Volume Title: Social Protection versus Economic Flexibility: Is There a Trade-Off?

Volume Author/Editor: Rebecca M. Blank

Volume Publisher: University of Chicago Press

Volume ISBN: 0-226-05678-3

Volume URL: http://www.nber.org/books/blan94-1

Conference Date: December 14-15, 1992

Publication Date: January 1994

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Chapter URL: http://www.nber.org/chapters/c11262

Chapter pages in book: (p. 301 - 332)

10 Social Welfare Programs for Women and Children: The United States versus France

Maria J. Hanratty

One of the central dilemmas in social welfare policy is how to protect families from financial hardship without causing them to become too reliant upon social assistance. The United States' approach to this dilemma has been to restrict cash assistance to the least "employable" segments of the population (single parents or families with a disabled adult) and to provide means-tested aid to these groups on an extended basis. This approach guarantees that certain segments of the population receive minimal income support, while preserving work incentives for the remainder of the population.

The French have taken a different tack to resolve this dilemma. First, rather than target aid only to the unemployable, France provides assistance to nearly all families with children. Second, rather than encouraging some segments of the population to remain permanently out of the labor force, France encourages all women with children to work. Thus, while France provides generous transfer assistance to families when their children are young, it sharply reduces transfer payments when the youngest child reaches age 3. In addition, other French policies (e.g., universal public nursery school, universal medical insurance, and mandatory maternity leave) make it easier for women to enter the labor force when their children reach age 3.

This paper will examine the impact of two time-limited transfer programs in France on the employment rates of women with children. The first, the Single-Parent Allowance (API) program, is a means-tested program for single parents. Much like the U.S. Aid to Families with Dependent Children (AFDC) program, this program offers means-tested assistance to single parents under a

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The author is grateful for comments from Rebecca Blank, John Abowd, Timothy Smeeding, and conference attendees. Support from the Ford Foundation is gratefully acknowledged.

high implicit tax rate. However, unlike the AFDC program, this program is provided only until the youngest child reaches age three or for one year after divorce/separation from or death of a spouse. The second program, the Parental Education Allowance, provides a payment to women who have three or more children and who take an employment leave following the birth of a child. Like the API, this program continues until the youngest child reaches age 3.

The French experience with time-limited benefits is relevant to the current U.S. debate over welfare reform, since many analysts in the United States have argued for a limit on the length of time that a single parent may receive welfare. They argue that this policy would prevent families from permanently relying on welfare as a means of support and thus would promote the economic sufficiency of single-parent families (Ellwood 1988). Currently, little is known about the impact of time-limited benefits; while there is a time limit on the unemployment insurance program, the United States has not experimented with placing a limit on welfare benefits for single-parent families. Thus, an examination of the French experience may be an important first step in determining how such a policy might affect the United States.

The French experience is also relevant to our understanding of the tradeoffs between economic protection and economic flexibility. One of the classic complaints about the U.S. welfare system is that it creates an "underclass" of families with little attachment to the labor force.[1] The French system of time-limited benefits may avert this problem if it is more successful in integrating women into the labor force. Placing a time limit on welfare benefits may increase work efforts of single parents in the short run, since it will decrease the returns to remaining out of the labor force. In addition, it may have important long-run effects: women may invest more in education and training if they anticipate that they cannot permanently rely on welfare for support. Finally, this policy may have important spillover effects if reducing welfare use by one family decreases the incentive for other families in the community to use welfare.[2]

A second component of the social protection–economic flexibility debate is the extent to which investments in children affect the future productivity of the work force. For younger children, France provides greater assistance in the form of both cash transfers and medical insurance coverage than does the United States. For older children (age 3–5), France provides less direct income support to some groups of families than the United States does, but it also more invests heavily in education through its high-quality universal public nursery school system.[3] Finally, the French system clearly provides greater in-

1. See Murray (1984) for a recent exposition of this view.
2. See Wilson (1987) for an exposition of this view.
3. Kamerman (1991) argues that attendance at public nursery school in France is important to later school performance.

ducement for single mothers with children over age 3 to work. This in turn may have important effects on their children's development.[4]

This paper adds to excellent descriptions of social welfare institutions in France for women and children by Starzec and David (1991), Jenson and Kantrow (1990), and Lefaucheur (1991). For a review of the extensive U.S. literature on poverty and social welfare programs, see Sawhill (1989) or Moffit (1992). Finally, Ray, Jeandidier, and Carvoyeur (1988) present an analysis of family allowances for a sample of women in Luxembourg and Lorraine. The chief contribution of this paper is the explicit comparison of programs and their impact on women's work effort in France and the United States.

10.1 Social Welfare Institutions in the United States and France

10.1.1 Cash Assistance Programs

This section provides information on social welfare programs in France and the United States in 1987 for families with children. These programs are summarized in appendix A.[5] All dollar amounts are in units of 1990 U.S. dollars.[6]

France

France offers cash assistance to families with children through a complex set of child and family allowance programs administered by the federal government. These programs are designed to serve multiple objectives: targeting assistance to families with children, increasing the French birth rate, and protecting economically vulnerable families (single parents and families with three or more children).

France offers assistance on a demogrant basis through its *Family Allowance Program.* This program offers assistance to all families with two or more children. Monthly payments increase with both the number and the age of children in the family: a family with two children ages 10–14 would receive a monthly

4. The desirability of encouraging mothers to work is controversial. On the one hand, a working mother may have less time to devote to her children; on the other hand, she may become a better role model if she is able to find a fulfilling job. See Blau and Grossberg (1990) for recent empirical research on this topic.

5. This analysis ignores the impact of differences in nonrefundable income tax subsidies to families with children. Under the French *Quotient Familial,* the marginal income tax rate declines with family size. Families compute their total tax liability by dividing taxable income by an index that varies by family size; they then compute their income tax liability on the basis of each share. In the United States, the federal income tax system allows families to claim a tax deduction for each dependent child.

6. To convert from French to U.S. dollars, this paper uses an estimate of the purchasing power parity for consumption of French relative to U.S. dollars in 1990 (OECD 1992). It adjusts this index for the relative inflation rates in each country from 1987 to 1990, using the gross domestic product deflators reported in International Monetary Fund (1992).

payment of $105, while a family with three children in the same age range would receive $257.

France offers three programs to assist economically vulnerable families on a time-limited basis. The first program is the Allowance for Young Children, which provides a monthly payment of $119 to families with a child under age 3. The "short form" of this program is provided on a non-means-tested basis from the fourth month after conception to the third month after pregnancy. The "long form" of this program continues for low-income families until the youngest child reaches age 3. To qualify for assistance, both the mother and child must complete a federally mandated schedule of medical care visits.

A second time-limited program is the Parental Education Allowance.[7] This program provides a monthly payment of $367 to parents who take a leave from their job following the adoption or birth of a child. Unlike the Young Child Allowance, this program is only available to families with three or more children. To qualify, the parent must have worked two of the preceding ten years. If they remain out of the labor force, parents may continue to receive the full benefit until their youngest child reaches age 3. After the third year, parents may receive a half-payment of $183 per month if they work part-time or enter a vocational education program.

A final program that assists families on a time-limited basis is the Single-Parent Allowance (API). This program assists low-income single parents who recently have had a child or experienced a divorce/separation from or death of a spouse. The maximum payment for a mother with two children is $730 per month. Like the U.S. AFDC program, this program is intended to temporarily assist single parents in times of crisis. Unlike the AFDC program, the API program tightly limits the duration of benefits. While a single parent in the United States may receive AFDC until her youngest child reaches age 18, a single parent in France may receive the API until her youngest child reaches age three or for up to twelve consecutive months within the eighteen months following the loss of a spouse.

France provides further cash assistance to vulnerable families through its Family Support Allowance, a small monthly payment provided on a non-means-tested basis to single-parent families. In addition, the Large-Family Supplement provides a monthly payment of $107 to low-income families with three or more children all over age 3. Finally, the Return to School Allowance provides a small payment to low-income families to defray the costs of school supplies at the beginning of the academic year.

France provides in-kind assistance to low-income families through its Housing Allowance program. This program provides cash payments to low-income families to help cover the costs of rent or mortgage payments. Both families

7. Despite the title of this program, the parent is *not* required to enter an education or training program to receive this benefit.

with a dependent child and newly married couples under age 40 may qualify for this program.

According to Starzec and David (1991), these programs provide assistance to a large number of families in France. By far the largest assistance program is the Family Allowance program, which served 3.6 million families in 1988, followed by the Return to School Allowance program (2 million children), the Young Child Allowance program (1.6 million families), and the Housing Allowance program (1.1 million households). The two time-limited programs were less extensive, with the Single-Parent Allowance serving 130,000 families and the Parental Education Allowance serving 160,000 families.[8]

United States

The U.S. transfer system differs from the French transfer system on a number of dimensions. First, while France provides assistance to all families with children, the U.S. system assists only low-income families. Second, the United States targets assistance more directly toward single-parent families. Finally, while the French programs provide greater assistance to families with young children, U.S. programs do not vary by age of children.

