

**Child Support  
Enforcement: How Well  
Is it Doing?**

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**Assessing  
the New  
Federalism**

An Urban Institute  
Program to Assess  
Changing Social Policies

**Discussion  
Papers**

## Assessing the New Federalism

*Assessing the New Federalism* is a multiyear Urban Institute project designed to analyze the devolution of responsibility for social programs from the federal government to the states. It focuses primarily on health care, income security, employment and training programs, and social services. Researchers monitor program changes and fiscal developments. Alan Weil is the project director. In collaboration with Child Trends, the project studies changes in family well-being. The project provides timely, nonpartisan information to inform public debate and to help state and local decisionmakers carry out their new responsibilities more effectively.

Key components of the project include a household survey, studies of policies in 13 states, and a database with information on all states and the District of Columbia. Publications and the database are available free of charge on the Urban Institute's Web site: <http://www.urban.org>. This paper is one in a series of discussion papers analyzing information from these and other sources.

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## Abstract

The federal and state governments have devoted considerable resources to strengthening child support enforcement over the last two decades, but the proportion of single mothers who receive child support has remained largely unchanged. Why does this trend appear impervious to state and federal efforts to increase child support? Have state and federal efforts to strengthen child support enforcement made a difference in single-mother families' receipt of child support? To answer these questions, we examine 21 years of data from the Current Population Survey, supplemented with detailed information on state-level child support policies. We find that several tools of the child support enforcement system—the \$50 pass-through, the tax intercept program, and presumptive guidelines—had a significantly positive effect on child support receipt among both never-married and previously married single mothers. As well, immediate wage withholding had a significantly positive impact on child support among previously married mothers on AFDC and the in-hospital paternity establishment program had a significantly positive effect on child support among never-married mothers not on AFDC. Finally, we find that the expansion of the child support enforcement program during this time period had a significant impact on increasing child support receipt among both never-married and previously married mothers.

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## **I. Introduction**

In the aggregate, it appears that little progress has been made in the last two decades in single mothers' receipt of child support, suggesting that child support enforcement has not done its job. In 1997, 30.7 percent of single mothers received child support, a figure that is less than one percentage point higher than 21 years earlier. Congress created an open-ended entitlement to child support enforcement services during this period and, along with the states, has spent over \$30 billion to implement this program since its inception in 1975. How can it be that the proportion of single mothers receiving child support has remained so stagnant despite this massive infusion of government spending?

This paper shows that the overall trend in child support receipt rates actually hides dramatic improvements among certain subgroups of single mothers, most notably never-married mothers. Between 1976 and 1997, the proportion of never-married mothers who received child support increased fourfold. Another group of single mothers—divorced and separated mothers who receive Aid to Families with Dependent Children (AFDC)—also experienced a large increase in their child support receipt rates. Progress for these families has been masked by a shift in the marital status composition of single mothers away from divorced and separated mothers toward never-married mothers. Since never-married mothers have much lower rates of child support receipt than divorced and separated mothers, this shift has caused the overall trend in child support receipt rates to remain largely unchanged.

We also find that child support reforms and a strengthened child support enforcement program have led to significantly higher rates of child support receipt for single mothers once shifts in their marital status composition are taken into account. Specific child support

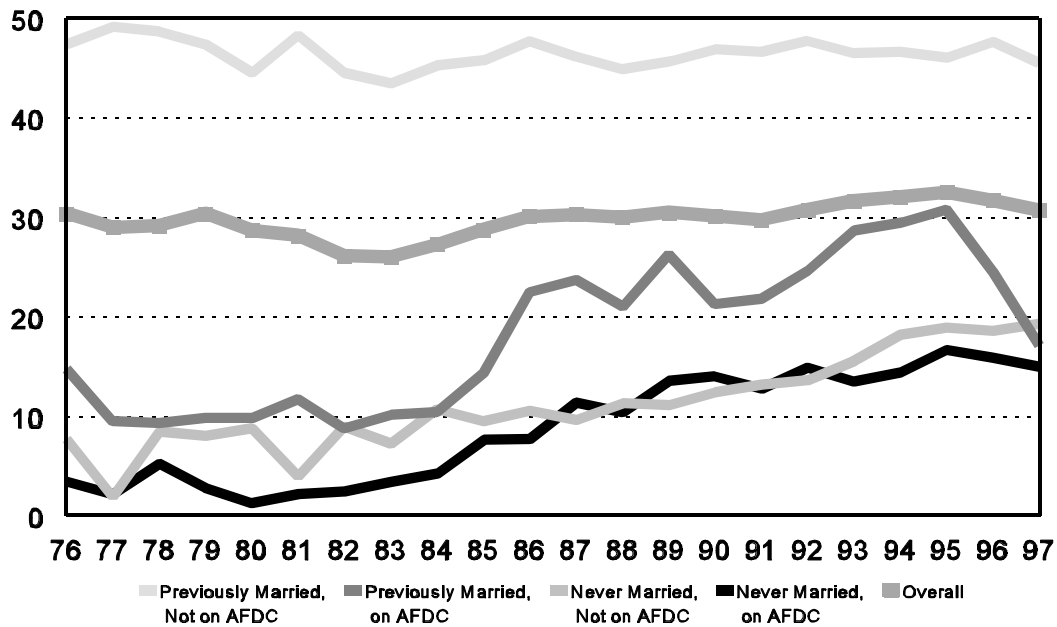
enforcement tools have been more beneficial to certain subgroups of mothers than others. For example, we find that the in-hospital paternity establishment program has been particularly effective for never-married mothers not on AFDC, while immediate wage withholding has been particularly effective for divorced mothers on AFDC. In contrast, other state-level variables, such as the state unemployment rate, have had minimal impact.

The outline of the paper is as follows. In the second section, we describe the trends in child support receipt between 1976 and 1997. In the third section, we summarize prior research on the effects of child support policy on child support outcomes. The fourth section provides background information on the key actors involved in child support. The fifth section delineates our econometric model. The sixth section describes our data. The seventh section discusses our regression results. The final section summarizes our results.

## **II. Trends in Child Support Receipt**

Figure 1 shows that three subgroups of mothers saw a dramatic improvement in their child support receipt rates between 1976 and 1997—never-married mothers on AFDC, never-married mothers not on AFDC, and divorced and separated (i.e., previously married) mothers on AFDC. Never-married mothers on AFDC saw their child support receipt rates increase from 3.4 percent to 14.9 percent, nearly a fivefold increase in 21 years. Never-married mothers not on AFDC and previously married single mothers on AFDC experienced twofold increases in their child support receipt rates. The only subgroup of single mothers who experienced a slight decline in their child support receipts was divorced and separated mothers who are not on AFDC. In 1997, 45.5 percent of these mothers received child support, which was slightly lower than it was 21 years earlier.

**Figure 1. Percentage of Single Mothers Receiving Child Support by Marital and AFDC Status**



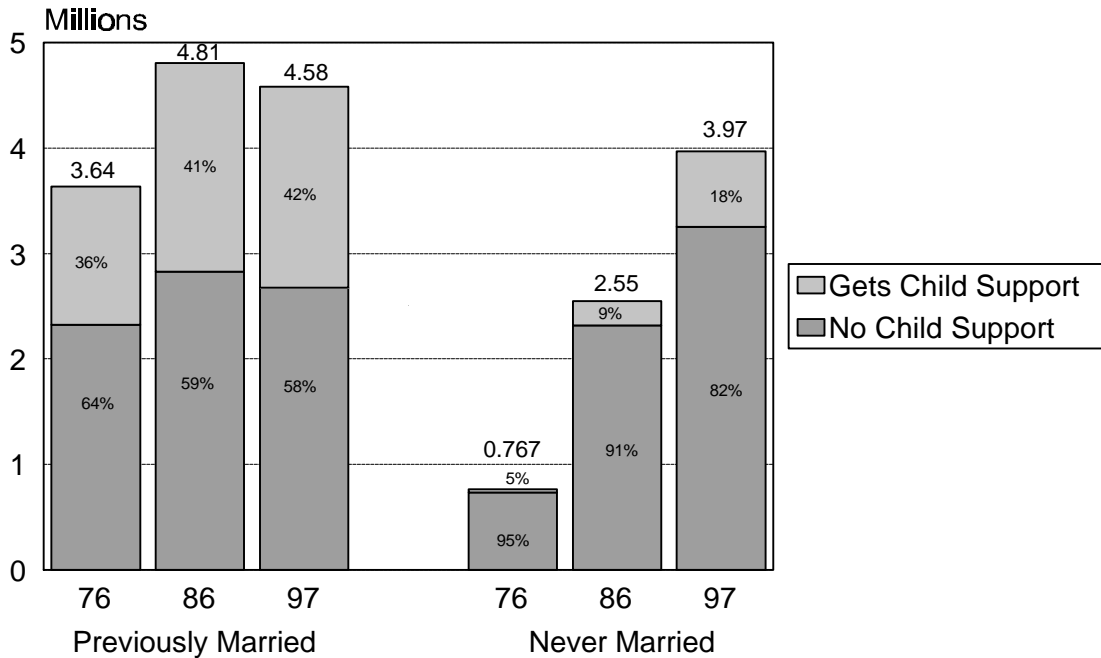
Source: March Current Population Surveys, 1977–1998.

These dramatic improvements in child support receipt rates for certain subgroups of single mothers are masked, however, by equally dramatic changes in the marital status composition of single mothers. Between 1976 and 1997, the number of never-married mothers increased fivefold, rising from 770,000 to 4.0 million. The number of divorced and separated mothers also increased during this period, but at a much slower rate, rising from 3.6 million to 4.6 million. Thus, the percentage of single mothers who have never married increased from 17.4 percent in 1976 to 46.4 percent in 1997.

Because never-married mothers' child support receipt rates are lower than that of previously married mothers, this shift in the marital status composition of single mothers caused the overall rate of child support receipt to remain largely unchanged. Figure 2 shows that, in

1976, only 5 percent of never-married mothers received child support, compared to 36 percent of previously married mothers. Although the rates of child support receipt have increased for both previously married and never-married mothers, never-married mothers are still considerably less likely to receive child support than previously married mothers. In 1997, 18 percent of never-

**Figure 2. Number of Single Mothers by Marital Status and Receipt of Child Support**



*Note:* May not add to 100 percent due to rounding.  
*Source:* March Current Population Surveys, 1977, 1987, 1998.

married mothers received child support, compared with 42 percent of previously married mothers.

### III. Prior Research Findings

Relatively little research has examined our primary research question—what impact has the expansion of the child support enforcement program had on child support outcomes? The few studies that have focused on this question have found that increased child support enforcement

has had a positive effect on child support outcomes. None of these studies, however, have examined child support reforms enacted in the 1990s, and none have examined the integral role of AFDC participation in child support outcomes.

Initial research in this area examined child support compliance rather than child support receipt rates (Beller and Graham 1993; Garfinkel and Robins 1994). The dependent variables were typically award rates, award amounts, and compliance with awards. Pooled cross-sectional data were used, drawing from the March/April Current Population Surveys (CPS) that included a Child Support Supplement (CSS) in 1979, 1982, 1984, 1986, and 1988 (the CPS-CSS has continued in the 1990s, but research on this topic has not included these later years). Both studies estimated many different models and typically found some evidence that child support laws and the child support enforcement program had a positive effect on child support compliance. Neither of these earlier studies, however, controlled for state-fixed effects. Thus, their results confound the effect of child support policies with other differences among states.

More recently, Freeman and Waldfogel (1998) have examined this issue for never-married mothers. Similar to our analysis, they examine child support receipt rates rather than child support compliance. They also use pooled cross-sectional data from the March CPS rather than the March/April CPS-CSS data and included year- and state-fixed effects in their analysis. They find that increased government expenditures on child support enforcement explain about one-fifth of the upward trend in child support receipt rates among never-married mothers. Unfortunately, they only examine child support enforcement tools enacted during the 1970s and 1980s, ignoring more recent child support reforms.

#### **IV. Background Information on the Key Actors in Child Support**

Several actors play critical roles in determining whether child support is actually paid. First and foremost are the parents who no longer live together. (The children also have a stake in whether child support is paid, but we have omitted their interests in this process since they typically do not have explicit legal rights.) The custodial parent, usually the mother, receives child support, while the noncustodial parent, usually the father, pays child support. As such, both parents have a critical stake in the payment of child support. Another actor is the government. Traditionally, the court system has been the ultimate arbiter regarding child support, but during the past 20 years the legislative branches of the federal and state governments have taken a more active role in child support enforcement because of their fiscal responsibilities for providing a safety net to poor children. We begin with a description of the government's role, followed by a description of the parents' roles.

##### **The Government's Role in Ensuring That Child Support Is Paid**

During the past 20 years, child support reform has dramatically altered the way in which child support orders are established and enforced. Prior to 1975, child support policy was dictated largely by family law in each state and enforced by the court system. As such, the child support enforcement process was "complaint driven." In other words, in order to establish legal paternity, to obtain a child support order, or to collect upon an existing order that was not being paid, a custodial parent had to hire an attorney, file a complaint, and go to court.

Today, the child support system is much more "proactive," especially for AFDC recipients, who are required to participate in the child support program or lose their benefits. (The AFDC program was abolished in 1996 and replaced by Temporary Assistance for Needy

Families (TANF). Throughout this paper, however, we refer to public aid recipients as AFDC recipients since that was the name of the program throughout the period under examination except for the last year.) It is also much less dependent on the court system; most states now have administrative or quasi-judicial processes for many of the steps involved in child support enforcement. But this transformation has been slow and is not complete; reforms are still being implemented as a result of the most recent federal child support reforms enacted in 1996.

The transformation started in 1975, when Congress enacted Title IV-D of the Social Security Act. This legislation established an open-ended entitlement to child support enforcement services. It established the federal Office of Child Support Enforcement (OCSE) to oversee the state child support enforcement programs but left the basic responsibility for administering the programs to the states. The federal government agreed to reimburse 75 percent of the administrative costs of running the program (which has since declined to 66 percent). In turn, each state had to establish a child support enforcement agency, better known as a IV-D program, and to serve AFDC recipients and any non-AFDC family requesting assistance.

The 1975 act also required AFDC recipients to assign their rights to child support to the government and to cooperate with the IV-D program as a condition of receiving AFDC. Thus, any child support paid on behalf of an AFDC family went directly to the government to reimburse it for the cost of providing AFDC to the family. The cooperation requirement was intended to offset the disincentive for custodial mothers to pursue child support since they did not receive any of the child support income collected on their behalf.

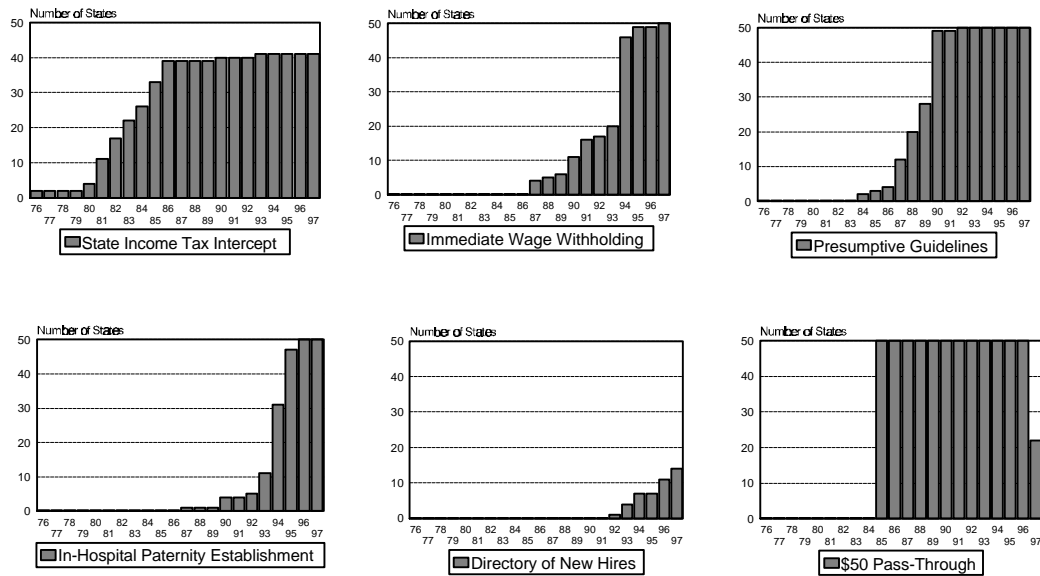
Although the program was technically available to non-AFDC families who requested its services, states rarely served this population at first. Congress did not make federal matching

funds available on a permanent basis for this population until 1980. Incentive funding, which was available for AFDC collections, was not extended to non-AFDC collections until 1984. As Congress increased its willingness to invest federal dollars to serve this population, states increased their efforts to serve them. Nonetheless, non-AFDC families are still underrepresented in the IV-D caseload.

The first challenge facing this federal/state partnership was to develop an efficient and effective system of collecting past-due child support from noncustodial parents who were behind in their child support payments. As a result, states began developing a series of enforcement tools to expedite these claims as well as ensure their payment. One such enforcement tool—state income tax intercept programs—was tried by many states. It withholds income tax refunds from noncustodial parents who are behind in their child support to offset their child support arrearages. This reform was codified into federal law as a part of the 1984 Child Support Enforcement Amendments. Figure 3 shows when states first adopted this reform (see the appendix for exact citations for the policy variables).

Another enforcement tool—wage withholding—became popular in the mid-1980s. At first, states required judges to impose wage withholding on noncustodial parents who fell behind in their child support payments. This approach was codified in the 1984 Child Support Enforcement Amendments. By the late 1980s, many states began to implement this mandate even before obligors became delinquent. Based on this experience, Congress enacted “immediate” wage withholding in the Family Support Act of 1988, which became effective January 1994 for all new child support orders. Figure 3 shows when states adopted immediate wage withholding for all new cases.

