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Pay Matters:

The Positive Economic Impacts of Paid Family Leave for Families, Businesses and the Public

A REPORT OF THE CENTER FOR WOMEN AND WORK

Linda Houser, Ph.D.
Affiliate Fellow

Thomas P. Vartanian, Ph.D.



Center for Women and Work
Rutgers, The State University of New Jersey
School of Management and Labor Relations
50 Labor Center Way
New Brunswick, NJ 08901

www.cww.rutgers.edu

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EXECUTIVE SUMMARY

Changes in the demographic composition of the U.S. workforce mean that more women and men are actively engaging in both paid work and care work. As of 2010, the percentage of children who had both parents (in married-couple families), or their only parent, in the labor force reached 72.3%, an increase of 13 percentage points since the mid-1980s.ⁱ Now, more than ever, U.S. workers – both women and men – need workplace and public policies that will promote healthy careers *and* healthy families. Foremost among these policies is paid family leave.

Despite public conversation and energy around the value of strong families and secure childhoods, the United States has fallen notably behind other industrialized countries in adopting public policies that support workers who need time off to address family needs.ⁱⁱ As of March 2011, a mere 11% of private sector workers and 17% of public sector workers report having access to paid family leave; among those earning in the bottom quarter of wages, those percentages drop to 5% and 14% respectively.ⁱⁱⁱ A recent Census Bureau report concludes that, between 2006 and 2008, 50.8% of women who were employed during pregnancy used some form of paid leave after their child's birth. Not surprisingly, the likelihood of reporting paid leave was higher for women aged 25 and over, for white women, for married women, and for women with a college education. Only a third of working mothers without post-secondary education reported paid leave time.^{iv}

Although the proportions of those able to access unpaid family leave of any length through either public policy or voluntary employer policies are considerably higher,^v many families are unable to afford the immediate and long-term consequences of unpaid time off, regardless of the immediacy and seriousness of the care need.^{vi}

To date, few studies have examined the economic effects of paid family leave as distinct from the effects of unpaid leave or no leave. As such, this is an important emerging area of research. If paid leave policies have the potential to protect women's and men's wages and long-term earnings, and perhaps even to reduce the use of state- and federally-funded public assistance, then any political or economic investment in such policies would be – quite literally – worth the cost.

This new study, commissioned by the National Partnership for Women & Families and conducted by the Center for Women and Work at Rutgers University, with funding from the Rockefeller Foundation, uses data from the National Longitudinal Survey of Youth, 1997 to 2009 Panel, and finds that women who take paid leave after a child's birth report **stronger labor force attachment and positive changes in wages** in the year following a child's birth, when compared to those who do not take any leave. Both women and men report **lower levels of public assistance receipt** in the year following a child's birth, when compared to those who do not take any leave. These analyses control for other factors that differentiate those with access to and use of paid leave from those with either no leave or access only to unpaid leave. These factors include average wages and hours of work, family income relative to the poverty line, education, health status, marital status, age, and race. Key study findings are listed below and described in detail beginning on page 5:

- Women who report taking paid leave are more likely to be working 9 to 12 months after a child's birth than are those who report taking no leave at all ("non-leave takers").
- Paid family leave increases wages for women with children. Women who report leaves of 30 or more days are 54% more likely to report wage increases in the year following the child's birth than are women who take no leave at all.
- Women who return to work after a paid leave have a 39% lower likelihood of receiving public assistance and a 40% lower likelihood of food stamp receipt in the year following the child's birth, when compared to those who return to work and take no leave at all.
- Men who return to work after a paid family leave have a significantly lower likelihood of receiving public assistance and food stamps in the year following the child's birth, when compared to those who return to work and take no family leave at all.
- Given local, state, and national attention to workplace policies that address the integration of work and family life, better national- and state-level data collection on leave-taking is needed. This includes attention to whether leaves are unpaid or paid, as well as to the sources, extent, and duration of any wage replacement.

PATHWAYS TO PAID FAMILY LEAVE¹

Adults in the United States have less access to job-protected family leave than do adults in other industrialized countries, and shorter allowable periods of leave when it is offered at all. Moreover, since leave provided for by public policies is unpaid in all but a handful of states and few employers provide paid family leave to both mothers and fathers, employees tend to take even shorter periods of leave than what they are entitled to, limiting the impact of existing leave policies.^{vii}

In all other high-income nations, workers – both women and increasingly men – have access to job security and wage replacement both before and after a child’s birth. In addition, public policies available in other industrialized nations but not in the United States (e.g., generous paid sick and vacation leave policies) allow parents with more extensive caregiving needs to address these needs before returning to work.^{viii}

