.
Maine	8	25 employees	1 year	4/88	No minimum
Minnesota	6	21 employees	1 year	7/87	20 hrs per week
Massachusetts	8	6 employees	3 months	10/72	Full-time
New Jersey	12	75 employees	1 year	4/90	1000 hrs in prior yr.
Oregon	12	25 employees	90 days	1/88	No minimum
Rhode Island	13	50 employees	1 year	7/87	Full-time
Tennessee	16	100 employees	1 year	1/88	Full-time
Vermont	12	10 employees	1 year	7/92	30 hrs per week
Washington <sup>c</sup>	12	100 employees	1 year	9/89	35 hours per week
Wisconsin	6	50 employees	1 year	4/88	1000 hrs in prior yr.

Source: Klerman, J. A. and A. Leibowitz (1997), the Women's Legal Defense Fund (1994), Bond (1991), and the Bureau of National Affairs (1987). California passed legislation mandating leave for disability in 1980. <sup>b</sup> Connecticut passed legislation mandating leave for disability in 1973. <sup>c</sup> Washington passed legislation mandating leave for disability in 1973.



**Table 2: Sample Means**

<u>Dependant Variable</u>	<u>Full Sample</u>		<u>With Leave</u>	<u>Without Leave</u>
Allowed Leave By Employer	0.610	(0.488)	0.612	0.608
Observations	75,570		33,447	42,123
			<u>Covered</u> <u>Firms</u>	<u>Firms Not</u> <u>Covered</u>
Allowed Leave By Employer			0.767	0.556
Observations			16,332	47,045
			<u>Eligible and</u> <u>Covered</u>	<u>Not Eligible</u> <u>and Covered</u>
Allowed Leave By Employer			0.809	0.557
Observations			13,170	49,352
<u>Explanatory Variables</u>	<u>Full Sample</u>		<u>With Leave</u>	<u>Without Leave</u>
Male (= 1 if male)	0.509	(0.500)	0.510	0.508
Black (= 1 if black)	0.297	(0.457)	0.275	0.314
Hispanic (= 1 if Hispanic)	0.188	(0.391)	0.190	0.187
Age (in years)	30.472	(4.945)	34.314	27.422
Education Level (years of schooling)	12.974	(2.327)	13.076	12.893
Marital Status (= 1 if married)	0.510	(0.500)	0.565	0.467
Children (= number of children)	1.010	(1.171)	1.268	0.805
Experience (in weeks)	474.675	(238.451)	624.495	355.712

Standard deviations are in parentheses. Also included in the analysis but not presented here are state dummy variables and year-specific dummy variables.

**Table 3: The Effect of Family Leave Legislation on Employer-Provided Family Leave**

	<u>Model 1: Full Sample</u>		<u>Model 2: Females</u>		<u>Model 3: Males</u>	
<b><u>Specification 1:</u></b>						
Weeks of Mandated Family Leave	0.0056**	(0.0029)	0.0105**	(0.0047)	0.0034	(0.0038)
Simulated Effect (with 0 and 12 weeks of leave)	0.603	0.618	0.719	0.741	0.490	0.499
<b><u>Specification 2:</u></b>						
Weeks of Mandated Family Leave	0.0056**	(0.0029)	0.0105**	(0.0047)	0.0034	(0.0038)
State Border Dummy Variable	-0.0571*	(0.0324)	0.0015	(0.0489)	-0.0856	(0.0435)
Simulated Effect (with 0 and 12 weeks of leave)	0.604	0.618	0.719	0.741	0.489	0.499
<b><u>Specification 3:</u></b>						
Average Weeks of Mandated Family Leave	0.0063**	(0.0031)	0.0105**	(0.0051)	0.0043	(0.0040)
Simulated Effect (with 0 and 12 weeks of leave)	0.603	0.618	0.719	0.741	0.488	0.501
<b><u>Specification 4:</u></b>						
Maximum Weeks of Mandated Family Leave	0.0024	(0.0028)	0.0059	(0.0046)	0.0006	(0.0036)
Simulated Effect (with 0 and 12 weeks of leave)	0.609	0.615	0.724	0.736	0.493	0.495

The dependent variable is the probability that employers provide family leave, which equals one if the employer allows family leave from work. \*indicates statistical significance at the 10% level, \*\* at the 5% level, and \*\*\* at the 1% level. Standard errors are in parentheses. There are 75,570 observations used in model 1, 37,102 observations used in model 2, and 38,468 in model 3. R-squared values are 0.102 for model 1, 0.087 for model 2, and range from 0.048 for model 3. All models contain the demographic covariates as well as state and year dummy variables.