Figure 3. Trends in Child Support Policies



Source: Authors' review of state statutes and other information (see appendix for exact citations).

States also began to address the lack of horizontal equity in the amount of child support awards that judges set. Prior to the advent of state child support guidelines, judges determined the amount of a child support award on a case-by-case basis with no underlying formula to ensure consistency across families. States began to adopt child support guidelines in the 1970s, either through legislation, court rule, or administrative action. The federal government required states to adopt guidelines in 1984, as part of the Child Support Enforcement Amendments, but it did not require judges to follow them. In 1988, as part of the Family Support Act, Congress required that states make their child support guidelines binding on judges unless a written finding was issued.

Figure 3 shows when states required that judges use the state's child support guidelines in the

absence of a written finding (called Presumptive Guidelines).

It wasn't until 1993 that Congress turned its attention to voluntary paternity establishment. Prior to 1993, the federal government had tried to make it more difficult for noncustodial fathers to *avoid* paternity establishment (for example, they required all parties in a contested paternity case to submit to genetic testing), but they had not established a federal directive that would allow noncustodial fathers to *voluntarily* acknowledge paternity. Since the late 1980s, the state of Washington had been operating a successful voluntary in-hospital paternity acknowledgment program, resulting in large numbers of voluntary paternitys being established for nonmarital children. Other states had also begun to experiment with this approach. In response to these successful programs, Congress required all states to adopt civil procedures for voluntary paternity acknowledgment, including in-hospital programs, as part of its Omnibus Budget Reconciliation Act of 1993. As shown in figure 3, only 11 states had in-hospital paternity programs in 1993, the year Congress enacted legislation requiring all states to adopt them. Since then, however, almost all states have adopted this program.

The latest federal effort to reform welfare, the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) of 1996, continued to transform the child support enforcement system by increasing its access to information and continuing its effort to automate caseload processing. One of the reforms that increases information to the states is the requirement that employers report all new hires within 20 days to the child support enforcement program. This additional information is expected to reduce the delay in establishing immediate wage withholding for noncustodial parents who begin new jobs, making it more difficult for noncustodial fathers to avoid paying child support by changing employers. Figure 3 shows that

only 14 states had adopted this type of program by the end of 1997 when our data ends.

PRWORA also eliminated the federal requirement that states pass through the first \$50 of child support paid to welfare families. As explained above, since 1975, any child support paid on behalf of a family receiving welfare was retained by the government to compensate it for the cost of providing aid to the family. After 1984, however, the federal government required states to pass through to the family the first \$50 of child support received each month and disregard that amount in the determination of welfare benefits. This policy was meant to give the family on assistance an incentive to cooperate with the child support enforcement program. Under PRWORA, states are no longer required to pass through the first \$50 of child support to welfare families. Figure 3 shows that 28 states have ceased providing a \$50 pass-through.

### **Factors Affecting the Mother's Desire for Child Support**

Because the child support enforcement program has been so closely tied to the AFDC program, we focus our modeling of the mother's demand for child support on her decisions to pursue child support and AFDC. We assume that there are four possible states of the world, which are mutually exclusive and exhaustive:

$S_1$  = mother receives child support only,

$S_2$  = mother receives child support and AFDC,

$S_3$  = mother receives neither child support nor AFDC, and

$S_4$  = mother receives only AFDC.

Furthermore, we assume that these states occur with probability  $p_j$ , where  $j = 1-4$ . Thus, a mother's expected utility from receiving child support can be expressed as:

$$\text{Exp } U = \sum_{j=1}^4 p_j U(Z_j) - q C_m$$

where:  $Z_j$  represents the amount of consumption that she and her children can obtain in states  $S_j$ ;  $q$  equals 1 if the mother chooses to seek child support and zero otherwise; and  $C_m$  represents the mother's costs of seeking child support.

The cost of obtaining child support includes both pecuniary and nonpecuniary components. To the extent that she must go to court, she will have to incur legal expenses and endure time lost due to the court process. Furthermore, she may expect to experience emotional distress as a result of seeking support from a father who is not particularly inclined to pay it. Thus, the mother must decide whether to pursue child support, given the costs (and potential benefits) involved.

The mother's budget constraint is described as follows:

$$Y = w_m H_m + N + CS + r(G - w_m H_m - N - CS + dP)$$

where:  $w_m$  is the mother's wage;  $H_m$  is her hours of work;  $N$  is her nonwage income;  $r$  equals one if she chooses to receive AFDC and zero otherwise;  $G$  is the AFDC guarantee in her state;  $CS$  is the amount of child support received;  $d$  equals one if her state of residence has a \$50 pass-through program; and  $P$  equals the lesser of \$50 or the amount of child support received.

This budget constraint assumes that AFDC reduces benefits "dollar for dollar" of private income received, with the exception of the first \$50 of child support received (in states with this program).<sup>1</sup> In fact, the AFDC rules are more complicated than that and have changed several times during the 20 years that we examine below. Nonetheless, our simplifying assumption captures the essence of the AFDC rules, which reduce AFDC benefits by nearly 100 percent for each dollar of private income received.

One AFDC rule that influences single mothers' demand for child support is the requirement that single mothers cooperate with the child support enforcement system as a condition of receiving aid. This requirement means that mothers who choose AFDC must pursue child support (i.e.,  $q$  must equal one if  $r$  equals one).

We assume that a mother selects the state that maximizes her expected utility given these constraints. In other words, she selects the values of  $H$ ,  $r$ , and  $q$  that maximize:

$$\text{Exp } U = p_1 U(w_m H_m + N + CS) + p_2 U(w_m H_m + N + CS + r(G - w_m H_m - N - CS + dP)) + p_3 U(w_m H_m + N) + p_4 U(w_m H_m + N + r(G - w_m H_m - N)) - q C_m$$

given that  $q = 1$  if  $r = 1$ .

Child support enforcement policies have three possible effects on mothers' demand for child support. First, changes in policy can increase the probability that mothers receive child support. Examples of such policies are wage withholding and the income tax refund intercept program. Second, changes in policy can increase the amount of child support paid. Requiring judges to follow specific guidelines in setting the amount of child support owed was intended to achieve this aim. Third, policy changes can reduce the cost of pursuing child support. An example of this approach is the in-hospital paternity establishment program, which eliminates the need for unwed parents to go to court to establish paternity.

What are the likely effects of the other factors in a mother's utility function on her desire for child support? The likely effect of the mother's earnings ability on her desire for child support is unknown a priori. As her earnings ability rises, the benefits of receiving child support will fall, but presumably the costs of obtaining child support will also fall since the mother will probably be more efficient at seeking legal assistance and the pecuniary burden of seeking child support may

be a smaller fraction of her total income. Similarly, the likely impact of receiving public assistance on the mother's desire for child support is ambiguous. As the amount of public assistance available to the mother increases, the benefit of receiving child support declines, but the costs of pursuing child support will be lower if she receives public assistance since the child support enforcement program will pay for her legal costs.

### **Factors Affecting the Father's Willingness to Pay Child Support**

We assume that the father's utility increases with his own consumption and that of his children who live elsewhere, but the utility gained from an additional dollar spent on his children is less than the amount received by the custodial mother. Two reasons come to mind as to why noncustodial fathers gain less utility than custodial mothers with each additional dollar spent on their children. First, noncustodial fathers do not live with their children and thus do not gain the satisfaction that comes with residential contact. Since children's consumption is relatively steady over time (except for birthdays and the like), the parent who lives with them will receive the greatest utility per dollar spent on the children. Second, nonresident fathers have considerably less control than custodial mothers over how their financial support is spent on their children. Child support is paid to the mother and the mother decides how her family's income, including child support, will be allocated.

Fathers must decide whether to pay child support or not. We assume that the probability a father pays child support is equal to  $p$  ( $p = p_1 + p_2$ , where  $p_1$  and  $p_2$  are defined above). Given that a father pays child support, the state of the world is described as state A; state B describes the world when a father decides not to pay child support. Thus, the father's expected utility function can be summarized as:

$$\text{Exp } U = p U(Z_{Af}, Z_{Ac}) + (1 - p) U(Z_{Bf}, Z_{Bc}) + (1 - p)C_f$$

where:  $Z_{Af}$ ,  $Z_{Ac}$ ,  $Z_{Bf}$ ,  $Z_{Bc}$  represent the amount of consumption of the father and child in each state; and  $C_f$  is the cost that the father incurs if he does not pay child support.

The father will incur both pecuniary and nonpecuniary costs if he does not pay child support. For example, the father may have considerably less access to his children if he does not pay child support. In addition, a father who does not pay child support may need to change jobs regularly or take a job that pays him under the table in order to hide from the child support system, both of which would probably reduce his income.

The father's budget constraint depends on his labor market earnings ( $w_f H_f$ ), the amount of child support that he must pay (CS), and any nonwage income that he may have (N). Thus, his budget constraint is:

$$Y = w_f H_f + N - CS.$$

We assume that the amount of child support that he must pay is determined by a court or the child support enforcement system. While some noncustodial fathers pay child support without a support obligation and some have a support obligation and choose to pay less (or more) than the obligated amount, neither of these possibilities occurs very often.

The father is assumed to maximize his expected utility given his budget constraint by selecting H and p that maximize the following equation:

$$\text{Exp } U = pU(w_f H_f + N - CS, X_{Ac}) + (1 - p)U(w_f H_f + N, X_{Bc}) - (1 - p)C_f.$$

Just as for the mothers, child support enforcement can affect three factors in this equation. First, it can affect the probability that a noncustodial father pays child support. For example, the \$50 pass-through may encourage the father of a child on AFDC to pay child support because

under this program some of his payment goes directly to the child instead of merely being used to defray the costs of AFDC. Second, child support enforcement can influence the amount of child support that he pays. As discussed above, state child support guidelines were intended to achieve this aim. Finally, policies can affect the costs the noncustodial father will incur if he does not pay child support. License revocation and new hire directories are two examples of recent policies enacted by Congress that are intended to increase the costs of not paying child support.

The other major factor that is expected to affect the likelihood of paying child support is the noncustodial father's earnings ability. As his earnings increase, the likelihood of paying child support should also increase.

### **Resulting Hypotheses**

This theoretical discussion yields several hypotheses:

- Single mothers' child support receipt rates will increase as a result of the expansion of the child support enforcement program.
- Single mothers on AFDC will benefit more from the expansion of the child support enforcement program than those not on AFDC.
- Reduced earnings ability of single men will reduce child support, while increased earnings ability of single men will increase child support.
- An increase in the earnings potential of single mothers will reduce the benefits of receiving child support, but it will also reduce the costs of obtaining it. Thus, its affect on child support receipt rates is not known a priori.

### **V. Econometric Model**

As explained above, we examine four possible outcomes for a mother and her children:

- (1) family receives AFDC but not child support; (2) family receives AFDC and child support;  
(3) family receives neither AFDC nor child support; and (4) family receives child support only.

These four family situations are mutually exclusive and exhaustive so that the probability of a family being in any given situation is between zero and one and the sum of the probabilities over all four outcomes is equal to one.

Throughout our analysis, we always divide single mothers into never-married mothers and previously married mothers because these populations are so different. In particular, a never-married mother must identify who fathered her children and his paternity must be legally established before a child support obligation can be set. On the other hand, for previously married mothers, paternity is rarely an issue.

Our objective is to ascertain whether the enactment of specific child support enforcement policies and the expansion of the child support enforcement program have influenced the probability of being in each of the four situations. The statistical model we employ is the multinomial logit, which allows us to estimate the relationship between our exogenous variables and these joint probabilities. We include a large number of individual characteristics and other state-level variables, discussed in greater detail below, to reflect the other factors in the parents' utility functions that may affect their decisions to demand and supply child support. This approach is essentially a reduced form specification in which a set of exogenous variables are hypothesized to influence four combinations of two endogenous variables—receipt of AFDC and receipt of child support.<sup>2</sup>

For each of the four possible outcome categories (as detailed above), the probability that a single mother  $i$  chooses a specific category  $j$  can be expressed as:

$$P(S_i = j) = \frac{\exp(X_i\beta_j)}{\sum_{k=1}^4 \exp(X_i\beta_k)} \quad j = 1, \dots, 4,$$

where  $X$  = a vector of individual characteristics and state-level attributes, and  $\beta_j$  = a vector of unknown parameters associated with situation  $j$ .

The parameters of this model (the  $\beta$ 's) are not uniquely identified. To achieve identification, we set all of the parameters of one of the family situations equal to zero. Below, we choose to set  $\beta_1$  equal to zero (i.e., family receives AFDC only). The choice of the normalization is completely arbitrary and has no bearing on the empirical results presented below. Given this normalization, the probabilities can be rewritten as:

$$P(S_i = j) = \frac{\exp(X_i \beta_j)}{1 + \sum_{k=1}^4 \exp(X_i \beta_k)} \quad j = 2, \dots, 4$$

$$P(S_i = 1) = \frac{1}{1 + \sum_{k=1}^4 \exp(X_i \beta_k)}$$

The coefficients in this model are difficult to interpret. Nonetheless, from estimates of  $\beta_j$ , it is straightforward to predict various unconditional and conditional probabilities of receiving child support.<sup>3</sup> The unconditional probability of receiving child support is:

$$\Pr(\text{CS}) = \hat{P}_2 + \hat{P}_4$$

where the “hats” refer to the predicted joint probabilities. To determine the impact of receiving AFDC on the probability of receiving child support, we calculate the following conditional probabilities:

$$\Pr(\text{CS}|\text{AFDC}) = \hat{P}_2 / (\hat{P}_1 + \hat{P}_2),$$

$$\Pr(\text{CS}|\text{no AFDC}) = \hat{P}_4 / (\hat{P}_3 + \hat{P}_4)$$

These unconditional and conditional probabilities will be used to assess our aforementioned hypotheses.

## **VI. Data**

Our research relies on several data sources described below.

### **March Current Population Surveys**

The primary data for this analysis are the March Current Population Surveys (CPS). The CPS is a nationally representative survey of approximately 50,000 households that is conducted monthly by the U.S. Census Bureau. We use the March CPS to conduct this research because the Census Bureau collects detailed income information about each respondent in this month, including information about child support and alimony. As well, the March CPS has been conducted annually since the 1960s, resulting in a continuous time trend.

In the past, child support research has not used these data. Instead, it has tended to focus its analysis on the matched March/April CPS that includes detailed questions about child support from the April Child Support Supplement (CSS). This data source, typically referred to as the March/April CPS-CSS, is available roughly every other year between 1979 and 1992. The main problem with these data for trend analysis, however, is that many of the questions in the supplement have changed over time, making it impossible to create a consistent series that describes the universe of eligible mothers or their child support outcomes. The March CPS, on the other hand, has had many fewer changes in its questions.<sup>4</sup>

On the other hand, the March CPS has several disadvantages for this analysis. First, it cannot identify the entire universe of custodial families; instead, only single-mother families can be distinguished (i.e., it misses custodial mothers who are currently married). Second, the survey

does not ask about the existence of child support orders or the amount due. Thus, we cannot discern whether child support reforms have differential effects on the different components of child support, such as award rates, levels of awards, and compliance with child support orders. Nonetheless, we believe the advantages of these data far outweigh the disadvantages when examining child support trends, and thus the data warrant rigorous analysis.

**Universe.** The universe for our analysis is single-mother families. We define single mothers as any adult woman who is divorced, separated, or never-married and who lives with her own children, at least one of whom is under 18 years of age. We discard widows from our pool of “single mothers” on the assumption that most of their children do not have a father who is living and thus are not eligible for child support.

**Dependent Variable.** Our dependent variable consists of four mutually exclusive (and exhaustive) outcomes: (1) receive AFDC only, (2) receive both AFDC and child support, (3) receive neither AFDC nor child support, and (4) receive child support only (see appendix table 1 for mean values of these outcomes in 1976 and 1997).<sup>5</sup> We divide the sample into these four categories because of endogeneity between child support and AFDC receipt—a woman’s decision to seek child support depends on her decision about AFDC income, and vice versa.

We did not examine the amount of child support received by single mothers because the time trend for the amount of child support received in the March CPS is particularly weak. Prior to 1988, the amount of child support income was combined with several income sources, including alimony, contributions from nonhousehold members, and other periodic income. In addition, because AFDC recipients do not actually receive the amount of child support paid on their behalf (except for possibly the first \$50), the question about the amount of child support

received is ambiguous. Does the AFDC recipient report the amount she actually receives or does she report the amount that is paid on her behalf? We suspect that it is the former, and thus the amount does not reflect the full amount of child support paid for the family.