U.S. federal law has defined access to *unpaid* family leave as a right for some workers under certain conditions. Since 1993, the Family and Medical Leave Act (FMLA) has required that eligible employees who work for larger employers (those with 50 or more employees) be provided up to 12 weeks of unpaid, job-protected leave annually, “for family and medical reasons.”^{ix}

In the absence of any federal-level policy pertaining to paid family leave, U.S. workers faced with a situation that requires leave from work, such as the birth of a child, often cobble together a number of employer-provided benefits, including sick leave, holidays, vacation, disability insurance, and/or paid and unpaid family leave. However, as noted earlier, many workers, and particularly the most economically vulnerable of U.S. workers, are without these benefits.^x While the United States has no federal-level paid family and medical leave policy, states have adopted policies that replace a portion of the wages that would otherwise have been earned during a family leave. Five states – California, Hawaii, New Jersey, New York, and Rhode Island – have disability insurance programs that allow women to use “short-term” or “temporary” disability insurance, created or required by state law, to cover a portion of lost wages for leave during and immediately after pregnancy. Two of these states – California and New Jersey – have enacted legislation to provide an additional 6 weeks of paid family leave for bonding with a newborn or newly adopted child. Both the California and New Jersey programs are funded through worker payroll taxes and include leave coverage for the care of a seriously ill family member. One additional state, Washington, has passed a paid parental leave law but has, as yet, no funding mechanism in place to permit implementation.²

¹ We use the term “paid family leave” to include leave, with wage replacement, taken by women and men after the birth of a child, which for the birth mother also includes the time needed for recovery.

² See Appendix A for a detailed description of FMLA, California’s Paid Family Leave (PFL) program, and New Jersey’s Family Leave Insurance (FLI) program.

EXISTING RESEARCH ON LEAVE EFFECTS

There is ample evidence linking family leave to desirable infant and maternal health outcomes and, to an increasing extent, to positive economic outcomes as well. In the health arena, studies have documented associations between parental leave and increased infant birth weight, decreased likelihood of premature birth,^{xi} increases in breastfeeding establishment and duration, and increased likelihood of obtaining well-baby care.^{xii} Given the well-established health benefits – for both mothers and babies – of breastfeeding and regular medical care, researchers and policy analysts have worried that the FMLA has not done enough to encourage leave-taking, especially for economically vulnerable families.^{xiii}

Despite strong evidence linking family leave-taking to positive maternal and infant health outcomes, there has been, to date, very little research in the United States that differentiates paid from unpaid family leaves in the examination of health outcomes, and still less attention to uncovering relationships between leave-taking and economic outcomes. In recent years and with the introduction of paid leave policies at the state level, researchers have begun to address such important questions. Boushey (2008) reports that women with paid maternity leaves have post-birth wages that are 9% higher than the wages of other mothers, after controlling for demographic and job-related characteristics.^{xiv}

Eileen Appelbaum and Ruth Milkman (2011) recently published the first comprehensive study of California’s Paid Family Leave (PFL) program, 6 years after implementation. They conclude that, among workers in low-quality jobs,³ use of PFL to care for new children positively affected employees’ perception of their ability to care for their child. Mothers using PFL reported double the median breastfeeding duration of their non-PFL-using peers. Perhaps most important from an economic standpoint for both employees and businesses, the use of PFL increased the probability that workers in low-quality jobs would return to the same employer after their leave.^{xv}

This study seeks to add to the growing body of literature on the economic benefits of paid family leave. It addresses a fundamental worker, business, and government concern: whether paid leave has positive economic impacts on families, businesses, and the public.

³ Appelbaum and Milkman (2011) define “low-quality jobs” as those that either pay \$20 per hour or less, or do not include employer-provided health insurance.

STUDY DESIGN

The study sample includes women and men ages 30 and under who reported a child's birth and at least 20 hours per week of work in the 3-4 months prior to the birth. In addition, they either (1) took a paid⁴ leave and returned to work for an average of 20 hours or more per week by months 9-12 after the birth; or (2) took an unpaid leave and returned to work for an average of 20 hours or more per week by months 9-12 after the birth; or (3) did not take leave and reported working an average of 20 hours or more per week in months 1-4 after the birth.

The age of the sample is limited by the dataset in use. The National Longitudinal Survey of Youth, 1997 to 2009 Panel, began with a nationally representative sample of 9,000 youth ages 12 to 16 as of December 31st, 1996. Study respondents are surveyed annually, with employment data reported for each month. As of the most recent year of data available (2009), study participants were no older than age 30. According to the National Vital Statistics Report, 63.3% of live U.S. births in 2008 were to women age 29 and under. In 2008, the average age at first birth was 25.^{xvi} Thus, using a sample of women age 30 and under addresses approximately two-thirds of births nationally.