The main cash assistance program in the United States is Aid to Families with Dependent Children (AFDC). This joint federal-state program provides cash assistance primarily to low-income single-parent families with children. In 1987, some states also allowed two-parent households to receive AFDC under stricter eligibility requirements; however, two-parent families represented only 6 percent of all AFDC recipients in these states.[9] Monthly benefits vary substantially across states. In 1987, the maximum monthly benefit for a family of three ranged from $133 to $845 per month, with a median of $400 per month. This program served 3.8 million families, or approximately 64 percent of all poor single-parent families in 1987.

A second U.S. program that assists the low-income population is the Food Stamps program. This federal program provides low-income families and individuals with coupons that can be used to purchase food. In 1987, the maximum coupon amount for a family of three was $242, reduced by 30 cents for every

8. These programs appear to reach a large share of their target population. In 1987, there were 365,000 families in France with three or more children and a child under age 3 (author's calculations from the 1987 Enquête sur l'Emploi). Thus, the Parental Education Allowance reached an estimated 44 percent of all categorically eligible women. It is more difficult to compute the number of families eligible for the API. While the data available make it possible to identify single parents who are eligible for this program because they have a child under age 3 (84,000 in 1987), it is not possible to identify single parents who qualify because they have recently lost a spouse due to divorce/separation or death.

9. The Family Support Act of 1988 requires all states to provide assistance to families with two-parent families in which the principal earner is unemployed. However, partly due to more stringent eligibility requirements for this group, two-parent families remain a very small part (7 percent) of the AFDC population in 1991.

dollar of countable income. This program served 19.1 million individuals, or approximately 59 percent of all poor individuals in 1987.

Finally, the United States provides assistance to working poor families with children through the earned income tax credit. This program provides a refundable income tax credit equal to 14 percent of earnings, to a maximum of $900; it then decreases by 10 cents for every $1 of earnings above $7,300. This program served 7.5 million families in 1987; of these, 2.9 million received a cash refund.

The combined effect of these programs is illustrated in table 10.1, which

Table 10.1 **Transfers for Families with Children: the United States versus France, 1987 (1990 U.S. dollars)**

Number of Children/Age of Youngest Child (in years)	United States[a]		France[b]			
			Single-Parent Family		Two-Parent Family	
	Single-Parent Family Maximum	Two-Parent Family Maximum	Maximum	Minimum	Maximum	Minimum
1 child						
0	$5,701	$2,899	$ 7,439	$1,195	$ 4,613	$ 404
1	5,701	2,899	7,035	791	4,613	0
2	5,701	2,899	7,035	791	4,613	0
3+	5,701	2,899	3,685	791	2,997	0
2 children						
0	7,264	3,672	9,256	2,321	6,181	1,530
1	7,264	3,672	8,852	1,917	6,181	1,126
2	7,264	3,672	8,852	1,917	6,181	1,126
3+	7,264	3,672	4,973	1,917	4,565	1,126
3 children						
0	8,615	4,362	12,505	4,396	11,817	3,605
1	8,615	4,362	12,505	3,992	10,379	3,201
2	8,615	4,362	12,505	3,992	10,379	3,201
3+	8,615	4,362	8,955	3,992	7,261	3,201
4 children						
0	9,998	5,243	14,672	6,401	13,984	5,610
1	9,998	5,243	14,672	5,997	13,984	5,206
2	9,998	5,243	14,672	5,997	13,984	5,206
3+	9,998	5,243	11,122	5,997	10,434	5,206

Note: "Maximum" indicates maximum transfer payments for a family with no other income; "minimum" indicates transfer payments for a high-income family (over $24,000 for a family with one child, $27,000 for a family with two children, and $32,000 for a family with three children).

[a]U.S. transfers include food stamp and median AFDC benefits. Calculations assume that single-parent family is eligible for AFDC and that two-parent family receives food stamps only.

[b]French transfers include Family Allowances, Family Support Allowance, Parental Education Allowance, Allowance to Young Children, Large-Family Supplement, Return to School Allowance, Single-Parent Allowance, and Housing Allowance, as described in appendix A. Calculations assume that two-child family has one child age 10–14, that three-child family has two children ages 10–14, and that four-child family has two children ages 10–14 and one child age 15–16. Calculations also assume that family receives maximum housing allowance.

indicates the total transfer income available to families in each country. The first two columns indicate maximum transfer payments to single- and two-parent families in the United States. The next four columns indicate both maximum and minimum payments to single- and two-parent families in France.

This table highlights several differences between the two systems. First, maximum transfer payments are much more generous in France than in the United States. For example, a single parent with two children under age 3 would receive $8,850 in France and $7,260 in the United States, while a married couple with two children age 3 would receive $6,200 in France and $3,700 in the United States. Second, while the United States offers virtually no non-means-tested assistance, French demogrant payments can be quite substantial: the minimum income for a family with three children ranges from $3,000 to $4,000 in France, while the minimum income for a family with four children ranges from $5,000 to $6,000.

Third, while both countries provide higher transfer payments to single parents than to two-parent families, French payments also provide relatively high levels of support to families with three or more children. For example, the maximum payment for a married couple increases from $6,180 to $10,400 as the number of children increases from one to three, whereas they would increase from $3,700 to $4,400 in the United States. This reflects both the French goal of increasing the birth rate and the view in France that large families are economically vulnerable and need additional income support.[10]

Finally, transfer payments decrease substantially in France when the youngest child reaches age 3, reflecting the termination of French time-limited benefits. This decline is particularly large for economically vulnerable groups in France: single parents and families with three or more children. For example, the maximum payment to a single parent with two children declines from $8,852 to $4,973 when the youngest child reaches age three, while the payment to a couple with three children declines from $10,400 to $7,300. In the United States, transfers remain constant until the youngest child reaches age 18.

10.1.2 Medical Assistance Programs

In addition to providing more extensive income support than the United States does, France offers greater access to medical care through its universal health insurance program. This program covers nearly 100 percent of the population; it is administered through the social security system and financed through a payroll tax. Families must pay a coinsurance rate of 25 percent of physician fees, 20 percent of hospital charges, and 30 percent to 60 percent of pharmaceutical costs (Rosa and Lanois 1990). In addition, both private insurance and municipal assistance to low-income families may defray costs not covered by the federal program.

10. For example, Centre d'Étude des Revenus et des Coûts (1987) identifies both of these two groups as economically vulnerable.

The U.S. provides medical care to low-income families with children through its Medicaid program. This joint federal and state program offers comprehensive, first-dollar coverage of most medical services to low-income families with children. However, due to tight financial and categorical eligibility criteria, this program reaches just a fraction of the poor: only 53 percent of poor children were covered by the Medicaid program in 1987.

10.1.3 Day Care

France provides access to day care for a much broader segment of the population than does the United States. For children above age 3, France has made day care universally available through its public nursery school system. For children under age 3, France, like the United States, uses a combination of limited public provision and subsidies to increase access to care.

The key program in France that provides day care to families with children over age 3 is the French public nursery schools (*écoles maternelles*). This system is open at no cost to all children from the age that they are first toilet trained until the age of school entry (age 6). In 1989, 36 percent of children age 2, 98 percent of children age 3, and nearly 100 percent of children ages 4–5 attended nursery school. While the nursery school is viewed as a necessary component of a child's education, it also plays an important custodial role, since it is open for the majority of the working day: 8:30 A.M. to 4:30 P.M. daily except Wednesday, and one-half day on Saturday.[11]

For children under age 3, France offers a combination of publicly provided care and subsidies to help parents obtain day care. Subsidized day care is provided through its public daycare centers (*crèches*). While the most common form of the crèche is the public day nursery, the French are now experimenting with daycare centers operating on a smaller scale, in family homes or through parent cooperatives. While these centers are an attractive daycare option, there are far too few slots currently available to meet the demand for daycare services (Bergmann 1992).

France also subsidizes the purchase of day care from mother's helpers (*assistantes maternelles*)—federally certified childcare workers who care for children in their homes. These workers are exempted from both the employer's and employee's social security tax contributions, which together amount to over 40 percent of wages.[12] In addition, the federal government allows families to deduct up to 10,000 francs per year from their taxable income for childcare expenses.

In 1986, 12 percent of all children under 3 with two parents working outside of the home received day care through public daycare centers, 26 percent re-

11. Schools are closed on Wednesday afternoon to allow children to attend religious education classes. Parents may purchase day care for times when the nursery school is not in session on a fee-paying basis (Kamerman 1991).