**Table 4: The Effect of Family Leave Legislation on Employer-Provided Family Leave**

	<u>Model 1: Full Sample</u>	<u>Model 2: Females</u>	<u>Model 3: Males</u>
<b><u>Specification 1: (Results Re-Displayed)</u></b>			
Weeks of Mandated Family Leave	0.0056**	-0.0029	0.0105** (0.0047) 0.0034 (0.0038)
Simulated Effect (with 0 and 12 weeks of leave)	0.603	0.618	0.719 0.741 0.490 0.499
R-Squared	0.102		0.087 0.048
Observations	75570	37102	38468
<b><u>Specification 5:</u></b>			
Weeks of Mandated Family Leave	0.0067**	(0.0031)	0.0121** (0.0051) 0.0038 (0.0041)
FMLA Mandated Family Leave	-0.0037	(0.0036)	-0.0059 (0.0059) -0.0014 (0.0046)
Simulated Effect (with 0 and 12 weeks of leave)	0.602	0.619	0.718 0.743 0.489 0.500
R-Squared	0.102		0.087 0.048
Observations	75570	37102	38468
<b><u>Specification 6:</u></b>			
Weeks of Mandated Family Leave (Pre-FMLA)	0.0090***	(0.0034)	0.0137** (0.0055) 0.0063 (0.0043)
Simulated Effect (with 0 and 12 weeks of leave)	0.602	0.624	0.719 0.747 0.487 0.505
R-Squared	0.110		0.085 0.041
Observations	53459	26332	27,112

The dependent variable is the probability that employers provide family leave, which equals one if the employer allows family leave from work. \*indicates statistical significance at the 10% level, \*\* at the 5% level, and \*\*\* at the 1% level. Standard errors are in parentheses. All models contain the demographic covariates as well as state and year dummy variables.

**Table 5: The Effect of Family Leave Legislation on Employer-Provided Family Leave**

	<u>Model 1: Full Sample</u>		<u>Model 2: Females</u>		<u>Model 3: Males</u>	
<b><u>Specification 7:</u></b>						
Weeks of Mandated Family Leave (covered employers)	0.0322***	(0.0029)	0.0299***	(0.0047)	0.0325***	(0.0038)
Simulated Effect (with 0 and 12 weeks of leave)	0.593	0.663	0.720	0.772	0.474	0.556
R-Squared	0.196		0.197		0.136	
Observations	63,377		30,834		32,543	
<b><u>Specification 8:</u></b>						
Weeks of Mandated Family Leave (eligible and covered)	0.0299***	(0.0032)	0.0174***	(0.0053)	0.0327***	(0.0040)
Simulated Effect (with 0 and 12 weeks of leave)	0.598	0.661	0.727	0.757	0.478	0.559
R-Squared	0.211		0.222		0.147	
Observations	62,522		30,422		32,100	

The dependent variable is the probability that employers provide family leave, which equals one if the employer allows family leave from work. \*indicates statistical significance at the 10% level, \*\* at the 5% level, and \*\*\* at the 1% level. Standard errors are in parentheses. All models contain the demographic covariates as well as state and year dummy variables. In addition, specification 7 controls for number of employees and specification 8 controls for tenure and number of employees.

**Table 6: The Effect of Family Leave Legislation on Employer-Provided Family Leave**

	<u>Model 1: Full Sample</u>		<u>Model 2: Females</u>		<u>Model 3: Males</u>	
<b>Specification 9:</b>						
Weeks of Mandated Family Leave (covered employers)	0.0349***	(0.0032)	0.0311***	(0.0051)	0.0371***	(0.0043)
Simulated Effect (with 0 and 12 weeks of leave)	0.592	0.666	0.719	0.773	0.472	0.564
R-Squared	0.203		0.211		0.148	
Observations	63,377		30,834		32,543	
<b>Specification 10:</b>						
Weeks of Mandated Family Leave (eligible and covered)	0.0309***	(0.0034)	0.0170***	(0.0056)	0.0361***	(0.0044)
Simulated Effect (with 0 and 12 weeks of leave)	0.598	0.662	0.727	0.756	0.477	0.565
R-Squared	0.219		0.236		0.159	
Observations	62,522		30,422		32,100	

The dependent variable is the probability that employers provide family leave, which equals one if the employer allows family leave from work. \*indicates statistical significance at the 10% level, \*\* at the 5% level, and \*\*\* at the 1% level. Standard errors are in parentheses. All models contain the demographic covariates as well as state and year dummy variables. In addition, specification 9 controls for number of employees and specification 10 controls for tenure and number of employees. These specifications also include state-year interaction terms.