No Infant Left Behind: Public Finance Arguments for Mandated Leave and Income Supports for Parents

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Abstract

This article constructs a theoretical and evidence-based argument concerning why maternity and parental leave policy must be viewed as human capital investment policy. It is argued that income support schemes which allow for (1) parental choice in terms of care and (2) inclusion of different income groups offer relative advantages over other alternatives in terms of both equity and political feasibility.

Skill formation is a dynamic process with strong synergistic components. Skill begets skill. Early investment promotes later investment. At current levels of investment, American society underinvests in the very young. When offered choices and the opportunity to experiment, most parents generally choose wisely, at least after they have gained some experience.

James J. Heckman 2000 Nobel Laureate in Economics Policies to Foster Human Capital (August 1999)

Introduction

In Policies to Foster Human Capital, Nobel Laureate James J. Heckman (1999) develops a strong theoretically and empirically based argument in support of human capital investments in the young. He argues that at current levels of investment in the United States, marginal returns to human capital investment are greatest for the young compared with investments made later in the life cycle for two reasons:

- 1. Younger persons have a longer horizon over which to recoup the fruits of investment and
- 2. Skill begets skill (Heckman, 1999, p. 42).

In addition he argues that "we cannot afford to postpone investing in children until they become adults, nor can we wait until they reach school age – a time when it may be too late to intervene (1999, p. 42)."

Heckman's arguments concerning the importance of early investments in children echo historical arguments that were made over a century ago as grounds for the establishment of maternity leave policies. Early maternal leave policies were instituted as a response to negative effects of dangerous employment conditions, including long hours, on maternal and child health. The connection between employment and infant and maternal health was evidence-based. In a review of a classic study of infant mortality, Yankauer (1994) reported that early studies of the link between maternal employment and infant mortality during the years from 1911 to 1915 found that maternal employment away from home raised the neonatal mortality rate by 80%. Strong associations, which continue until today, also existed between socioeconomic status, race, immigrant status and infant mortality. Within the last decade, a growing body of literature has developed that provides support for the hypothesis that under certain conditions, maternal employment during pregnancy and soon after childbirth can increase the risk of negative outcomes for both infant and maternal physical and mental health. The role maternity and parental leave policies play in fostering societal investments in young children remains an essential rationale for maternity and parental leave policies in the Western industrialized countries.

This article is based on this premise that public policy needs to maximize an underlying utility function for society as a whole that maximizes children's health and development in the short and the long term subject to the budget constraint of the society's income and wealth. Its rationale is that optimal outcomes on these measures are essential for optimal economic growth and development in the long run. Its purpose is to provide a public finance framework that embeds parental leave within the matrix of policies that can help to remedy the sub-optimal level of investment in young children documented by Heckman and many other economists in recent years. See for example, Danziger and Waldfogel, 2000 for a review of the literature and the emerging consensus among economists on this issue. Harvard

University's Project on Global Working Families has also conducted extensive, recent work that examines where the Unites States stands globally on a work, family, and equity index (Heymann, Earle, Simmons, Breslow, & Kuenhoff, 2004). Its review of policies and outcomes supports the conclusion that the United States invests suboptimally in children and families.

While recognizing that maternity and parental leave policies in the United States are often classed together with family and medical leave policy, this article focuses exclusively on the rationale for maternity and parental leave as opposed to other forms of leavetaking. The article develops an argument that provides a basis for both government mandates for job-guaranteed leaves for maternity and parental purposes and for government support for income provision to families during the early months of the life of a newborn or newly adopted child. After providing a brief overview of the broader rationales for family leave policies in Section II, Section III provides empirical evidence concerning the direct and indirect impacts of maternal employment during the first year on human capital investment in young children. Next Section IV provides evidence concerning the extent to which limited access to leave and to wage replacement during leave constrain parent's leave-taking behavior. Section V develops public finance arguments concerning why firms may be providing sub-optimal levels of job-guaranteed leave and why firms should be held accountable for these costs. These arguments stem from the theory of public goods and externalities. The arguments regarding the provision of the job-guarantee are not, however, transferable to arguments concerning the provision of wage replacement during leave (or for income supplements to parents with newborn or newly adopted children). Section VI provides an analysis of different options for providing wage replacement for leave using a number of different criteria to evaluate the potential distribution of costs and benefits of different financing mechanisms. This section draws both on alternatives that have been implemented in Europe and in state proposal and legislation in the United States. The final section, Section VII, summarizes the argument constructed in the article and provides some recommendations for both future research and public policy.

Rationales for Leaves and Current National Policies

Historical Background

Several historical accounts exist that describe the development of maternity and parental policies, including works by Kamerman (1988), Kamerman and Kahn (1981), Allen (1988), and Frank and Lipner (1988). More recent studies also emphasize the multifaceted justifications for leave policies (European Commission 2002; Gauthier, 2000; Moss and Deven, 1999). In these works, the authors identify rationales that have emerged as justifications for government mandated leaves. These rationales include:

- 1. concern with maternal and child health;
- 2. concern with the role of parenting in human development;
- 3. concern with eliminating labor market policies and practices that make it difficult for families to function;
- 4. concern with establishing social and economic supports for families with children;
- 5. concern with eliminating discrimination and promoting labor market equality for women; and
- 6. concern with promoting equality in society, not only between the sexes, but also between different groups and classes.

These concerns are linked with other societal concerns, such as fertility, inflation, pressures on family income, and changes in the labor market participation rates of women with children. As described by Moss & Deven (1999), parental leave is "one thread woven together with many others. It is both shaped and defined by its relationship with other threads but also has its own effect on these other and on the whole. It is not just an object acted upon but also an object capable of agency (1999, p. 9)". Not all the concerns receive equal weight over time; changing demographic, economic, and political circumstances affect when and to what extent a given concern emerges.

Different countries also place varying degrees of importance on each factor. Sweden, for example, now has as its primary concerns income redistribution, with particular emphasis on families with children, and equity between the sexes both in the work place and in the home (Kamerman and Kahn 1981; Stoiber 1989; Haas and Hwang, 1999). France emphasizes providing a broad range of societal supports

to facilitate children's optimal development and social and economic supports to enable women to choose among alternative roles (Richardson and Marx 1989; Fagnani, 1999). Historically Germany placed primary emphasis on offering women the opportunity to remain at home with young children. Its current policy agenda reflect a greater emphasis on facilitating part-time work, including high quality part-time work, in conjunction with caregiving, with more efforts directed at father as well as mother involvement in caregiving of infants (Trzcinski, 2000, 2003).

In all countries, the development of maternity and parental leave policies occurs within the broader context of goals and policies concerning families, social welfare, and general macroeconomic conditions. Generous policies concerning maternity and parental leave tend to correspond to generous provisions regarding other types of leave. These policies also typically operate in conjunction with a wide array of program and income supports for families with children. Appendix A provides an example of the range of services available for parents with small children in Norway. Other European countries and Canada may offer a different portfolio of benefits and services than Norway, but the United States remains an aberration both in its parental leave policy and its low level of universal supports to parents with small children.

A number of on-line sources provide detailed information on the current status of parental leave policies worldwide. These sources, which are updated periodically, include the European Observatory on Social Policies and the International Labor Organization. In addition, most of the European countries provide extensive access to English versions of government sites that provide detailed information on each country's social and economic policies (See the country-specific resource sections in Walter, 2003 and the Commission of the European Communities, 2003). Each of the rationales listed above could be used as a basis for developing public finance arguments concerning leave and income supports for the needs for which the leaves are required. The purpose of this article is more modest and will focus exclusively on the rationales concerning how leave and wage replacement affect the level of human capital investment in young children.

Early Maternal Employment and Human Investments in Infants

For the public goods and externalities arguments that are developed below in Section V to be relevant in terms of justification for leave policies, it must first be demonstrated that maternal employment in infancy does affect child outcomes and that a lack of formal leave policies does influence a mother's work surrounding childbirth. This section provides an overview of the relevant literature concerning these effects. In this literature, the effects of maternal employment are emphasized rather than the effects of father's employment for two reasons: (1) mothers are more affected by the physical demands of birth and (2) mothers in the United States are still the primary caregivers for infants. In addition, among all new fathers, the percentage of cases where fathers withdraw from the labor market or substantially reduce their work hours to care for newborn children is very small.

Historical Background

Early maternal leave policies were instituted as a response to negative effects of dangerous employment conditions, including long hours, on maternal and child health. The connection between employment and infant and maternal health was evidence-based (Yankauer 1994). More recent literature suggests that these same negative effects occur today. Ruhm (2000a), for example, has demonstrated that a negative association exists between length of leave policies and infant mortality in Europe. For outcomes in the United States, a substantial body of literature now exists examining the role of work immediately before and after childbirth on maternal and child outcomes. Some of this work examines the immediate effects on maternal health; other work focuses on developmental outcomes in pre-school age children (ages 3 to 5).

The accumulating evidence strongly suggests that under certain conditions maternal employment during the later periods of pregnancy and soon after childbirth can result in negative effects for maternal mental and physical health and for infant mental and physical health. The relationships are, of course, by no means deterministic and do not imply that all children whose mothers who return to work early suffer detrimental effects.

Breastfeeding and Mother's Return to Employment. In some cases, the results are indirect, for example, in terms of the length of time that mothers breastfeed their infants. The American Academy of Pediatrics (Heinig, 1998) and the U.S. Department of Health and Human Services (HHS, 2000) currently recommend breastfeeding as a better feeding method than formula feeding. Despite established benefits and official recommendations, national breastfeeding rates in the United States remain below Healthy People 2010 national health objectives of at least 75% of mothers who breastfeed their babies in the early postpartum period and 50% of mothers who continue breastfeeding until their babies are 5-6 months of age (Mahoney and James, 1998; Humenick, Hill, and Spiegelberg 1998; Schmied and Barclay 1999; Cadwell, 1999).

Lower than recommended levels of breastfeeding are more frequently observed among women who return to work more quickly after birth and among lower-income women. Although no differences exist concerning whether mothers intend to breast-feed their infants, mothers who return to work sooner either fail to initiate breastfeeding or stop more quickly than other mothers (Pediatric Report's Child Health Newsletter, 1991). Based on a range of different estimation methodologies and datasets, research has consistently found a negative relationship between early return to work and duration of breastfeeding. Roe, Whittington, Fein, & Teisl (1999) estimated a set of simultaneous equations to examine whether breastfeeding and return to work are jointly determined. They also examined the intensity of breastfeeding. Their results indicated that "working women make fundamental decisions about continuing breastfeeding based largely on the resumption of their active work lives (199: 167)" They also found that an early return to work not only decreases the duration of breastfeeding, but also the level of intensity. They concluded that decisions about work and breastfeeding are linked and that there is a "high degree of competition between the behaviors ((1999: 167)."

Lindberg (1996) used discrete time hazard models to estimate the duration of breastfeeding for a sample of non-Black and Black women from the National Survey of Family Growth. Her results indicated that a women who entered employment in any month was 3.03 times more likely to stop breastfeeding as a women not employed in that month. She also found a significant risk of stopping breastfeeding with continued employment. The size of the effects was stronger for Black women than for non-Black women. Chatterji and Frick (2003) found that returning to work within the first three months of an infant's life reduced the probability of initiating breastfeeding by 16-18 percent and reduced the duration of breastfeeding by an average of 4-6 weeks among mothers who actually initiate. They also found that lower-income women only initiate breastfeeding 50% of the time, and only 12% are still breastfeeding when their infants are 6 months of age.

Hence the lack of leave as well as the lack of wage replacement has both equity and efficiency consequences for low-income women and for women of color, who are disproportionately represented among low income women. Low-income women are more strongly affected by the lack of supports because they are likely to return to work more quickly than higher income women.