12. The employee's contribution is exempted from taxation, while the parent receives a rebate of any payments made for the employer's contribution.

ceived assistance through certified mother's helpers, and 6 percent received day care through family daycare centers. The remaining 56 percent received day care from other sources, such as nonregulated day care or from friends and other family members (Starzec and David 1991).

The U.S. system is more fragmented than the French system, with both federal and state governments playing a role in providing child care. While the federal government operates over forty programs to expand daycare availability, over 80 percent of all federal spending in 1988 was devoted to the four programs described below (U.S. General Accounting Office 1989).[13]

The federal government subsidizes public childcare centers through its Title XX Social Services Block Grant program, an unrestricted grant that states may use to pay for child care and other social services. Total spending for this program in 1987 was $2.7 billion, of which approximately $660 million were allocated to daycare services.[14]

The federal government directly sponsors childcare services through its Head Start program. This enriched education program prepares disadvantaged children ages 3–5 for primary school. Unlike the French nursery school, most Head Start programs operate for half a day: only one-fifth of all program participants in 1987 attended Head Start for a full six-hour day. In 1987, this program served 450,000 children, or 17 percent of poor children ages 3–5. Total expenditures on the program for 1987 were $1.1 billion.

Finally, the federal government supports child care through its dependent care tax credit. This is a nonrefundable income tax credit of up to 30 percent of employment-related expenses on dependent care, up to a limit of $2,400 per child and $4,800 per family. Total tax expenditures for this item were $3.8 billion in 1987.

In 1987, 17 percent of all U.S. children under age 3 with a working mother were cared for in public daycare centers: 33 percent were cared for by nonrelatives in informal settings; the remaining 50 percent were cared for by relatives. Of children ages 3–4 with a working mother, 36 percent were cared for in organized childcare or education facilities, 22 percent were cared for by nonrelatives, and 42 percent were cared for by relatives (U.S. Department of Commerce 1990).

10.1.4 Maternity Leave

France has a legally mandated maternity leave policy that requires all employers to provide a job-protected leave at the time of the birth or adoption of a child. The length of the required leave varies with the number of children in the family: it begins six–eight weeks prior to expected date of delivery and ends ten–eighteen weeks after childbirth. During this period, the parent may

13. See Robins (1991) for an excellent overview of the U.S. childcare system.

14. Unless otherwise noted, all estimates of expenditures and recipiency rates presented in this section are from U.S. House of Representatives (1988, 1989).

also qualify for maternity insurance, which replaces 84 percent of average earnings.

In addition to standard maternity leave, parents may also qualify for an extended leave under the Parental Education Leave program.[15] This program allows parents to claim a two-year job-protected leave at the end of the standard maternity leave. Firms with fewer than 100 employees may be exempted from this requirement if they can demonstrate that this leave is harmful to their company. Parents may combine this leave with the Parental Education Allowance, described above.

As of 1987, the U.S. policy regarding family leave was much more limited than that of France. At the federal level, the Pregnancy Discrimination Act of 1980 required all employers who operate disability insurance programs to cover pregnancy-related disabilities. This legislation is very short term in nature, since it applies only to the period during which a mother cannot work due to pregnancy-related disabilities (Trzcinski and Alpert 1994).[16] In addition, in 1987, thirteen states (twenty-five states by 1991) had enacted legislation requiring employer-provided parental leave. These laws require employers to provide an unpaid job-protected leave of from six to twenty-four weeks for the birth, adoption, or serious illness of a child (Finn-Stevenson and Trzcinski 1991).[17]

10.2 Predictions and Estimation Approach

This section will examine the impact of the termination of two time-limited transfer programs in France. The first is a means-tested program for single parents, the API program described above. The second, Parental Education Leave, is a program for families with three or more children.

10.2.1 Single-Parent Family Programs

Figure 10.1 illustrates the income-earnings frontier for single parents in France and the United States. As shown, both U.S. single parents and French single parents with a child under age 3 have income-earnings frontiers that exhibit a flat "notch" around zero earnings, reflecting the presence of a means-tested welfare program with a high tax rate on earnings. However, while the U.S. income-earnings frontier remains constant, the French income-earnings frontier changes substantially when the youngest child reaches age 3.

As shown, there are two important changes in the income-earnings frontier

15. As before (see note 7 above), the parent does not need to participate in an education or training program to qualify.

16. In 1980, when this legislation was enacted, pregnant women who were covered by disability programs were covered for an average of six weeks of benefits.

17. The U.S. government recently passed the Family and Medical Leave Act of 1993. The act requires employers who have at least fifty employees to guarantee an unpaid job-protected leave of twelve weeks per year for family and medical emergencies.

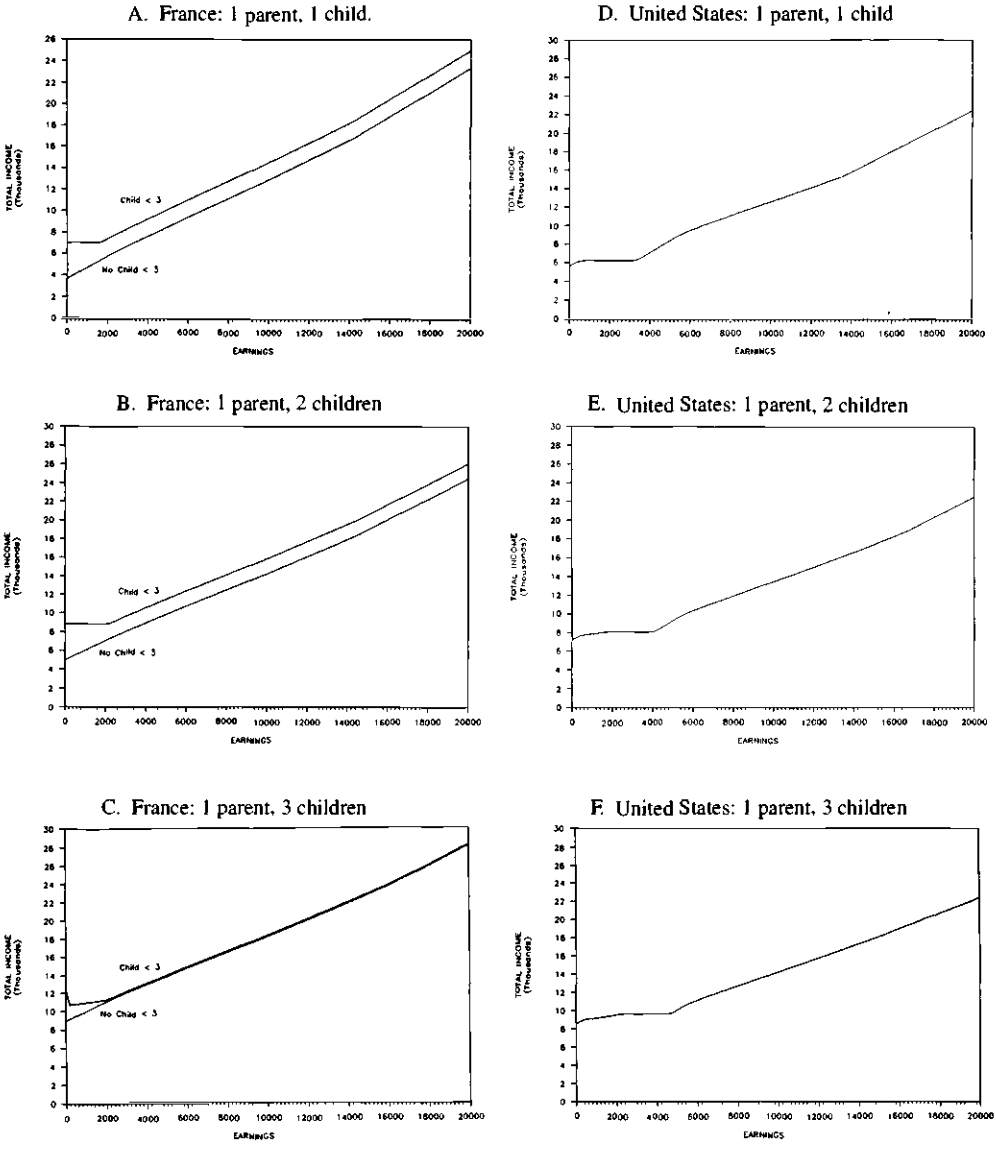

Fig. 10.1 Income-earnings frontier for single parents in the United States and France

in France that should increase the employment rate of single parents when their youngest child reaches age 3. First, the income-earnings frontier shifts downward, reflecting a decline in total nonlabor income available to French single parents. Second, the flat notch around zero earnings is eliminated, reflecting a decline from 100 percent to 6 percent in the tax rate on earnings.

Both of these changes should increase the incentive to work: since single mothers have less nonlabor income, they will find it harder to forgo market work. In addition, since they realize a larger gain in total income as their earnings increase, they will be more likely to substitute market for nonmarket work.