All results were drawn from logistic and linear regression analyses using controls for a series of individual-level job characteristics and demographic indicators, including respondents' wages before birth, number of work hours, family income relative to the poverty line, spouse's salary, health status prior to the birth, race, family size, age, education, and marital status. Limitations in the dataset prevent us from controlling for employer attributes, which could potentially lead to selection bias. Depending upon the analysis and sample in question, sample sizes ranged from a low of 420 to a high of 1,174.⁵

⁴ The text of the question used for the analysis is as follows: "Between [last year] and [date end employment], were there any periods of a full week or more during which you took any PAID leave from work with this employer because of a pregnancy or the birth of a child?" This is followed by a question on the duration of the leave.

⁵ See Appendix B for further details on methods and for results tables.

FINDINGS ON PAID LEAVE

Labor Force Attachment

Paid leave is associated with post-birth labor force attachment: Women who take paid family leave are much more likely to be working 9 to 12 months after a child's birth than are those who do not take any leave.

In some ways, this finding seems obvious: we might expect that a woman who takes family leave, whether paid or unpaid, is doing so because she plans to return to work, rather than quit her job. But there is another way of looking at this. Previous research suggests that many women who leave their jobs prior to a birth – perhaps because they lack job-protected or employer-provided leave, or require more leave than what is allowed under the FMLA – have difficulty returning to work once employment ties have been broken.

In a study of mothers in California, Guendelman et al. (2006) find that women who quit jobs during pregnancy are less likely to have had paid leave than are those who continue to work. Those who take leave after their pregnancies work, on average, one month longer than those who quit.^{xvii} A Census report released in 2011 highlights the value accrued to employers when women return to the labor force after pregnancy: 80% of mothers who returned to work within 12 months of their child's birth returned to the same employer, and 69% had no change in pay or hours worked.^{xviii} The costs of replacing this group of employees would have been high, whether measured in terms of the hiring and training of new employees, the retraining of existing employees, or the lost productivity and time associated with all of these efforts.^{xix} According to the American Management Association, the estimated costs of replacing a lost employee range from roughly a quarter of, to as much as five times, the employee's annual salary or wages, with concomitant losses in the form of productivity and employee morale.

When we include in our sample all women who worked at least 20 hours per week prior to a child's birth (without restricting the sample to those who are back at work 9-12 months after the birth), we find that those with a paid leave are 93% more likely to be working at postpartum months 9-12 than are those who did not take any leave. The strength and direction of these findings hold true regardless of the marital status of the women at the time of the birth and with the inclusion of a comprehensive set of job- and worker-related characteristics in the analysis. When we apply the results of this analysis to a hypothetical "average" woman⁶ and determine

⁶ The "average" woman refers to a hypothetical woman who has the average characteristic for all variables in the analysis, with the only difference being whether she reports paid leave or no leave.

her overall likelihood of returning to work at 9-12 months postpartum, we find that her likelihood of returning is 63% if she takes no leave and 76.6% if she takes paid leave.

Thus, paid family leave may strengthen women's workforce attachment and workforce stability by allowing women to retain employment both before and after a birth, particularly employment with the same employer and at the same, or better, wage (see page 6). This benefits the woman, her family, and – by reducing turnover costs – her employer.

Wages

Paid family leave has protective effects on pre- to post-birth wages for women, increasing the likelihood of higher post-birth wages by 54%, relative to women who take no leave at all.

One of the primary concerns about leave-taking and the current state of family leave policy in the United States is the extent to which women (and, we might assume, men) lose out on earnings both during and after a period of unpaid leave. For families that are struggling financially, job protection may not be enough to allow women and men to give up as many as 12 weeks of earnings. Moreover, there is some evidence that women pay a penalty for leave-taking in wages and earnings long after the child's birth.^{xx} A portion of this "motherhood penalty" is likely direct (i.e., lost wages and lost time toward scheduled earnings increases), and another portion is likely indirect (i.e., lost status in the company).

Using nationally representative data, Lundberg and Rose (2000) find that women who maintain employment in the year before and the year after the birth of a child experience no wage declines, while those who report an interruption in employment (i.e., of more than a year) have both wage and hour reductions.^{xxi} While this suggests that earlier returns to work have wage-protective effects, it leaves unanswered the question of whether the specific conditions under which women take leave (i.e., job protected or unprotected, paid or unpaid) matter for both the timing and the wage status of their return.