Length of Leave and Maternal Health. Gjerdingen, Froberg, and Kochevar (1991) conducted a small longitudinal study to investigate changes in women's mental and physical health around the time of childbirth, and to determine whether health was related to length of maternity leave. For women who returned to work prior to 6 months postpartum, they found that the number of days that mothers were ill because of infections steadily increased from pregnancy until 6 months postpartum, the last observation point in their study. They also found statistically significant outcomes between women who did and who did not return to work by the 6th postpartum month, with non-working mothers experiencing a significant decline in depressive symptoms from the prenatal period through the 6th postpartum month. They concluded that significant changes occurred in mental and physical health for this group of first-time mothers, with more negative outcomes occurring for the mothers who returned to work shortly after childbirth.

In another study, Gjerdingen, Froberg, Chaloner, & McGovern (1993) found that women who returned to the work force noted more symptoms of respiratory infections. They also found that women with vaginal births had a higher prevalence of hemorrhoids, vaginal discomfort, pain with intercourse, difficulty reaching orgasm, sinus problems, and acne. Based on the incidence and severity of observed symptoms, the authors concluded that recovery from childbirth often requires more than the 6 weeks traditionally allotted. Work status and delivery type both appeared to affect postpartum health. Gjerdin-

gen and Center (2003) conducted a prospective study of 261 expectant father and mothers during pregnancy and at 6 months postpartum. They found that both mothers and fathers experienced declines in health. These declines in health persisted at least 6 months after the birth and were associated with both partner satisfaction and characteristics of the job.

McGovern et al. (2003) found that women's mental and physical health statuses are correlated with the timing of return to work. While women who return to work more quickly exhibit more positive physical health than other women, women who first returned to work at 12 months had the highest mental health scores. Based on a random sample of 654 women who had given birth in Minnesota from December 1991 to February 1992, McGovern et al. (1997) examined the link between time off from work for postpartum women and maternal health. They found positive effects on maternal health when women took leaves longer than those now mandated by the Family and Medical Act. Specifically, when women took more than 12 weeks leave, positive effects on vitality were observed. More than 15 weeks leave had a positive effect on maternal, mental health, and more than 20 weeks leave had a positive effect on role function. They also found that employed women in their sample experienced problems in well being at approximately seven months postpartum. Women who took longer leaves, who had less physical exertion on the job, and had higher levels of job satisfaction tended to have better health outcomes than other women. Most troubling was their finding that among women lacking access to any paid leave benefits, the average duration of leave was a total of 6.6 weeks, that is, the minimum time period that permits women to physically recover from childbirth with no time available to adjust the stress and fatigue that follow childbirth for most women.

Chatterji and Markowitz (2004) used data from the 1998 National Maternal and Infant Health Survey to examine whether the length of maternal leave affects maternal health. Their analyses, which used instrumental variable modeling, found a negative association between mother's depressive symptoms and length of maternal leave, but no association between clinical depression and length of leave. Their only other measure of maternal health was a dichotomous variable that indicated whether the mother had at least three outpatient visits in the first six months of childbirth. They found no statistically significant relationship between length of leave and this variable. Even though they were able to control for whether the mother had health insurance and a

set of other predictor variables, they were, careful to note the limitations of using this variable as proxy for maternal health.

Negative outcomes for maternal health and for other outcomes, such as duration of breastfeeding, are associated with increased risk of negative outcomes for children. It is well established that postpartum depression increases the risk that mothers will not develop secure mother-infant attachments. Kahn, Zuckerman, Bauchner, Homer, and Wise (2002) used longitudinal survey data of a national cohort of 8,087 women who had recently given birth. The women were surveyed in 1988 and 1991. The authors examined the relationship between women's physical and mental health conditions after pregnancy and maternal reports of child outcomes at approximately 3 years of age. Their findings strongly suggested that women's poor physical health and smoking had strong, graded associations with children's physical health and behavior problems. In their study, women's depressive symptoms were associated with children's delayed language and behavior problems.

Early Maternal Employment and Child Cognitive Development. A number of studies have relied on data from the National Longitudinal Survey of Youth to assess the impact of maternal employment on child outcomes. The earlier works were limited to examining the impact of maternal employment in the first year at one observation point for the children; later research examined whether initial negative effects of early maternal employment persisted across time (See Waldfogel, Han, and Brooks-Gunn, 2002 and Ruhm, 2000 for reviews of the past literature on early maternal employment and child outcomes based on the NLSY). Waldfogel, Han and Brooks-Gunn (2002) followed 1,872 children born to mothers in the NLSY from birth to age 7 and 8.

The authors found persistent negative effects of maternal employment on child outcomes for white children, even after controlling for variables that are most likely correlated with maternal employment, such as home environment, income, and breastfeeding. They also found that negative effects were most pronounced for mothers who worked more than 20 hours per week. They did not, however, discuss when the mothers returned to work in the first year. Hence their analyses may understate the negative effects of returns to work that occurred very shortly after births and overstate negative effects of returns to work that occurred closer to the end of the infant's first year. In addition, they differentiated their sample by income

subgroups and found larger negative effects of maternal employment among low-income white families than among other white families. They did not find negative effects associated with early return to maternal employment for non-white Hispanic or for Black children. Not only were sample sizes smaller for Hispanic and Black children, but compared with their white counterparts, maternal differences in education and household income were also far more dramatic for Hispanic and Black mothers who worked in the first year versus women who did not work in the first year. Specifically, for white mothers, mean educational level was 12.85 years for women who were employed for the first 3 years of the child's life and 12.32 years for those not employed for the first 3 years; mean income was \$41,690 for the working women and \$36,649 for the non-working women. Among Black mothers who worked in all three years, mean education was 12.66 years, but only 10.97 years for those not employed. For Hispanics, the corresponding means were 12.09 and 10.83 years of education. The mean income among Black mothers was \$18,834 per year higher for employed mothers than for non-employed mothers; for Hispanic mothers, the difference was \$26,282.

In an analysis that closely paralleled the work of Waldfogel, Han and Brooks-Gunn, Ruhm (2000) found that maternal employment in the child's first year is associated with lower verbal ability at ages 3 and 4. Ruhm also looked at the long-term effects of maternal employment on the reading and mathematics performance of 5 and 6 years whose mothers continued to work during the pre-school period. He concluded that "the cumulative effect of early employment appears quite detrimental (2000, p. 27)". Ruhm did differentiate level of child outcomes by when the mother returned to work. Based on his calculations, the "optimal post-birth employment absence exceeds 20 months for the verbal ability of 3 and 4 year old and two years for the reading and mathematics achievement of 5 and 6 years olds (p. 20)." In contrast to the findings of Waldfogel, Han and Brooks-Gunn, Ruhm found that early maternal employment may be particularly detrimental for twoparent families. In yet another analyses of NLSY data, Baum (2003) found that maternal employment in the first year of an infant's life is associated with negative outcomes that are only partially offset by increases in income.

Each of these studies controlled for unobserved heterogeneity, that is, each study attempted to control for the possibility that women who return to work more quickly may have other unobserved characteristics that result in less favorable outcomes for children. Waldfogel, Han, and Brooks-Gunn (2002) and Ruhm (2000) both used fixed family effects to test the robustness of their specifications. The FFE models weakened, but did not eliminate the negative effects associated with an early return to employment.

Baum (2003) used a number of different techniques to control for potential unobserved heterogeneity bias "by including an unusually large number of exogenous background characteristics, by instrumenting maternal labor supply using local labor market conditions, and by estimating a portion of the models with a more homogeneous group of mothers who were employed prior to giving birth (2003: 414)." The major limitation of existing research centers on the lack of knowledge concerning how long any observed negative effects persist. Specifically, we do not yet know how early maternal employment influences outcomes in late childhood and adolescence and how this employment affects the transition to adulthood and adult outcomes.

Availability of Leave and Income Supports

Constraints in the Availability and Leave and Income Supports. In interpreting these results concerning maternal employment and child outcomes, we can either conclude that mothers in the United States are insufficiently concerned with optimizing their own children's well-being or that mothers are constrained in their choices concerning working time and financial resources. This section provides evidence concerning the constraints faced by women in terms of availability of leave and available income. First, however, it reviews the free market arguments concerning the availability of leave. If markets are functioning optimally according to textbook theory, then the explanation that mothers are unconcerned (or uniformed) about the potential negative outcomes may be supportable.

The Free Market Argument. Some economists who use an unmodified version of the dominant paradigm in microeconomics, the neoclassical model, contend the competitive model produces an allocation of goods and services in which no one can be made better off without making someone else worse off. They label this condition a "Pareto-efficient allocation of goods". Labor economics have extended this theory to deal with wage determination in competitive markets.

For Pareto optimality to hold, a number of conditions must be satisfied. Kaufman (1986) describes these conditions as follows:

- 1. Business firms seek to maximize dollar profits, and workers seek to maximize utility.
- 2. Workers and firms have perfect information about wages and job opportunities in the labor market.
- 3. Workers in the labor market are identical with respect to skills and productivity; jobs offered by firms are identical with respect to working conditions and other nonage attributes.
- 4. The labor market is composed of many individual firms on the buyer's side of the market and many workers on the seller's side. The workers do not belong to unions, and firms do not collude
- 5. All jobs in the labor market are open to competition by workers, and there are no institutional barriers to mobility of workers from one job to another. Costs of mobility are zero (p. 209).

This model provides a theoretical framework for the premise that a market-determined wage-fringe mix is efficient. In this application, the optimal mix occurs when employees can select among a menu of benefits--where the menu is provided either by a single employer via a cafeteria plan or by a range of employers, each providing a different mix of wages and fringe benefits. In this analysis each firm allocates its total costs for labor across a vector of characteristics such as wages, health insurance coverage, vacation leave, life insurance, and other fringe benefits and across other characteristics of the job, such as how safe or pleasant the work environment is. The particular mix offered by a given employer depends in part on how much the different components cost relative to one another--a factor that can be affected by type of product and available technologies. Employees choose a particular employer based on their individual preferences regarding these characteristics. If the market is producing an optimal mix of wages and leaves, then a government mandate that forces employees to take more leave than they are currently taking would necessarily reduce labor market hours and increase non-market time. This analysis theoretically applies to the early maternity leave statutes, which all required compulsory leave. Now countries are divided in whether maternity/parental leave constitutes a right (workers are entitled to leave, but they are not compelled to take it) or an obligation (some period of compulsory leave exists). The above analysis is less appropriate when leave is a right, not an obligation.

The free market argument, together with its corollary that government intervention must introduce inefficiency through regulation of markets, formed the cornerstone behind opposition to mandated leave legislation in the United States. In the European countries, the free market argument has historically been far less intense. The primary opponents to mandated leave at both the Federal and the state level were small businesses and the organizations that represent them, such as the U.S. Chamber of Commerce, the National Federation of Small Business, the Small Business Legislative Council, and the U.S. Small Business Administration. These organizations unilaterally rejected any type of mandated benefits and continue to lead the opposition to government-sponsored programs that provide wage replacement during leave.

Specific arguments raised by the different groups (e.g., the U.S. Small Business Administration 1989; the U.S. Chamber of Commerce 1987) in their testimony and position papers against leave included:

- 1. Required long-term leave poses a problem for small business, which can least afford to expand coverage.
- 2. The legislation would discourage small businesses from hiring younger or part-time workers.
- 3. Mandated benefits reduce other preferred benefits.
- 4. In those countries with generous maternity leaves, women are remaining, for the most part, in menial low-skilled jobs or are unemployed.
- 5. The U.S. free market approach to business has encouraged job creation, economic growth, and entrepreneurial activity--the likes of which are virtually nonexistent in countries where business is over-regulated by government-mandated benefits.
- 6. Existing law is fair and effective.

Similar arguments have been raised more recently in response to President Clinton's Executive Order that allowed states to use unemployment insurance funds to provide wage replacement during parental leave—an executive order that was rescinded without public discussion or comment by the President George W. Bush. Such arguments are also routinely voiced in state debates regarding the provision of wage replacement during leave.