One way to estimate the impact of the termination of French time-limited transfer benefits is to compute the difference between the employment rate of French single parents with a youngest child age 3–5 and those with a child age 0–2:

$$\Delta E_{fs} = h(\Delta G_{fs}, \Delta t_{fs}) + \theta_f + \Phi_s, \tag{1}$$

where f indicates France, s indicates single parent, ΔE_{fs} represents the difference in employment rates of women with a youngest child age 3–5 versus age 0–2, $h(\Delta G, \Delta t)$ represents the impact of the change in implicit tax rate and income guarantee under the transfer system when the youngest child changes from age 0–2 to age 3–5, θ_f represents factors common to France, and Φ_s represents factors that are common to single parents and could change the employment rate of French women when their youngest child reaches age 3.

The estimator shown in equation (1) is likely to overestimate the impact of terminating time-limited transfers, because it ignores other important factors common to France, such as the dramatic expansion in public day care or the termination of government-mandated maternity leave, which occurs when the youngest child reaches age 3. Failure to account for these factors, designated θ_f in equation (1), could clearly lead to a biased estimate of the impact of time-limited benefits.

One way to deal with this problem is to compute the difference between the change in employment of single parents and the change in employment of two-parent families when the youngest child reaches age 3:

$$\Delta E_{fs} - \Delta E_{fm} = h(\Delta t_{fs}, \Delta G_{fs}) + \Phi_s - \Phi_m, \tag{2}$$

where m designates married and the remaining terms are as defined above. As shown, this "difference in difference" estimator eliminates the θ_f term in equation (1), thus eliminating factors common to France that may affect the employment rates of women with children.[18] However, this estimator may still be biased because it does not control for other underlying differences between single and married women, designated $\Phi_s - \Phi_m$ above, which may affect the relative change in employment. For example, differences in the availability of informal daycare services, family income, or alternative costs of time all may cause women in single-parent and two-parent families to have different rates

18. Note that equation (2) assumes there is *no* change in transfers for two-parent families in France. However, as shown in figure 10.2, there is a slight decline in the income guarantee for this group when their youngest child reaches age 3, which in turn may cause their employment rate to increase. Thus, the estimates presented here may underestimate the impact of the termination of the API.

at which their employment increases when their youngest child reaches age three.

To control for these factors, one can compute a "difference in difference in difference" estimator, which computes the difference between France and the United States in the difference between single- and two-parent families in the change in employment when the youngest child changes from age 0–2 to age 3–5:

$$(3) \qquad (\Delta E_{fs} - \Delta E_{fm}) - (\Delta E_{us} - \Delta E_{um}) = h(\Delta t_{fs}, \Delta G_{fs}),$$

where u indexes United States and all remaining terms are defined above. To the extent that the United States is a valid control group for France (i.e., the underlying difference $\Phi_s - \Phi_m$ is the same in both countries) this estimator will produce an unbiased estimate of the impact of the termination of time-limited transfer programs for single parents in France.

10.2.2 Programs for Large Families (Parental Education Allowance)

As noted earlier, the French system provides supplemental assistance on a time-limited basis to families with three or more children through its Parental Education Allowance (PEA). Panel C of figure 10.2 illustrates how this program changes the incentive for married women with three or more children to work when their youngest child reaches age 3. As shown, when the youngest child reaches age three, the income guarantee available to this group declines markedly, reflecting the elimination of the PEA payment. In addition, the implicit tax rate on earnings decreases substantially: before the youngest child reaches age three, members of this group effectively face an infinite tax rate on earnings since they must remain out of the labor force to qualify for the PEA, whereas afterward the implicit tax rate is near zero (6 percent). Both of these changes should increase the incentive of women in large families to work, since they imply a decrease in nonlabor income available to "spend" on nonmarket activities, and an increase in the return to market work.

To isolate the impact of the Parental Education Allowance from that of the API program, this analysis will focus on married women only. As before, there are three possible methods of estimating the impact of the Parental Education Allowance. First, for women with large families (three-plus children), one could compute the difference between the employment rates of those with a youngest child age zero–two and those with a child age three–five. As before, this estimator does not control for other factors that change at the time the youngest child reaches age three, such as the increase in publicly provided day care. Second, one could compute a difference-in-difference estimator, which would compute the difference between large families (three-plus children) and small families (one–two children) in the difference between the employment rates of women with a youngest child age 3–5 versus age 0–2. While this would eliminate the potentially contaminating impact of factors that do not vary by family size, it still would not control for factors that affect the underlying

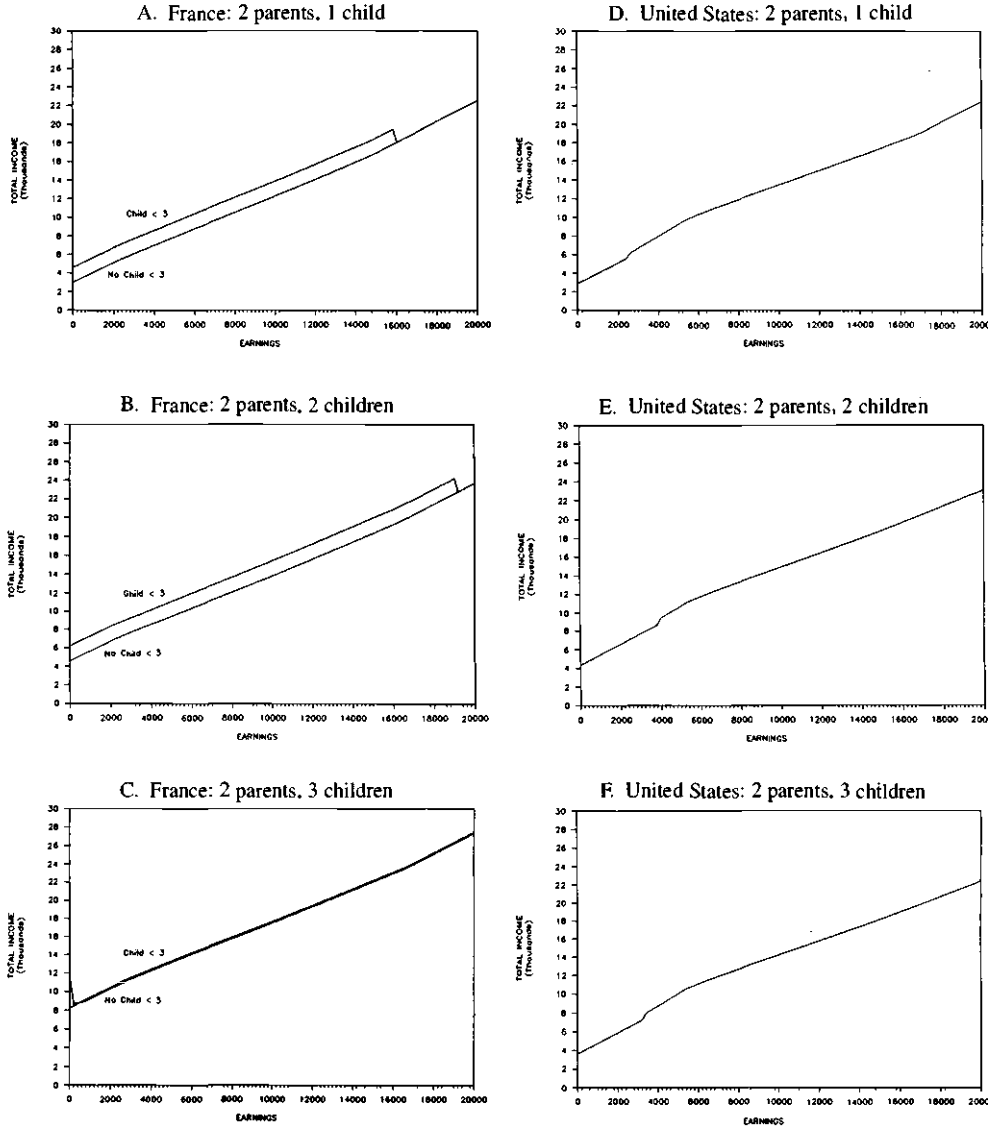

Figure 10.2 Income-earnings frontier for two-parent families in the United States and France

change in employment of small versus large families.[19] Third, one could compute a difference-in-difference-in-difference estimator, which computes the difference between the United States and France in the difference between large and small families in the change in employment when the youngest child reaches age 3:

$$(4) \qquad (\Delta E_{fb} - \Delta E_{fs}) - (\Delta E_{ub} - \Delta E_{us}) = h(\Delta t_{fs}, \Delta G_{fs}),$$

where f indicates France, u indicates United States, b indicates "big" family (three or more children), s indicates "small" family (two or fewer children), and the other terms are defined above.