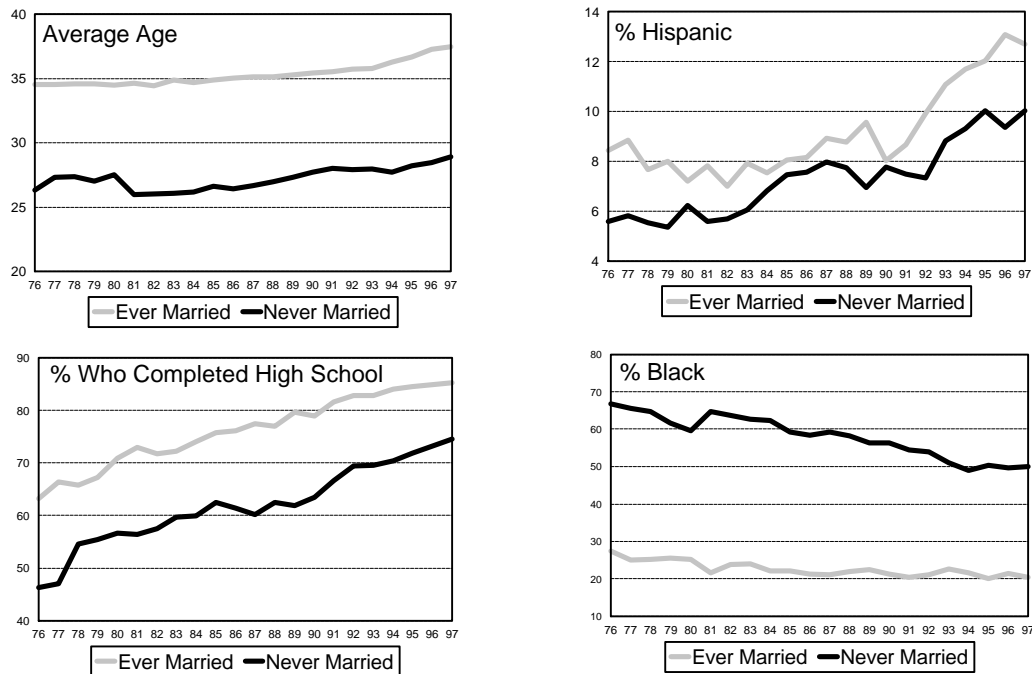
AFDC participation reflects the receipt of cash assistance last year. Although it is well known that AFDC participation is underreported, we make no effort to correct for this underreporting since AFDC participation is not the main focus of this paper.<sup>6</sup>

**Demographic Controls.** We include the following demographic characteristics of single mothers: age, race, ethnicity, education, and number and age of children. A mother's age as well as its square are included in the model. Her education is divided into three dummy variables—high school graduate, some college, and college graduate (high school dropout is the omitted category)—with her highest level of education set equal to one and the other variables equal to zero. Race and ethnicity are combined into two dummy variables: the first equals one if the mother reports that she is Hispanic and the second equals one if the mother reports that she is African American (but not Hispanic). The number of children living with the single mother is included as well as a dummy variable indicating whether the mother has children living with her who are under the age of six (see appendix table 1 for mean values of these variables in 1976 and 1997).

Figure 4 shows four key demographic characteristics of single mothers and how they have changed since 1976. First, we find that single mothers' educational attainment has increased, especially among never-married mothers. In 1976, less than half (46.3 percent) of never-married mothers had completed high school, but by 1997 that figure had increased to 74.5 percent. Similarly, among previously married mothers, their high school completion rate increased from

63.2 percent to 85.3 percent during this period. Figure 4 also shows that the average age of single mothers has risen during this period. In 1976, the average age of never-married mothers was 26.3; this increased to 28.9 in 1997. Previously married mothers experienced a similar increase, going from an average age of 34.5 to an average age of 37.5 over the 21-year time period.

Figure 4. Demographic Characteristics of Single Mothers by Marital Status



Source: March Current Population Surveys, 1977–1998.

Also shown in figure 4, the proportion of single mothers who are black has declined sharply since 1976, especially among never-married mothers. In 1976, two-thirds of never-married mothers were black, but by 1997 this figure had fallen to one-half. Among previously married mothers, the percentage who were black declined from 27.5 percent to 20.4 percent.

Finally, we find that the proportion of never-married single mothers who are Hispanic has risen from 5.6 percent to 10.0 percent. For previously married mothers, the proportion who are Hispanic increased from 8.4 percent to 12.7 percent.

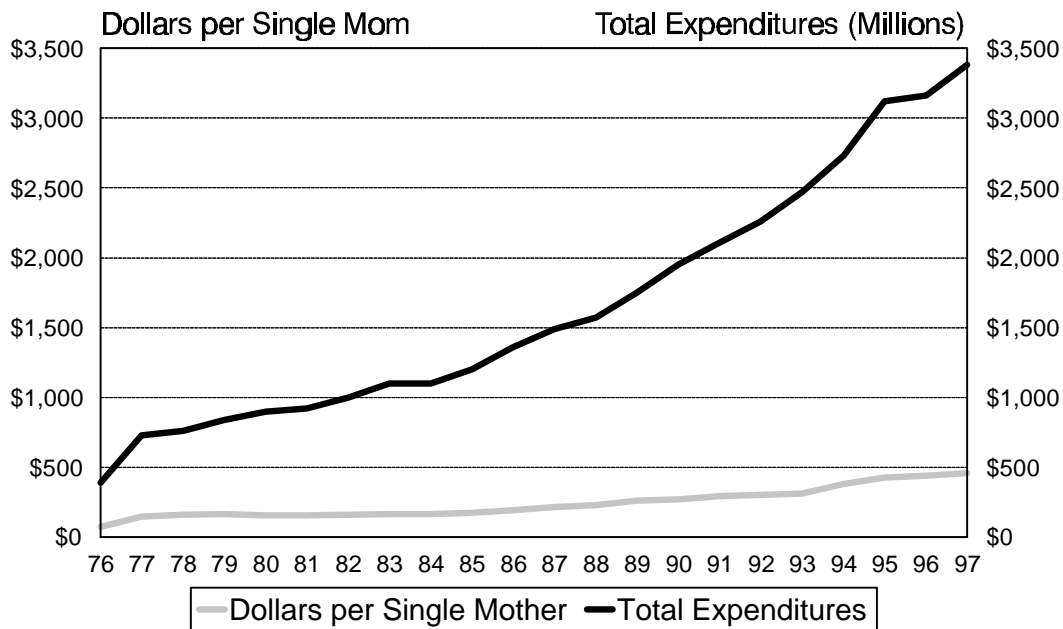
**Fixed Effects.** State- and time-fixed effects are controlled for in each model by including a dummy variable for the year the mother's data are from and a dummy variable for the state in which the single mother lived. These variables are included to control for time and state effects that are not captured by the policy variables and other state-level variables in the model.

### **Child Support Enforcement Data**

We augment the March CPS by adding the years in which six child support enforcement laws became effective in each state, described in greater detail above.<sup>7</sup> This information was collected through extensive legal research of state statutes, state child support enforcement plans, and, when necessary, queries to the state child support enforcement offices (see the appendix for exact citations). It provides a unique data set that previously has not been available to researchers.

We characterize the child support enforcement (IV-D) program by examining child support expenditures in each state and year. We examine administrative costs on a per capita basis (i.e., per single mother) in an effort to capture the increase in child support expenditures relative to the demand for these services (see figure 5 below).<sup>8</sup> We limit our IV-D administrative data to this series because it is routinely audited by the federal government, which improves its quality and consistency. Unfortunately, much of the other administrative data that the federal OCSE publishes in its annual report to Congress are not considered reliable (Guyer, Miller, and Garfinkel 1996).

Figure 5. Federal and State Child Support Expenditures



Note: Values expressed in 1997 dollars.

Source: Expenditures data from Federal Office of Child Support Enforcement, Annual Reports to Congress (various years); number of mothers from March Current Population Surveys, 1977–1998.

Figure 5 shows that the federal and state governments spent \$3.4 billion on the child support enforcement program in FY 1997, up from \$389 million (expressed in 1997 dollars) in FY 1976, representing more than an eightfold increase in 20 years. On a per capita basis (i.e., per single mother), expenditures did not rise as rapidly, but they still quadrupled during this period, increasing from \$71.13 per single mother to \$458.00 per single mother (see figure 5).

### Other State-Level Control Variables

Single mothers rely on other sources of income besides child support, such as AFDC or their own employment, to care for their children. Thus, we wanted to examine factors thought to influence these decisions. Because of concerns about endogeneity between work, AFDC reciprocity, and child support receipt, we include proxy measures for the AFDC and work

decisions rather than the actual observed characteristics. We include the maximum AFDC benefit level for a family of three in each state/year as a regressor since it is expected to influence a mother's decision to receive aid.<sup>9</sup> To proxy a mother's propensity to work, we include the proportion of single mothers that are working in each state/year, which was obtained from the March CPS data. Figure 6 shows the trends in these two measures. The real value of the maximum benefit for a family of three on AFDC has declined sharply since 1976, while single mothers' employment rate has steadily increased.

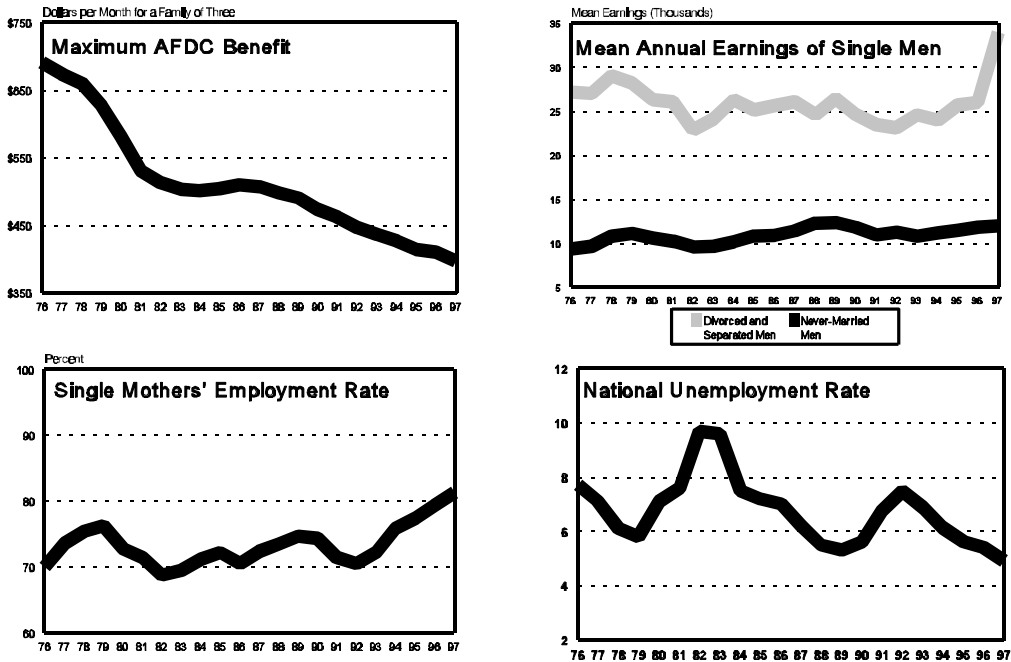
We anticipate that an important determinant of child support payments is the earnings of noncustodial fathers. Ideally, we would have information about the earnings of each noncustodial father associated with a custodial mother in our CPS sample. Unfortunately, these data do not exist. Instead, we rely on the average annual earnings of single men to reflect noncustodial fathers' ability to pay child support. We generated the mean annual earnings of single men between the ages of 15 and 39 in each state and year from the March CPS data. We focus on this population of men because they are more likely than married men (or single men outside of this age range) to be noncustodial fathers.

Figure 6 shows that the annual earnings (in 1997 dollars) of divorced and separated men remained relatively stable throughout this period, hovering around \$27,221, until they rose sharply to \$33,963 in 1997. Never-married men's annual earnings, on the other hand, increased slightly during this period, rising from \$9,401 in 1976 to \$11,979 in 1997.

Another indicator that measures labor market opportunities is the unemployment rate. In our regression analysis below, we use the state unemployment rate in each year, which was obtained from the U.S. Department of Labor. Figure 6 reports the national unemployment rate to

show how volatile the unemployment rate has been in the last 21 years, especially in comparison to average male earnings.

**Figure 6. Other State-Level Control Variables**



*Note:* Dollar values are expressed in 1997 dollars. Men are between 15 and 35 years old.  
*Source:* Urban Institute microsimulation model (TRIM); March Current Population Surveys, 1977–1998; Economic Report of the President, 1998.

## VII. Regression Results

This section examines the extent to which the expansion of the child support enforcement system contributed to the rise in child support receipt rates for never-married and previously married mothers. The overall impact of the child support enforcement expansion is discussed first, followed by a discussion of each specific policy variable. We then turn our attention to the impact of the other factors in the analysis.

### **Overall Impact of the Expansion of the Child Support Enforcement System**

To test our basic hypothesis—that single mothers’ child support receipt rates were

significantly affected by the expansion of the child support enforcement program—we conducted a likelihood ratio test of our model with and without the child support enforcement variables.<sup>10</sup>

We found that adding the child support enforcement variables to our model produced a difference in these likelihood ratio statistics that was statistically significant at the 10 percent level for never-married and previously married mothers, confirming our hypothesis.

How much did single mothers benefit from the expansion of the child support enforcement program? To answer this question, we first graphed the predicted probability of receiving child support for previously married (figure 7) and never-married mothers (figure 8) for each year between 1976 and 1997 (the darkest lines on the graphs). We then graphed the predicted probability of receiving child support in each year from a multinomial logit model of child support receipt that includes all of the explanatory factors except the policy variables (the light grey lines on the graphs). Finally, we added the policy variables to the multinomial logit model and graphed the resulting predicted probabilities of receiving child support in each year from this model, referred to as the full model (the dark grey lines on the graphs). This latter model indicates the trend in child support receipt rates if child support enforcement policies in the model had not been implemented and none of the other factors in the model had changed. The difference between the latter two trend lines measures the extent to which the child support enforcement variables in the model can account for the change in child support receipt rates. The difference between the predicted probabilities without any controls (i.e., the year dummies only model) and the predicted probabilities from the full model measures the extent to which other factors besides time contribute to the change in child support receipt rates.

Figure 7. Predicted Probability of Receiving Child Support from Three Multinomial Logit Models for Previously Married Mothers

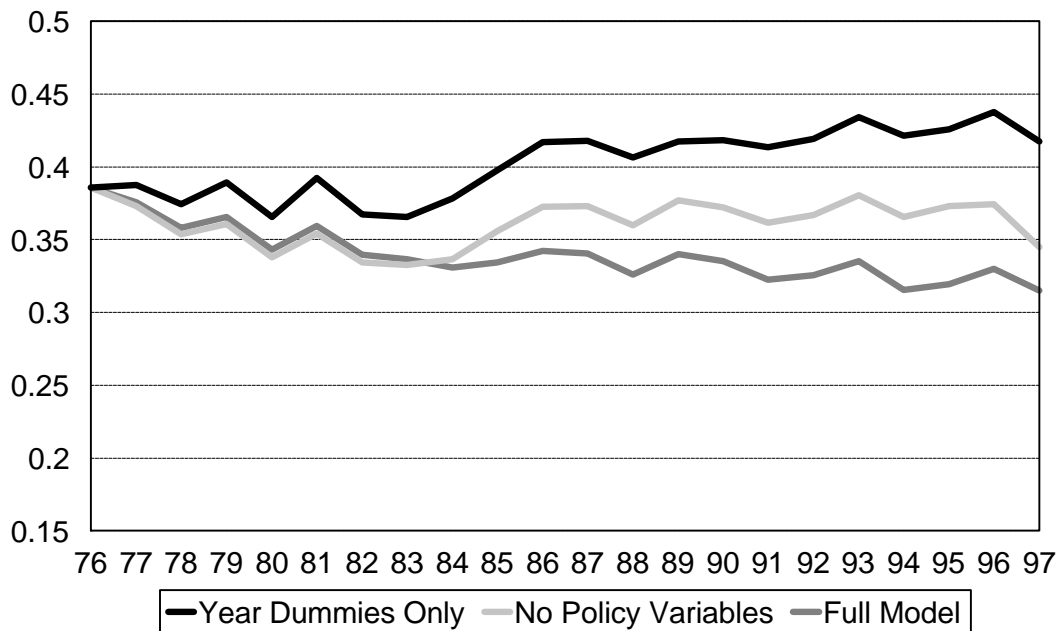


Figure 7 shows that the predicted probability of receiving child support among previously married mothers increased by 3.1 percentage points between 1976 and 1997, from 38.6 percent to 41.7 percent. It also shows, however, that if all of the other explanatory factors in the model other than the child support enforcement variables had not changed, the predicted probability of receiving child support among previously married mothers would have declined 4.1 percentage points, from 38.6 percent to 34.5 percent. In other words, changes in the mothers' individual characteristics and other state characteristics contributed to the rise in child support receipt rates for previously married mothers. Nonetheless, if the child support enforcement variables in the model had not been implemented, we find that the predicted probability of receiving child support among previously married mothers would have declined another 3.0 percentage points. In other words, implementing these policies increased the likelihood of receiving child support among

previously married mothers by 3.0 percentage points. The difference between the top line and the bottom line, which was 10.2 percentage points by 1997, indicates the extent to which factors in our model other than time explain the change in child support receipt rates. Thus, the child support enforcement variables in this model explained 29 percent of the overall change in the predicted probability of receiving child support for previously married mothers (i.e., 3.0/10.2).

Figure 8. Predicted Probability of Receiving Child Support from Three Multinomial Logit Models for Never-Married Mothers

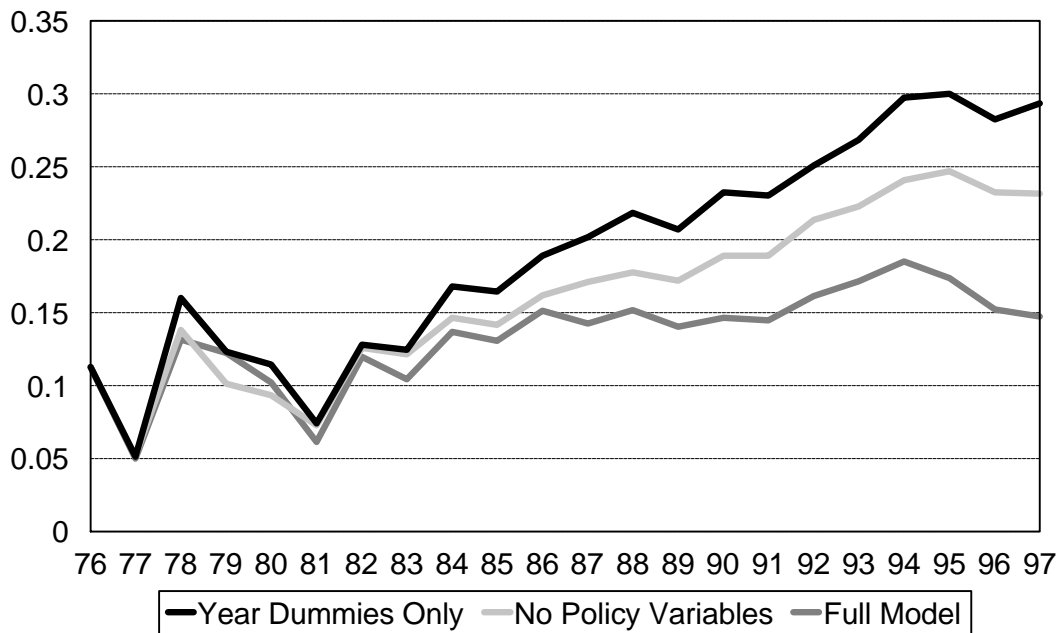


Figure 7 also shows that the child support enforcement program began to affect child support receipt rates for previously married mothers in 1985, which coincides with the first major federal efforts to reform child support enforcement. Prior to that date, the child support enforcement variables in our model had no discernible effect on the national child support receipt

rates of previously married mothers. Child support enforcement's impact on child support receipt rates for previously married mothers peaked in 1995 and has since declined somewhat.