The overall argument ties these pieces together as follows. In voicing opposition to mandated leave, these organizations contended that the U.S. labor market already provided an adequate level of leave

and that where leave was unavailable businesses were finding other flexible ways to meet their employees' need. Government intervention would therefore force employers to offer benefits that their employees prefer less, both reducing flexibility and increasing costs. Both of these factors would inhibit the ability of firms to create new jobs and to spur economic growth. The impact would be particularly severe on growth and productivity because the primary source of job creation in the United States is the small firm sector. Furthermore, these organizations contended that mandated leave would lower U.S. competitiveness in the international economy. They argued that U.S. competitors suffer a disadvantage because their governments dictate how firms must meet certain employee needs regarding leave and other benefits.

Opponents of mandated leave concluded that governments in other countries end up hurting women by increasing their rates of unemployment and by restricting their job opportunities. Were leave policies to be mandated in the United States, these organizations argued that American women would suffer the same fate. These arguments formed the basis for President Bush's two vetoes of the FMLA. The arguments were less convincing in the House and the Senate, where the FMLA was passed after years of debate in 1992. The law, of course, was not implemented until President Clinton assumed office in 1993(1).

Despite levels of unemployment in the last decade that have exceeded those in the United States, most western industrialized countries have not accepted such arguments. Although several countries within the European Union are debating how to cut back on their level of social welfare protection, both as a reaction to high unemployment and to major projected changes in their demographic profiles, programs and policies to support work and family life have not been targeted for reductions. (See Heymann, Earle, Simmons, Breslow, and Kuehnhoff, 2004, for an extensive set of resources for tracking these policies across countries over time.) Blank's edited collection *Social Protection versus Economic Flexibility* reached the conclusion that there is "little evidence that labor market flexibility is substantially affected by the presence of social protection programs, nor is there evidence that the speed of labor market adjustment can be enhanced by limiting these programs (Blank, 1994: 15)."

The Empirical Evidence. Some researchers have found that statistically strong links exist between the length of time women take off from work after childbirth and the availability of paid leave and spousal earnings. In their sample of 654 women who had given birth in Minnesota, McGovern et al. (2000) found that only 46% of women had access to paid leave—a factor that was associated with a four-week difference in leave duration. Because of the strong link between paid leave, spousal earnings, and length of leave, the authors suggested that low income mothers and single mothers were at risk of facing more negative maternal and infant health outcomes than mothers with greater access to adequate income during periods of time off after birth.

Table 1. Employees needing but not taking leave: 1995 and 2000 Survey of Employees			
	Persons not taking leave		
	1995 Survey	2000 Survey	
Number of employees needing but not taking leave (for a covered reason) in the previous 18 months	3,925,000	3,520,000	
Percent of employee population	3.1%	2.4%	

Source: Table 2.14 in U.S. Department of Labor (2000). Family and Medical Leave Act Survey: Balancing the Needs of Families and Employers, 2000 Update.

Evidence from the 1995 and 2000 U.S. Department of Labor Survey of Establishments also suggests that parents face constraints based on both limited availability of leave and limited availability of adequate income supports during leave. As Table 1 shows, an estimated 3.9 million employees in 1995 and 3.5 million employees in 2000 reported that they needed leave in the previous 18 months for purposes covered under the Family and Medical leave, but they did not take the needed leave. Although the survey results did not differentiate among reasons for need, 26.4% of all employees who took leave in the previous 18 months did so for maternity-disabilities or for care for a newborn, newly adopted, or newly placed foster child. If we assume that this percentage applies to those who needed, but did not take leave, then

approximately 929,280 parents needed leave that they were unable to take during the same 18-month period. In 1995, 6.6% of all employees seeking leave were denied leave (an estimated 1,343,736 employees); in 2000, 6.2% were denied leave (an estimated 1,477,478 employees).

The most frequently cited reason for not taking needed leave was lack of adequate income resources: 87.8% reported that they could not afford the leave (Table 2). Lack of adequate income resources affected not only the likelihood that leave would be taken but also the length of leave. Among employees who took leaves, 53.8% of those surveyed in 2000 reported that they worried about not having enough money for bills. Among all employees who took leaves where only partial or no pay was received, 50.9% reported that they would have taken leave for a longer period if some/additional pay had been received (Table 3).

Table 2. Perceived Impact Survey	of Pay on Leave-Needers: 2000
Perceived Impact of Pay	Percent of Leave-Needers Who Could Not Afford to Take Leave
Would have taken leave if some/additional pay had been received	87.8%
Would <u>not</u> have taken leave if some/additional pay had been received	12.2%

Source: Table 2.18 in U.S. Department of Labor (2000). Family and Medical Leave Act Survey: Balancing the Needs of Families and Employers, 2000 Update.

Market versus Government Mandates in the Provision of Leave and Income Supports. Based on the above evidence, we have the observed outcome that leave-taking depends on length of leave available with job guarantee, whether the leave is paid, and available income from spousal earnings and other household income. Before turning to the next section of the argument regarding public goods and externalities, it is important to highlight the fact that markets have tended to provide a lower level of leave than what employees report that they need. It is also important to look at the evidence concerning how the leave that is available for maternity and parental needs developed historically.

Table 3. Perceive Impact of Pay on Length of Leave: 2000 Survey		
Percent of Leave-Takers Receiving Less Than Full Pay During Longest Leave		
50.9%		
49.1%		

Source: Table 4.9 in U.S. Department of Labor (2000). Family and Medical Leave Act Survey: Balancing the Needs of Families and Employers, 2000 Update.

The evidence strongly suggests that government policies played a central role—historically the market has provided very little leave paid or unpaid without the inducement of government mandate. In the United States, prior to the Family and Medical Leave Act, most maternity leave was available because advocates for women and children successfully made the judicial and legislative argument that sick leave and short-term disability leave had to be made available for use for periods of inability to work that occurred on account of pregnancy and childbirth. Specifically, prior to the passage of the Pregnancy Discrimination Act, many firms did not permit women to use paid sick leave or short-term disability insurance for work incapacities related to pregnancy and childbirth. Trzcinski and Alpert (1994, 2000) provide extensive discussions of the role of the courts and state and federal legislatures in affecting the level of leave and wage replacement that is available.

In addition, prior to the passage of the U.S. Family and Medical Leave Act, most firms did not provide unpaid maternity or paternity leave. As Table 4 indicates, prior to the act, among small establishments, less than 20% provided unpaid maternity leave and less than 10 percent provided unpaid paternity leave; in medium and large establishment, the percentages for maternity leave were beneath 40% for maternity leave and less than 20% for paternity leave. The 20% figure provides a better estimate of the amount of parental leave

available as opposed to leave for maternity-related disabilities. Paid maternity and paternity leaves were provided in less than 5% of firms regardless of firm size (U.S. Department of Labor, Bureau of Labor Statistics, 1991). In 2000, seven years after the passage of the Family and Medical Leave Act, most leave covered under the Family and Medical Leave Act continues to be unpaid (See Table 5). Nonetheless the passage of the act seemed to be associated with a substantial increase in the percentage of firms that claim they offer wage replacement during parental leave.

Table 4. U.S. Department of Labor, Bureau of Labor Statistics Surveys: Full-time employees participating in selected employee benefit programs, small private establishments, 1990 and medium and large private establishments, 1989 (in percent)

Employee Benefit	Small Establishments	Medium and large establishments		
Paid Sick Leave	48%	68%		
Sickness and accident insurance	26%	43%		
Paid Maternity Leave	2%	3%		
Paid paternity Leave	0%	1%		
Unpaid Maternity Leave	17%	37%		
Unpaid Paternity Leave	8%	18%		
Flexible Benefit Plans	2%	9%		
Child Care Benefits	1%	5%		
Source: U.S. Department of Labor, Bureau of Labor Statistics, 1991.				

The United States is the norm and not the exception in terms of how parents are provided with access to leave for caregiving needs. A fact of Western industrialized countries is that no market economy has ever provided significant amounts of parental leave coverage without government mandate—not one case can be documented where a market-based solution has provided most employees with leave for caregiving needs, including leave for caregiving for newborn and newly adopted children. In all countries, maternity and parental leave and wage replacement during leave are only provided on a wide scale basis because of government mandate, including the leave and wage replacement in the United States. Today wage replacement is available

in less than 25% of all establishments for parental and family leave (U.S. Department of Labor, 2000). Hence in over 75% of all establishments, the only wage replacement that is available is through vacation and/or sick leave policies, policies that were not developed in response to employee demands for wage replacement during caregiving leaves. In addition, many firms still do not permit sick leave policies to be used for parental leave, with the result that employees in the United States must use vacation if they want any paid leave for these purposes.

Table 5 Continuation of Pay during Leave by FMLA Status: Reasons for Which Pay is Continued: 2000 Survey				
Establishment continues pay during leave for Parent to Care for Newborn	Percent of Covered Establishme nts	Percent of Non- covered establishments	Percent of all establishment s	
Full pay	17.3%	24.9%	24.0%	
Partial pay	6.0%	7.2%	7.0%	
Depends on circumstances	22.7%	17.6%	18.2%	
No pay	54.1%	50.4%	50.8%	

Source: U.S. Department of Labor (2000). Family and Medical Leave Act Survey: Balancing the Needs of Families and Employers, 2000 Update.

Despite evidence concerning the availability of family leave and wage replacement during leave, some analysts might argue that in the long run, the market would eventually provide optimal levels of leave and wage replacement (if the low level observed is not already optimal), arguing that the small amounts of leave observed prior to the passage of the Family and Medical Leave Act provide evidence that the market did indeed provide leave. Empirical evidence suggests, however, that the existence of leave and wage replacement mandates produce greater increases in the extent of leave or wage coverage than the law mandates. For example, a larger percentage of firms now offer leave in excess of the Family and Medical Leave Act requirements than the percentage that offered any leave at all prior to the law (Compare Tables 4 and 6).

Another example is Canada. Canada provides wage replacement during parental leave via its employment insurance program (previously its unemployment insurance system). In Canada, a larger share of firms offer partial wage replacements that supplement the amounts provided by the Federal system payments at a rate than exceeds the percentage of firms offering any wage replacement in the United States, where no federally mandated wage replacement systems exist for maternity, parental, or family leave. (See Trzcinski, 2004; Trzcinski and Alpert, 1994, 2000 for discussion of the Canadian system). Thus, in cases where government financed wage supplements are beneath full wage replacement, the evidence seems not to support fears expressed by some economists (See Summers, 1989) that government financed wage-replacement schemes would supplant private measures.

Table 6. Provision of Leave Beyond that guaranteed by FMLA Coverage Status: 2000 Survey of Establishments				
	Percent of covered establishments	Percent of non- covered establishments	Percent of all establishments	
More than 12 weeks per year				
Yes	22.9%	21.1%	21.4%	
No	49.6%	52.7%	52.3%	
Depends on circumstances	27.5%	26.1%	26.3%	

Source: Table 5.4 in U.S. Department of Labor (2000). Family and Medical Leave Act Survey: Balancing the Needs of Families and Employers, 2000 Update. Author's note: Given that employers almost always have different policies for an employee's own sickness and other needs for leave, these percentages must be interpreted as an upward bound on leave available for caregiving purposes.

Market Imperfections: Public Goods and Externalities

This section develops the theoretical basis for why firms need to be held accountable for the costs of providing leave, but not necessarily for the costs of providing wage replacement. In any discussion of family leave policy, it is essential to differentiate between leave and wage replacement. The arguments developed below concerning externalities and public goods associated with employer organizational practices do not imply that firms must be responsible for all the costs of wage replacement. Their responsibility for wage replacement should theoretically be limited to their share of paying for the costs associated the public goods component of investment in young children.