10.3 Estimated Impacts

10.3.1 Data

The primary data source used for France is the French Enquête sur l'Emploi for 1987. This annual survey of 68,000 households in France asks detailed questions about labor force activity and family demographic characteristics. Given its large size and its focus on labor force measures, this survey is well suited for an analysis of the impact of time-limited transfer programs on employment. Unfortunately, this survey contains limited information on family income and thus does not make it possible to analyze the impact of these programs on economic well-being.

The primary data source used for the United States is the March Current Population Survey. This annual survey of over 60,000 households in the United States contains detailed information on family demographic characteristics, labor force activity, and family income sources.

In France, cohabiting couples with children represent a relatively large share of all families with children (4.5 percent), whereas they represent a relatively small share of families with children in the United States (1.4 percent). For purposes of this analysis, cohabiting couples are included with married couples. There are two reasons for this classification. First, in both countries, cohabiting couples are not legally eligible for transfer programs targeted toward single-parent families. Second, the women in this group exhibit employment patterns more similar to those of women in two-parent families than to women in single-parent families.[20]

Table 10.2 presents estimates of the employment rates of women with children, by age of youngest child in the family. The first three columns present estimates for France; the second three columns present estimates for the United States. This table classifies the patterns of employment in the preceding week by total employment (one or more hours), full-time work (thirty-five or more hours), and part-time work (one to thirty-four hours).

19. For example, women with three or more children may be more likely to remain out of the labor force altogether and thus show a smaller increase in employment than do women with one or two children.

20. One obtains very similar results if one drops cohabiting couples or if one treats them as a separate group in the analysis. However, if cohabitors are treated as a part of the single-parent family group, the estimated effects become much weaker.

Table 10.2 **Employment Rates of Women in the United States and France (standard errors in parentheses)**

Employment Measure/ Age of Youngest Child (in years)	France			United States		
	Single Parent, < 3 Kids	Two Parents, < 3 Kids	Two Parents, 3+ Kids	Single Parent, < 3 Kids	Two Parents, < 3 Kids	Two Parents, 3+ Kids
Total employment						
0–2	0.430	0.479	0.172	0.502	0.504	0.399
	(0.024)	(0.011)	(0.018)	(0.028)	(0.009)	(0.014)
3–5	0.657	0.561	0.292	0.612	0.593	0.487
	(0.027)	(0.010)	(0.019)	(0.023)	(0.011)	(0.016)
6–17	0.683	0.574	0.345	0.696	0.659	0.594
	(0.014)	(0.005)	(0.015)	(0.010)	(0.006)	(0.014)
Full-time employment						
0–2	0.340	0.335	0.082	0.378	0.293	0.199
	(0.023)	(0.011)	(0.015)	(0.028)	(0.008)	(0.012)
3–5	0.496	0.380	0.151	0.443	0.366	0.271
	(0.028)	(0.010)	(0.019)	(0.023)	(0.011)	(0.014)
6–17	0.530	0.391	0.189	0.550	0.442	0.347
	(0.015)	(0.005)	(0.016)	(0.011)	(0.006)	(0.014)
Part-time employment						
0–2	0.090	0.144	0.090	0.124	0.211	0.200
	(0.014)	(0.008)	(0.014)	(0.019)	(0.007)	(0.012)
3–5	0.161	0.181	0.141	0.169	0.227	0.216
	(0.021)	(0.008)	(0.018)	(0.017)	(0.009)	(0.013)
6–17	0.153	0.182	0.156	0.145	0.217	0.247
	(0.011)	(0.004)	(0.015)	(0.008)	(0.005)	(0.012)
Sample size	1,779	15,635	3,948	2,888	12,593	3,524

Sources: U.S. data from Current Population Survey (March 1987); French data from Enquête sur l'Emploi (1987).

Note: Sample includes women ages 23–58 who are heads of a single-parent family or are wives in a two-parent family with one or two children under age 18. Two-parent family includes cohabiting couples. "Full-time employment" indicates 35 or more hours of work last week; "part-time employment" indicates 1–34 hours. Estimates are computed using sample weights; unweighted estimates are very similar to weighted estimates presented here.

As shown, France's more generous assistance to single parents with young children does not appear to have permanently depressed the relative employment rate of single parents: while the employment rate of single parents with children under age 3 is lower in France than in the United States (43 percent versus 50 percent), the employment rate of single parents with a child age 3–5 is higher (66 percent versus 61 percent). By contrast, two-parent families with three or more children have consistently lower employment rates in France (17 percent versus 40 percent for a family with a youngest child age 0–2 and 29 percent versus 49 percent for a family with a youngest child age 3–5). Finally,

two-parent families with one or two children have similar employment rates in both countries, despite the higher transfer payments in France.[21]

To isolate the impact of each of the time-limited programs addressed here, this paper will repeat the analysis for two different subsets of the population. To estimate the impact of the API program, it will focus on women with one or two children. To estimate the impact of the Parental Education Allowance, it will focus on married women with children. These estimates are provided below.

10.3.2 Single-Parent Family Programs (API)

Table 10.3 presents estimates of the difference between the employment rates of women with a youngest child age 3–5 versus age 0–2 for single- and two-parent families in each country. These estimates can be used to compute the estimators of the API program impact outlined in equations (1) through (3) above.

As shown, the employment rate of French single parents is 22.7 points higher for women with a youngest child age 0–2 than for those with one age 3–5, compared to a difference of 8.2 points for two-parent families. This yields a difference-in-difference estimate of the API program impact of 14.5 points (equation [2]). Part of this difference may reflect unmeasured factors unrelated to transfer benefits, since U.S. single parents also experienced a 2.1-point gain in employment relative to two-parent families when their youngest child reached age 3–5. Thus, the net effect attributable purely to the termination of French time-limited transfers is 12.4 points, the difference-in-difference-in-difference estimator of equation (3).

As shown in table 10.3, the impact of the API appears to operate exclusively through an increase in full-time employment: while the net increase in full-time employment for single parents was 11.9 points, part-time employment increased by 0.5 points. The estimates for both full-time and total employment are significantly different from zero at a 5 percent confidence level.

One problem with this analysis is that it does not control for differences in demographic characteristics that may affect the trend in employment rates of single parents in each country. As shown in table 10.4, there are substantial differences in the characteristics of single parents relative to two-parent families in each country. Single parents in the United States have both a higher relative concentration in minority groups and lower relative educational attainment than do single parents in France. These factors could influence the comparison of trends in employment in each country.

21. These comparisons may understate the extent of labor market attachment in France relative to the United States, since a larger share of nonemployed women in France have ties to a job through maternity or sick leave.

Table 10.3 **Difference-in-Difference-in-Difference Estimates: Women with 1 or 2 Children (standard errors in parentheses)**

	Single Parent	Two Parents	Difference[a]
Total employment			
France (3–5 minus 0–2)	0.227	0.082	0.145
	(0.036)	(0.015)	(0.039)
United States (3–5 minus 0–2)	0.110	0.089	0.021
	(0.036)	(0.014)	(0.039)
Net change	0.117	−0.007	0.124
	(0.051)	(0.021)	(0.055)
Full-time employment			
France (3–5 minus 0–2)	0.156	0.045	0.111
	(0.036)	(0.015)	(0.039)
United States (3–5 minus 0–2)	0.065	0.073	−0.008
	(0.036)	(0.014)	(0.039)
Change	0.091	−0.028	0.119
	(0.051)	(0.020)	(0.055)
Part-time employment			
France (3–5 minus 0–2)	0.071	0.037	0.034
	(0.025)	(0.011)	(0.027)
United States (3–5 minus 0–2)	0.045	0.016	0.029
	(0.025)	(0.011)	(0.028)
Change	0.026	0.021	0.005
	(0.036)	(0.016)	(0.039)

Sources: See table 10.2.

Note: See table 10.2.

[a]One-parent family minus two-parent family.

Table 10.5 presents probit estimates of the probability of employment, which control for demographic characteristics of families in each country. It presents estimates of the impact on total employment (columns 1–2), full-time employment (columns 3–4), and part-time employment (columns 5–6).

As shown, the demographic controls perform in the United States roughly as expected: employment rates are higher for more-educated women, for women ages 29–39, and for minorities (full-time employment measure only). In France, the results for age and education have the same sign as those for the United States, although the impact of education is smaller and the impact of age larger in magnitude. In addition, unlike in the United States, minority status appears to decrease rather than increase employment in France.

