# Single Mothers and Their Child-Support Receipt

How Well Is Child-Support Enforcement Doing?

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#### ABSTRACT

An increasingly large number of children are being raised by single parents. Child-support enforcement is aimed at mitigating the economic loss that these children face as a result of living with just one parent. Prior research has shown that early child-support reforms have succeeded in increasing child support, but recent reforms have not been examined and the critical role of welfare participation has been overlooked. Using 25 years of data from the March Current Population Survey augmented by child-support policies, this paper updates and expands our understanding of the impact of child-support enforcement on single mothers.

## I. Introduction

The federal and state governments have spent considerable time and money during the past 25 years to build a strong child-support enforcement program so that single-parent families can depend on child support as a source of income. Even the most recent welfare reform effort in 1996 contained major changes in childsupport law. Prior research (Freeman and Waldfogel 2001) has examined whether the expansion of the child-support program has succeeded in increasing child support, but it has overlooked the important role of welfare participation when measuring these impacts and it has not examined key reforms enacted in the 1990s.

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Using 25 years of the March Current Population Survey and a multinomial logit model, we find that the largest beneficiaries of the expansion of the child-support program have been divorced and separated (previously married) mothers on welfare and never-married mothers not on welfare. Divorced and separated mothers on welfare have benefited from several of the child-support policies examined in this article, including immediate wage withholding and increased child-support expenditures. The major reform benefiting never-married mothers has been the establishment of voluntary paternity acknowledgement programs, mandated by Congress in 1993. We do not find that never-married mothers on welfare have benefited from the child-support policies in this analysis, except for the federally mandated \$50 pass-through, which was rescinded in 1996.

## **II.** Trends in Child-support Receipt

As noted by other researchers, the overall child-support receipt rate has remained roughly constant overtime, in part because the proportion of nevermarried single mothers, who have much lower child-support receipt rates than previously married mothers, has increased during this period (Hanson, Garfinkel, McLanahan, and Miller 1996; Freeman and Waldfogel 2001; Lerman and Sorensen 2001). Nonetheless, certain subgroups of single mothers have experienced significant improvements (Figure 1). For example, never-married mothers on welfare saw their child-support receipt rates increase nearly fivefold between 1976 and 2000, starting at 3.5 percent and rising to 17.8 percent (throughout this paper, we use the terms aid or welfare to refer to Aid to Families with Dependent Children, and its replacement in 1996, Temporary Assistance for Needy Families). Never-married mothers not on welfare experienced similar gains; their receipt rate reached 24.2 percent in 2000 from a trough of 3 percent in 1977.

Previously married (divorced and separated) mothers have not experienced such dramatic improvements in their child-support receipt rates. For those on welfare, their child-support receipt rate increased from around 10 percent in the late 1970s to 30 percent in 1995, but then fell to 20.2 percent in 2000. As we show later, this decline in the late 1990s is caused, in part, by changes in child-support policy, but it also reflects a dramatic decline in welfare participation among previously married mothers and a compositional shift in this population toward older mothers who are less likely to receive child support. Figure 1 also shows that the child-support receipt rates among previously married mothers not on welfare have remained roughly stable over this 25-year period, hovering around 46 percent.

### **III.** Prior Research Findings

Relatively little research has examined our primary research question: What impact has the expansion of the national child-support enforcement program had on the child-support outcomes of America's single mothers? 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



### Figure 1

Percent of Single Mothers Receiving Child Support by Marital and Welfare Status (Data from March CPS, 1977-2001)

studies, however, have examined the integral role of welfare participation in childsupport outcomes or recent child-support reforms.

Initial research in this area examined child-support compliance rather than childsupport 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 from the March/April Current Population Surveys-Child Support Supplement (CPS-CSS) were used. 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.

More recently, Freeman and Waldfogel (2001) examined this issue for nevermarried mothers. Similar to our analysis, they examine child-support receipt rates rather than child-support compliance and use pooled cross-sectional data from the March CPS rather than the March/April CPS-CSS. They also include year- and statefixed effects in their analysis as we do below. They find that increased government expenditures on child-support enforcement explain about one quarter of the upward trend in child-support receipt rates among never-married mothers between 1981 and 1995. Hypothesizing that child-support expenditures are more likely to be effective when combined with stronger child-support enforcement laws, Freeman and Waldfogel also construct a child-support legislation index and interact the index with expenditures. For the 1980s, they find that the highest receipt rates among nevermarried mothers occurred when child-support expenditures and the index score were both high.