Externalities. Economists have defined externalities as a potential source of market failure. A standard definition of an activity that generates externalities is provided by Baumol and Blinder (1982):

An activity is said to generate a beneficial or detrimental externality if that activity causes incidental benefits or damages to others, and no corresponding compensation is provided to or paid by those who generate the externality (1982, p. 536).

Other similar definitions include:

An externality is any valued impact (cost or benefit) resulting from any action (whether related to production or consumption) that affects someone who did not fully consent to it (Weimer and Vining 1989, p. 56), An externality is said to exist when a decision variable of one consumer or producer cannot be excluded from entering directly into the utility or production function of some other consumer or producer (Russell and Wilkinson 1979, p. 374).

Although public finance economists have developed a rich and extensive literature concerning externalities in regards to environmental policy, social externalities, particularly externalities generated by employer choices of organization and employee policy, remain largely unexplored in economic theory. As Summers (1989) notes, however, externality arguments can be used to justify mandated benefits. He provides the example of mandated plant-closing notification and argues that because major layoffs can have serious adverse consequences for communities, an externality can be said to exist (2).

The argument concerning social externalities is based on the observation that firms are free to choose among a range of organizational practices. These organizational practices can have positive or negative effects on family and community well being. In any conceptualization family leave (which can involve very short as well as very

long absences from work), employers must play a central role in terms of creating a workplace that either facilitates or impedes leave. Although leave is usually conceptualized as a wage issue, this narrow conceptualization prevents the understanding that conditions of work can affect both the ability and likelihood that employers agree to leave policies. The provision of leave will often entail organizational implications, not just a reallocation of the wage vector. In addition because the organization of work affects all workers at a particular worksite and not just an individual employee, employees are constrained—in theory as well as in practice—from negotiating individual solutions to workplace organization.

For example, at least in theory, an employer could offer two options (1) a wage vector that provides relatively higher wages and health insurance or (2) relatively lower wages with no health insurance. Except for economies of scale in the administration of the health insurance policies, the choice of option 1 or option 2 by one set of employees is not dependent on the choice of option 1 or option 2 by another set of employees—even if these employees are working side-by-side on the same assembly line or in the same office. Some employers do in fact offer employees the option of receiving higher wages in place of health insurance benefits. The workers do not need to be spatially isolated. But organizational issues require co-ordination. One employee's choice will have direct implications for other employees.

The broader conceptualization of the externality argument concerns the need to organize society so that its institutions are supportive of, rather than antagonistic to, the healthy development and functioning of families. Here the argument rests on the ecological premise that we are not isolated individuals, living atomistic lives separated from the rest of society. Instead all of life is viewed as interrelated, and as social beings, we must design our institutions to recognize our interdependence. Urie Bronfenbrenner, an international renowned expert in the ecological theory of human development, has been one of the major contributors to the U.S. public policy debate on work and family policy. He has argued:

Today we acknowledge that the massive alteration of the natural environment made possible by modern technology and industrialization can destroy the physical ecosystem essential to life itself. We have yet to recognize that this same awesome process now also has an analogue in the social realm as well: the unthinking exercise of massive technological power, and an unquestioning acquiescence to the demands of industrialization, can unleash forces which, if left unbridled, can destroy the human ecosystem. Based in the family unit, but extending far beyond, this ecosystem comprises the social fabric that sustains our capacity to live and work together effectively and to raise our children and youth to become competent and compassionate members of our society. (1988, p. 143).

This argument is rarely applied to externalities in economics in terms of the effects of organizational practices within firms spilling over into families and communities. However, if we note that the organizational practices within firms cannot be isolated into a sphere that is separate from the rest of society, then businesses must be held accountable for practices that interfere with or undermine the ability of parents to provide optimal level of human capital investments in their children.

Employer and employee characteristics will also affect the ability of employees to negotiate successfully for leave, including the ability to negotiate a fixed hedonic wage vector with the allocation of wages, work flexibility and number and allocation of hours worked that optimizes an employee's preferences for monetary compensatory and working conditions. Different employees have very different degrees of power in negotiating both short and long leaves from work. Power differentials between employers and employees as well as power differentials among different classes of employees have the potential to affect this allocation.

Even though the denial or granting of leave will have impacts on how successfully families can invest in children, under i.i.d. assumptions of maximizing behavior, employers and other employees (who are not currently seeking leave) will not, however, consider the impact of their decisions on how the denial of leave affects family and societal functioning. Based on assumptions of utility maximizing and profit maximizing behavior, neither employers or other employees who are affected by the outcome of this negotiation are likely to consider the social externality costs associated with their choices. For these reasons, standard textbook analysis of parental leave as one of many components of wage vector must be modified.

Unless government mandates exist that require employers to bear the costs associated with leave for parental and family leave purposes, most employers will refuse to bear these costs in most cases—just as employers refuse to bear externality costs associated with pollution unless they are forced to do so by governmental mandate (or some other form of societal pressure). The counterfactual that some firms do provide universal leave policies and that other firms provide leave on a discretionary basis to some employees does not undermine the basic tenets of the argument. On occasion, the costs of losing a highly qualified employee will outweigh the costs associated with providing the leave. In other cases, some firms may gain a competitive advantage from customers who prefer to deal with firms that produce fewer negative externalities (3). This competitive advantage, however, will be lost as more firms try to capture customers who base their decisions on both price and ethical considerations. It is thus not because of a lack of rationality on the part of firms that they do not follow the example of those firms who yearly receive accolades from Working Women magazine for their family-friendly workplaces. It is instead rational behavior whereby they choose not to deal with costs of the social externalities produced by their organizational practices (4).

Public Goods. This section applies the public goods argument to investments in young children. As noted in Section IV above, the lack of leave and the lack of income supports affect the ability of new mothers to have access to lengths of leave that allow optimal human capital investment in infants. Because of the public goods aspect of children, economic theory would predict that employers and employees alike would underinvest in children. It is important to emphasize that this argument is not identical to the externality argument presented in the preceding section. The externality argument, which dealt with the organizational aspect of the workplace and its impact on the organization and functioning of other societal institutions, applies even in cases where all the benefits associated with children are borne by their own parents.

Economists define private goods on the basis of three characteristics: rivalry in consumption; excludability in ownership and use; and depletability (Kaufman, 1986). Rivalry means that what one person consumes cannot be consumed by another person. Excludability means that one person has exclusive control and use over the good, that anyone not paying for the good can be prevented from enjoying its

benefits. Depletability means that when one person consumes or benefits from the good, these actions deplete the supply either temporarily or permanently. Economists define public goods as goods and resources that lack one or more of these characteristics. Where these characteristics are absent, individuals will understate their willingness to pay for a good or a resource. As long as others produce and pay for the good or the service, it will be available to everyone else. Too low a supply of the good or service then occurs, resulting in economic inefficiency. Government policy can theoretically rectify this inefficiency.

Most countries and governments, including the United States, recognize that investments in children represent public goods, but they differ in when they invoke this argument to justify family policy in general and statutory work and family policies in particular. Even though the United States has a long history of public investment in children, the ideology of individuality and the ideology (although not the reality) that a woman's place is in the home are so strong that interest groups, such as the U.S. Chamber of Commerce, and private citizens can sometimes block legislation on the grounds that children are the individual and exclusive responsibility of parents. Hence this conflict results in lower levels of public investment in young children than found in other industrialized countries, with sometimes severe negative repercussions for individual children and for children in specific demographic groups. (See Heymann, Earle, Simmons, Breslow, & Kuehnhoff, 2004; Cornea and Danziger, 1997; Duncan. & Brooks-Gunn, 1999 for detailed discussions of underinvestment in children in the United States and international comparisons of child well being).

Because adult levels of human capital are strongly related to an individual's successfully achieving specific age-specific stages of human development during infancy and childhood, the collective level of human capital resources available to a given society will depend at least in part on the investments in children made by this society. This collective level of human capital constitutes the public goods aspect of investments in children. In modern industrial democratic societies, it is difficult to imagine how parents can exclude others from gaining from their own private investments in their children. A more extreme negative case may, however, be more illustrative. If underinvestment a in child seriously impedes that child's ability to function effectively in society, the costs to society will not simply be lower wages earned by the individual, but also the potential harm and suffering caused by

illegal and/or destructive activity, including but not limited to the costs of incarceration. Underinvestment may also result in both physical and mental health problems that produce costs to the society beyond the lowered wages earned by the individual with the health difficulties.

Other countries, particularly those in Western Europe and Canada, have formulated work and family polices to reflect a redefinition of childbearing and childrearing as a contribution to the survival and well-being of society, not merely as a source of personal and individual pleasure (Kamerman, 1988; Kamerman & Kahn, 1981; Wisensale, 2001). Even after the collapse of communism, many countries that were previously part of the Communist bloc invest relatively more in children and family policies than does the United States (Trzcinski, 2002). These policies and their justifications look at the role of parenting as providing nurturance and care for children. These arguments center on the public goods aspect of childbearing and childrearing. They rest on two premises: (1) successful parenting enhances the prospects that society will have available productive citizens and workers; and (2) the benefits from successful parenting accrue not only to parents, but to the social and economic system as a whole.

A case study that encompasses an eloquent presentation of this theoretical perspective is found in the history of maternity and parental law and policy in Canada. The particular example stems from a case argued before the Canadian Supreme Court and deals with why employment policies must be designed to remove unfair disadvantages targeted against women as a result of pregnancy and childbirth.

In Brooks, Allen and Dixon et al. v. Canada Safeway Ltd. (1989), three women filed discrimination complaints. Susan Brooks, Patricia Allen and Patricia Dixon were part-time cashiers employed by Safeway, a large supermarket chain. At the time each of the appellants became pregnant the plan provided disability benefits would not be payable during work absences that occurred as a result of pregnancy and childbirth.

Justice Dickson, who delivered the judgement in this case, argued:

1. It cannot be disputed that everyone in society benefits from procreation.

2. A business policy that excludes pregnancy, such as the Safeway plan, places one of the major costs of procreation entirely upon one group in society: pregnant women.

Justice Dickson further emphasized that a refusal to find the Safeway plan discriminatory would undermine one of the purposes of antidiscrimination legislation, arguing that:

It would do so by sanctioning one of the most significant ways in which women have been disadvantaged in our society. It would sanction imposing a disproportionate amount of the costs of pregnancy upon women.

Justice Dickson's arguments also apply when the costs of human capital investments in children are also born by one group in society to the exclusion of others. Today such arguments are frequently found in official government statements of the state goals for family policies. The following examples from Finland and Canada are typical:

Finnish family policy aims to provide a secure growing environment for children and to ensure that parents have the material and psychological possibilities for giving birth and rearing children. Using various forms of financial support and the system of child care, society compensates some of the costs born by families with children (Finnish Ministry of Social Affairs and Health, 2003).

In 2000, when Canada increased the availability of employment insurance benefits from 10 to 35 weeks of parental benefits, the Government announced that these changes were intended to "increase the duration, accessibility and flexibility of parental benefits in order to support families in balancing the demands of work and family during a child's critical first year (Human Resources Development Canada, 2000, EI Monitoring and Assessment Report, p. 5)."Although the public goods argument forms the backbone for family policies implemented by many countries in Europe and in other sections of the world, these arguments tend to be unsuccessful in the United States, particularly when the legislation imposes clearly defined costs on the business community or other identifiable groups.

Efficiency and Equity in Fostering Optimal Human Capital Investment in Young Children. The social externalities and public goods arguments do not imply that businesses must bear all of the costs associated both with leave and with income replacement during leave. They simply imply that businesses must be held accountable for the costs they create by choosing organizational technologies that interfere with optimal human capital development. In terms of the public goods argument, firms are but one of the future beneficiaries of optimal human capital investments in young children. As one of the beneficiaries, they should bear some of the costs associated with this investment. The distinction here is that firms should be held accountable for any practices that create obstacles to optimal human capital investments in children.