The key variable of interest is the interaction variable, France*single parent*kid35, which corresponds to the difference-in-difference-in-difference estimate shown in equation (3).[22] As shown, this coefficient is positive and sig-

22. The estimated regression is equivalent to the following equation:

$$(5) \qquad E = \delta_0 + \delta_1 Kid35 + \delta_2 Single + \delta_3 Single * Kid35 + \delta_4 France + \delta_5 France * Kid35 + \delta_6 France * Single + \delta_7 France * Single * Kid35 ,$$

Table 10.4 **Mean Characteristics of Women with Children, France versus the United States (standard errors in parentheses)**

	France			United States		
	Single Parent, < 3 Kids	Two Parents, < 3 Kids	Two Parents, 3+ Kids	Single parent, < 3 Kids	Two Parents, < 3 Kids	Two Parents, 3+ Kids
Age < 28	0.111	0.153	0.082	0.161	0.172	0.164
	(0.008)	(0.003)	(0.004)	(0.003)	(0.007)	(0.014)
Age > 40	0.287	0.254	0.114	0.259	0.279	0.116
	(0.011)	(0.003)	(0.005)	(0.005)	(0.007)	(0.012)
One child	0.666	0.524		0.584	0.503	
	(0.011)	(0.004)		(0.009)	(0.004)	
Two children	0.334	0.476		0.416	0.497	
	(0.011)	(0.004)		(0.009)	(0.004)	
Three children			0.726			0.723
			(0.005)			(0.007)
Four or more children			0.274			0.277
			(0.007)			(0.007)
Minority	0.034	0.024	0.144	0.316	0.117	0.138
	(0.004)	(0.001)	(0.006)	(0.009)	(0.003)	(0.006)
Size < 100,000	0.437	0.577	0.612	0.212	0.263	0.288
	(0.012)	(0.004)	(0.008)	(0.009)	(0.004)	(0.007)
Size 100,000–199,000	0.104	0.076	0.069	0.067	0.064	0.063
	(0.007)	(0.002)	(0.004)	(0.005)	(0.002)	(0.004)
Size 200,000–1.999 million	0.244	0.190	0.176	0.384	0.366	0.332
	(0.010)	(0.003)	(0.006)	(0.009)	(0.004)	(0.008)
Size 2 million+	0.214	0.156	0.142	0.338	0.306	0.318
	(0.010)	(0.003)	(0.006)	(0.009)	(0.004)	(0.008)
< High school	0.761	0.740	0.803	0.222	0.123	0.209
	(0.010)	(0.002)	(0.006)	(0.008)	(0.004)	(0.007)
High school	0.089	0.099	0.061	0.410	0.438	0.418
	(0.007)	(0.003)	(0.004)	(0.009)	(0.004)	(0.008)
College	0.127	0.143	0.114	0.368	0.439	0.373
	(0.008)	(0.003)	(0.005)	(0.009)	(0.004)	(0.008)
Youngest child age 0–2	0.121	0.242	0.360	0.113	0.263	0.345
	(0.008)	(0.003)	(0.008)	(0.000)	(0.004)	(0.008)
Youngest child age 3–5	0.155	0.174	0.283	0.173	0.165	0.285
	(0.009)	(0.003)	(0.007)	(0.007)	(0.003)	(0.007)
Youngest child age 6–17	0.724	0.583	0.357	0.714	0.572	0.370
	(0.011)	(0.004)	(0.008)	(0.008)	(0.004)	(0.008)

Sources: See table 10.2.

Note: Sample includes women ages 23–58 who are heads of a single-parent family or are wives in a two-parent family with one or two children uner age 18. Two-parent family includes cohabiting couples. "Full-time employment" indicates 35 or more hours of work last week: "part-time employment" indicates 1–34 hours. Other variables are defined in appendix B. Estimates are computed using sample weights; unweighted estimates are very similar to weighted estimates presented here.

Table 10.5 **Probit Estimates of Employment Determinants, All Women with Less than Three Children**

	Total Employment		Full-Time		Part-Time	
	Beta	S.E.	Beta	S.E.	Beta	S.E.
Intercept	−0.541**	0.042	−1.058**	0.044	−0.904**	0.048
France	0.524**	0.051	0.670**	0.052	−0.160**	0.059
France*single parent	−0.120	0.117	−0.194*	0.119	0.059	0.155
France*single*kid35	0.285*	0.157	0.274*	0.157	0.050	0.196
France*Single*Kid617	0.221*	0.127	0.256*	0.129	0.006	0.166
Single parent	0.038	0.075	0.227**	0.077	−0.295**	0.095
Single*kid35	0.095	0.099	0.006	0.100	0.150	0.120
Single*kid617	0.146	0.082	0.047	0.083	0.126	0.102
France*kid35	−0.091*	0.049	−0.113*	0.050	0.040	0.056
France*kid617	−0.183**	0.044	−0.241	0.045	0.095*	0.050
Kid35	0.259**	0.036	0.215**	0.037	0.074	0.040
Kid617	0.511**	0.032	0.494**	0.032	0.025	0.035
Age < 28	−0.042	0.032	−0.049	0.033	0.002	0.036
Age > 40	−0.132**	0.027	−0.106**	0.026	−0.026	0.029
Minority	0.038	0.031	0.218**	0.030	−0.266**	0.037
High school	0.556**	0.031	0.445**	0.033	0.200**	0.037
College	0.753**	0.032	0.629**	0.033	0.201**	0.037
France*age < 28	−0.146**	0.045	−0.048	0.046	−0.169**	0.053
France*age > 40	−0.236**	0.036	−0.284**	0.036	0.044	0.041
France*minority	−1.029**	0.078	−1.092**	0.084	−0.184*	0.102
France*high school	−0.322**	0.046	−0.366**	0.047	0.030	0.053
France*college	−0.558**	0.043	−0.714**	0.044	0.183**	0.049
Log likelihood	−21323		−21318		−15629	

Sources: See table 10.2.

Note: Sample includes women ages 23–58 who are single parents or wives of a two-parent family with less than three children. Two-parent family includes cohabiting couples. "Part-time employment" indicates 1–34 hours of work last week; "full-time employment" indicates 35 or more hours. Regression includes controls for population size (100,000–199,000, 200,000–1.999 million, or 2 million–+); these controls enter separately and are interacted with France dummy. $N = 32{,}827$.

*Significant at 10 percent confidence level.

**Significant at 1 percent confidence level.

nificant in both the total employment and the full-time employment equations but is not significant in the part-time employment. These estimates suggest that the termination of time-limited benefits was associated with an increase in

while the difference-in-difference-in-difference estimator is equivalent to:

$$(\Delta E_{fs} - \Delta E_{fm}) - (\Delta E_{us} - \Delta E_{uf}), \tag{6}$$

where δE is the difference in employment rates of women with a youngest child age 3–5 versus age 0–2, f = France, u = United States, s = single, and m = married. Substituting in terms from equation (5), the second term in equation (6) is equal to $[(\delta_0 + \delta_1 + \delta_2 + \delta_3) - (\delta_0 + \delta_2)] - [(\delta_0 + \delta_1) - \delta_0] = \delta_3$. Using similar logic, one can show that the first term in equation (5) is equal to $\delta_3 + \delta_7$. Thus, the difference between these two numbers is δ_7, the coefficient on France*single*kid35 in equation (5).

employment, which was driven primarily by an increase in full-time employment.

The top four rows of table 10.6 present simulations of the implied magnitude of the estimated impact of time-limited transfers shown in table 10.5. It presents estimates for both single- and two-parent families in each country who have a child age 0–2 and who have fewer than three children. For each group shown, this table uses the parameter estimates of table 10.5 to compute the average change in predicted employment before and after adding in a term equal to the coefficient on the interaction variable France*single parent*kid35. As noted above, this term is intended to capture the impact of time-limited transfers for single parents in France.

Table 10.6 Simulated Impact of Time-Limited Benefits

	Employment Rate		
	Total	Full-time	Part-time
Single-parent family benefits (table 10.5)			
Single parent, 1–2 children, youngest child 0–2			
France	11.0	10.2	0.8
United States	10.9	10.2	1.1
Two parents, 1–2 children, youngest child 0–2			
France	10.8	10.3	1.0
United States	10.9	9.9	1.5
Large-family benefits (table 10.9)			
Two parents, 1–2 children, youngest child 0–2			
France	8.9	7.8	4.5
United States	6.1	3.6	2.4
Two parents, 1–2 children, youngest child 0–2			
France	9.0	7.6	4.5
United States	8.9	6.3	4.3

Sources: See table 10.2.

Note: Sample includes women ages 23–58 who are heads of a single-parent family or are wives in a two-parent family with one or two children under age 18. Two-parent family includes cohabiting couples. "Full-time employment" indicates 35 or more hours of work last week; "part-time employment" indicates 1–34 hours. The top five rows of this table present simulations of the average impact of time-limited transfer programs for single-parent families on the employment rates of women with young children in each country; the bottom five rows present simulations of the impact of time-limited transfers for families with three or more children. For each group, it computes the average over all individuals of the function $\phi(XB + \delta) - \phi(XB)$, where XB is the cross-product of the vector of personal characteristics and the vector of estimated parameters from table 10.5 (top four rows) or table 10.8 (bottom four rows), and δ is the estimated impact of time-limited transfer programs. This table assumes that the impact of time-limited transfers is captured by the coefficient on the interaction variable France*single*kid35 in table 10.5 and the coefficient on France*3 children*kid35 in table 10.8 (see text note 22).