# IV. The Government's Role in Ensuring that Child Support Is Paid

During the past 25 years, the child-support system has changed dramatically. Prior to 1975, child-support enforcement was dictated largely by family law in each state and enforced by the court system. Any family that wanted to receive child support had to hire an attorney and go to court. Today, child-support enforcement has two systems, which are generally referred to as the public system and the private system, both of which are administered by the states. The public system, better known as the IV-D system, must conform to federal law in order to receive federal funding, but the private system does not have to conform. Although states have extended most federal reforms to the private system, it is still judicially based and complaint-driven. In contrast, the public system is much more pro-active in pursuing child support for its clients and uses many administrative and quasi-judicial procedures to expedite child-support collections. Although this distinction between private and public systems is still evolving, with the public system expanding its responsibilities and the private system contracting, this distinction is still quite important.

Public and private systems have emerged because Congress has never required families who are not on welfare to use the IV-D program. The IV-D program must provide child-support enforcement services to anyone who requests them, but welfare families must participate in this program and assign their rights to child support to the government as a condition of receiving aid. Any child support collected on behalf of welfare families belongs to the government and are used to offset the cost of providing welfare to the family. Hence, collecting child support on behalf of welfare families raises money for the government, while collecting child support on behalf of nonwelfare families does not. These requirements of welfare recipients reflect the original aim of the IV-D program, which was to recoup welfare costs.

Welfare families have dominated the IV-D caseload for most of the program's existence. Although the number of nonwelfare families served by the IV-D program has steadily risen over time, it was not until the dramatic decline in welfare participation in the later part of the 1990s that nonwelfare families represented half of the IV-D caseload.

In this paper, we examine the impact of six child-support reforms as well as the impact of child-support expenditures. As we discuss below, several of these reforms should affect IV-D participants, while others should affect all child-support eligible families. Although our data cannot identify single mothers who received IV-D services, we can identify those who received welfare. Thus, our empirical analysis compares the impact of these child-support measures on welfare and nonwelfare families.

#### A. Reforms that Should Affect IV-D Participants

The federal and state governments spend considerable sums of money to operate the IV-D program. In FY2000, child-support expenditures totaled \$4.5 billion. This amount has steadily increased since the inception of the program in 1975. In our regression analysis, we examine child-support administrative costs on a per capita basis (per single mother) in an effort to capture the increase in expenditures relative to the demand for these services. We anticipate that this variable will have its greatest impact on IV-D clients.

Another reform that should only affect public cases is the interception of income tax refunds. Noncustodial parents in the public system have their federal income tax refunds intercepted if they fall behind in their child support payments. States with an income tax also intercept state income tax refunds. In 1999, 41 states operated this program.

The Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) of 1996 required states to create New Hire Directories. The purpose of these directories is to ensure the timely use of wage withholding. As we discuss below, wage withholding is the primary method used to ensure the regular payment of child support. One weakness in the process, however, is that if obligors leave their job, wage withholding orders do not necessarily follow. To reduce the amount of time that lapses between the start of a new job and the placement of a wage withholding order, the New Hire Directories gather information from employers about all newly hired employees. The IV-D program, in turn, matches this information to their records and generates a wage withholding order. These services are only available to IV-D clients.

One aspect of the IV-D program should only affect welfare families—whether states pass through child support to welfare families. As noted above, since 1975, any child support paid on behalf of a family receiving public assistance has been 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 families on assistance an incentive to cooperate with the child-support enforcement program. Since the PRWORA of 1996, states are no longer required to pass through the first \$50 of child support to welfare families. Nonetheless, 21 states have continued a pass-through policy; 29 have eliminated it.

#### **B.** Reforms that Should Affect All Single Mothers

Wage withholding is considered to be the most effective enforcement tool (Legler 2000). At first, Congress required states to mandate judges to impose wage withholding on all noncustodial parents who fell behind in their child support. By the late 1980s, many states began to implement this mandate for IV-D cases even before obligors became delinquent. This practice, referred to as immediate wage withholding, was codified into federal law in 1988. At that time, Congress mandated that immediate wage withholding become effective for IV-D families no later than 1990 and, for all new child-support orders, no later than 1994. Our regression analysis reflects the date in which immediate wage withholding for all new orders became effective in each state.

States also began to address the lack of horizontal equity in the amount of childsupport 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. In the 1970s, states began to adopt child-support guidelines. At first, states developed child-support guidelines and made them available to judges to use as they saw fit. In 1989, however, Congress went further and required that states make their child-support guidelines binding on judges unless a written finding was issued, a requirement referred to as presumptive guidelines. Our regression analysis uses the date that states adopted presumptive guidelines.