Such a formulation would permit an application of the standard economic paradigm that primarily deals with the issue of optimal human capital investment in young children through a theoretical trade-off between efficiency and equity. To the extent that economic theory is formulated under the more realistic assumption that organizational practices within firms can produce externalities for other sectors within the society, arguments for mandated leave can then be advanced in which leave results in both greater efficiency and greater equity. This formulation will also permit consistency with the efficiency –equity nexus and with other frameworks for analyzing how society can best optimize economic efficiency and optimal human investment in young children.

When firms are considered separate spheres disconnected from other societal activities, such as caregiving that takes place outside of the firms, more equitable and equal distributions of income are generally expected to reduce output. This approach tends to conceptualize greater equity or equality in outcomes as being achieved through a transfer of income. This transfer of income produces disincentive effects regarding individuals' willingness to work and to invest.

With the simple relaxation of the assumption of separate and non-intersecting spheres for the business sector and caregiving sectors, (or more narrowly the human capital generating sector for children and youth), other theories regarding equity and efficiency and standard economic theory no longer need to stand in opposition to one another. By extending the concept of externalities to include social externalities, those who rely on standard economic theory would no longer be limited to conceptualizing policies such as mandated leave as income redistribution strategies that transfer income from one group to another

at the expense of economic efficiency. Instead the extension of the well-developed economic theory of externalities to include social externalities would result in an expansion of both efficiency and equity for the society and economy as a whole. To the extent that economists both acknowledge and use the social externalities argument in their discussions of human investments in children, they will no longer be forced to argue efficiency-equity trade-offs in terms of the role of the business sector. Although a necessary pre-condition for optimal human capital investment, the removal of obstacles will not be sufficient to generate the resources needed for this optimal investment to occur. Achievement of this goal will also require government-provided income supports.

Strategies for Providing Wage Replacement during Leave

Most women cannot afford to forfeit their income during maternity leave; if they had to, many would not use all their leave. On the other hand, the birth of healthy children benefits the whole nation and, as a matter of equity, employers alone should not bear the cost as regards working women. As early as 1919, ILO standards have upheld the principle that during maternity leave, women should receive cash benefits, and that these should be paid out of public funds or through a system of insurance. In assessing maternity protection systems, therefore, the amount of and the eligibility requirements for cash benefits, as well as the source of such benefits, are important.

ILO Conditions of Work Digest, 1994

A wide range of alternatives exist for the provision of financial support to caregivers—ranging from the provision of wage replacements solely by the employer to the provision of financial resources solely by general government funds, with no direct contributions from employers. Among alternative strategies for providing for paid leave in the United States, the two most advocated strategies are the use of the unemployment insurance system, that is, the model that is used in Canada and a continued emphasis on encouraging the provision of paid leave policies as part of the compensation package. Other alternatives do exist; Appendix B provides a range of options that have been proposed in different states throughout the U.S. Most of these

alternatives have also been implemented in one or more of the many countries worldwide that provide wage replacement during leave—although the language, but not the actual conceptual formulation, may differ. The following sub-sections discuss advantages and disadvantages of two of these alternatives: payroll taxes and refundable tax credits and deductions for families. The Canadian case is used to discuss payroll taxes; the Norwegian case is used to discuss tax credits and deductions. The Norwegian option provides support for both parents who work in the labor market and who do not do so, either before or after the birth of the child.

Payroll Taxes

The Canadian Employment Insurance system represents an excellent example of providing benefits via payroll taxes. In addition, the Canadian funding scheme represents a shared responsibility model. Appendix C provides some basic information on the Canadian model, which as of January 4th, 2004 also includes coverage for compassionate care. Historically it also provides an example of the flexibility of an existing funding mechanism to adapt to new features of the labor market with a minimum of administrative cost. See Trzcinski 2004 for an extensive discussion of the public finance aspects of the Canadian employment insurance system.

Three special features of the Canadian employment insurance system affect the level of benefits received by claimants: the intensity rule, the benefit repayment feature for high earners (the clawback), and the family supplement. Another feature includes the provision for employers to establish supplemental insurance plans. The Canadian system provides flexibility in its design in that it seeks to limit excessive use of employment insurance benefits, but only for frequent users of regular benefits. Although it provides sharp limits on the extent of wage replacement provided, it contains additional features to provide extra income to families with the greatest financial need. The Canadian Employment Insurance system is now financed exclusively through employer and employee contributions. As a result of reductions in annual maximum insurable earnings and the premium rate, annual maximum contributions declined from \$1,245 in 1994 to \$936 in 2000 for employees and from \$1,745 to \$1,310 for employers (Table 7).

	Table 7. Impact of Changes to the Employment Insurance (EI) Premium Rate: Maximum Insurable Earnings 1994 to 2000				
Year	Maximum Annual Insurable Earnings	Premium Rate per \$100 of Insurable Earnings		Annual Maximum Contribution (\$)	
		Employee	Employer	Employee	Employer
1994	\$40,560	3.07	4.30	1,245	1,743
1995	\$42,380	3.00	4.20	1,271	1,780
1996	\$39,000	2.95	4.13	1,151	1,611
1997	\$39,000	2.90	4.06	1,131	1,583
1998	\$39,000	2.70	3.78	1,053	1,474
1999	\$39,000	2.55	3.57	994.50	1392.30
2000	\$39,000	2.40	3.36	936	1,310
	Source: Human Resources Development Canada, 2000 EI Premium Reduction, www.hrdc-drhc.gc.ca/common/news/insur/9979.shtml				

The intensity rule was designed to introduce an employee experience rating component into the employment insurance system. According to the intensity rule, the wage replacement rate is reduced by 1 percentage point for every 20 weeks of unemployment insurance benefits received in the past 5 years. The intensity rule can result in a maximum reduction of the wage replacement rate from 55% to 50% of insurable earnings. The intensity rule is not applicable to claimants of special benefits, that is, maternity, sickness, and parental benefits or to claimants who are receiving the family supplement (Human Resources Development Canada, 2000d). The Canadian employment insurance system is not, however, experience rated for employers. In a system that covers leaves for maternity and other caregiving reasons, this design feature can minimize any discriminatory effects on caregivers, particularly on working women who are also mothers.

The family supplement was introduced in 1996 to replace the low-income supplement, which had provided 60% wage replacement levels instead of the 55% to low income individuals. The family supplement provides additional benefits to claimants in low-income families with children by increasing the maximum benefit rate from 55% to 80% of their insurable earnings (Human Resources Development

Canada, 2000). Claimants who receive the Canada Child Tax Benefit and whose net family income is beneath \$25,921 per year are eligible for the family supplement. The total monthly benefit cannot exceed the maximum benefit amount, which equaled \$413 per week in 2000. In 1999, 11.4% of all EI claimants received the family supplement, 16% of all female claimants and 7.3 of all male claimants (Human Resources Development Canada, 2000).

The benefit replacement provision (referred to as the clawback) is designed to ensure that high-income earners repay some of their benefits once their annual net income exceeds a certain threshold. The clawback provision also functions in conjunction with the intensity rule in that frequent claimants are required to repay a higher percentage of their employment insurance benefits. Both the family supplement and the benefits replacement provisions apply to special benefits as well as to regular benefits.

Supplemental Insurance Plans

The Employment Insurance program includes provisions that provide tax advantages to employers and to employees when employers establish a supplemental employment insurance plan. Such plans can provide wage replacement during the two-week waiting period prior to the eligibility for special benefits and can provide income topups to benefits received as long as the total wage-replacement does not exceed the benefit recipient's usual wage (Human Resources Development Canada, 2000, 2002).

Advantages. Under an employment insurance system plan or under another payroll tax plan, a government can encourage labor force participation and labor force attachment by parents with caregiving responsibilities (traditionally women). As the Canadian system indicates, the system can be designed to accommodate a range of different policy goals within the same administrative framework. It simultaneously strives to limit frequent access to the system, while still providing relatively more protection to low-wage workers than to high-wage workers. The 2004 addition of "compassionate care benefits" is yet another indicator of how flexible the system can be. Governments also have considerable flexibility in influencing the level of shared responsibility. In the Canadian case, for example, the system was originally designed with a three-way funding scheme and included

funds from general revenues in addition to employer and employee contributions. When the system covers a wide range of reasons for income support, the potential for discrimination against any one group is also minimized particularly when the system is not experience-rated for the employer.

Disadvantages. Any employment (or unemployment insurance system) will only provide assistance to those workers who qualify for the program. This qualification immediately excludes parents who do not work in the market and those who have not worked sufficient hours. If the aim of the program is optimize human capital investment in children, the use of the employment insurance system provides greater governmental support to one set of parents than to other parents. In the case of the United States, exclusions for eligibility under current regulations would be particularly problematic for lowincome women. Furthermore a worker's willingness to take leave will depend on whether a job guarantee is available. Unless the Family and Medical Leave Act is modified to cover employees in small to mediumsized firms, many employees would hesitate to take advantage of benefits under an employment insurance scheme for fear of losing their jobs. Furthermore, in the case of the United States, an experience-rated method for employers of determining contribution level could result in retaliatory discrimination against caregivers. Another major disadvantage in the case of the United States is that any proposed extension of the Unemployment Insurance system will tend to generate intense business opposition.

Refundable Tax Credits and Deductions for Families

In the last decade in many countries, family policy concerning supports for infants and young children has focused on increasing flexibility for parents. These measures have included greater flexibility for fathers as well as mothers to take leave; greater flexibility in terms of hours of work during the first years of a child's life, and greater flexibility to choose among full-time, part-time, and no market work during the critically-important early stages of a child's human development. Refundable tax credits and deductions for families constitute an important part of this strategy. Appendix A provides a comprehensive outline of Norway's approach. In addition to providing full-wage replacement parental benefits for parents with labor market attachment, Norway, provides lump sum maternity and adoption grants, child benefits, cash benefit scheme for families with small

children, and tax deductions. Current economic indicators for Norway also provide evidence that such supports can exist side-by-side with strong economic performance.

A similar array of policies is found in other European countries. The policies allow choice; they also provide refundable tax relief to low income families. In Norway, for example, the lump sum maternity and adoption grant, which provides more than \$5000 USD, is available for parents not eligible for labor-market based parental benefits. Parents are able to choose between an in-kind child care benefit and a cash benefit scheme that provides direct income support to parents who forego the use of a public-funded child care slot. This income support is not means-tested, but depends only on the number of hours that a child spends in publicly-provided child care.

Advantages. A major advantage of a refundable tax credit is the degree of coverage that such a policy could provide. Such a policy would permit a transfer of income to parents that was not dependent on their choice of parental employment, particularly maternal employment during the child's first year. A refundable tax credit could also be designed to include families at different points in the income distribution. In the United States, the flexibility and range of coverage could be a major advantage in garnering the political support for the credit. By encompassing coverage for as wide a range of families as possible, this formulation would avoid the negative labeling and associated political vulnerability of programs that are targeted to low income families (Midgley, Tracy, Livermore, 2000, Midgley, 2000). It would also avoid conflict between families that make different choices regarding their own optimal choice of work and family balance. Provided that parents have full information concerning the risks associated with early parental employment, it would also allow parents to be the primary decision-makers concerning their own assessment of the risk associated with early parental employment in their own circumstances.