As noted above, access to and use of paid family leave has been positively associated with labor force attachment, measured both as the length of time women remain at work during pregnancy and the likelihood of quitting a job during pregnancy. Moreover, our findings suggest that, regardless of the duration of the leave, women who take paid leave are more likely to be working in months 9 to 12 following a birth than are women who take no leave. If the timing of a return to work is associated with the degree to which an individual returns at the same or higher wage, we would expect paid leave to have protective effects on wages (i.e., wages that either remain the same or follow the pattern of increase that would have been in place without the leave).

After accounting for differences in family income, education, and other job- and worker-related characteristics,⁷ our findings indeed suggest that paid family leave has protective effects on women's wages. Women who report paid family leaves of 30 or more days are 54% more likely to report wage increases in the year following the child's birth than are women who take no family leave. With sharp and sustained declines in employment, particularly for men, and with women increasingly taking on the role of primary breadwinner or co-breadwinner, wage retention and growth for women is as critical an issue now as it ever has been.^{xxii}

Public Assistance and Food Stamp Use

Paid leave has implications for governments and taxpayers. Women and men who take paid family leave report a lower likelihood of both general public assistance and food stamp receipt in the year following a child's birth, when compared to those who return to work but take no family leave.

As noted, the vast majority of paid maternity and family leaves are provided through private employer plans, including accrued vacation or sick time; through employer or state disability insurance programs; or, in the case of two states, through paid family leave insurance programs. To date, no public funding has gone into providing wage replacement for family leave or to incentivizing employers or states to develop their own leave programs.

By contrast, too often, the financial consequences of having parents quit jobs or take unpaid family leaves are paid out in public dollars, most directly in the form of "welfare" or public assistance. According to a 2000 survey of family leave-taking, almost one-tenth of workers using unpaid FMLA leave after the birth of a child used public assistance during their leave.^{xxiii}

Our study finds that, with controls for demographic and job-related characteristics, as well as for pre-birth levels of public assistance receipt, women who take paid leave are 39% less likely than those who take no leave to report public assistance receipt⁸ in the year following the child's birth. Moreover, women who take paid leave report \$413 less in public assistance on average in the year following the child's birth, than women who take no leave. For the average mother in the sample, the likelihood of receiving public assistance in the year following the child's birth is 17% if she does not take any leave and only 11% if she does. Those whose paid leaves are 30 days or more are 43% less likely than non-leave takers to have higher public assistance income in the year following the child's birth than they had in the year prior to the child's birth.

⁷ We compared these results to those achieved in models that control for the degree of wage change recorded in the year prior to the birth, to account for differences in pay scale and trajectory between employers. The effects of paid leave in these models remained large, positive, and statistically significant.

⁸ This variable includes multiple forms of public assistance: cash assistance, food stamp income, and "other welfare."

In short, not only is paid leave associated with fewer dollars in welfare spending, it also reduces the chance that a family receiving welfare will increase its dependence on public funding following a child's birth.

When we look only at food stamp income for women,⁹ paid leaves reduce the likelihood of receipt by 40% relative to non-leave taking in the year following a child's birth. Moreover, among those who do receive food stamp income prior to the birth, paid leaves are linked to a 60% lower likelihood of increased levels of receipt after birth.

It is important to note that the relationships reported above become even stronger when we look only at women who were not married at the time of the child's birth or at women in low-income households;¹⁰ these are arguably among the most economically vulnerable individuals in the sample.

Similar to our findings for women, men who report paid family leaves have a significantly lower likelihood of receiving income from public assistance, lower average amounts of welfare income, and a lower likelihood of receiving food stamp income, relative to men who report not taking leave.

While we cannot rule out the possibility that our findings may be based on differences in the quality of the job or in some other characteristic separating those who take paid leave from those who take no leave, they do persist even with controls for factors both theoretically and statistically linked to job quality, including wage and salary, wage trajectories prior to a child's birth, family income, age, education, and health.

Gaps in the Data

Better national- and state-level data collection on leave taking can help shape workplace and public policies that address the integration of work and family life.

In addition to Washington state, where implementation of a paid parental leave program awaits a funding plan, 9 states have recently considered paid family leave programs. They are Arizona, Illinois, Maine, Massachusetts, Missouri, New Hampshire, New York, Oregon, and Pennsylvania.^{xxiv}

With growing national attention to policies that address employees' needs for flexibility and employers' and governments' needs for efficiency and cost savings, policy-makers and analysts

⁹ What was formerly known as the *Food Stamp Program* is now called the *Supplemental Nutrition Assistance Program* (SNAP).