As shown in table 10.6, probit estimates imply an increase in the total employment rate of 10.8 to 11.0 points for each group, slightly less than the estimate from table 10.3 of 12.4 points. As before, this change largely reflects changes in full-time (9.9 to 10.3 points) rather than part-time employment (0.8 to 1.5 points).

10.3.3 Programs for Large Families (Parental Education Leave)

Table 10.7 presents estimates of the difference in employment between women with a youngest child 3–5 versus 0–2 years for married women with children, by number of children in the family (1–2 versus three-plus children). Following the approach outlined in equation (4), these estimates can be used to identify the impact of time-limited programs for large families.

As shown, French women with three or more children had an increase in employment of 3.8 points relative to women with one or two children when their youngest child reached age 3, compared to a relative decrease for the United States of 0.1 points. Thus, the difference-in-difference-in-difference

Table 10.7 **Difference-in-Difference-in-Difference Estimates, Married Women with Children**

	3+ Children	< 3 Children	Difference
Total employment			
France (3–5 minus 0–2)	0.120	0.082	0.038
	(0.017)	(0.015)	(0.023)
United States (3–5 minus 0–2)	0.088	0.089	−0.001
	(0.021)	(0.014)	(0.026)
Net change	0.032	−0.007	0.039
	(0.027)	(0.021)	(0.034)
Full-time employment			
France (3–5 minus 0–2)	0.069	0.045	0.024
	(0.013)	(0.015)	(0.020)
United States (3–5 minus 0–2)	0.071	0.073	−0.002
	(0.018)	(0.014)	(0.023)
Net change	−0.002	−0.028	0.026
	(0.023)	(0.020)	(0.030)
Part-time employment			
France (3–5 minus 0–2)	0.051	0.037	0.014
	(0.013)	(0.011)	(0.017)
United States (3–5 minus 0–2)	0.017	0.016	0.001
	(0.018)	(0.011)	(0.021)
Net change	0.034	0.021	0.013
	(0.022)	(0.016)	(0.027)

Sources: See table 10.2.

Note: Sample includes women ages 23–58 who are wives in a two-parent family with one or two children under age 18. Two-parent family includes cohabiting couples. "Full-time employment" indicates 35 or more hours of work last week; "part-time employment" indicates 1–34 hours. Estimates are computed using sample weights; unweighted estimates are very similar to weighted estimates presented here.

estimator is equal to a 3.9-point increase in employment. As shown, most of this increase reflects a net increase in full-time employment (2.6 points), compared to an increase in part-time employment (1.3 points). None of the estimates presented here is statistically significant at a 5 percent confidence level.

Table 10.8 presents probit estimates of the difference-in-difference-in-difference estimator, which include demographic controls for age, education, minority status, and population density. As before, estimates are presented for total employment (columns 1–2), full-time employment (columns 3–4), and part-time employment (columns 5–6).

Table 10.8 **Probit Estimates of Employment Determinants, Married Women with Children**

	Total		Full-time		Part-time	
	Beta (1)	S.E. (2)	Beta (3)	S.E. (4)	Beta (5)	S.E. (6)
Intercept	−0.473**	0.042	−0.927**	0.044	−1.004**	0.048
France	0.468**	0.050	0.548**	0.052	−0.049	0.058
France*3 children	−0.625**	0.064	−0.630**	0.073	−0.238**	0.074
France*3 children*kid35	0.233**	0.093	0.214*	0.103	0.147	0.106
France*3 children*kid617	0.177*	0.084	0.255*	0.092	0.020	0.096
3 children	−0.229**	0.043	−0.278**	0.048	−0.024	0.049
3 children*kid35	0.017	0.065	0.039	0.070	0.021	0.072
3 children*kid617	0.073	0.058	0.019	0.062	0.161**	0.064
France*kid35	−0.100*	0.049	−0.112*	0.050	0.020	0.056
France*kid617	−0.235**	0.044	−0.270**	0.045	0.066	0.050
Kid35	0.258**	0.036	0.210**	0.037	0.084*	0.040
Kid617	0.532**	0.032	0.504**	0.033	0.045	0.035
Age < 28	0.005	0.032	−0.009	0.033	0.012	0.035
Age > 40	−0.179**	0.027	−0.146**	0.027	−0.036	0.030
Minority	0.169**	0.033	0.406**	0.032	−0.344**	0.039
High school	0.474**	0.031	0.316**	0.033	0.275**	0.036
College	0.636**	0.032	0.448**	0.033	0.311**	0.036
France*age < 28	−0.228**	0.045	−0.102*	0.047	−0.227**	0.053
France*age > 40	−0.145**	0.037	−0.205**	0.037	0.042	0.041
France*minority	−1.167**	0.069	−1.258**	0.076	−0.298**	0.088
France*high school	−0.228**	0.045	−0.250**	0.047	−0.002	0.051
France*college	−0.387**	0.042	−0.487**	0.044	0.088*	0.047
Log likelihood	−22,980		−21,760		−16909	

Sources: See table 10.2.

Note: Sample includes married women ages 23–58 with children under age 18. Two-parent family includes cohabiting couples. "Full-time" indicates 35 or more hours of work last week; "part-time" indicates 1–34 hours. Regression includes controls for population size (100,000–199,000, 200,000–1.999 million, or 2 million–+); these controls enter separately and are interacted with France dummy. $N = 22{,}178$.

*Significantly different from zero at 10 percent confidence interval.

**Significant at 1 percent level.

As shown, the impact of demographic controls is roughly the same as before. Older women (over age 40) have lower total and full-time employment rates. Women with higher education levels have higher full-, part-time, and total employment rates. Minorities appear to work more full time and less part time in the United States, whereas they have lower rates of employment on all three employment measures in France.

The variable that corresponds to the difference-in-difference-in-difference estimator is the interaction variable France*3 children*kid35. This variable is positive and statistically significant in the total employment and the full-time employment equation, while it is insignificant in the part-time employment equation.

The bottom four rows of table 10.6 present estimates of the simulated impact of this program for two-parent families with a child under age 3 in each country, disaggregated by number of children (1–2 versus three-plus children). As shown, these estimates imply a much larger impact of time-limited benefits than the estimates presented in table 10.7: time-limited benefits increase the employment rate of French families with three or more children by 6.1 points, compared to the estimate from table 10.7 of 3.9 points. This reflects an increase in both full-time (3.6 points) and part-time employment (2.4 points).

Calculations not presented here suggest that the primary reason that the results are much stronger in the probit specification than in the simple tabulations of table 10.7 is that each approach assumes a different functional form.[23] In particular, table 10.7 assumes that time-limited benefits have the same absolute effect on the probability of employment on all groups within the population, whereas tables 10.6 and 10.8 allow the impact to vary with the initial employment rate of each group. These estimates may be more sensitive to functional form than the estimates presented for single parents, because there is a greater divergence between the employment rates of large and small families than there is between single- and two-parent families.

10.4 Conclusion

The French model offers a unique resolution to the conflict between social protection and economic flexibility. France offers extensive social protection to families when their children are young and then, by cutting back cash transfers and increasing publicly subsidized day care, promotes the work effort of women when their youngest child reaches age 3. By contrast, the United States provides cash assistance to single parents until their youngest child reaches age 18, thus encouraging them to rely on welfare on a long-term basis.

23. A probit estimate with no demographic controls produces estimates similar to those presented in table 10.8, suggesting that the difference is not driven by the addition of demographic controls. In addition, a linear regression model with the same controls shown in table 10.8 yielded estimates similar to those found in table 10.7, further confirming that differences in functional form are causing the estimates to differ.

This paper suggests that the French policy of placing a time limit on transfer payments can provide a powerful incentive for women to enter the labor force. Simulations suggest that the 40 percent to 44 percent reduction in transfers to single parents when their youngest child reaches age 3 results in an increase in their employment rate of 11 points, while the 26 percent to 30 percent reduction in transfers to families with three or more children increases the employment rate of large families in France by 6 points. These estimates imply an elasticity of employment with respect to transfer maximums of 0.55 to 0.59 for single parents and of 1.17 to 1.40 for large families.[24]

It is not possible at this point to assess whether such a policy would be advantageous for the United States. To do so, one would want to know more about how time-limited transfers affect the economic well-being of families and children. In addition, one would want to know how these policies affect broader measures of economic flexibility such as entry onto welfare, investment in education or training, and the educational development of children.

It is clear, however, that the United States would be unlikely to reduce total short-run expenditures if it adopted the French system of cutting back welfare and expanding public day care when the youngest child reaches age 3. Assuming the same per child daycare cost and the same dollar reduction in transfers as found in France, the United States would realize a reduction in expenditures of $400 per family if it could precisely target daycare subsidies toward the current AFDC recipient pool.[25] However, if as in France the United States were to make day care broadly available to families with children, its short-run expenditures on families with children would increase substantially.