Turning our attention to never-married mothers, figure 8 shows that the predicted probability of receiving child support increased 18.0 percentage points, from 11.3 percent in 1976 to 29.3 percent in 1997. Once the characteristics of never-married mothers and changes in state characteristics other than child support enforcement policies are controlled for, figure 8 shows that the predicted time trend from this model increased by 11.9 percentage points by 1997. In other words, if other factors in the model had not changed, the predicted probability of receiving child support for never-married mothers would have increased by 11.9 percentage points. The bottom trend line in figure 8 shows that if all of the explanatory factors in the model had remained unchanged, the predicted probability of receiving child support among never-married mothers would have risen by 3.5 percentage points. Thus, the child support enforcement variables included in the model explain 58 percent of the rise in child support receipt rates for never-married mothers (i.e.,  $(11.9 - 3.5)/(18 - 3.5)$ ).

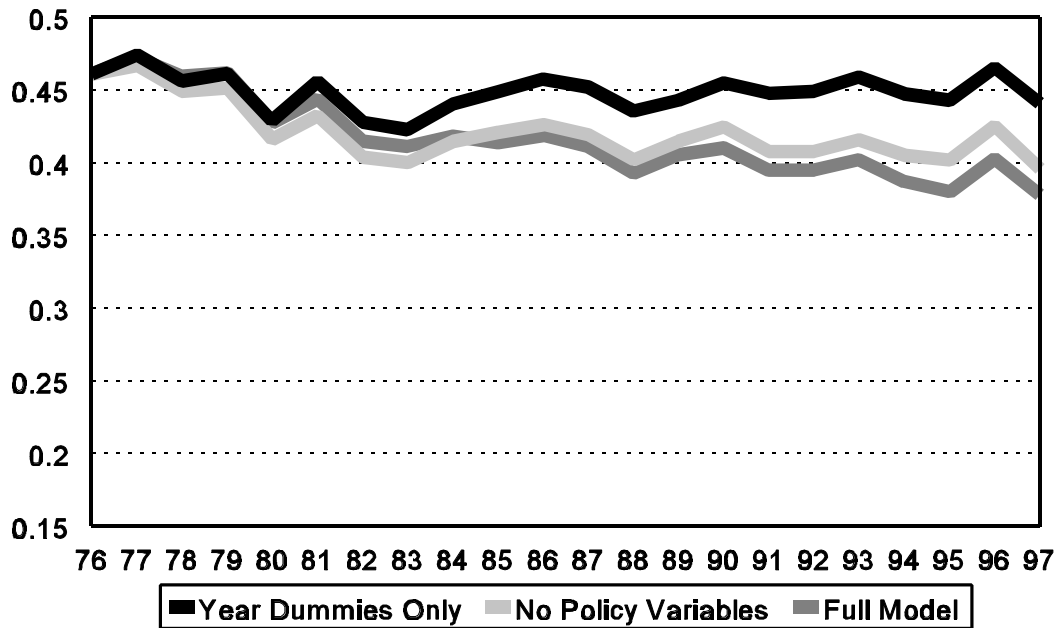
Figure 8 also suggests that child support policies included in our analysis did not affect child support receipt rates for never-married mothers until 1987, two years after they affected previously married mothers' receipt rates. In addition, it shows that the greatest gains for never-married mothers from the child support enforcement program have occurred since 1994, which coincides with the federal mandate to enact in-hospital paternity establishment programs. Again, this contrasts with previously married mothers, who have seen their gains from child support enforcement decline somewhat in the past two years.

Our second hypothesis is that the expansion of the child support enforcement system had a greater impact on receiving child support for single mothers on AFDC than for those not on AFDC. To test this hypothesis, we examined the predicted probability of receiving child support conditional on the receipt of AFDC.

We find evidence to confirm our hypothesis for previously married mothers but not for never-married mothers. Figure 9 shows that the likelihood of receiving child support among previously married mothers not on AFDC increased somewhat as a result of the child support enforcement variables included in the model. The trend line representing the full model for previously married mothers not on AFDC is lower than that representing the model without policy variables. By 1997, the difference between these two trend lines is 1.8 percentage points. Thus, we estimate that the expansion of the child support enforcement program increased the likelihood of receiving child support by 1.8 percentage points for previously married mothers not on AFDC.

Nonetheless, figure 10 shows that the expansion of the child support enforcement program had an even larger impact on the likelihood of receiving child support among previously married mothers on AFDC than among those off AFDC. The trend line representing the full model for previously married mothers on AFDC is substantially lower than the trend line representing the model without policy variables. This difference began in 1984; peaked in 1995, at which time the child support program had increased the likelihood of receiving child support among previously married mothers on AFDC by 19.8 percentage points; but since then has waned. By 1997, we estimate that the child support enforcement variables in our program resulted in a 11.1 percentage point increase in the likelihood of receiving child support among previously married mothers on AFDC.

**Figure 9. Predicted Probability of Receiving Child Support from Three Multinomial Logit Models for Previously Married Mothers**  
 Receive Child Support Given Not on AFDC



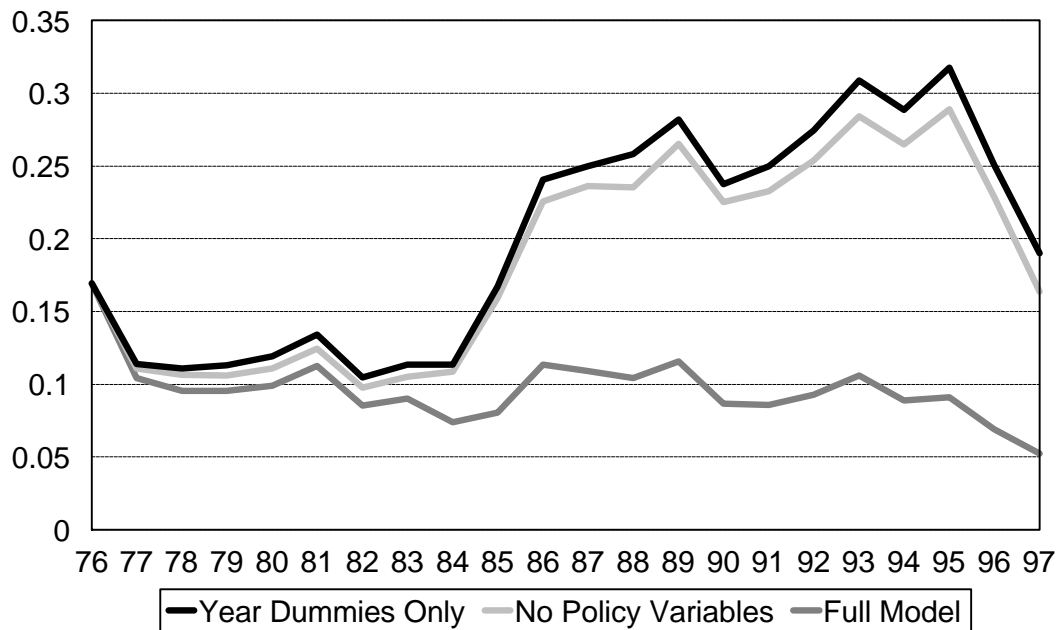
We

suspect that part of the reason that the benefits of the child support enforcement program for AFDC recipients have waned in recent years is the elimination of the federally mandated \$50 pass-through. Comparing figures 9 and 10 shows that previously married mothers not on AFDC did not experience a similar decline in benefits derived from the child support enforcement program, suggesting that it is a change in the AFDC rules that has contributed to this decline. (We have additional evidence to support this hypothesis, which is discussed below.)

Figure 10 also shows that the other variables in the model besides child support enforcement, such as the personal characteristics of the single mothers and employment-related

state characteristics, had very little effect on the likelihood of receiving child support among previously married mothers on AFDC. The child support enforcement variables explained over 80 percent of the rise in child support receipt rates for previously married mothers on AFDC.

**Figure 10. Predicted Probability of Receiving Child Support from Three Multinomial Logit Models for Previously Married Mothers Receive Child Support Given on AFDC**

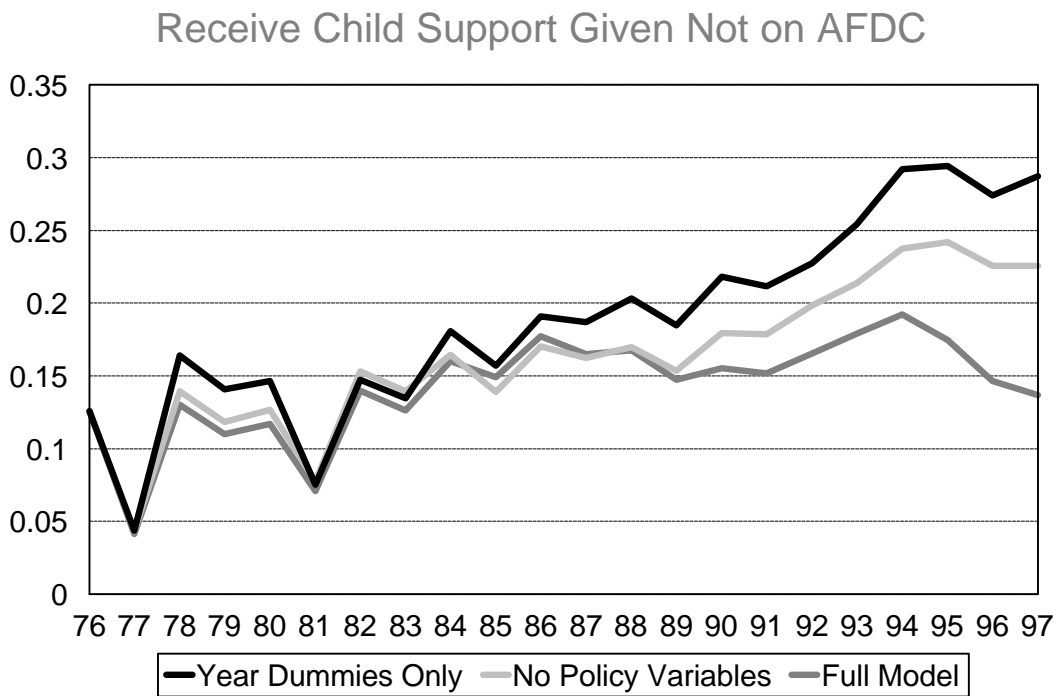


Turning our attention to never-married mothers, figure 11 shows that the expansion of the child support enforcement program greatly improved the likelihood of receiving child support among never-married mothers not on AFDC, in contrast to its relatively minor impact on *previously* married mothers not on AFDC. By 1997, the difference between the predicted probability of receiving child support from the full model and that from the model without child support enforcement variables was 8.9 percentage points for never-married mothers not on AFDC. Based on this finding, we estimate that the expansion of the child support enforcement

program increased the likelihood of receiving child support by 8.9 percentage points for never-married mothers not on AFDC.

Nonetheless, figure 11 shows that the child support enforcement program only began to benefit never-married mothers not on AFDC in the 1990s. Prior to that, the child support enforcement variables in our model had no discernible impact on the likelihood of receiving child support for never-married mothers not on AFDC. These gains coincided with the expansion of the in-hospital paternity establishment program, which is discussed in greater detail below.

Figure 11. Predicted Probability of Receiving Child Support from Three Multinomial Logit Models for Never-Married Mothers

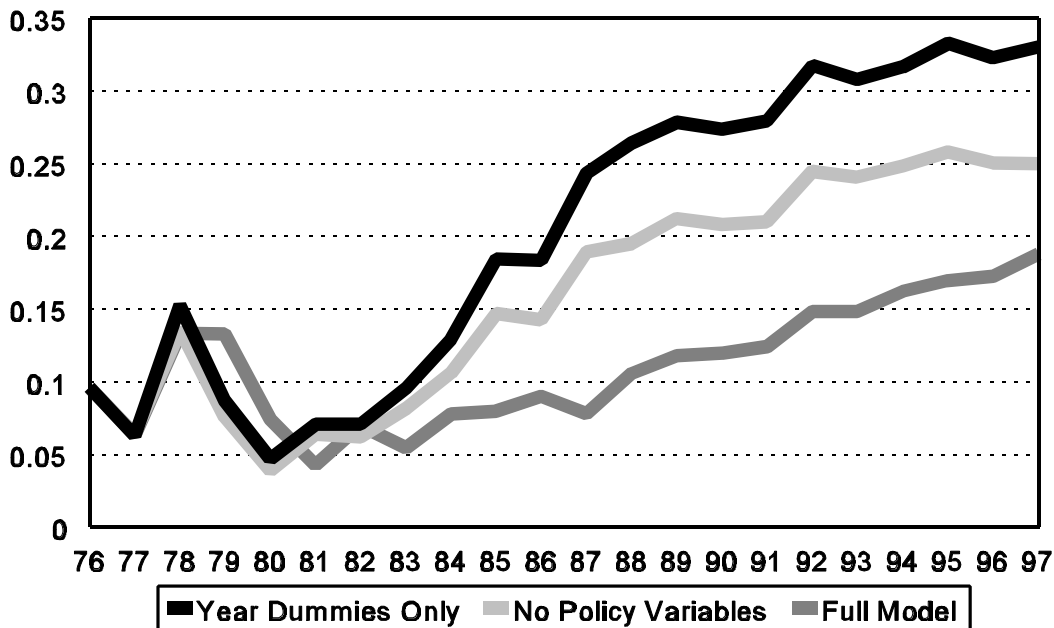


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Figure 12 shows that the expansion of the child support enforcement program benefited never-married mothers on AFDC, but these gains have waned in recent years. In 1987, we estimate that

the child support enforcement program had increased the likelihood of receiving child support by 11.1 percentage points for never-married mothers on AFDC, but this has since declined to 6.2 percentage points. As mentioned earlier, we suspect that a primary factor contributing to the declining impact of child support enforcement on this population is the repeal of the federally mandated \$50 pass-through. Over half of the decline in the benefits to child support enforcement for never-married mothers on AFDC has occurred since 1995.

**Figure 12. Predicted Probability of Receiving Child Support from Three Multinomial Logit Models for Never-Married Mothers**  
**Receive Child Support Given on AFDC**



In sum, we find evidence to confirm our hypothesis that the expansion of the child support enforcement program benefited those on AFDC more than those off AFDC, but only for previously married mothers. For never-married mothers, we find that both AFDC recipients and non-AFDC recipients benefited from the expansion of the child support enforcement program.

## **Impact of Specific Child Support Enforcement Policies**

To determine whether specific child support enforcement policies significantly affected child support receipt rates for single mothers, we deleted one child support enforcement variable at a time from our model and conducted log-likelihood ratio tests to ascertain whether the model with and without each specific policy was significantly different. For those policies that produced a statistically significant difference in the likelihood ratio statistic at the 10 percent level, we then derived predicted probabilities of receiving child support in 1997 from each model without the specific policy variable and compared that to the predicted probability of receiving child support generated from the full model.

By deleting one policy variable at a time, we are measuring the extent to which each specific enforcement variable contributed to the rise in child support received. In other words, it answers the question—if a specific enforcement policy had been enacted, but none of the other child support enforcement policies had been, what would have happened to child support receipt rates? It is important to note that the estimated impact of each specific policy does not necessarily sum to the estimated impact of the policies taken as a whole. These policies work together and have overlapping effects on child support receipt. Table 1 summarizes our results.

In general, we find that most of the specific child support enforcement variables included in our analysis significantly increased the likelihood of receiving child support. Interestingly, immediate wage withholding, typically considered the most effective child support enforcement tool, significantly affected child support receipt rates for previously married mothers only (Sorensen and Karant 1999). Our research finds that never-married mothers have not benefited

**Table 1. Estimated Impact of Specific Regressors on the Receipt of Child Support among Single Mothers**

Explanatory Variables	Never-Married Mothers			Previously Married Mothers		
	On AFDC	Off AFDC	Total	On AFDC	Off AFDC	Total
<b>Percentage-Point Impact of Specific Policies on the Likelihood of Receiving Child Support</b>						
Tax Intercept Program	4.3	.5	1.6	.8	.1	.4
Wage Withholding				1.2	.1	.3
Child Support Guidelines	-.9	2.5	1.9	.9	1.2	.7
In-Hospital Paternity	0.0	2.8	2.2			
New Hire Directories						
\$50 Pass-Through	4.5	-.9	.4	2.1	.9	1.1
Child Support Expenditures	1.5	3.1	2.8	2.4	-2.4	-1.4
<b>Percentage-Point Impact of Other State-Level Variables</b>						
Average Earnings of Single Men	3.5	-.2	.6	.1	.2	.3
State Unemployment Rate						
Single Mothers' Employment Rate	-.5	0.1	-.1	-.2	.1	-.3
Maximum AFDC for a Family of 3						
<b>Percentage-Point Impact of Individual Characteristics</b>						
Black	1.7	1.0	1.1	.4	1.3	1.4
Hispanic	0.0	-.1	-.1	-.4	-1.7	-1.7
Age	.3	.6	.5	-.1	.4	.7
Education	1.4	1.8	1.6	.4	3.0	3.4
Age and Number of Children	.3	-.3	-.3	0.0	-1.0	-.6
State-Fixed Effects	-6.0	-1.7	-2.6	2.3	-8.9	-6.0

*Note:* Percentages are reported when a variable produced a statistically significant difference at the 10 percent level in the likelihood ratio test for the multinomial logit model with and without the specific variable(s).

from this enforcement tool. Furthermore, the positive impact of immediate wage withholding has been limited to previously married mothers on AFDC; it has not benefited those off AFDC. For previously married mothers on AFDC, immediate wage withholding caused child support receipt rates to increase by 1.2 percentage points (see table 1). The limited benefit of immediate wage withholding may be attributed to the fact that it has only been federally mandated for non-AFDC cases since 1994. The federal mandate began in 1990 for AFDC cases.