¹⁰ Household income measured at 150% of the poverty level or less.

need improved data collection on existing workplace policies and practices. Such information would provide the data needed to assess both short- and long-term impacts of such practices on families, businesses, and the public. Data collection should come both in the form of employer and employee surveys and interviews, as well as in the form of questions added to large-scale, nationally representative surveys, such as the Early Childhood Longitudinal Survey (ECLS), the Panel Study of Income Dynamics (PSID), and the full set of National Longitudinal Surveys (NLS). Particular attention should be paid to the following components:

- differentiation of paid from unpaid leave time,
- duration of paid leave time and of unpaid leave time,
- source of wage replacement for paid leave time, allowing for multiple sources,
- extent of wage replacement for paid leave time, again allowing for multiple sources,
- employer size and type,
- satisfaction with the duration of leave, and
- reasons for selecting leave duration.

CONCLUSION AND RECOMMENDATIONS

Changing workforce demographics, the work-family needs of a new generation of workers, and national and international trends toward workplace flexibility together create a powerful case for a careful examination of the United States' family leave policies. Controlling for factors that differentiate those who use paid leave from those who take no leave or use only unpaid leave, our study finds that women who take paid leave after a child's birth are more likely than those who do not take leave to report positive changes in wage, lower levels of welfare use, and stronger labor force attachment in the year following a child's birth.

In light of these findings and broad demographic trends, we recommend the following:

1. Expand national job-protected family leave policies to
 - a. include wage replacement, and
 - b. broaden the pool of eligible workers.
2. Document potential cost savings for employers and employees and employee and family impacts of paid family leave through improved and expanded data collection.
3. Provide outreach and education to both employers and employees about
 - a. the health and income security benefits of paid family leave, and
 - b. existing leave policies, including the FMLA nationally, the PFL program in California, and the FLI program in New Jersey.

4. Enlist employers in efforts to improve job retention and competitiveness in hiring through the adoption of paid family leave policies.

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APPENDIX A

The Family and Medical Leave Act (FMLA)

Under the FMLA, qualifying employees are eligible for 12 weeks of unpaid, job-protected leave annually, “for the birth and care of the newborn child of an employee; for placement with the employee of a child for adoption or foster care; to care for an immediate family member (spouse, child, or parent) with a serious health condition; or to take medical leave when the employee is unable to work because of a serious health condition.”^{xxv} In 2008, amendments to the FMLA authorized leaves of up to 26 weeks for family members caring for an injured service member and up to 12 weeks for military family members addressing “qualifying exigency” needs arising from the deployment of a service member.

FMLA applies only to certain categories of employees, specifically public and private sector employees who have worked for the same employer for at least 1,250 hours over a minimum of 12 months, in a company of 50 or more employees. Time taken off due to pregnancy complications can be counted against the 12 allowable weeks under federal law, although some states provide more generous leave to new and expecting mothers as well as to new fathers.^{xxvi}

California’s Paid Family Leave (PFL) Program

California’s Paid Family Leave (PFL) program was created in 2002 and has been delivering partial pay to workers during family leaves since July of 2004. The program operates through the state’s short-term disability insurance (SDI) program, which typically (depending upon physician recommendation), allows women up to 4 weeks of paid pregnancy disability before birth, and up to 6 weeks of paid leave after birth for a vaginal delivery or up to 8 weeks for a Cesarean delivery.^{xxvii} Unused pre-delivery leave time cannot be saved for use after the birth. The PFL program then builds upon SDI to provide up to 6 additional weeks postpartum for infant bonding. While the PFL program itself does not provide job protection, workers covered by the FMLA or by state antidiscrimination or leave law must be reinstated into the same or an equivalent position and cannot be retaliated against for taking family leave.

California’s PFL program is available to both women and men, and provides partial wage replacement to workers when they take time off for bonding with a newborn or newly adopted child, as well as time off to care for certain family members with serious health conditions. Wage replacement is set at 55% of the individual’s average weekly earnings, with a maximum payment of \$987 per week in 2011. As noted above, the PFL program operates as a form of leave insurance; in 2012, workers will pay a 1% payroll tax on the first \$95,585 of earned income to cover both SDI and PFL premiums.^{xxviii} To be eligible for PFL, workers must show earnings of at

least \$300 in an SDI-covered job for any 3 months within the 5 to 17 months prior to the PFL claim.^{xxix}

New Jersey's Family Leave Insurance (FLI) Program

In 2009, New Jersey began providing paid family leave under its Family Leave Insurance (FLI) program. As in California, New Jersey's FLI is an extension of its pre-existing Temporary Disability Insurance (TDI) program. For up to 12 months following a birth or adoption, or at any time for the care of a seriously ill family member, women and men in New Jersey are eligible for 6 weeks of partial wage replacement for family leave. Job protection is provided for eligible workers under the FMLA or other applicable state law. Wage replacement is set at two-thirds of the individual's average weekly wage, up to \$559 per week in 2011. The FLI payroll tax in 2011 was .06% of the first \$29,600 of earnings, with a maximum annual contribution of \$17.76.^{xxx}