The rhetoric of parental choice is powerful in the United States (Sylvester, 2001); the use of a refundable tax credit could hence be made available to both "stay-at-home" moms and to parents who wish to use the refundable credit to purchase high quality child care. "Stay-at-home" dads would, of course, also be included. In the United States, strong precedent already exists for the use of tax credits, including refundable tax credits and tax investment credits. The policy could be implemented as either an extension of the current child care tax credits, with the

amount increased substantially during the first six to twelve months of a child's life. The credit could be labeled in such a way that it generates wide-spread support, for example, *The No Infant Left Behind Tax Investment Credit: Promoting America's Competitive Advantage Today and in the Future.* Because no other country labels their policy in such a way, the tax credit could be promoted as a groundbreaking, innovative measure, a uniquely U.S. invented solution –a feature that might offer additional appeal to the U.S. public. Although the measure would represent a transfer of resources to parents with young children, politically it could be presented as a tax cut rather than as a government expenditure because it would be providing tax relief to families--another advantage in the United States, where voters make such distinctions even if economists do not (5).

In addition, it would entail no direct costs to business. Hence it would be more difficult for major business lobbying organizations to formulate strong arguments opposing the measure. Administrative costs of the credit would be minimal, since the United States already has a well-developed administrative framework to deal with the earned income tax credit, the college tax deductions, and the child care tax credits. Should U.S. citizens collectively decide that the tax credit should be tied to labor market attachment, criteria could be developed concerning level of attachment to the labor market based on weeks of work in the year prior to the birth.

Disadvantages. The primary disadvantage is that businesses would not be held directly responsible for their share of the costs in providing for income support for human capital investment in the future work force. However, as long as businesses were required to provide at least minimum levels of job-guaranteed leave, including small to medium sized firms, this model would still result in an increase of the provision of needed resources to parents for human capital investment in newborn children. The extension of the Family and Medical Leave Act to include employers with more than 15 employees would be essential to insure equity under the tax credit scheme. Otherwise choice for parents would be limited--parents with access to a job guarantee could afford to take leave without jeopardizing their future income stream; those without a job guarantee would risk job loss.

Despite frequently-voiced concerns about the costs of job guaranteed leave for small to medium sized businesses, no researchbased evidence exists documenting that the costs to small and mediumsized businesses of providing short-term leaves are prohibitive. The evidence clearly points in the opposite direction (U.S. Department of Labor, 2000). Nevertheless, if U.S. policy makers want to protect small business from bearing these costs, they can craft a subsidy program for firms that can demonstrate economic hardship. In order to prevent abuse of this policy by the businesses, it would be essential that firms provide concrete and detailed documentation concerning the hardship before they receive compensation. Precedent exists for the use of protective measures for small firms in some European countries, but there is a lack of research concerning how these policies function in practice.

Summary and Conclusions

The primary purpose of this article was to construct a theoretical and evidence-based argument concerning why maternity and parental leave policy must be viewed as human capital investment policy. First, the article reviewed the accumulating evidence concerning the risk that early maternal employment poses for both infant and maternal mental and physical health and the risk that negative outcomes associated with early maternal employment persist throughout early childhood. Second, the article examined the extent to which lack of leave and income support sometimes create obstacles that constrain a parent's ability to choose the optimal level of leave for her own health and for the optimal level of investment in newborn children. Third, arguments were developed that drew on the strong contributions of public finance theory in terms of externalities and public goods. These arguments were applied to the provision of mandated leave policy. Fourth, the article drew together a wide range of options that have proposed and enacted both here in the United States and in other countries concerning the provision of income supports for parents of infant and evaluated the advantages and disadvantages of these options. It was argued that income support schemes which allow for (1) parental choice in terms of care and (2) inclusion of different income groups offer relative advantages over other alternatives in terms of both equity and political feasibility.

In the projected wake of the largest deficits ever yet seen in the United States, it seems especially urgent that adequate investments be made in the citizens who will need to bear the burden of this debt. Today's newborn children will need to be far more productive than

today's workforce in order to provide not only for themselves, but also for the debt bequeathed by the policies of the current generation. If other issues such as global warming also need to be dealt with, today's children will face even greater challenges that will demand substantial human resources to solve.

Appendix A

The rights of parents of small children in Norway (Excerpts)

1. Parental and adoption benefits

Parental Benefits.

The right to parental and adoption benefits is laid down in chapter 14 of the National Insurance Act. B parental and adoption benefits we understand the amounts that are intended to replace wages and salaries during leave of absence. To qualify for parental or adoption benefit the recipient must have care of the child and stay home from work during leave of absence. If the recipient chooses to take partial leave from employment, the parental or adoption benefit is scaled in proportion to the time worked. If the recipient has a time account agreement, the parental or adoption benefit is scaled in proportion to the reduction in working hours. In order to be entitled to parental or adoption benefit, the mother must have been employed and earning a pensionable income for at least 6 of the 10 months immediately prior to the commencement of the benefit period, while the father must have been employed and earning a pensionable income for 6 of the 10 months immediately prior to the commencement of his part of the benefit period. The parental benefit period is either 52 weeks with 80 per cent pay or 42 weeks with 100 per cent pay.

The time account scheme

Under the time account scheme, parents may combine parental or adoption benefits with shorter working hours. The period of full-time leave of absence is reduced, but the size of the parental or adoption benefit remains the same. The benefit period is extended and the parents can combine work with care of the child without loss of income. The time account scheme may be used by employees, self-employed persons and freelancers who are entitled to a parental or adoption benefit and who have worked more than half of a full-time post. Both mother and father may use the time account. They may choose to use their time accounts simultaneously or consecutively.

Lump sum maternity and adoption grants

Women who do not quality for parental or adoption benefit will receive a lump sum grant. All women therefore receive some form of national insurance benefit when they give birth to or adopt a child. The lump sum grant is NOK 32,138 (2000). The size of the lump sum grant is fixed by the Storting. The grant is not subject to tax. In the case of multiple births or adoptions, the grant is payable for each child.

2. Cash benefit scheme for families with small children

Provision for the cash benefit scheme is made in the Cash Benefit Act. The right to the cash benefit applies from the month after the child's first birthday up to and including the month of the child's third birthday. Parents are not entitled to receive cash benefits while they are receiving full parental/adoption benefits. However, parents who make use of the time account scheme may receive parental or adoption benefits at the same time as the cash benefit. The cash benefit is payable for each child without means or needs testing and it is tax-free.

3. The right to leave of absence

Parents have a number of other rights relating to childbirth and adoption, parallel to and in addition to their rights to parental and adoption benefits. These are often rights to leave of absence without entitlement to pay. Each parent is entitled to up to one year's unpaid leave for each child in addition to the parental or adoption benefit period. This leave must be taken in conjunction with statutory leave in connection with pregnancy, birth, adoption or taking over the care of foster children. Parents may take this leave simultaneously. Employees who have sole responsibility for the care of a child are entitled to up to two years' additional leave for each child (three years in all).

4. The right to leave of absence if the child or childminder is ill Sick children

Employees who have the care of children under the age of 12 are entitled to leave with pay (care pay) to look after sick children. Each parent is entitled to leave with care pay for up to 10 days per year. Parents with more than two children are entitled to 15 days each. Single providers are entitled to 20 days' leave to look after sick children, or 30 days if they have the care of more than two children under the age of 12.

Sick childminders

An employee is also entitled to leave with care pay according to the above rules, if the person responsible for the daily supervision of the child (e.g. the other parent, a childminder or day-care teacher) falls ill. These days are taken from the same quota as the days to which the employee is entitled if a child is ill.

Chronically ill or disabled children

An employee who has the care of a chronically ill or disabled child is entitled to up to 20 days' care pay per year. If this employee is a single provider, he or she is entitled to 40 days' care pay.

5. The right to shorter working hours

Both the mother and father are entitled to work shorter hours if this is necessary for strong welfare reasons, such as the desire and need of parents of small children to spend more time with their children. Permission to work shorter hours can only be granted if this will not seriously inconvenience the enterprise concerned. Disputes between employers and employees are settled by the labour inspection office. Practice of the rules indicates that the inconvenience to the enterprise must be considerable before an application for shorter working hours can be denied.

6. Financial support schemes

In addition to parental and adoption benefits for working parents, there are a number of financial support schemes and special tax rules for families with children. The right to child benefit is laid down in the Act relating to Child Benefit. Child benefit is the most important social security benefit for families with children. Anyone living in Norway and supporting children under the age of 18 (from 1 May 2000 child benefit will also be payable for 16 and 17-year-olds) has the right to child benefit. This right applies from the month after the child is born or after taking over the care of an adopted child, up to and including the month before the child reaches 18. Parents lose the right to child benefit if the child enters into marriage or partnership.

A single provider with a child or children between nil and three years of age is entitled to an additional young child supplement if he/she is entitled to child benefit for one more child than he/she actually supports (pursuant to the Children's Act) and he/she is entitled to the full transitional benefit (pursuant to the National Insurance Act). One additional young child supplement is payable per single provider. This supplement is payable from the month following the birth of the child until the month in which the child

reaches three years of age. Single providers with children under the age of 18 are entitled to child benefit for one child more that they actually have (additional child benefit).

Tax rules for families with children

Persons with dependants are entitled to certain deductions in income tax.

Tax allowance for dependants

The tax allowance for dependants is laid down in the Tax Act. Anyone providing for children under the age of 19 is entitled to a tax allowance. Providers with no income receive the same amount in cash. In 2000, the tax allowance amounts to NOK 1,820 per child per year.

Tax allowance for child-care expenses

Parents of children under the age of 12 are entitled to a tax allowance for child care expenses. This is a deduction in taxable income for substantiated child-care expenses. The maximum allowance is NOK 25,000 for one child and NOK 30,000 for two or more children.

Persons who have the care of small children Persons who have the care of small children earn pension points, so-called 'care points'. They can earn 3.00 pension points annually for unpaid care of children under the age of seven. Points for care work are allocated automatically to the person receiving child benefit. Persons who have the care of disabled children over the age of seven can apply for care points. If the child is receiving attendance benefits at rate 3 or 4, care points are credited automatically.

7. Pupils and students with loans from the state educational loan fund

Maternity grant from the State Educational Loan Fund

Women who give birth while they are studying are entitled to a maternity grant from the State Educational Loan Fund for the last 3 weeks prior to delivery and for the first 39 weeks after delivery. The size of the grant is equivalent to the maximum grant payable to the mother by the State Educational Loan Fund. If part of the 42 weeks coincides with the summer holidays, a grant may also be provided for this period. If both parents are studying, the father may receive a grant if he is responsible for the care of the child. The grant may also be shared between the parents.

8. Health and social services

Health clinics

Health clinics are part of the statutory municipal health services and are provided for all children. Their activities comprise preventive and health-promoting activities for babies, infants and their families. This includes vaccinations, medical examinations and guidance on child-related matters or child-parent relationships. Everyone who gives birth for the first time is visited by the district nurse. Many clinics also offer this service for later children. Some clinics offer prenatal care, prenatal courses and post-natal checkups. Health clinics work in close cooperation with other municipal health and social services. Their services are free of charge.

Respite schemes and personal contact schemes

Local authorities are obliged to provide respite schemes and personal contact schemes as part of their social services. Respite is offered to families with particularly burdensome care responsibilities. Help is provided in and outside the home. Personal contacts are provided, for example, for children with functional disabilities and for children in families with various social and health-related problems. The personal contact can help to give the child a more varied and meaningful leisure time. Under the provisions of the Social Services Act, local authorities are also obliged to offer practical help in the home to persons with special needs. Such special needs may arise as a consequence of a parent's or child's handicap, illness or for other reasons.

Family counselling

The family counselling service is laid down in the Family Counselling Service Act. Family members who experience problems or difficulties within the family can contact the family counselling service for advice and guidance, on behalf of the whole family, the parents or individual members. Each county has a family counselling service. The family counselling service also provides mediation prior to divorce. Mediation is compulsory for all couples with joint children under the age of 16. The purpose of mediation is to help parents to reach an acceptable agreement on where the child is to live, access, etc. after the marriage has broken down.

Parental guidance

Parental guidance is available at municipal health clinics and in day care centres. Here parents can exchange experiences and discuss questions relating to child up-bringing and receive information and guidance about children's needs and development. Health clinics, day care centres and schools can be of help in finding other forms of assistance if the family so wishes.