Our research shows that two other child support enforcement tools—the tax intercept program and presumptive guidelines—have had a large impact on the likelihood of receiving child support among previously married and never-married mothers. The tax intercept program has largely benefited AFDC recipients, increasing the likelihood of receiving child support by 4.3 percentage points for never-married mothers and by .8 percentage point for previously married mothers. Interestingly, presumptive guidelines have had their biggest effect on never-married and previously married mothers off AFDC. Table 1 shows that the likelihood of receiving child support increased by 2.5 percentage points for never-married mothers off AFDC and by 1.2 percentage points for previously married mothers off AFDC.

Another child support mandate that the federal government recently rescinded—the \$50 pass-through—significantly increased the likelihood of receiving child support for never-married and previously married mothers. Not surprisingly, the impact of this program was basically limited to AFDC recipients. The \$50 pass-through program increased the likelihood of receiving child support by 4.5 percentage points for never-married mothers on AFDC and by 2.1 percentage points for previously married mothers on AFDC (see table 1). This finding does not necessarily imply that the federally mandated \$50 pass-through increased the likelihood of noncustodial

fathers *paying* child support, which was the aim of the mandate. Instead, it only shows that single mothers on AFDC were more likely to receive child support, which is inevitable with any pass-through program.

The voluntary in-hospital paternity establishment program benefited never-married mothers off AFDC, but not other groups of single mothers. We estimate that this policy increased the likelihood of receiving child support by 2.8 percentage points for never-married mothers off AFDC (table 1). Paternity establishment is rarely an issue for previously married mothers, and thus it comes as no surprise that they have not benefited from this program. We suspect that never-married mothers on AFDC have not benefited from this program because there is little, if any, incentive to voluntarily acknowledge paternity for mothers on AFDC since nearly all of the child support collected on their behalf will go to the government to reimburse it for providing AFDC. In addition, establishing paternity gives the father legal standing in court, which he could use against her in a custody hearing.<sup>11</sup>

The newest federal mandate examined in this paper—new hire directories—did not significantly increase the likelihood of receiving child support among previously married or never-married mothers. Only 11 states had adopted a new hire directory by the time that our data ends in 1997. Thus, it is not surprising that this policy had not yet had a national impact on child support receipt rates, which this analysis measures.

Our final child support enforcement variable—IV-D expenditures per single mother—increased the likelihood of receiving child support for never-married mothers and previously married mothers on AFDC, but it had a large negative effect on the likelihood of receiving child support among previously married mothers off AFDC. We estimate that if child support

expenditures had expanded, but nothing else had changed, child support receipt rates for previously married mothers off AFDC would have declined by 2.4 percentage points. This result reflects the fact that the child support enforcement program has historically focused primarily on AFDC recipients. For previously married mothers on AFDC, the expansion of child support expenditures increased their likelihood of receiving child support by 2.4 percentage points.

We also find that never-married mothers on and off AFDC benefited from the expansion of child support enforcement expenditures. The expansion of child support expenditures increased the likelihood of receiving child support by 1.5 percentage points for never-married mothers on AFDC and by 3.1 percentage points for never-married mothers off AFDC. Although never-married mothers off AFDC may well have been on AFDC in previous years, that does not explain why never-married mothers off AFDC appear to have benefited *more* from the expansion of child support expenditures than never-married mothers on AFDC. We suspect that child support enforcement's focus on paternity establishment has paid off for never-married mothers not on AFDC and that explains our results.

### **Single Mothers' Characteristics**

Using the same methodology as explained above for specific policy variables, we drop one regressor (or set of regressors) at a time from the full model and measure the impact of that particular regressor by taking the difference in the predicted probabilities generated from the full model and the full model without the particular regressor.

In general, we find that the effects of changes in single mothers' characteristics on child support receipt rates are more reflective of fathers' ability and willingness to pay child support than mothers' desire for it. For example, increases in single mothers' education have been

correlated with higher child support receipt rates, but decreases in the number of children in the home have been correlated with a reduction in child support receipt rates. Both of these factors reflect an increase in the earnings potential of single mothers, and thus we would have expected a similar effect on the likelihood of receiving child support if they reflected mothers' desire for child support. Instead, they have opposite effects, which are more consistent with fathers' ability and willingness to pay child support. We suspect that the positive effect of increases in single mothers' education reflects increases in fathers' ability to pay child support, while the negative effect of fewer children in the home reflects their reduced willingness to pay as the number of children declines.

**Race/Ethnicity.** As discussed earlier, the proportion of single mothers who are black declined for both never-married mothers and previously married mothers (see figure 4). Since black single mothers are less likely to receive child support than nonblack mothers, this shift in the racial composition away from black mothers toward nonblack mothers contributed to the rise in child support receipt rates. We estimate that if the racial composition of never-married and previously married mothers had changed, but nothing else had, the child support receipt rates of never-married and previously married mothers would have risen by 1.1 percentage points and 1.4 percentage points, respectively.

On the other hand, the proportion of single mothers who are Hispanic increased by 55.6 percent for never-married mothers and 66.4 percent for previously married mothers (see figure 4). Since Hispanic mothers are less likely to receive child support than non-Hispanic mothers, this shift in the ethnic composition toward Hispanic mothers reduced the rise in child support receipt rates. We estimate that if the ethnic composition of single mothers had changed, but nothing else

had, the likelihood of receiving child support would have declined by 1.7 percentage points for previously married mothers, and there would have been no discernible effect on the receipt rate of never-married mothers. Thus, the overall change in the racial and ethnic composition of single mothers resulted in higher child support receipt rates for never-married mothers but lower ones for previously married mothers.

**Mothers' Age and Education.** As shown in figure 4, the average age of never-married and previously married mothers increased between 1976 and 1997. As a result of these increases, the likelihood of receiving child support increased by .5 percentage point for never-married mothers and .7 percentage point for previously married mothers (see table 1). In addition, figure 4 shows that the percentage of single mothers who dropped out of high school also declined dramatically during this period. These improvements in education increased the likelihood of receiving child support by 1.6 percentage points for never-married mothers and 3.4 percentage points for previously married mothers.

**Age and Number of Children.** The average number of children in a single mother's home declined during this period, as well as the likelihood of her having a child under 6. Together, these trends reduced the likelihood of receiving child support by .6 percentage point for previously married mothers and .3 percentage point for never-married mothers.

**State Dummy Variables.** The final set of individual-level controls—the state dummy variables—had a significantly negative impact on the likelihood of previously married mothers and never-married mothers receiving child support. If the only factors in our model that were allowed to change were the state dummy variables, we find that the likelihood of receiving child support would have declined by 6.0 percentage points for previously married mothers and by 2.6

percentage points for never-married mothers. Changes in single mothers' geographic location are similar to those occurring within the nation as a whole. The proportions of previously married mothers and never-married mothers living in the Northeast and Midwest have declined, while the proportions living in the South and West have increased (see appendix table 1). Texas is a good example of this shift. In 1976, 5.5 percent of previously married mothers and 2.1 percent of never-married mothers lived in Texas. By 1997, these figures had increased to 9.8 percent and 6.7 percent, respectively. These results suggest that single mothers, on average, are migrating away from states that have been relatively successful in collecting child support and moving into states that have worse track records in this area.

### **State Labor Market Characteristics and Welfare Generosity**

Table 1 shows that the state-level indicators of the labor market and welfare generosity had minor, but sometimes statistically significant, effects on the likelihood of receiving child support for never-married and previously married mothers. The slight increase in single men's earnings during this period (see figure 6) explains a .6 percentage point increase in the likelihood of receiving child support for never-married mothers and a .3 percentage point increase for previously married mothers, providing some evidence to confirm our third hypothesis.

The state unemployment rate, however, did not have a statistically significant impact on the child support receipt rates of never-married or previously married mothers. This variable reflects the labor market for all workers and its lack of significance suggests that, after controlling for everything else, changes in the overall labor market did not have an independent effect on the likelihood of receiving child support.

The rise in the employment/population ratio of single mothers had a small, but statistically significant, impact on the likelihood of receiving child support among never-married and previously married mothers. It decreased the likelihood of receiving child support by .1 percentage point for never-married mothers and by .3 percentage point for previously married mothers (table 1). The decline in state AFDC benefit levels had no impact on the likelihood of receiving child support among never-married or previously married mothers.

### **VIII. Summary**

This research finds that child support receipt rates among single mothers have shown little progress during the past 21 years because the marital status composition of single mothers has shifted away from divorced and separated mothers toward never-married mothers. Between 1976 and 1997, the percentage of single mothers who are never-married increased from 17.4 percent to 46.4 percent. Furthermore, never-married mothers have much lower rates of child support receipt than divorced and separated mothers. Hence, this shift in marital status has caused the overall rate of child support receipt for single mothers to remain largely unchanged.

Once marital status is taken into account, we find that the expansion of the child support enforcement system has had a significant impact on child support receipt rates. We estimate that the expansion of the child support enforcement program increased child support receipt rates by 3.0 percentage points for previously married mothers and by 8.4 percentage points for never-married mothers, explaining about one-third of the rise in child support receipt rates for previously married mothers and one-half of the rise for never-married mothers.

Three of the six child support enforcement tools examined in this paper—the tax intercept program, presumptive guidelines, and the \$50 pass-through—had a significantly positive impact

on the child support receipt rates of both never-married and previously married mothers. Two others—immediate wage withholding and voluntary in-hospital paternity establishment—had a significant impact on specific subgroups of single mothers. Immediate wage withholding increased the likelihood of receiving child support among previously married mothers on AFDC; the in-hospital paternity establishment program increased the likelihood of receiving child support among never-married mothers not on AFDC. The only enforcement tool examined in this paper that did not affect some group of single mothers was new hire directories, which was federally mandated in 1997, the year our data end.

As welfare reform has taken hold across the country, single mothers' reliance on private sources of income, including child support, has grown and will continue to do so. The child support enforcement program, with its expanded enforcement tools, has contributed to this trend. Improving the efficiency and effectiveness of the child support enforcement program will result in greater numbers of single-mother families being able to count on child support, thereby moving more of America's poor families toward self sufficiency. Without these continued improvements, child support will remain a dream for many poor children.

## Notes

1. These budget constraints are also ignoring other public assistance programs, such as food stamps, medical assistance, and housing assistance. All of these programs treat child support income as unearned income in their eligibility and benefit determinations.
2. We originally estimated a structural model, but because this approach imposes additional restrictions on the effects of the exogenous variables, we abandoned this approach for the one presented here.
3. See Robins and Dickinson (1985) for a similar analysis.
4. Researchers familiar with the March CPS know of many changes in this survey, most notably changes in weighting and processing procedures. But these changes also affect the March/April CPS-CSS.
5. We combined the receipt of child support and alimony in order to obtain a consistent series throughout the time period analyzed. The March CPS asks respondents about numerous sources of income. These income questions are typically framed as follows: “During the last year, did you receive any money from (.....)? If so, how much did you receive?” For child support, the first question always asked about alimony *and* child support until 1988, when separate source questions were introduced. Thus, to create a consistent series throughout our time period, we had to examine the receipt of child support or alimony. This assumption is not particularly limiting, however, since few single mothers receive alimony but not child support. In 1988, only 6 percent of single mothers who received child support or alimony received only alimony.
6. See Richard Bavier (1999) for a recent discussion of the “underreporting” problem in the CPS.
7. In our regression analysis, three of our policy variables are lagged one year. They are the tax intercept program, the in-hospital paternity establishment program, and the new hire directory. These three policies were lagged because the effective dates indicate when the programs were initiated, not when we expected them to have an impact. The tax intercept program was expected to have a delayed impact since taxes were not intercepted until a year after the effective date. The other two policies represented relatively new procedures for states, and it took time to implement these programs. Three other variables—the \$50 pass-through, immediate wage withholding, and presumptive guidelines—were not lagged because it was anticipated that they had an immediate impact on their effective dates. The \$50 pass-through was discontinued the very month that states eliminated it. Thus, we expected its effect to be immediate. Immediate wage withholding and presumptive guidelines were policies that had significant policy developments prior to their effective dates, making it highly likely that they would have an impact on their effective dates. Immediate wage withholding (in all cases) was typically preceded by immediate wage withholding in IV-D cases and was always preceded by mandatory wage withholding. Presumptive guidelines were always preceded by advisory guidelines. Thus, these policies were not new to IV-D; they represented ways of strengthening existing policies.

8. The variable that measures child support enforcement expenditures per single mother in each state and year is lagged one year in our regression analysis. (Since expenditures are measured from October 1 to September 30, this means that the expenditure data are essentially lagged one year and a quarter.) We lagged these data to reduce the endogeneity that exists between child support expenditures and child support outcomes. We expected expenditures to be somewhat responsive to child support outcomes, increasing in years when child support outcomes were poor and decreasing in years when child support outcomes were good. But we expected the causality to be much stronger in the other direction.

9. The maximum AFDC benefit for a family of three is also included as a control variable. It is obtained from the Urban Institute's microsimulation model—Transfer Income Model version 2 (TRIM2), which includes detailed AFDC rules and benefit levels. These data are added each year to TRIM2 from original federal government documents.

10. Specifically, we took the difference in the likelihood ratio statistics for the model with and without the child support enforcement variables. We assumed that this difference was distributed asymptotically chi-square with degrees of freedom equal to the difference in the degrees of freedom for the two models.

11. AFDC recipients are required to cooperate with the child support enforcement program as a condition of receiving aid, but that does not require them to establish paternity at the child's birth.

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## Appendix

This appendix provides citations for each of the child support policy variables included in our regression analysis. A brief description of our terms and specific source information are given below:

- NCSL Reports: National Conference of State Legislatures. State Legislative Summary: Children, Youth, and Family Issues. Children, Youth, and Families Program. Various years.
- Personal Contact with IV-D Office: phone contact with employees of individual state child support enforcement (IV-D) offices.
- State Paternity Profile: Department of Health and Human Services. State Paternity Profiles: An Information Exchange. Administration for Children and Families. July 6, 1994.
- State Plan: plan submitted to the federal office of child support enforcement annually by the states detailing their child support programs.
- State Session Laws: archived state laws showing additions and deletions legislated by the state government (on microfilm).
- Statute: current state statutes (may have been supplemented by state session laws to obtain effective dates).