Finally, it is important to stress that one reason that the French system of time-limited transfer payments may be effective in integrating women into the labor force is that France provides extensive support to working families through its systems of universal public day care, universal medical insurance, universal family allowances, and federally mandated maternity leave. If these programs were not also in place, it is not clear that time-limited welfare programs would have the same impact in the United States as they have had in France.

24. The much larger elasticity for large families is due to the very low initial employment rate for this group.

25. This estimate assumes reductions in transfer payments equal to those shown in table 10.1, a family size distribution equal to that found in the U.S. Current Population Survey (1987), and a per child cost of public nursery school of $2,100, as documented in Bergmann (1992).

Appendix A

Transfer Programs for Women with Children (nonelderly, non–health related)

French Programs as of 1 January 1987

The source of the information in this section is Lefebvre (1987). In France, all family benefits are calculated with respect to a monthly base salary. This monthly base amount in 1987 was equal to $292 (1990 U.S. dollars).

Family Allowance

The Family Allowance program provides non-means-tested monthly payments to families with two or more children. Monthly payment varies by number of children: 32 percent of base amount if two children, 73 percent if three children, and 114 percent if four children. In addition, the payment is increased by 9 percent of the monthly base for each child age 10–14 and by 16 percent for each child age 15 or more, except when the child is the eldest of a family with fewer than three children.

Family Support Allowance

Non-means-tested monthly payments to children with an absent parent are provided by the Family Support Allowance. Monthly payment is equal to 30 percent of monthly base if two parents are missing, 22.5 percent if one parent is missing.

Parental Education Allowance

Parents of three or more children who take leave from employment following the birth of a child receive a monthly Parental Education Allowance of 142.57 percent of the monthly base. To qualify, the parent must have worked at least two years in the ten years preceding the birth of the child and must completely stop working after the child is born. The allowance is paid until the youngest child reaches age 3 or the parent reenters the labor force. In the year before the youngest child reaches age 3, the parent may receive half of the allowance if he or she works or enters a training program on a part-time basis. Families may claim only one allowance per family. This allowance may not be combined with the Young Child Allowance or unemployment insurance; however, families may combine this payment with Family Allowances.

Allowance to Young Children

The Allowance to Young Children program provides monthly cash payments of 45.95 percent of the monthly base to families with children under age 3. The "short form" of this program is not means-tested and lasts from the fourth month of pregnancy until the third month after childbirth. The "long form" of

this program continues until the youngest child reaches age 3 if families meet an income test: gross family income must fall below $23,700 for a single parent with one child or a two-parent family with one child in which both parents are working, and below $18,000 for a two-parent family with one child in which only one parent is working. The income eligibility cutoff increases by $2,600 if the family has a second child and by an additional $3,100 for the third and any subsequent child.

Large-Family Supplement

Through the Large-Family Supplement program, a monthly payment of 41.65 percent of the monthly base is available to families who have three or more children all over the age of 3. To qualify for assistance, the family must meet an income test (described above, under "Allowance to Young Children").

Return to School Allowance

Low-income families with school-aged children are entitled to the Return to School Allowance, an annual payment equal to 20 percent of the monthly base for each child age 6–16 who is registered in school. To qualify for assistance, a family with one child must have total income below $12,600. This income cutoff is increased by $2,900 for each additional child.

Single-Parent Allowance

The Single-Parent Allowance provides payment to single-parent families with children under age 3 or to women who have children of any age and have recently experienced a divorce/separation from or death of spouse. Payments may be made for twelve consecutive months within eighteen months following date of divorce, separation, or spouse's death or until youngest child reaches age 3. Maximum monthly benefit amount for a single parent with one child is equal to 200 percent of monthly base (150 percent for a pregnant woman) and is increased by 50 percent of the monthly base for each additional child. The total benefit is reduced by one dollar for every dollar of countable income. Countable income does not include the Allowance to Young Children (short form) or the Return to School Allowance.

Housing Allowance

The Housing Allowance program provides a monthly payment to low-income households with a dependent child or a dependent elderly or handicapped adult. In addition, newly married young (under age 40) couples without children may qualify for up to five years. Housing must meet minimum quality standards. The total allowance is determined by the formula:

Housing allowance = K * $(L + C - L^0)$, where

$K =$ .90 − Resources / {$24,900 * [1 + (.4 * Number of children)]}

$L =$ Actual rent up to a ceiling that varies by family size and location. Maximum monthly rent is \$186 for single individual living alone, \$220 for a family with one or two dependents, and \$246 for family with three dependents.

$C =$ \$55 for a family size of two, with an increment of \$9.60 for each additional family member. This is intended to adjust for utility costs.

$L^0 =$ Minimum annual rent contribution of family. This is equal to 0 percent of first \$1,650 of annual income, 15 percent of income between \$1,650 and \$2,400, 26 percent of income between \$2,400 and \$4,800, and 36 percent of income greater than \$4,800. This amount is then increased by \$70.

U.S. Transfer Programs as of 1 January 1987

The source of the information in this section is U.S. House of Representatives, Committee on Ways and Means (1987).

Aid to Families with Dependent Children (AFDC)

AFDC is a joint federal-state program that provides cash payments to low-income families with children, primarily to single-parent families. Some states allow two-parent households to receive AFDC under stricter eligibility rules; however, in 1987, two-parent families represented only 6 percent of all AFDC families. A 66 percent tax rate on earnings applies for the first four months of recipiency and rises to 100 percent thereafter. The median state maximum benefit for a family of three is \$400 per month (lowest state \$133, highest state \$845; the latter is an outlier, as the next highest state pays \$696 per month).

Food Stamps

The Food Stamp Program provides low-income families and individuals with coupons that can be used to purchase food. The federal government establishes both eligibility and benefit levels. Maximum food stamps benefit is \$91 for an individual, \$168 for a family of two, \$242 for a family of three, \$306 for a family of four, and \$363 for a family of five. The food stamp benefit is reduced by \$0.30 for every dollar of net income after deductions. Deductions include (1) a standard deduction of \$110, (2) 20 percent of earnings, (3) a deduction of up to \$168 for expenditures on shelter over 50 percent of countable income, and (4) a dependent childcare deduction of up to \$180.

Earned Income Tax Credit (EITC)

The EITC is available to low-income families with children under age 18. It does not vary with family size. Credit is 14 percent of earnings to a maximum of \$900. The amount of the credit is decreased by \$0.10 for every \$1 of earnings above \$7,300. Credit is refundable to those without tax liabilities.

Appendix B
Data Sources

Current Population Survey (CPS)

The March Current Population Survey is an annual survey of over 60,000 households conducted by the U.S. Bureau of the Census. It contains detailed information on family demographic characteristics, income, and employment over the previous year. It is available on tape from the U.S. Bureau of the Census.

Enquête sur l'Emploi

The Enquête sur l'Emploi is an annual survey of 68,000 households in France conducted by the Institut National de la Statistique et des Études Economiques (INSEE). It contains detailed information on labor force activity and family demographic characteristics. Unfortunately, it contains limited information on family income or income sources. It is available on tape from the French Observatoire Economique de Paris (OEP).

Sample Construction

The sample includes women ages 23–58 who are heads of a single-parent family or are wives in a two-parent family with at least one child under age 18. Since the French data do not make it possible to readily identify subfamilies, this analysis only includes the primary family in each household.

This analysis defines nonmarried couples living together in the same household to be equivalent to married couples. In the French data, cohabiting couples are readily identifiable; in the U.S. data, they must be imputed. Thus, this analysis assumes that any male and female who live together in the same household who differ in age by less than ten years are a cohabiting couple. This process identified as cohabiting couples 4.5 percent of families with children in France and 1.4 percent of families with children in the United States.

Variable Definitions

The definitions of the variables used in the regression analysis are as follows:

Employed	= 1 if worked one or more hours in last week
Employed full time	= 1 if worked thirty-five or more hours in last week
Single parent	= 1 if single-parent family

Kid35	= 1 if youngest child in family is age 3–5
Kid617	= 1 if youngest child in family is age 6–17
Age < 28	= 1 if age of mother is less than 28 years
Age > 40	= 1 if age of mother is greater than 40 years
Minority	= 1 if mother is nonwhite in the United States and non-European in France
Size 100,000–199,000	= 1 if city size is 100,000–199,000
Size 200,000–1.999 million	= 1 if city size is 200,000–1.999 million
Size 2 million +	= 1 if city size is 2 million–plus
High school	= 1 if twelve years of school in United States or baccaulauréat in France
Post–high school	= 1 if thirteen or more years school in United States, degree beyond baccaulauréat in France

All variables equal zero if they do not satisfy the criteria specified above.

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