Excerpted from: Norwegian Ministry of Children and Family Affairs (2000). The Rights of Parents of Small Children in Norway. 36 pages. English version. (Retrieved on February 28, 2004 from http://odin.dep.no/bfd/engelsk/publ/handbooks/004071-120005/index-dok000-b-n-a.html)

Appendix B National Partnership for Women and Families: Models for Paid Parental Leave

Table B.1: Funding Alternatives

Payroll taxes.

Payroll taxes are already collected for social security, Medicare, unemployment compensation and, in some states, disability insurance. They can be collected from the employer (based on a percentage of payroll paid) or from the employee (based on a percentage of salary received) or both. Because they are flat percentage rates, they are inherently regressive taxes, a problem which can be ameliorated by a progressive benefits structure.

"Shared responsibility."

This phrase refers to funding for family leave benefits in which three parties - the employer, the employee, and the state government B A share responsibility" for providing benefits. For example, the state may match employers' contributions of one-third of the cost of providing paid leave so that one-third is paid by the employer, one-third by the state, and one third by the employee (the latter in foregone wages).

General funds.

States can simply allocate some of their general funds for family leave benefits programs, either as a one-time appropriation or on an ongoing basis, to people who meet the eligibility criteria of the program.

Child care funds.

States can use child care funds, such as those made available through the Child Care and Development Block Grant, to provide income for eligible low-income working parents who elect to stay home to care for their infants. Because these funds are for child care, they are limited to parental leave and carry with them the state and federal income eligibility criteria applicable to child care programs.

TANF and MOE supplemental funds.

Each state receives a Temporary Assistance for Needy Families (TANF) block grant each year. In order to receive the TANF block grant, the state must meet a maintenance of effort (MOE) obligation, requiring the state to spend at least a specified level of state funds for benefits and services to needy families. States can use TANF or MOE dollars to fund the low-income family component of a paid family leave initiative.

Table B.1: Funding Alternatives, cont.

Tax expenditures.

Tax credits and other tax incentives are often suggested to encourage employers to provide paid leave.

Potential federal demonstration or grants monies.

There are several federal bills that would authorize a federal program to make grants to state or local governments to pay for the federal share of the cost of providing wage replacement for individuals responding to their family's caregiving needs.

Establishing a State Temporary Disability Insurance (TDI) Program A state program that provides partial wage replacement to employees who are temporarily disabled for non-work-related reasons, including pregnancy and childbirth.

Source: National Partnership for Women & Families (2001). Family Leave Benefits: A Menu of Policy Models for State and Local Policy Leaders. Washington, D.C.: National Partnership for Women and Families.

Table B.2: Model Legislation	Prototypes in Enacted and Proposed		
Model	Prototypes: Enacted or proposed legislation		
Establishing a State Temporary Disability Insurance (TDI) Program	Five states (New York, California, New Jersey, Rhode Island, and Hawaii and Puerto Rico) have state-required TDI benefits programs and have had them for over 40 years.		
Expanding a State Temporary Disability Insurance (TDI) Program	On September 23, 2002, California Governor Gray Davis signed SB 1661 into law. This legislation expands the state's disability insurance program to provide up to 6 weeks of wage replacement benefits to workers who take time off work to care for a seriously ill child, spouse, parent, domestic partner, or to bond with a new child.		
Family Leave Benefits Insurance Program	In Massachusetts, Senate leaders have proposed a 3-year pilot program, for a New Families Trust. The program provides men and women with up to 12 weeks to care for a newborn or newly adopted child with benefits up to 50 percent of their average weekly salary. The Governor has proposed a similar program that provides men and women with up to 12 weeks to care for a newborn or newly adopted child with benefits up to 50 percent of their average weekly salary. Her proposal is limited to low-income families. Families earning more than 250% of poverty and no more than \$88,250 are responsible for paying back a portion of the benefits over a five-year period. Both programs are funded by state surpluses.		
Set-Aside for Family Leave Benefits	In his budget proposal to the Vermont Legislature, Governor Howard Dean recommended a general fund appropriation of \$750,000 for a pilot parental leave benefits program.		

Table B.2: Model Legislation, cont.	Prototypes in Enacted and Proposed		
At-Home Infant Care" (AHIC) Program	In Minnesota, eligible families receive a stipend of 90% of the child care payment rate (minus a co-pay based on the income of the family while on the program) for up to one year		
Expanded Use of Sick Leave	In 1999, Governor Gray Davis signed legislation, effective January 1, 2000, that requires California employers that offer sick leave to let employees use at least the amount of sick leave earned in six months to care for a sick child, parent, or spouse. Similarly, Wisconsin's state Family and Medical Leave law, enacted in 1988 as one of the nation's first comprehensive state family and medical leave laws, specifically allows employees to use their accrued sick leave when out of work temporarily for any covered family or medical reason.		

Source: National Partnership for Women & Families (2001). Family Leave Benefits: A Menu of Policy Models for State and Local Policy Leaders. Washington, D.C.: National Partnership for Women and Families.

Appendix C Family and Medical Benefits Available under the Canadian Employment Insurance System

Types of Benefits Available

Regular Benefits: Regular benefits are paid to people who have lost their job and want to return to work. To receive these benefits you must be actively looking for another job and be willing and able to work at all times.

Maternity, parental and sickness benefits: Maternity/parental benefits are paid to individuals who are pregnant, have recently given birth, are adopting a child or are caring for a newborn. Sickness benefits are paid to those who are unable to work due to sickness, injury, or quarantine.

Compassionate care benefits: Compassionate care benefits are paid to persons who have to be away from work temporarily to provide care or support to a family member who is gravely ill with a significant risk of death.

Type of Benefit	Who is eligible?	How long can you receive maternity, parental or sickness benefits?
Maternity benefits:	Mothers (birth mothers and	15 weeks
beliefits.	surrogate mothers)	
Parental	Biological and	35 weeks
benefits:	adoptive parents	
Sickness benefits:	People whose illness, injury or	15 weeks
	quarantine	
	prevents them from	
	working	

As of March 3, 2002 if your claim is still active or starting on that date or after, you could receive up to a maximum of 65 weeks of combined sickness, maternity and parental benefits instead of the normal combined maximum of 50 weeks.

To be eligible for maternity, parental or sickness benefits you must show that:

- your regular weekly earnings have been decreased by more than 40%; and
- you have accumulated 600 insured hours in the last 52 weeks or since your last claim, (this period is called the qualifying period).

The qualifying period is the shorter of:

- the 52 week-period immediately before the start date of a claim, or
- the period since the start of a previous EI claim if that claim had started during the 52 week-period.

How much will you receive?

The basic benefit rate is 55% of your average insured earnings up to a maximum amount of \$413 per week. Your EI payment is a taxable income, meaning provincial (if it applies) and federal taxes will be deducted. You could receive a higher benefit rate if you are in a low-income family (an income of less than \$25,921) with children and you or your spouse receive the Canada Child Tax Benefit (CCTB), you are entitled to the Family Supplement. The Family Supplement is a feature of Employment Insurance (EI) that provides additional benefits to low-income families with children.

Source: Canadian Department of Social Development. (2004). Welcome to Employment Insurance Online. http://www.hrdc-drhc.gc.ca/ei-ae/employment-insurance.shtml

Notes

- (1) More detailed discussions of the public policy debates and the use of economic theory in these debates can be found in Trzcinski (2002, 1995, and 1994).
- (2) As a justification for parental leave, Summers (1989) prefers the adverse selection argument as proposed by Michael Rotschild and Joseph Stiglitz (1976). Under this argument, imperfect information would lead to a sorting of workers whereby firms that offer the benefit are likely to disproportionately attract workers more likely to use a benefit (such as leave or health. Because rational firms would be unlikely to create such a risk for themselves, the market as a whole would undersupply leave or health insurance. He also posits an alternative argument that could justify mandated benefits based on the Shapiro-Stiglitz (1984) model of a noncompetitive labor market with either efficiency wages or monopsony power. Although Summers does not develop this argument fully, the existence of power differentials between employers and employees would be less likely to lead to the efficient allocation of fringe benefits predicted under the existence of perfect markets.
- (3) A specific example would be a firm that received the designation of being a socially and environmentally responsible firm. For these firms the costs of avoiding the negative-externality behavior may be less than for other firms. Hence for a relatively smaller cost, these firms can gain a competitive advantage with customers or potential employees who base their consumption and employment choices on monetary and non-monetary criteria. Under this scenario, however, equilibrium will be reached before the negative externalities are reduced to a socially optimal level. That is, as more firms behave in ways that reduce or eliminate social externalities, the "marketing" advantage of this behavior will be diluted and eventually lost completely.
- (4) An alternative explanation is that employees look at how their decisions affect them not only as individuals but also as members of clearly defined groups. Some employees may also want to avoid bearing the costs associated with human capital investment in children and will want to obtain an advantageous in both the market and non-market sphere by blocking organizational changes that are needed by those who provide care. This type of argument has been well

developed by some feminist economists (See for example, Folbre, 1994).

(5) Economists also argue that the distribution of payroll taxes under an unemployment insurance scheme is analytically unimportant for assessing distributional effects. Despite the widespread acceptance of this approach among economists, it is nevertheless an important element of debate in the public policy arena in almost all countries with such a financing mechanism for social protections.

References

Allen, J. (1988), European infant care leaves: Foreign perspectives on the integration of work and family roles," in *The Parental Leave Crisis: Toward a National Policy*, E. Zigler and M. Frank, Eds., 245-275. New Haven: Yale University Press.

Baum II, C. L. (2003). Does early maternal employment harm child development? An analysis of the potential benefits of leave taking. *Journal of labor Economics*: 21(2): 409-

Baumol, W. & Blinder, A. (1982). *Economics: Principles and Policy*. New York: Harcourt Brace Jovanovich, Inc.

Blank, R. M., Ed. (1994) Social Protection versus Economic Flexibility: Is There a Trade-off? National Bureau of Economic Research, Comparative Labor Markets Series. Chicago: The University of Chicago Press.

Bronfenbrenner, U. (1988). Strengthening family systems, in *The Parental Leave Crisis: Toward a National Policy*, E. Zigler and M. Frank, Eds., 143-160. New Haven: Yale University Press.

Cadwell K. (1999). Reaching the goals of "Health People 2000" regarding breastfeeding. *Clinics in Perinatology* 26 (2): 527-537.

Chatterji, P. & Markowitz, S. (2004). Does the length of maternity leave affect maternal health? National Bureau of Economic Research Working Paper #10206.

Chatterji, P. & Frick K. (2003). Does returning to work after childbirth affect breastfeeding practices? National Bureau of Economic Research 2003, Working Paper #9630.

Commission of the European Communities (2003). Report from the Commission on the Implementation of Council Directive 96/34/EC of 3rd June 1996 on the framework agreement on parental leave concluded by UNICE, CEEP, and the ETUC. Brussels: COM (2003) final.

Cornea, G. A. & Danziger, S. Eds. (1997). Child Poverty and Deprivation in Industrialized Countries, 1945-1995. Oxford: Clarendon Press. Danziger, S. & Waldfogel, J. (2000). Securing the Future: Investing in Children from Birth to College. New York: Russell Sage Foundation.

Dorfman, R. & Dorfman, N., Eds. (1977). Economics of the Environment. New York: W. W. Norton & Co.

Duncan, G. & Brooks-Gunn, J. (1999). Consequences of Growing Up Poor. New York: Russell Sage Foundation.

European Commission (2002). Family Benefits and Family Policies in Europe. Employment and social affairs, social security and social integration. Brussels: Directorate-General for Employment and Social Affairs.