### **In-Hospital Paternity Program**

- Alabama -- Code of Alabama Annotated § 26-17-22 (1995 Suppl)
- Alaska -- Alaska Statutes § 18.50.160 (1992)
- Arizona -- Arizona Revised Statutes Annotated § 36-322 (1996 Suppl)
- Arkansas -- State Paternity Profile
- California -- Annotated California Codes (Family) § 7571 (1994)
- Colorado -- Colorado Revised Statutes Annotated § 25-2-112 (1996 Suppl)
- Connecticut -- Connecticut General Statutes Annotated § 17b-28 (1997 Suppl)
- Delaware -- Delaware Code Annotated 16 § 3121 (1995)
- Florida -- Florida Statutes Annotated § 382.013 (1997 Suppl)
- Georgia -- Official Code of Georgia § 19-7-27 (1996 Suppl)
- Hawaii -- Hawaii Revised Statutes Annotated § 584-3.5 (1997)
- Idaho -- State Paternity Profile
- Illinois -- Illinois Compiled Statutes Annotated 410 § 535/12 (1997 Suppl)
- Indiana -- Indiana Statutes Annotated § 16-37-2-2.1 (1996 Suppl)
- Iowa -- State Paternity Profile
- Kansas -- Kansas Statutes Annotated § 38-1137 (1996 Suppl)
- Kentucky -- Kentucky Revised Statutes § 213.046 (1996 Suppl)
- Louisiana -- Louisiana Statutes Annotated 40 § 46.1 (1997 Suppl)
- Maine -- Maine Revised Statutes Annotated 22 § 2761-B (1996 Suppl)
- Maryland -- Annotated Code of Maryland § 4-208 (1996 Suppl)
- Massachusetts -- Annotated Laws of Massachusetts 46 § 3C (1996 Suppl)

Michigan -- Michigan Compiled Laws Annotated 333 § 21532 (1997 Suppl)  
 Minnesota -- Minnesota Statutes Annotated § 257.75 (1997 Suppl)  
 Mississippi -- Mississippi Code Annotated § 93-9-28 (1994)  
 Missouri -- Annotated Missouri Statutes § 193.087  
 Montana -- Montana Code Annotated § 50-15-210 (1995)  
 Nebraska -- Revised Statutes of Nebraska Annotated § 43-1408.1 (1995)  
 Nevada -- Nevada Revised Statutes Annotated § 449.246 (1996)  
 New Hampshire -- New Hampshire Revised Statutes Annotated § 126:6-a (1996)  
 New Jersey -- New Jersey Statutes Annotated § 26:8-30; § 26:8-28.1  
 New Mexico -- New Mexico Statutes § 24-14-13 (1994)  
 New York -- Consolidated Laws of New York Annotated (Public Health Law) § 4135-b  
 (1997 Suppl)  
 North Carolina -- General Statutes of North Carolina § 130A-101 (1990)  
 North Dakota -- North Dakota Century Code § 14-19-06 (1995 Suppl)  
 Ohio -- Ohio Revised Code Annotated § 3727.17  
 Oklahoma -- Oklahoma Statutes Annotated 63 § 1-311.3 (1997)  
 Oregon -- state session laws  
 Pennsylvania -- Pennsylvania Consolidated Statutes Annotated 23 § 5103 (1997 Suppl)  
 Rhode Island -- General Laws of Rhode Island § 40-6-21.1 (1996 Suppl)  
 South Carolina -- Code of Laws of South Carolina § 44-7-77 (1996 Suppl)  
 South Dakota -- South Dakota Laws § 25-8-50 (1997 Suppl)  
 Tennessee -- Tennessee Code Annotated § 24-7-118 (1996 Suppl)  
 Texas -- Texas Codes Annotated (Health and Safety) § 192.003 (1997 Suppl)  
 Utah -- Utah Code Annotated § 26-2-5 (1995)  
 Vermont -- Vermont Statutes Annotated 15 § 307 (1996 Suppl)  
 Virginia -- Code of Virginia § 20-49.9 (1997 Suppl)  
 Washington -- State Paternity Profile  
 West Virginia -- State Paternity Profile  
 Wisconsin -- State Paternity Profile  
 Wyoming -- Wyoming Statutes Annotated § 14-2-102 (1996 Suppl)

### **State Income Tax Intercept**

Alabama -- Code of Alabama Annotated § 40-18-102 (1995 Suppl)  
 Alaska -- no state income tax  
 Arizona -- Arizona Revised Statutes Annotated § 42-133 (1991); 1985 NCSL Report  
 Arkansas -- state session laws  
 California -- Annotated California Codes (Government) § 12419.3 (1992)  
 Colorado -- state session laws  
 Connecticut -- Connecticut General Statutes Annotated § 12-742  
 Delaware -- Delaware Code Annotated 13 § 513 (1993)  
 Florida -- no state income tax  
 Georgia -- Official Code of Georgia § 48-7-163 (1995)

Hawaii -- Hawaii Revised Statutes Annotated § 231-53 (1996)  
Idaho -- Idaho Code § 56-203D (1994)  
Illinois -- Illinois Compiled Statutes Annotated 305 § 5/10-17.5 (1993)  
Indiana -- Indiana Statutes Annotated § 6-8.1-9.5-2 (1996)  
Iowa -- Iowa Code Annotated § 421.17 (1990)  
Kansas -- Kansas Statutes Annotated § 75-6202 (1989)  
Kentucky -- Kentucky Revised Statutes § 131.560 (1991)  
Louisiana -- state session laws  
Maine -- Maine Revised Statutes Annotated 36 § 5276-A (1990)  
Maryland -- Annotated Code of Maryland § 10-113 (1996 Suppl)  
Massachusetts -- Massachusetts General Laws Annotated 62D § 3 (1988)  
Michigan -- Michigan Compiled Laws Annotated 552 § 624 (1988)  
Minnesota -- Minnesota Statutes Annotated § 270A.06 (1989)  
Mississippi -- Mississippi Code Annotated § 27-7-507 (1991)  
Missouri -- Annotated Missouri Statutes § 143.784 (1996)  
Montana -- Montana Code Annotated § 17-4-105 (1995)  
Nebraska -- Revised Statutes of Nebraska Annotated § 77-27, 161 (1995)  
Nevada -- no state income tax  
New Hampshire -- no state income tax  
New Jersey -- New Jersey Statutes Annotated § 54A:9-8.1 (1986)  
New Mexico -- New Mexico Statutes § 7-2C-5 (1995)  
New York -- Consolidated Laws of New York Annotated (Social Services Law) §111-n (1992)  
North Carolina -- General Statutes of North Carolina § 105A-3 (1995)  
North Dakota -- North Dakota Century Code § 57-38.3-04  
Ohio -- state session laws  
Oklahoma -- state session laws  
Oregon -- Oregon Revised Statutes Annotated § 25.610 (1988)  
Pennsylvania -- Pennsylvania Consolidated Statutes Annotated 23 § 4307 (1991)  
Rhode Island -- General Laws of Rhode Island § 44-30.1-3 (1995)  
South Carolina -- Code of Laws of South Carolina § 43-5-220 (1985)  
South Dakota -- no state income tax  
Tennessee -- no state income tax  
Texas -- no state income tax  
Utah -- Utah Code Annotated § 59-10-529 (1996)  
Vermont -- Vermont Statutes Annotated 15 § 794 (1996 Suppl)  
Virginia -- Code of Virginia § 58.1-523 (1997)  
Washington -- no state income tax  
West Virginia -- personal contact with state IV-D office  
Wisconsin -- Wisconsin Statutes Annotated § 49.855 (1997)  
Wyoming -- no state income tax

## Presumptive Guidelines

Alabama -- Code of Alabama, Rules of Alabama Supreme Court, Rule #32  
Alaska -- Alaska Rules of Court, Rule #90.3  
Arizona -- personal contact with IV-D office  
Arkansas -- Arkansas Code Annotated, Court Rules, Administrative Order #10  
California -- Annotated California Codes (Family) § 4052  
Colorado--Colorado Revised Statutes Annotated § 14-10-15 (1989)  
Connecticut -- state session laws  
Delaware -- personal contact with IV-D office  
Florida -- Florida Statutes Annotated § 61.30 (1997 Suppl)  
Georgia -- Official Code of Georgia § 19-6-15  
Hawaii-- state session laws  
Idaho-- Idaho Code § 32-706A  
Illinois --Illinois Compiled Statutes Annotated 750 § 20/24 (1993)  
Indiana -- Indiana Statutes, Court Rules, Child Support Rules and Guidelines  
Iowa -- state session laws  
Kansas -- personal contact with IV-D office  
Kentucky -- Kentucky Revised Statutes 14 § 403.211 (1996 Suppl)  
Louisiana -- Louisiana Revised Statutes Annotated 9 § 315.1  
Maine -- Maine Revised Statutes Annotated 19 § 315 (1996 Suppl)  
Maryland -- Annotated Code of Maryland § 12-204  
Massachusetts -- personal contact with IV-D office  
Michigan -- Michigan Compiled Laws Annotated § 722.3 (1993)  
Minnesota -- Minnesota Statutes Annotated §518.551  
Mississippi -- Mississippi Code Annotated § 43-19-101 (1993)  
Missouri -- Annotated Missouri Statutes § 452.340  
Montana -- personal contact with IV-D office  
Nebraska -- personal contact with IV-D office  
Nevada -- Nevada Revised Statutes Annotated § 125B.080 (1993)  
New Hampshire -- New Hampshire Revised Statutes Annotated § 458-C:4 (1992)  
New Jersey -- personal contact with IV-D office  
New Mexico -- New Mexico Statutes § 40-4-11.1 (1994)  
New York --Consolidated Laws of New York (Domestic Relations) §240  
North Carolina -- state session laws  
North Dakota -- North Dakota Century Code § 14-09-09.7 (1991)  
Ohio -- personal contact with IV-D office  
Oklahoma -- Oklahoma Statutes Annotated 43 § 118  
Oregon -- Oregon Revised Statutes Annotated § 25.280 (1994 Suppl)  
Pennsylvania -- Pennsylvania Consolidated Statutes Annotated 23 § 4322 (1991)  
Rhode Island -- General Laws of Rhode Island § 15-9-1 (1996)  
South Carolina -- Code of Laws of South Carolina § 20-7-852 (1996 Suppl)  
South Dakota -- South Dakota Codified Laws § 25-7-6.10 (1992)  
Tennessee -- Tennessee Code § 36-5-101

Texas -- Texas Codes (Family) § 154.122  
Utah -- Utah Code Annotated § 78-45-7.2  
Vermont -- Vermont Statutes Annotated 15 § 659 (1989)  
Virginia -- personal contact with IV-D office  
Washington -- Revised Code of Washington Annotated § 26.19.020 (1997)  
West Virginia -- West Virginia Code of State Rules, Title 78, Series 16  
Wisconsin -- personal contact with IV-D office  
Wyoming -- Wyoming Statutes Annotated § 20-6-304 (1996)

### **Immediate Wage Withholding**

Alabama -- Code of Alabama Annotated § 30-3-61 (1995 Suppl)  
Alaska -- Alaska Statutes § 25.27.062 (1996)  
Arizona -- state plan  
Arkansas -- Arkansas Code Annotated § 9-14-218 (1993)  
California -- Annotated California Codes (Family) § 5253 (1994)  
Colorado -- Colorado Revised Statutes Annotated § 14-14-111.5 (1996 Suppl)  
Connecticut -- Connecticut General Statutes Annotated § 52-362 (1991)  
Delaware -- state session laws  
Florida -- Florida Statutes Annotated § 61.1301 (1997 Suppl)  
Georgia -- Official Code of Georgia § 19-6-32 (1997 Suppl)  
Hawaii -- Hawaii Revised Statutes Annotated § 571-52.3 (1997)  
Idaho -- Idaho General Laws § 32-2105 (1996)  
Illinois -- Illinois Compiled Statutes Annotated 750 § 45/20 (1993)  
Indiana -- Indiana Statutes Annotated § 31-2-10-7 (1996 Suppl)  
Iowa -- Iowa Code Annotated § 252D.8 (1996)  
Kansas -- state session laws  
Kentucky -- Kentucky Revised Statutes § 403.215 (1996 Suppl)  
Louisiana -- Louisiana Statutes Annotated 9 § 303 (1997 Suppl)  
Maine -- Maine Revised Statutes Annotated 19 § 780 (1996 Suppl)  
Maryland -- state session laws  
Massachusetts -- state session laws  
Michigan -- Michigan Compiled Laws Annotated 552 § 604 (1997 Suppl)  
Minnesota -- Minnesota Statutes Annotated § 518.611 (1997 Suppl)  
Mississippi -- Mississippi Code Annotated § 93-11-103 (1994)  
Missouri -- Annotated Missouri Statutes § 452.350 (1997)  
Montana -- Montana Code Annotated § 40-5-315 (1995)  
Nebraska -- Revised Statutes of Nebraska Annotated § 43-1718.02 (1995)  
Nevada -- Nevada Revised Statutes Annotated § 31A.025 (1996)  
New Hampshire -- New Hampshire Revised Statutes Annotated § 458-B:2 (1996 Suppl)  
New Jersey -- New Jersey Statutes Annotated § 2A:17-56.9 (1997 Suppl)  
New Mexico -- New Mexico Statutes § 40-4A-4.1 (1994)  
New York -- state session laws

North Carolina -- General Statutes of North Carolina § 110-136-3 (1995)  
North Dakota -- North Dakota Century Code § 14-09-09.24 (1991)  
Ohio -- Ohio Revised Code Annotated § 3113.21 (1996)  
Oklahoma -- Oklahoma Statutes Annotated 12 § 1171.3 (1997 Suppl)  
Oregon -- Oregon Revised Statutes Annotated § 25.311 (1994 Suppl)  
Pennsylvania -- Pennsylvania Consolidated Statutes Annotated 23 § 4348 (1991)  
Rhode Island -- General Laws of Rhode Island § 15-16-5.1 (1995)  
South Carolina -- Code of Laws of South Carolina § 20-7-1315 (1996 Suppl)  
South Dakota -- South Dakota Codified Laws § 25-7A-23 (1992)  
Tennessee -- Tennessee Code Annotated § 36-5-501 (1996)  
Texas -- Texas Codes Annotated (Family) § 158.001 (1997 Suppl)  
Utah -- Utah Code Annotated § 62A-11-403 (1997)  
Vermont -- Vermont Statutes Annotated 15 § 781 (1996 Suppl)  
Virginia -- Code of Virginia § 20-79.2 (1995)  
Washington -- state session laws  
West Virginia -- West Virginia Code Annotated § 48-2-15b (1996)  
Wisconsin -- Wisconsin Statutes Annotated § 767.265 (1993)  
Wyoming -- Wyoming Statutes Annotated § 20-6-204 (1996)

### **New Hire Directory**

All new hire information was obtained from:

U.S. Department of Health and Human Services. OCSE Information Exchange: New Hire Reporting Legislative Profile. Administration for Children and Families. July 8, 1997.

(Supplemented by personal contact with the new hire programs in each state.)

### **\$50 Pass-Through**

All \$50 pass-through information was obtained from:

Center for Law and Social Policy. "State Action Re \$50 Pass-Through and Disregard."  
<http://www.clasp.org/pubs/childenforce/50pasdis.htm>. December 1997.

Lewin Associates. 1998. "State Financing of Child Support Enforcement Program."

(Supplemented by the Welfare Rules Database, the Urban Institute.)

**Appendix Table 1.  
Mean Values of Variables in the Model in 1976 and 1997**

Variables in the Model (Except Where Noted)	Never Married		Previously Married	
	1976	1997	1976	1997
<b>Proportion of Population with the Following Outcomes:</b>				
AFDC and No Child Support	.668	.225	.307	.113
Child Support and No AFDC	.020	.133	.304	.392
Neither AFDC nor Child Support	.290	.599	.336	.472
Both AFDC and Child Support	.022	.042	.053	.023
<b>Proportion of Population Living in States with the Following Policies:*</b>				
State Income Tax Intercept	.020	.837	.025	.773
Presumptive Guidelines	0	1	0	1
Immediate Wage Withholding	0	1	0	1
In-Hospital Paternity Establishment	0	1	0	1
Directory of New Hires	0	.286	0	.262
\$50 Pass-Through	0	.597	0	.560
<b>Average IV-D Program Expenditures per Single Mom (expressed in 1997 dollars)*</b>				
IV-D Program Expenditures per Single Mom	\$111	\$383	\$109	\$390
<b>Other State-Level Variables</b>				
Average State Unemployment Rate	8.0	5.1	7.8	5.0
Employment Population Ratio for Single Moms	.645	.774	.670	.785
Mean Earnings for Single Men (in 1997 dollars)	\$9,505	\$12,516	\$26,627	\$34,381
Maximum AFDC Benefit for a Family of 3 (in 1997 dollars)	\$716	\$408	\$707	\$394

<b>Appendix Table 1. Continued</b>				
<b>Mean Values of Variables in the Model in 1976 and 1997</b>				
Variables in the Model (Except Where Noted)	Never Married		Previously Married	
	1976	1997	1976	1997
<u>Individual Characteristics</u>				
Proportion Black, Non-Hispanic	.569	.387	.235	.150
Proportion Hispanic	.139	.208	.092	.151
Proportion with Kids under the Age of Six	.734	.640	.365	.296
Average Number of Children minus one	.767	.666	1.08	.773
Proportion Who Dropped out of High School	.534	.268	.380	.158
Proportion Who Graduated from High School	.374	.389	.416	.361
Proportion Who Attended Some College	.073	.275	.134	.336
Proportion Who Graduated from College	.018	.068	.070	.145
<u>Regional Distribution</u> (not included in the model; state dummy variables were included)				
Northeast	.259	.227	.259	.204
Midwest	.231	.214	.231	.189
South	.303	.302	.303	.337
West	.207	.257	.255	.268
<u>Sample Size</u>				
Sample Size	545	1,799	2,675	2,262

\* Some of these variables are lagged in our regression analysis. See note 6 in the text.

*Primary source:* Authors' tabulations of the March Current Population Surveys, 1977–1998. See text for other sources.