Employees who have worked 20 calendar weeks in covered employment and have earned at least \$145 per week or \$7,300 per year during the 52 weeks preceding the leave are eligible for FLI.^{xxxi}

Appendix B

Details of Methodology

The findings detailed in this brief were drawn from a subsample of the National Longitudinal Survey of Youth (NLSY), 1997 to 2009 Panel. This subsample included women and men ages 30 and under who reported a child's birth and at least 20 hours per week of work in the 3-4 months prior to the birth. In addition, they either (1) took a paid leave and returned to work for an average of 20 hours or more per week by months 9-12 after the birth; or (2) took an unpaid leave and returned to work for an average of 20 hours or more per week by months 9-12 after the birth; or (3) did not take leave and reported working an average of 20 hours or more per week in months 1-4 after the birth.

Separate analyses were conducted for women and for men, as well as for subgroups of women, including those who were (1) married and (2) not married at the time of the birth, and those whose family incomes are (3) above and (4) below 150% of the federal poverty line.

The findings detailed in this brief were drawn from logistic and linear regression analyses using a series of economic outcomes. Ordinary least squares (OLS) models were used to examine the effects of leave on total public assistance income after a child's birth, measured as the average monthly income from all sources of public assistance in the one-year period following the birth.

Logistic regression analyses were used to examine the following dichotomous indicators:

- Whether the individual reported public assistance receipt in the year after the birth;
- Whether public assistance income was higher after the birth than before the birth;
- Whether the individual reported food stamp receipt in the year after the birth;
- Whether food stamp income increased in the year after the birth;¹¹
- Whether the individual's wage was higher in the year after the birth than in the year before the birth; and
- Whether the individual was employed an average of 20 hours or more per week in months 9 to 12 after the birth.¹²

¹¹ Sample sizes in these models were smaller than those reported below, as they included only those who had reported food stamp income in the year prior to the birth.

¹² This analysis was conducted for women only, including all women who worked at least 20 hours per week in the 3-4 months prior to a child's birth.

All models included a series of control variables designed to capture individual-level job characteristics and demographic indicators, including respondents' wages before birth, number of work hours, family income relative to the poverty line, spouse's salary, health status prior to the birth, race, family size, age, education, and marital status. We ran a series of Heckman selection models to determine whether missing outcome data poses a problem for the analyses and found no evidence for this. We used robust cluster standard error estimators to account for multiple births to the same individual over the period under examination, 1997 to 2009.

The dataset does not include information on employer attributes. Our inability to control for such attributes adds to the risk of selection bias, or the possibility that those with paid leave or their employers differ from those with unpaid or no leave in ways that are insufficiently accounted for in our models.

Tables of Results

Below, we present full results for one outcome variable, total public assistance income, for each group (with the exception of women with household incomes above 150% of the federal poverty level), followed by a summary table showing coefficients for all other dependent variables examined for men and women separately.

Table 1: Ordinary Least Squares Analysis of Total Public Assistance Income in the Year Following the Child's Birth, for Women and Men

Variable Name	Women	Men
	Coefficient (SE)	Coefficient (SE)
Paid leave	-413.10** (174.76)	-420.51*** (113.33)
Unpaid leave	-252.57 (190.19)	-158.87 (161.54)
Time on leave	.50 (2.01)	-10.42* (5.96)
Age	-53.23* (28.73)	-43.96* (22.27)
Race		
Black	362.17** (154.38)	37.74 (104.22)
Other	-79.86 (190.91)	24.12 (150.09)
(White)		
Salary prior to birth	-.005* (.002)	-.002* (.003)
Wage prior to birth	-1.33* (.67)	-.56* (.39)
Family money-to-needs standard	-24.48 (17.08)	-47.02*** (10.52)
Weekly hours of work prior to birth	.12 (5.46)	-7.91** (2.88)
Education level		
High school diploma	-822.88** (275.38)	-85.17 (133.30)
Associate degree	-1036.13** (328.53)	-365.19** (125.77)
College degree and beyond	-899.22** (293.57)	-39.15 (183.22)
(Less than high school)		

Number of children in household	475.87*** (122.03)	255.81* (108.40)
Married at time of birth	-12.03 (145.40)	-45.85 (104.98)
Poor health prior to birth	514.75* (260.41)	43.67 (141.07)
<i>N</i>	845	1174
<i>R</i> ²	.1637***	.0746***

NOTE: two-tailed significance tests: + p<0.10, * p<0.05, ** p<0.01, *** p< 0.001.