Fagnani, J. (1999). Parental leave in France, pp. 69-84 in Moss, P. & Deven, F (Eds.), *Parental Leave: Progress or Pitfall?* (NIDI CBGS publications, 35) Brussels: Vlammse Gemeenschap.

Folbre, N. (1994). Who Pays for the Kids? Gender and the Structures of Constraint. London: Routledge.

Frank, M. & Lipner, R. (1988), History of maternity leave in Europe and the United States," in *The Parental Leave Crisis: Toward a National Policy*, E. Zigler and M. Frank, Eds., 3-22. New Haven: Yale University Press.

Gauthier, A.H. (2000). Public policies affecting fertility and families in Europe: A survey of the 15 member states. Paper prepared for the European Observatory on Family Matters, Annual Seminar 2000, Low Fertility, families and Public Policies, Sevilla (Spain, 15-16 September 2000.

Gjerdingen, D.K. & Center, B. A. (2003). First-time parents' prenatal to postpartum changes in health and the relation of postpartum health to work and partner characteristics. *The Journal of the American Board of Family Practice (JABFP)*, 16(4): 304-311.

Gjerdingen, D.K.& Froberg, D. (1991). Predictors of health in new mothers. Social Science and Medicine, 33(12): 1399-407.

Gjerdingen, D.K., Froberg, D.G., Chaloner, K.M., & McGovern, P.M. (1993). Changes in women's physical health during the first postpartum year, *Archives of Family Medicine* 2(3): 277-83.

Gjerdingen, D.K., Froberg, D.G., & Kochevar, L. (1991). Changes in women's mental and physical health from pregnancy through six months postpartum. *Journal of Family Practice*, 32(2): 161-6.

Haas, L. & Hwang, P. (1999) Parental leave in Sweden, pp. 45-68 in Moss, P. & Deven, F (Eds.), *Parental Leave: Progress or Pitfall?* (NIDI CBGS publications, 35) Brussels: Vlammse Gemeenschap.

Heckman, J. J. (1999). Policies to foster human capital. NBER Working Paper Series, Working Paper 7288, Cambridge, MA: National Bureau of Economic Research.

Heinig M.J. (1998). The American academy of pediatrics recommendation on breastfeeding and the use of human milk. *Journal of Human Lactation* 14 (1): 2-3.

Heymann, J., Earle, A., Simmons, S., Breslow, S., & Kuehnhoff, A. (2004). The work, family, and equity index: Where does the United States stand globally? The Project on Global Working Families. Boston: Harvard School of Public Health. www.workingfamilies.org

Human Resources Development Canada (2002). Supplements to EI maternity and parental benefits. Ottawa: HRDC

Human Resources Development Canada (2000). Information on supplemental unemployment benefit (SUB) plans. Human Resources Development Canada (2002b). Supplements to EI maternity and parental benefits. Ottawa: HRDC.

Humenick S, Hill P. & Spiegelberg P. (1998). Breastfeeding and health professional encouragement. *Journal of Human Lactation* 14 (4): 305-310.

International Labour Organization (1994) Conditions of Work Digest: Maternity and Work. Geneva: International Labour Organization. Kahn, RS, Zuckerman, B.; Bauchner, H; Homer, C.J.; & Wise, P. H. (2002). Women's health after pregnancy and child outcomes at age 3 years: A prospective cohort study. American Journal of Public Health, 92(8): 1312-1318

Kamerman, S. & Kahn, A. (1981). Child Care, Family Benefits, and Working Parents: A Study in Comparative Policy. New York: Columbia University Press.

Kamerman, S. (1988), "Maternity and parenting benefits: An international overview," in *The Parental Leave Crisis: Toward a National Policy*, E. Zigler and M. Frank, Eds., 235-244. New Haven: Yale University Press.

Kaufman, B. (1986). The Economics of Labor Markets and Labor Relations. Chicago: The Dryden Press.

Lindberg, L. D. (1996). Women's decisions about breastfeeding and maternal employment. *Journal of Marriage and the Family, 58*: 239-251.

Lovell, V. (2003). Estimating the benefits of paid family and medical leave: A colloquium report. Washington, D.C.: Institute for Women's Policy Research.

Mahoney, M.C. & James, D.M. (2000). Predictors of anticipated breastfeeding in an urban, low -income setting. *Journal of Family Practice* 49: 529-533.

McGovern, P.M, Dowd, B., Gjerdingen, D., Moscovice, I., Kochevar, L., & Lohman, W. (1997). Time off work and the postpartum health of employed women. *Medical Care*, *35*(5): 507-21.

McGovern, P., Dowd, B., Gjerdingen, D, Moscovice, I, Kochevar, L. & Murphy, S. (2000). The determinants of time off work after childbirth. *Journal of Health Politics, Policy and Law*, 25(3): 527-564.

McGovern, P., Gross, C, Gjerdingen, D., Dowd, B., Rockwood, T., et al. (2003). Changes in health and employment after childbirth. Paper presented at the 7th International women's Policy Research Conference, Washington, D.C., June 22-24, 2003.

Midgley, J. (2000). The institutional approach to social policy. pp. 365-376 in J. Midgley, M. B. Tracy, & Mi. Livermore (Eds). *The Handbook of Social Policy*. Thousand Oaks: Sage Publications, Inc. Midgley, J., Tracy, M.B. & Livermore, M., Eds. (2000). *The Handbook of Social Policy*. Thousand Oaks: Sage Publications, Inc.

Moss, P. & Deven, F. (Eds.) (1999). *Parental leave: Progress or Pitfall?* (NIDI CBGS publications, 35) Brussels: Vlammse Gemeenschap.

Pediatric Report's Child Health Newsletter (1991) Effect of maternal employment on breast-feeding. 8(4): 30.

National Partnership for Women & Families (2001). Family Leave Benefits: A Menu of Policy Models for State and Local Policy Leaders. Washington, D.C.: National Partnership for Women and Families.

Roe, B. Whittington, L.A., Fein, S. Beck, & Teisl, M.R. (1999). Is there competition between breast-feeding and maternal employment? *Demography*, 36:2: 157-171.0-

Rothschild, M. & Stiglitz, J.E. (1976). Equilibrium in competitive insurance markets: An essay on the economics of imperfect information, *Quarterly Journal of Economics*, 90: 629-50.

Ruhm, C. J. (2000a). Parental leave and child health. *Journal of Health Economics* 19: 931-960.

Ruhm, C. J. (2000b). Parental employment and child cognitive development. NBER Working Paper Series. Working paper 7666. Cambridge, MA: National Bureau of Economic Research.

Russell, R. R. & Wilkinson, M. (1979). *Microeconomics: A Synthesis of Modern and Neoclassical Theory*. New York: John Wiley and Sons.

Schmied V. & Barclay L. (1999) Connection and pleasure, disruption and distress: women's experience of breastfeeding. *Journal of Human Lactation* 15 (4): 325-333.

Shapiro, C. & Stiglitz, J.E. (1984). Equilibrium unemployment as a worker disciplining device, *American Economic Review*, 74, 433-44.

Spalter-Roth, R. M. and Hartmann, H. (1988), Unnecessary Losses: Costs to Americans of the Lack of Family and Medical Leave. Washington, D.C.: Institute for Women's Policy Research.

Summers, L.H. (1989). Some simple economics of mandated benefits. *American Economic Review 79(2):* 177-183.

Sylvester, K. (2001). Caring for our youngest: Public attitudes in the United States. *The Future of Children 11(1)*: 53-61.

Trzcinski, E. (2003). The Employment Insurance Model: Maternity, Parental, and Sickness Benefits in Canada, in Gender and Work in Comparative Perspective, H. Gottfried & L. Reese (Eds.). New York: Lexington Books

Trzcinski, E. (2003). Women in Germany, pp. 233-262 in Lynn Walter, Editor, *The Greenwood Encyclopedia of Women's Issues Worldwide: Europe*. London: Greenwood Publishing Group.

Trzcinski, E. (2002). Work and family policies: Economic burden or long-term economic stimulus?" pp. 185-202 in E. Jurczynskiej-McCluskey (Ed.) *Spolecznosci Lokalne I Regionalne: Miedzy Teoria Socjologiczna a Praktyka*. Bielsko-Biala: Wydawnictwo Akademii Techniczno-Humanistyczney w Bielsku-Bialej.

Trzcinski, E. & W. T. Alpert (2000). "The Economics of Family and Medical Leave in Canada and the United States," pp. 129-180, In W.T. Alpert and S. Woodbury (Eds.) *Employee Benefits and Labor Markets in Canada and the United States*, Kalamazoo, MI: W.E. Upjohn Institute.

Trzcinski, E. (1995). The use and abuse of neoclassical theory in the political arena," Chapter 15, pp. 231-247. In E. Kuiper and J. Sap, Editors, *Out of the Margin: Feminist Perspectives on Economic Theory*, London: Routledge.

- Trzcinski, E. (1994). Family and Medical Leave, Contingent employment, and flexibility: A feminist critique of the U.S. approach to work and family policy, *Journal of Applied Social Sciences*, Fall/Winter 18(1), 71-88.
- Trzcinski, E. & Alpert, W.T. (1994). Changes in pregnancy and parental leave benefit in the U.S. and Canada: Judicial decisions and legislation," *Journal of Human Resources*, 30(2), 534-554.
- Trzcinski, E. & Finn-Stevenson, M. (1991). A response to arguments against parental leave: Findings from the Connecticut Survey of Parental Leave Policies, *Journal of Marriage and the Family*, 52(3), 445-460.
- Trzcinski, E. (1991). Separate versus equal treatment approaches to parental leave: Theoretical issues and empirical evidence," *Law and Policy*, 13(1), 1-33.
- Trzcinski, E. (1991). Employers' parental leave policies: Does the labor market provide parental leave?" In Hyde, J. S. and M. J. Essex, Editors, pp. 209-228_Parental Leave and Child Care: Setting a Research and Policy Agenda. Philadelphia: Temple University Press.
- Trzcinski, E. (1991). National consumption patterns and the prevalence of leave policies: The role of market failure, government intervention, and Equity," pp. 383-395, In Robert Mayer, Ed., *Enhancing Consumer Choice*, ACCI, 1991.
- U.S. Chamber of Commerce (1987). Statement of the Chamber of Commerce of the United States on S.249, The `Parental and Medical Leave Act of 1987' to the Subcommittee on Children, Family, Drugs, and Alcoholism of the Senate Committee on Labor and Human Resources. Washington, D.C.: U.S. Government Printing Office.
- U. S. Department of Health and Human Services. (2000) HHS Blueprint for Action on Breastfeeding. Washington, DC: Department of Health and Human Services Office of Women's Health.
- U.S. Department of Labor (2000). Family and Medical Leave Act Survey: Balancing the Needs of Families and Employers, 2000 Update.

A report submitted by Westat to the U.S. Department of Labor. Report retrieved from http://www.dol.gov/asp/fmla/main2000.htm

U.S. Department of Labor, Bureau of Labor Statistics, (1991) Employee Benefits in Medium and Large Establishment, 1991; Employee Benefits in Small Establishments, 1989.

U.S. Small Business Administration (1989). Family and Medical Leave: The Impact on Small Business, In *Focus on the Future: Small Business in the 1990s*. Proceedings of the 10th National Legislative Conference on Small Business Issues, Washington, D.C.: U.S. Small Business Administration.

Waldfogel, J., Han, W-J., Brooks-Gunn, J. (2002). The effects of early maternal employment on child cognitive development. *Demography*, 39(2): 369-392.

Weimer, D. & Vining, A. (1989). *Policy Analysis: Concepts and Practice*. Englewood Cliffs, NJ: Prentice Hall.

Wisensale, S.K. (2001). Family Leave Policy: The Political Economy of Work and Family in American. London: M.E. Sharpe.

Yankauer, A. (1994). A classic study of infant mortality - 1911-1915. *Pediatrics*, 94(6): 874-878.

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