**Appendix Table 2.**  
**Multinomial Logit Results for Never-Married Mothers**  
**(all regressors in the model; omitted category is “AFDC only”)**  
**(standard errors are in parentheses)**

Regressors	Outcome = Both AFDC and Child Support	Outcome = Neither AFDC nor Child Support	Outcome = Child Support Only
<u>State-Level Child Support Variables</u>			
State Income Tax Intercept	.3706** (.1595)	-.0297 (.0565)	.0485 (.1246)
Presumptive Guidelines	-.0622 (.1472)	-.1431** (.0651)	.0971 (.1303)
Immediate Wage Withholding	-.1833 (.1183)	-.0379 (.0551)	-.0368 (.1003)
In-Hospital Paternity Establishment	.0167 (.1600)	.0067 (.0797)	.2920** (.1266)
Directory of New Hires	.0963 (.1925)	.0833 (.0998)	.1862 (.1498)
\$50 Pass-Through	.5251* (.2744)	-.1709 (.1310)	-.3879** (-.1841)
IV-D Program Expenditures per Single Mom	-2.41e-04 (4.49e-04)	-3.82e-04 ( 2.19e-04)	3.07e-04 (3.48e-04)
<u>Other State-Level Variables</u>			
Unemployment Rate	.0208 (.0322)	-.0067 (.0135)	-.0381 (.0277)
Employment Population Ratio	-.3774 (.6049)	1.994*** (.2729)	2.463*** (.5144)
Mean Male Earnings	8.20e-05*** (2.57e-05)	3.08e-05*** ( 1.15e-05)	2.25e-05 (2.10e-05)
Maximum AFDC Benefit	-7.90e-05 (7.63e-.04)	8.86e-04*** ( 2.96e-04)	-4.85e-04 (6.38e-4)

<b>Appendix Table 2. Continued</b>			
Regressors	Outcome = Both AFDC and Child Support	Outcome = Neither AFDC nor Child Support	Outcome = Child Support Only
<b>Individual Characteristics</b>			
Age	.2084*** (.0397)	-.1245*** (.0124)	.1873*** (.0275)
Age Squared	-.0035*** (6.74e-04)	.0021*** ( 1.96e-04)	-.0025*** (4.33e-04)
Black, Non-Hispanic (other is omitted)	-.7254*** (.0756)	-.3506*** (.0335)	-.8572*** (.0615)
Hispanic (other is omitted)	-.4649*** (.1060)	-.0744* (.0438)	-.7807*** (.0948)
Children under the Age of Six (omitted is no kids <6)	.1691** (.0837)	-.3456*** (.0365)	-.2980*** (.0631)
Number of Children minus one (omitted is one child)	.1029*** (.0287)	-.5418*** (.0169)	-.3995*** (.0321)
High School Graduate (HS dropout is omitted)	.3936*** (.0704)	.4480*** (.0311)	.9158*** (.0690)
Attended Some College (HS dropout is omitted)	.5049*** (.0932)	.7481*** (.0420)	1.354*** (.0796)
College Graduate (HS dropout is omitted)	.7669*** (.2439)	1.989*** (.1043)	2.614*** (.1378)
<b>Year Dummies (omitted year = 1976)</b>			
1977	-.4799 (.4665)	.2933** (.1373)	-.9570* (.5500)
1978	.4022 (.3837)	.1979 (.1428)	.2532 (.3924)
1979	-.2817 (.4230)	.2771** (.1376)	.1226 (.3860)
1980	-1.017** (.4960)	.2990** (.1377)	.2133 (.3825)

<b>Appendix Table 2. Continued</b>			
Regressors	Outcome = Both AFDC and Child Support	Outcome = Neither AFDC nor Child Support	Outcome = Child Support Only
<u>Year Dummies</u>			
1981	-.4738 (.4273)	.5895*** (.1325)	-.0679 (.3978)
1982	-.5480 (.4351)	.7548*** (.1360)	.9054** (.3673)
1983	-.2811 (.4165)	.7056*** (.1371)	.7303*** (.3718)
1984	-.1846 (.4087)	.8166*** (.1444)	1.148*** (.3659)
1985	-.1125 (.4622)	.8743*** (.1860)	1.114*** (.4032)
1986	-.2080 (.4673)	.9941*** (.1877)	1.469*** (.4005)
1987	.1290 (.4730)	1.047*** (.1918)	1.430*** (.4082)
1988	.1779 (.4820)	1.050*** (.1960)	1.456*** (.4140)
1989	.3089 (.4841)	1.159*** (.1967)	1.400*** (.4165)
1990	.3347 (.5010)	1.132*** (.2037)	1.445*** (.4293)
1991	.3797 (.5024)	1.070*** (.2048)	1.352*** (.4308)
1992	.6215 (.5093)	1.167*** (.2085)	1.575*** (.4357)
1993	.6286 (.5123)	1.108*** (.2092)	1.628*** (.4363)
1994	.7471 (.5250)	1.231*** (.2157)	1.863*** (.4445)

<b>Appendix Table 2. Continued</b>			
Regressors	Outcome = Both AFDC and Child Support	Outcome = Neither AFDC nor Child Support	Outcome = Child Support Only
<u>Year Dummies</u>			
1995	.7930 (.5474)	1.291*** (.2263)	1.788*** (.4608)
1996	.8015 (.5484)	1.412*** (.2270)	1.674*** (.4632)
1997	.9122* (.5473)	1.551*** (.2201)	1.728*** (.4572)
<u>State Dummies</u> (omitted state = NY)			
Alabama	1.445*** (.4822)	.1767 (.1992)	.6383 (.3928)
Alaska	-.2994 (.5093)	-.0853 (.1900)	-.5367 (.3761)
Arizona	.0505 (.4664)	.2174 (.1810)	-.4269 (.3462)
Arkansas	1.818*** (.4471)	-.0829 (.1983)	.4516 (.3840)
California	-.1793 (.1838)	-.1136 (.0745)	-.3342** (.1518)
Colorado	.1495 (.4548)	-.5662*** (.1751)	-.8657** (.3621)
Connecticut	1.147*** (.2814)	-.3154** (.1465)	-.4803 (.3086)
Delaware	1.424*** (.3689)	-.0131 (.1700)	.2535 (.3097)
Florida	.6557* (.3928)	-.0337 (.1530)	.2360 (.3129)
Georgia	1.514*** (.3817)	.1735 (.1681)	.7560** (.3164)

<b>Appendix Table 2. Continued</b>			
Regressors	Outcome = Both AFDC and Child Support	Outcome = Neither AFDC nor Child Support	Outcome = Child Support Only
<b>State Dummies</b>			
Hawaii	-.2094 (.3808)	-.3213** (.1551)	-.2895 (.2635)
Idaho	.2243 (.5579)	-.6409*** (.2215)	-.4614 (.3802)
Illinois	-.3636 (.2932)	-.5081*** (.1093)	-.9996*** (.2425)
Indiana	.8089* (.4264)	-.4064** (.1756)	.3156 (.3255)
Iowa	1.414*** (.3277)	-.7697*** (.1785)	-.3633 (.3106)
Kansas	.8422** (.3932)	-.1266 (.1765)	-.3847 (.3324)
Kentucky	1.111** (.4430)	-.5338*** (.1964)	-.1673 (.3813)
Louisiana	1.080** (.4350)	.0939 (.1754)	.4692 (.3641)
Maine	.9237*** (.3546)	-.7769*** (.1934)	-.8861** (.3658)
Maryland	1.398*** (.3139)	.1743 (.1447)	.7520*** (.2575)
Massachusetts	.1984 (.2105)	-.7983*** (.0965)	-.5314*** (.1835)
Michigan	.9342*** (.1967)	-.5533*** (.0890)	-.5261*** (.1855)
Minnesota	.6747** (.2854)	-1.011*** (.1571)	-.9889*** (.2866)
Mississippi	1.088** (.4953)	-.1715 (.2013)	-.1095 (.4155)

<b>Appendix Table 2. Continued</b>			
Regressors	Outcome = Both AFDC and Child Support	Outcome = Neither AFDC nor Child Support	Outcome = Child Support Only
<b>State Dummies</b>			
Missouri	.5896 (.4130)	-.4657*** (.1669)	-.5445 (.3442)
Montana	.3013 (.4123)	-.8285*** (.1772)	-.9205*** (.3237)
Nebraska	.3425 (.4730)	-.6527*** (.1888)	-.5297 (.3373)
Nevada	-.3665 (.7899)	.3273 (.2176)	.3808 (.3815)
New Hampshire	.7910* (.4753)	-.3519 (.2362)	-.1486 (.3885)
New Jersey	.3079 (.2455)	-.0636 (.0961)	.0413 (.1985)
New Mexico	-.2009 (.4813)	.0083 (.1611)	-.1683 (.3124)
North Carolina	1.706*** (.3632)	-.0976 (.1565)	.6864** (.3026)
North Dakota	1.345*** (.3585)	-1.104*** (.1949)	-.8943*** (.3369)
Ohio	.3921 (.3097)	-.5370*** (.1250)	-.5333** (.2539)
Oklahoma	.2781 (.5213)	-.2179 (.1914)	-.8863** (.4258)
Oregon	.8223** (.3364)	-.7260*** (.1672)	-.7113** (.3180)
Pennsylvania	1.256*** (.2365)	.1817* (.1030)	.6503*** (.1965)
Rhode Island	.2925 (.2987)	-.6248*** (.1446)	-.7142** (.3193)

<b>Appendix Table 2. Continued</b>			
Regressors	Outcome = Both AFDC and Child Support	Outcome = Neither AFDC nor Child Support	Outcome = Child Support Only
<b>State Dummies</b>			
South Carolina	2.014*** (.4309)	.3429* (.1910)	.7460** (.3708)
South Dakota	1.172*** (.4419)	-.5148*** (.1893)	-.3494 (.3463)
Tennessee	1.175** (.5191)	-.4338** (.2066)	.0014 (.4222)
Texas	.4663 (.4749)	-.1243 (.1824)	-.0574 (.3768)
Utah	.4562 (.5433)	-.1588 (.2081)	-.4981 (.3888)
Vermont	-9.69e-04 (.5091)	-.5356*** (.1981)	-.9242** (.3787)
Virginia	.8459** (.3802)	-.1891 (.1535)	.3323 (.2957)
Washington	.3500 (.3972)	-.8363*** (.1635)	-1.327*** (.3383)
West Virginia	-.2569 (.5750)	-.6702*** (.2059)	-1.392*** (.4910)
Wisconsin	1.112*** (.2822)	-.8946*** (.1491)	-.1429 (.2422)
Wyoming	1.083** (.5028)	-.8569*** (.2255)	-.5382 (.4007)
Constant	-7.576*** (1.118)	.6657 (.4267)	-7.362*** (.9186)
LOG LIKELIHOOD = -28362.441 Sample Size = 31,049			
Note: * p < .10 ** p < .05 *** p < .01			

**Appendix Table 3.**  
**Multinomial Logit Results for Previously Married Mothers**  
**(all regressors in the model; omitted category is “AFDC only”)**  
**(standard errors are in parentheses)**

Regressors	Outcome = Both AFDC and Child Support	Outcome = Neither AFDC nor Child Support	Outcome = Child Support Only
<b>State-Level Child Support Variables</b>			
State Income Tax Intercept	.2316*** (.0879)	.0519 (.0465)	.0660 (.0494)
Presumptive Guidelines	.1953* (.1032)	-.1172* (.0605)	-.0604 (.0650)
Immediate Wage Withholding	.2299*** (.0882)	.0048 (.0532)	.0090 (.0561)
In-Hospital Paternity Establishment	.0588 (.1224)	-.1024 (.0788)	-.0268 (.0824)
Directory of New Hires	.0480 (.1772)	.0208 (.1056)	.1104 (.1090)
\$50 Pass-Through	.6440** (.3062)	-.0324 (.1528)	.0469 (.1593)
IV-D Program Expenditures per Single Mom	9.56e-04*** ( 3.22e-04)	2.31e-04 ( 1.94e-04)	7.77e-05 ( 2.05e-04)
<b>Other State-Level Variables</b>			
Unemployment Rate	.0294 (.0203)	-.0247** (.0111)	-.0176 (.0118)
Employment Population Ratio	1.039** (.4036)	1.901*** (.2270)	1.892*** (.2376)
Mean Male Earnings	3.16e-06 ( 5.98e-06)	4.74e-06 ( 3.36e-06)	7.03e-06** ( 3.54e-06)
Maximum AFDC Benefit	3.37e-04 ( 4.06e-04)	-7.29e-04*** ( 2.23e-04)	7.17e-04*** ( 2.39e-04)

<b>Appendix Table 3. Continued</b>			
Regressors	Outcome = Both AFDC and Child Support	Outcome = Neither AFDC nor Child Support	Outcome = Child Support Only
<b>Individual Characteristics</b>			
Age	.0376* (.0219)	.0695*** (.0099)	.2171*** (.0124)
Age Squared	-7.63e-04** ( 3.06e-04)	-6.03e-04*** ( 1.31e-04)	-.0027*** ( 1.65e-04)
Black, Non-Hispanic (other is omitted)	-.7419*** (.0616)	-.3326*** (.0304)	-1.709*** (.0372)
Hispanic (other is omitted)	-.5022*** (.0752)	-.2326*** (.0370)	-1.058*** (.0455)
Children under the Age of Six (omitted is no kids <6)	-.0327 (.0529)	-.3808*** (.0297)	-.5443*** (.0320)
Number of Children minus one (omitted is one child)	.0439** (.0199)	-.4981*** (.0122)	-.3456*** (.0132)
High School Graduate (HS dropout is omitted)	.3684*** (.0505)	.8371*** (.0273)	1.494*** (.0322)
Attended Some College (HS dropout is omitted)	.6482*** (.0634)	1.120*** (.0358)	2.036*** (.0396)
College Graduate (HS dropout is omitted)	.9499*** (.1377)	.2367*** (.0784)	3.465*** (.0798)
<b>Year Dummies (omitted year = 1976)</b>			
1977	-.6029*** (.1502)	-.1484* (.0776)	-.1038 (.0823)
1978	-.7161*** (.1597)	-.2426*** (.0826)	-.2624*** (.0889)
1979	-.7129*** (.1582)	-.1372* (.0813)	-.1416 (.0873)
1980	-.6763*** (.1555)	-.0343 (.0810)	-.1952** (.0873)

<b>Appendix Table 3. Continued</b>			
<b>Regressors</b>	<b>Outcome = Both AFDC and Child Support</b>	<b>Outcome = Neither AFDC nor Child Support</b>	<b>Outcome = Child Support Only</b>
<b>Year Dummies</b>			
1981	-.5156*** (.1616)	-.0244 (.0851)	-.1066 (.0914)
1982	-.8282*** (.1825)	.1796** (.0899)	-.0312 (.0975)
1983	-.6662*** (.1822)	.1661* (.0914)	-.0629 (.0990)
1984	-1.016*** (.2208)	-.0310 (.1108)	-.2355** (.1182)
1985	-.9259*** (.3527)	.1019 (.1792)	-.1172 (.1885)
1986	-.5260 (.3504)	.0522 (.1807)	-.1458 (.1898)
1987	-.5653 (.3564)	.1760 (.1845)	-.0528 (.1938)
1988	-.6242* (.3628)	.2158 (.1883)	-.0977 (.1981)
1989	-.4948 (.3642)	.2548 (.1890)	.0029 (.1990)
1990	-.8544** (.3778)	.1608 (.1960)	-.0724 (.2069)
1991	-.8747** (.3795)	.1747 (.1972)	-.1326 (.2083)
1992	-.7810** (.3846)	.2098 (.2010)	-.0960 (.2122)
1993	-.6146 (.3864)	.2439 (.2026)	.0241 (.2139)
1994	-.8416** (.3948)	.1428 (.2080)	-.2034 (.2196)

<b>Appendix Table 3. Continued</b>			
Regressors	Outcome = Both AFDC and Child Support	Outcome = Neither AFDC nor Child Support	Outcome = Child Support Only
<b>Year Dummies</b>			
1995	-.7887* (.4099)	.3892* (.2181)	.0207 (.2303)
1996	-1.095*** (.3963)	.2489 (.2145)	-.0137 (.2260)
1997	-1.378*** (.3762)	.4613** (.1984)	.0884 (.2088)
<b>State Dummies (omitted state = NY)</b>			
Alabama	.4826 (.3326)	.5794*** (.1671)	.8244*** (.1811)
Alaska	-.0951 (.2727)	-.1037 (.1515)	-.3832** (.1631)
Arizona	.1404 (.3021)	.3687** (.1499)	.3196* (.1601)
Arkansas	.5260* (.3022)	.3825** (.1592)	.4107** (.1722)
California	-.0946 (.1279)	-.0315 (.0645)	-.2506*** (.0727)
Colorado	.2247 (.2474)	-.2817** (.1314)	-.1398 (.1387)
Connecticut	.3457 (.2540)	-.2640** (.1339)	.1963 (.1409)
Delaware	.3427 (.3042)	.2018 (.1561)	.4922*** (.1671)
Florida	.5943** (.2400)	.4012*** (.1269)	.5343*** (.1368)
Georgia	1.318*** (.2732)	.6357*** (.1586)	1.055*** (.1698)

<b>Appendix Table 3. Continued</b>			
Regressors	Outcome = Both AFDC and Child Support	Outcome = Neither AFDC nor Child Support	Outcome = Child Support Only
<b>State Dummies</b>			
Hawaii	.0446 (.2619)	-.2281 (.1416)	-.4120*** (.1505)
Idaho	.3218 (.2495)	-.4058*** (.1434)	-.2895* (.1498)
Illinois	.1089 (.1829)	-.1187 (.0936)	-.0527 (.1028)
Indiana	1.083*** (.2483)	.1575 (.1446)	.5847*** (.1515)
Iowa	.6207*** (.2026)	-.9589*** (.1283)	-.4783*** (.1284)
Kansas	.3679 (.2424)	-.3722*** (.1387)	-.1340 (.1441)
Kentucky	-.0706 (.2791)	-.4178*** (.1435)	-.2813* (.1533)
Louisiana	1.228*** (.2844)	.6342*** (.1590)	1.034*** (.1722)
Maine	.5330** (.2141)	-.9757*** (.1362)	-.7974*** (.1390)
Maryland	.5776** (.2731)	.3882*** (.1395)	.5965*** (.1516)
Massachusetts	-.0330 (.1517)	-.7384*** (.0815)	-.4826*** (.0872)
Michigan	.6168*** (.1358)	-.5361*** (.0788)	-.1217 (.0839)
Minnesota	.3248 (.2032)	-1.034*** (.1320)	-.5989*** (.1305)
Mississippi	.9771*** (.3179)	.5994*** (.1742)	.4905** (.1925)

<b>Appendix Table 3. Continued</b>			
Regressors	Outcome = Both AFDC and Child Support	Outcome = Neither AFDC nor Child Support	Outcome = Child Support Only
<b>State Dummies</b>			
Missouri	.5762** (.2591)	-.2302 (.1412)	.0323 (.1505)
Montana	.1036 (.2513)	-.4703*** (.1409)	-.6005*** (.1481)
Nebraska	.4789* (.2687)	-.5318*** (.1562)	-.0416 (.1589)
Nevada	.1010 (.3556)	.6025*** (.1654)	.5603*** (.1753)
New Hampshire	1.065*** (.2651)	-.0718 (.1692)	.1644 (.1724)
New Jersey	-.1486 (.1782)	-.1156 (.0840)	.1124 (.0935)
New Mexico	-.0044 (.2504)	-.1285 (.1259)	-.2244 (.1378)
North Carolina	1.005*** (.2348)	.2667** (.1332)	.5195*** (.1430)
North Dakota	.8513*** (.2542)	-.6541*** (.1719)	-.2257 (.1702)
Ohio	.2646 (.1873)	-.4151*** (.1015)	-.0970 (.1087)
Oklahoma	.3074 (.2720)	.0859 (.1438)	.1404 (.1522)
Oregon	.6194*** (.2018)	-.6266*** (.1279)	-.4786*** (.1331)
Pennsylvania	.7148*** (.1538)	-.0833 (.0844)	.0697 (.0920)
Rhode Island	.1356 (.2199)	-.6657*** (.1206)	-.6827*** (.1303)

<b>Appendix Table 3. Continued</b>			
Regressors	Outcome = Both AFDC and Child Support	Outcome = Neither AFDC nor Child Support	Outcome = Child Support Only
<b>State Dummies</b>			
South Carolina	1.105*** (.3061)	.5625*** (.1701)	.8344*** (.1846)
South Dakota	.6866*** (.2479)	-.7521*** (.1494)	-.4618*** (.1530)
Tennessee	.9807*** (.3028)	.0894 (.1654)	.2296 (.1791)
Texas	.5455** (.2704)	.5173*** (.1466)	.4435*** (.1572)
Utah	.0760 (.2457)	-.3642*** (.1350)	-.0913 (.1395)
Vermont	.3641 (.2288)	-.8001*** (.1452)	-.5270*** (.1445)
Virginia	.7540*** (.2559)	.2313* (.1351)	.4850*** (.1460)
Washington	.3943* (.2044)	-.5185*** (.1193)	-.3713*** (.1241)
West Virginia	.1345 (.2746)	-.2801* (.1488)	-.2312 (.1572)
Wisconsin	.2024 (.2069)	-.8155*** (.1239)	-.1592 (.1215)
Wyoming	.8766*** (.2635)	-.4732*** (.1607)	-.4056** (.1666)
Constant	-3.738*** (.6638)	-1.834*** (.3504)	-5.036*** (.3901)
LOG LIKELIHOOD = -67360.043 Sample Size = 64,892			
* p < .10   ** p < .05   *** p < .01			

## About the Authors

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## Appendix

This appendix provides citations for each of the child support policy variables included in our regression analysis. A brief description of our terms and specific source information are given below:

NCSL Reports: National Conference of State Legislatures. State Legislative Summary: Children, Youth, and Family Issues. Children, Youth, and Families Program. Various years.