Table 2: Ordinary Least Squares Analysis of Total Public Assistance Income in the Year Following the Child's Birth, Women by Marital Status and by Household Income

Variable Name	Women by Marital Status		Women by HH Income
	Married	Not Married	Below Poverty
	Coefficient (SE)	Coefficient (SE)	Coefficient (SE)
Paid leave	-292.79 (274.17)	-506.93* (221.62)	-656.57* (327.76)
Unpaid leave	-264.17 (325.28)	-307.10 (239.13)	-63.36 (330.35)
Time on leave	1.62 (2.67)	-.67 (2.48)	-2.60 (3.29)
Age	10.43 (41.60)	-78.23* (36.67)	-71.09 (59.92)
Race			
Black	-76.23 (266.18)	578.15*** (184.55)	376.49 (286.94)
Other (White)	91.54 (327.93)	-75.09 (221.64)	500.17 (464.29)
Spouse's salary	-.007+ (.004)		-.03+ (.02)
Wage prior to birth	-.44 (.35)	-6.45* (2.80)	-9.61*** (2.27)
Family money-to-needs standard	35.19 (51.73)	-68.24** (20.42)	-236.32 (271.25)
Weekly hours of work prior to birth	5.45 (9.38)	-1.82 (6.71)	3.14 (12.35)
Education level			
High school diploma	-1096.62+ (682.92)	-611.22* (297.76)	-731.81* (374.49)
Associate degree	-1453.69* (663.76)	-592.65 (472.96)	-807.25 (728.05)
College degree and beyond (Less than high school)	-1136.20+ (657.48)	-972.23*** (318.78)	-1358.38* (571.59)
Number of children in household	644.65** (231.06)	384.12** (135.57)	642.28*** (196.31)
Married at time of birth			-205.20 (334.50)
Poor health prior to birth	1163.42+ (626.77)	285.89 (275.69)	435.56* (337.92)
<i>N</i>	341	504	333
<i>R</i> ²	.2083**	.1542***	.1527***

NOTE: two-tailed significance tests: + p<0.10, * p<0.05, ** p<0.01, *** p< 0.001.

Table 3: Logistic Regression Results for the Relationship between Paid Leave Taking and Economic Outcomes

Economic Outcome (dichotomous indicators)	Women (n=845)	Men (n=1,174)
	Odds Ratio (SE)	Odds Ratio (SE)
Public assistance receipt ¹³	.61* (.16)	.01*** (.01)
Increase in public assistance income	.71 ^a (.19)	.03* (.05)
Food stamp receipt	.60* (.15)	.01*** (.01)
Increase in food stamp receipt	.40* (.21)	
Increase in wage	1.26 ^a (.25)	1.55 (.68)
Working in months 9-12 following the birth	1.93*** (.30)	

NOTE: two-tailed significance tests: + p<0.10, * p<0.05, ** p<0.01, *** p< 0.001.

^a A statistically significant relationship exists between paid leaves of 30 days or more and the outcome variable.

ⁱ United States Census Bureau. (2010). *Employment Characteristics of Families*. Retrieved 25 October 2011, from <http://factfinder2.census.gov>.

ⁱⁱ Gornick, J. & Meyers, M.K. (2003). *Families that Work: Policies for Reconciling Parenthood and Employment*. New York: Russell Sage Foundation.

ⁱⁱⁱ United States Department of Labor, Bureau of Labor Statistics. (2011, March). *National Compensation Survey: Employee Benefits in the United States, March 2011 (Tables 33)*. Retrieved 25 October 2011, from <http://www.bls.gov/ncs/ebs/benefits/2011/ebbl0048.pdf>.

^{iv} Laughlin, L. (2011, October). Maternity leave and employment patterns of first-time mothers: 1961-2008. *United States Census Bureau, Current Population Reports, P70-128*.

^v United States Department of Labor, Bureau of Labor Statistics. (2011, March). *National Compensation Survey: Employee Benefits in the United States, March 2011 (Tables 33)*. Retrieved 25 October 2011, from <http://www.bls.gov/ncs/ebs/benefits/2011/ebbl0048.pdf>.

^{vi} Waldfogel, J. (2001). Family and Medical Leave: Evidence from the 2000 surveys. *Monthly Labor Review*. Retrieved 14 November 2011, from <http://www.bls.gov/opub/mlr/2001/09/art2full.pdf>.

^{vii} Han, W-J. & Waldfogel, J. (2003). Parental leave: The impact of recent legislation on parents' leave taking. *Demography*, 40, 191-200.

^{viii} Gornick, J. & Meyers, M.K. (2003). *Families that Work: Policies for Reconciling Parenthood and Employment*. New York: Russell Sage Foundation.