Personal Contact with IV-D Office: phone contact with employees of individual state child support enforcement (IV-D) offices.

State Paternity Profile: Department of Health and Human Services. State Paternity Profiles: An Information Exchange. Administration for Children and Families. July 6, 1994.

State Plan: plan submitted to the federal office of child support enforcement annually by the states detailing their child support programs.

State Session Laws: archived state laws showing additions and deletions legislated by the state government (on microfilm).

Statute: current state statutes (may have been supplemented by state session laws to obtain effective dates).

### **In-Hospital Paternity Program**

Alabama -- Code of Alabama Annotated § 26-17-22 (1995 Suppl)

Alaska -- Alaska Statutes § 18.50.160 (1992)

Arizona -- Arizona Revised Statutes Annotated § 36-322 (1996 Suppl)

Arkansas -- State Paternity Profile

California -- Annotated California Codes (Family) § 7571 (1994)

Colorado -- Colorado Revised Statutes Annotated § 25-2-112 (1996 Suppl)

Connecticut -- Connecticut General Statutes Annotated § 17b-28 (1997 Suppl)

Delaware -- Delaware Code Annotated 16 § 3121 (1995)

Florida -- Florida Statutes Annotated § 382.013 (1997 Suppl)

Georgia -- Official Code of Georgia § 19-7-27 (1996 Suppl)

Hawaii -- Hawaii Revised Statutes Annotated § 584-3.5 (1997)

Idaho -- State Paternity Profile

Illinois -- Illinois Compiled Statutes Annotated 410 § 535/12 (1997 Suppl)

Indiana -- Indiana Statutes Annotated § 16-37-2-2.1 (1996 Suppl)

Iowa -- State Paternity Profile

Kansas -- Kansas Statutes Annotated § 38-1137 (1996 Suppl)

Kentucky -- Kentucky Revised Statutes § 213.046 (1996 Suppl)

Louisiana -- Louisiana Statutes Annotated 40 § 46.1 (1997 Suppl)

Maine -- Maine Revised Statutes Annotated 22 § 2761-B (1996 Suppl)

Maryland -- Annotated Code of Maryland § 4-208 (1996 Suppl)

Massachusetts -- Annotated Laws of Massachusetts 46 § 3C (1996 Suppl)

Michigan -- Michigan Compiled Laws Annotated 333 § 21532 (1997 Suppl)

Minnesota -- Minnesota Statutes Annotated § 257.75 (1997 Suppl)

Mississippi -- Mississippi Code Annotated § 93-9-28 (1994)  
Missouri -- Annotated Missouri Statutes § 193.087  
Montana -- Montana Code Annotated § 50-15-210 (1995)  
Nebraska -- Revised Statutes of Nebraska Annotated § 43-1408.1 (1995)  
Nevada -- Nevada Revised Statutes Annotated § 449.246 (1996)  
New Hampshire -- New Hampshire Revised Statutes Annotated § 126:6-a (1996)  
New Jersey -- New Jersey Statutes Annotated § 26:8-30; § 26:8-28.1  
New Mexico -- New Mexico Statutes § 24-14-13 (1994)  
New York -- Consolidated Laws of New York Annotated (Public Health Law) § 4135-b  
(1997 Suppl)  
North Carolina -- General Statutes of North Carolina § 130A-101 (1990)  
North Dakota -- North Dakota Century Code § 14-19-06 (1995 Suppl)  
Ohio -- Ohio Revised Code Annotated § 3727.17  
Oklahoma -- Oklahoma Statutes Annotated 63 § 1-311.3 (1997)  
Oregon -- state session laws  
Pennsylvania -- Pennsylvania Consolidated Statutes Annotated 23 § 5103 (1997 Suppl)  
Rhode Island -- General Laws of Rhode Island § 40-6-21.1 (1996 Suppl)  
South Carolina -- Code of Laws of South Carolina § 44-7-77 (1996 Suppl)  
South Dakota -- South Dakota Laws § 25-8-50 (1997 Suppl)  
Tennessee -- Tennessee Code Annotated § 24-7-118 (1996 Suppl)  
Texas -- Texas Codes Annotated (Health and Safety) § 192.003 (1997 Suppl)  
Utah -- Utah Code Annotated § 26-2-5 (1995)  
Vermont -- Vermont Statutes Annotated 15 § 307 (1996 Suppl)  
Virginia -- Code of Virginia § 20-49.9 (1997 Suppl)  
Washington -- State Paternity Profile  
West Virginia -- State Paternity Profile  
Wisconsin -- State Paternity Profile  
Wyoming -- Wyoming Statutes Annotated § 14-2-102 (1996 Suppl)

### **State Income Tax Intercept**

Alabama -- Code of Alabama Annotated § 40-18-102 (1995 Suppl)  
Alaska -- no state income tax  
Arizona -- Arizona Revised Statutes Annotated § 42-133 (1991); 1985 NCSL Report  
Arkansas -- state session laws  
California -- Annotated California Codes (Government) § 12419.3 (1992)  
Colorado -- state session laws  
Connecticut -- Connecticut General Statutes Annotated § 12-742  
Delaware -- Delaware Code Annotated 13 § 513 (1993)  
Florida -- no state income tax  
Georgia -- Official Code of Georgia § 48-7-163 (1995)  
Hawaii -- Hawaii Revised Statutes Annotated § 231-53 (1996)  
Idaho -- Idaho Code § 56-203D (1994)  
Illinois -- Illinois Compiled Statuted Annotated 305 § 5/10-17.5 (1993)

Indiana -- Indiana Statutes Annotated § 6-8.1-9.5-2 (1996)  
Iowa -- Iowa Code Annotated § 421.17 (1990)  
Kansas -- Kansas Statutes Annotated § 75-6202 (1989)  
Kentucky -- Kentucky Revised Statutes § 131.560 (1991)  
Louisiana -- state session laws  
Maine -- Maine Revised Statutes Annotated 36 § 5276-A (1990)  
Maryland -- Annotated Code of Maryland § 10-113 (1996 Suppl)  
Massachusetts -- Massachusetts General Laws Annotated 62D § 3 (1988)  
Michigan -- Michigan Compiled Laws Annotated 552 § 624 (1988)  
Minnesota -- Minnesota Statutes Annotated § 270A.06 (1989)  
Mississippi -- Mississippi Code Annotated § 27-7-507 (1991)  
Missouri -- Annotated Missouri Statutes § 143.784 (1996)  
Montana -- Montana Code Annotated § 17-4-105 (1995)  
Nebraska -- Revised Statutes of Nebraska Annotated § 77-27, 161 (1995)  
Nevada -- no state income tax  
New Hampshire -- no state income tax  
New Jersey -- New Jersey Statutes Annotated § 54A:9-8.1 (1986)  
New Mexico -- New Mexico Statutes § 7-2C-5 (1995)  
New York -- Consolidated Laws of New York Annotated (Social Services Law) §111-n (1992)  
North Carolina -- General Statutes of North Carolina § 105A-3 (1995)  
North Dakota -- North Dakota Century Code § 57-38.3-04  
Ohio -- state session laws  
Oklahoma -- state session laws  
Oregon -- Oregon Revised Statutes Annotated § 25.610 (1988)  
Pennsylvania -- Pennsylvania Consolidated Statutes Annotated 23 § 4307 (1991)  
Rhode Island -- General Laws of Rhode Island § 44-30.1-3 (1995)  
South Carolina -- Code of Laws of South Carolina § 43-5-220 (1985)  
South Dakota -- no state income tax  
Tennessee -- no state income tax  
Texas -- no state income tax  
Utah -- Utah Code Annotated § 59-10-529 (1996)  
Vermont -- Vermont Statutes Annotated 15 § 794 (1996 Suppl)  
Virginia -- Code of Virginia § 58.1-523 (1997)  
Washington -- no state income tax  
West Virginia -- personal contact with state IV-D office  
Wisconsin -- Wisconsin Statutes Annotated § 49.855 (1997)  
Wyoming -- no state income tax

### **Presumptive Guidelines**

Alabama -- Code of Alabama, Rules of Alabama Supreme Court, Rule #32  
Alaska -- Alaska Rules of Court, Rule #90.3  
Arizona -- personal contact with IV-D office  
Arkansas -- Arkansas Code Annotated, Court Rules, Administrative Order #10

California -- Annotated California Codes (Family) § 4052  
Colorado--Colorado Revised Statutes Annotated § 14-10-15 (1989)  
Connecticut -- state session laws  
Delaware -- personal contact with IV-D office  
Florida -- Florida Statutes Annotated § 61.30 (1997 Suppl)  
Georgia -- Official Code of Georgia § 19-6-15  
Hawaii-- state session laws  
Idaho-- Idaho Code § 32-706A  
Illinois --Illinois Compiled Statutes Annotated 750 § 20/24 (1993)  
Indiana -- Indiana Statutes, Court Rules, Child Support Rules and Guidelines  
Iowa -- state session laws  
Kansas -- personal contact with IV-D office  
Kentucky -- Kentucky Revised Statutes 14 § 403.211 (1996 Suppl)  
Louisiana -- Louisiana Revised Statutes Annotated 9 § 315.1  
Maine -- Maine Revised Statutes Annotated 19 § 315 (1996 Suppl)  
Maryland -- Annotated Code of Maryland § 12-204  
Massachusetts -- personal contact with IV-D office  
Michigan -- Michigan Compiled Laws Annotated § 722.3 (1993)  
Minnesota -- Minnesota Statutes Annotated §518.551  
Mississippi -- Mississippi Code Annotated § 43-19-101 (1993)  
Missouri -- Annotated Missouri Statutes § 452.340  
Montana -- personal contact with IV-D office  
Nebraska -- personal contact with IV-D office  
Nevada -- Nevada Revised Statutes Annotated § 125B.080 (1993)  
New Hampshire -- New Hampshire Revised Statutes Annotated § 458-C:4 (1992)  
New Jersey -- personal contact with IV-D office  
New Mexico -- New Mexico Statutes § 40-4-11.1 (1994)  
New York --Consolidated Laws of New York (Domestic Relations) §240  
North Carolina -- state session laws  
North Dakota -- North Dakota Century Code § 14-09-09.7 (1991)  
Ohio -- personal contact with IV-D office  
Oklahoma -- Oklahoma Statutes Annotated 43 § 118  
Oregon -- Oregon Revised Statutes Annotated § 25.280 (1994 Suppl)  
Pennsylvania -- Pennsylvania Consolidated Statutes Annotated 23 § 4322 (1991)  
Rhode Island -- General Laws of Rhode Island § 15-9-1 (1996)  
South Carolina -- Code of Laws of South Carolina § 20-7-852 (1996 Suppl)  
South Dakota -- South Dakota Codified Laws § 25-7-6.10 (1992)  
Tennessee -- Tennessee Code § 36-5-101  
Texas -- Texas Codes (Family) § 154.122  
Utah -- Utah Code Annotated § 78-45-7.2  
Vermont -- Vermont Statutes Annotated 15 § 659 (1989)  
Virginia -- personal contact with IV-D office  
Washington -- Revised Code of Washington Annotated § 26.19.020 (1997)  
West Virginia -- West Virginia Code of State Rules, Title 78, Series 16  
Wisconsin -- personal contact with IV-D office

Wyoming -- Wyoming Statutes Annotated § 20-6-304 (1996)

### **Immediate Wage Withholding**

Alabama -- Code of Alabama Annotated § 30-3-61 (1995 Suppl)

Alaska -- Alaska Statutes § 25.27.062 (1996)

Arizona -- state plan

Arkansas -- Arkansas Code Annotated § 9-14-218 (1993)

California -- Annotated California Codes (Family) § 5253 (1994)

Colorado -- Colorado Revised Statutes Annotated § 14-14-111.5 (1996 Suppl)

Connecticut -- Connecticut General Statutes Annotated § 52-362 (1991)

Delaware -- state session laws

Florida -- Florida Statutes Annotated § 61.1301 (1997 Suppl)

Georgia -- Official Code of Georgia § 19-6-32 (1997 Suppl)

Hawaii -- Hawaii Revised Statutes Annotated § 571-52.3 (1997)

Idaho -- Idaho General Laws § 32-2105 (1996)

Illinois -- Illinois Compiled Statutes Annotated 750 § 45/20 (1993)

Indiana -- Indiana Statutes Annotated § 31-2-10-7 (1996 Suppl)

Iowa -- Iowa Code Annotated § 252D.8 (1996)

Kansas -- state session laws

Kentucky -- Kentucky Revised Statutes § 403.215 (1996 Suppl)

Louisiana -- Louisiana Statutes Annotated 9 § 303 (1997 Suppl)

Maine -- Maine Revised Statutes Annotated 19 § 780 (1996 Suppl)

Maryland -- state session laws

Massachusetts -- state session laws

Michigan -- Michigan Compiled Laws Annotated 552 § 604 (1997 Suppl)

Minnesota -- Minnesota Statutes Annotated § 518.611 (1997 Suppl)

Mississippi -- Mississippi Code Annotated § 93-11-103 (1994)

Missouri -- Annotated Missouri Statutes § 452.350 (1997)

Montana -- Montana Code Annotated § 40-5-315 (1995)

Nebraska -- Revised Statutes of Nebraska Annotated § 43-1718.02 (1995)

Nevada -- Nevada Revised Statutes Annotated § 31A.025 (1996)

New Hampshire -- New Hampshire Revised Statutes Annotated § 458-B:2 (1996 Suppl)

New Jersey -- New Jersey Statutes Annotated § 2A:17-56.9 (1997 Suppl)

New Mexico -- New Mexico Statutes § 40-4A-4.1 (1994)

New York -- state session laws

North Carolina -- General Statutes of North Carolina § 110-136-3 (1995)

North Dakota -- North Dakota Century Code § 14-09-09.24 (1991)

Ohio -- Ohio Revised Code Annotated § 3113.21 (1996)

Oklahoma -- Oklahoma Statutes Annotated 12 § 1171.3 (1997 Suppl)

Oregon -- Oregon Revised Statutes Annotated § 25.311 (1994 Suppl)

Pennsylvania -- Pennsylvania Consolidated Statutes Annotated 23 § 4348 (1991)

Rhode Island -- General Laws of Rhode Island § 15-16-5.1 (1995)

South Carolina -- Code of Laws of South Carolina § 20-7-1315 (1996 Suppl)

South Dakota -- South Dakota Codified Laws § 25-7A-23 (1992)  
Tennessee -- Tennessee Code Annotated § 36-5-501 (1996)  
Texas -- Texas Codes Annotated (Family) § 158.001 (1997 Suppl)  
Utah -- Utah Code Annotated § 62A-11-403 (1997)  
Vermont -- Vermont Statutes Annotated 15 § 781 (1996 Suppl)  
Virginia -- Code of Virginia § 20-79.2 (1995)  
Washington -- state session laws  
West Virginia -- West Virginia Code Annotated § 48-2-15b (1996)  
Wisconsin -- Wisconsin Statutes Annotated § 767.265 (1993)  
Wyoming -- Wyoming Statutes Annotated § 20-6-204 (1996)

### **New Hire Directory**

All new hire information was obtained from:

U.S. Department of Health and Human Services. OCSE Information Exchange: New Hire Reporting Legislative Profile. Administration for Children and Families. July 8, 1997.

(Supplemented by personal contact with the new hire programs in each state.)

### **\$50 Pass-Through**

All \$50 pass through information was obtained from:

Center for Law and Social Policy. "State Action Re \$50 Pass-Through and Disregard."  
<http://www.clasp.org/pubs/childenforce/50pasdis.htm>. December 1997.

Lewin Associates. 1998. "State Financing of Child Support Enforcement Program."

(Supplemented by the Welfare Rules Database, The Urban Institute.)