^{ix} United States Department of Labor. *Leave Benefits*. Retrieved 13 October 2011, from <http://dol.gov>.

^x Appelbaum, E. & Milkman, R. (2011). *Leaves That Pay: Employer and Worker Experiences with Paid Family Leave in California*. Retrieved 13 October 2011, from http://www.paidfamilyleave.org/pdf/leaves_that_pay.pdf.

¹³ Models for this outcome include a control variable for public assistance receipt in the three months prior to the birth.

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- ^{xi} Rossin, M. (2011). The effects of maternity leave on children's birth and infant health outcomes in the United States. *Journal of Health Economics*, 30, 221-239.
- ^{xii} Berger, L.M., Hill, J., & Waldfogel, J. (2005). Maternity leave, early maternal employment and child health and development in the U.S. *The Economic Journal*, 115, 29-47.
- ^{xiii} Hofferth, S.L. & Curtin, S.C. (2006). Parental leave statutes and maternal return to work after childbirth in the United States. *Work and Occupations*, 33, 73-105.
- Han, W-J. & Waldfogel, J. (2003). Parental leave: The impact of recent legislation on parents' leave taking. *Demography*, 40, 191-200.
- ^{xiv} Boushey, H. (2008). Family friendly policies: Helping mothers make ends meet. *Review of Social Economy*, 66, 51-70.
- ^{xv} Appelbaum, E. & Milkman, R. (2011). *Leaves That Pay: Employer and Worker Experiences with Paid Family Leave in California*. Retrieved 13 October 2011, from http://www.paidfamilyleave.org/pdf/leaves_that_pay.pdf.
- ^{xvi} Martin, J.A., Hamilton, B.E., Sutton, P.D., Ventura, S.A., Mathews, T.J., & Osterman, M.J.K.. (2010). Births: Final data for 2008. *National Vital Statistics Reports*, 59(1), 1-72.
- ^{xvii} Guendelman, S. Pearl, M., Graham, S., Angulo, V., & Kharrazi, M. (2006). Utilization of pay-in antenatal leave among working women in Southern California. *Maternal and Child Health Journal*, 10, 63-73. doi: 10.1007/s10995-005-0057-8.
- ^{xviii} Laughlin, L. (2011, October). Maternity leave and employment patterns of first-time mothers: 1961-2008. *United States Census Bureau, Current Population Reports*, P70-128.
- ^{xix} American Management Association (AMA). (2006, June 29). If you've got 'em, keep 'em. Retrieved 16 November 2011, from <http://www.amanet.org/training/articles/If-Youve-Got-em-Keep-em.aspx>.
- ^{xx} Waldfogel, J. (1998). Understanding the 'Family Gap' in pay for women with children. *Journal of Economic Perspectives*, 12, 137-156.
- ^{xxi} Lundberg, S. & Rose, E. (2000). Parenthood and the earnings of married men and women. *Labour Economics*, 7, 689-710.
- ^{xxii} Boushey, H. (2009, October 16). The new breadwinners. In H. Boushey & A. O'Leary (Eds.). *The Maria Shriver Report: A Woman's Nation Changes Everything*. Center for American Progress. Retrieved 30 October 2011, at <http://www.americanprogress.org>.
- ^{xxiii} Waldfogel, J. (2001). Family and Medical Leave: Evidence from the 2000 surveys. *Monthly Labor Review*. Retrieved 14 November 2011, from <http://www.bls.gov/opub/mlr/2001/09/art2full.pdf>.
- ^{xxiv} Appelbaum, E. & Milkman, R. (2011). *Leaves That Pay: Employer and Worker Experiences with Paid Family Leave in California*. Retrieved 13 October 2011, from http://www.paidfamilyleave.org/pdf/leaves_that_pay.pdf.
- ^{xxv} Ibid.
- ^{xxvi} Ibid.
- ^{xxvii} Employment Development Department, State of California. (n.d.). *Disability Insurance Program and Paid Family Leave*. Retrieved 25 October 2011, from http://www.edd.ca.gov/disability/FAQ_DI_Pregnancy.htm.
- ^{xxviii} Employment Development Department, State of California. (2012). *California's Employment Guide 2012*. Retrieved 4 November 2011, from http://www.edd.ca.gov/pdf_pub_ctr/de44.pdf.
- ^{xxix} Ibid.
- ^{xxx} Department of Labor and Workforce Development, State of New Jersey. (n.d.). *Temporary Disability*. Retrieved 13 October 2011, from <http://lwd.dol.state.nj.us/labor/t di/tdiindex.html>.
- ^{xxxi} Ibid.