For a child born to unmarried parents, paternity must be legally established before child support can be collected from the father. Prior to 1993, the federal government had tried to make it more difficult for noncustodial fathers to *avoid* paternity establishment, but they had not established a federal directive that would allow noncustodial fathers to *voluntarily* acknowledge paternity. As part of its Omnibus Budget Reconciliation Act of 1993, Congress required all states to adopt civil procedures for voluntary paternity acknowledgment, including in-hospital programs. Our regression analysis reflects the effective date of states' voluntary paternity programs.

## V. Data and Methods

The primary data for this analysis are the March Current Population Surveys (CPS) from 1977 to 2001. We use the March CPS, rather than the March/ April CPS-CSS, because it collects information on child-support income on an annual basis and has a longer time trend available. In addition, the survey instrument has not changed nearly as much as the March/April CPS-CSS, which underwent significant changes in the early 1990s.<sup>1</sup>

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.

Our dependent variable consists of four mutually exclusive (and exhaustive) outcomes:

- (1) Receives welfare only (no child support);
- (2) Receives welfare and child support;
- (3) Receives neither welfare nor child support; and
- (4) Receives child support only.<sup>2</sup>

We examine these four outcomes because we expect the expansion of the childsupport program to differentially affect welfare and nonwelfare recipients.<sup>3</sup> Thus, we needed to take the endogeneity between welfare participation and child-support receipt into account: A woman's decision to seek child support depends on her decision to receive welfare, and vice versa.

The statistical model we employ is the multinomial logit, which allows us to estimate the relationship between our exogenous variables and these joint probabilities. 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 welfare and receipt of child support. As well, we correct the standard errors in our models to account for the multi-level aspect of our data caused by the inclusion of many state-level regressors.

We augment the March CPS by adding data on the child-support expenditures per single mother in each state and year as well as data on the years in which six child-support enforcement laws became effective in each state, described in greater detail above.<sup>4</sup> The child-support policy variables are constructed as dummy variables

<sup>1.</sup> The March CPS has undergone changes too, most notably to its weighting and processing procedures. But these changes also affect the March/April CPS-CSS.

<sup>2.</sup> Our dependent variable combines the receipt of child support and alimony in order to obtain a consistent series throughout the time period analyzed. This approach 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.

<sup>3.</sup> 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, a separate flag for the receipt of child support or alimony income was included, but the amount of child support and alimony received was combined with several income sources, including contributions from nonhousehold members, and other periodic income. It should also be noted that household surveys do not appear to accurately reflect the amount of child support that *they* received, but if a custodial parent is on welfare they are suppose to receive, at most, the first \$50 of child support paid on their behalf. Thus, it is unclear what welfare recipients are reporting when asked about child support income on household surveys.

<sup>4.</sup> We measure child support enforcement expenditures per single mother in real terms (2000 prices) and lag it 15 months. (Expenditures are measured from October 1 to September 30.) We lag these data to reduce the endogeneity that exists between child support expenditures and child support outcomes.

that equal zero until the year that the policy becomes effective and one thereafter.<sup>5</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 and other researchers. Expenditure data are from various issues of the federal Office of Child Support Enforcement's Annual Report to Congress.

A recurring concern in models with state-level policy variables is the potential endogeneity of the policies. It is difficult, however, to anticipate the possible direction that these biases might take. For example, it may be that states with low levels of child-support receipt are more likely to adopt stricter enforcement provisions in an effort to catch up with other states. If this is the case then the policy impacts that we estimate would be biased downward. On the other hand, it may be that states with high levels of child-support receipt are more likely to adopt stricter enforcement provisions because they can afford to experiment with new enforcement tools. In this case, our policy estimates would overstate the impact of policy. Future work will need to examine this issue more carefully.

The coefficients in this model are difficult to interpret. Nonetheless, it is straightforward to predict various unconditional and conditional probabilities of receiving child support using the model coefficients. The unconditional probability of receiving child support is:

(1) 
$$\Pr(CS) = \hat{P}_{AFDC \text{ and } CS} + \hat{P}_{CS \text{ only}}$$

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:

(2) 
$$\Pr(CS|AFDC) = \hat{P}_{AFDC \text{ and } CS} / (\hat{P}_{AFDC \text{ only}} + \hat{P}_{AFDC \text{ and } CS})$$

(3) 
$$Pr(CS|noAFDC) = \hat{P}_{CS \text{ only}} / (\hat{P}_{neither} + \hat{P}_{CS \text{ only}})$$

These unconditional and conditional probabilities are used to predict child-support receipt under different assumptions to test the effects of child-support enforcement policy on single mothers' child-support receipt rates.

Throughout our analysis, we estimate separate models for 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 legally establish paternity before a child-support obligation can be set. In contrast, paternity

<sup>5.</sup> If a policy was enacted after July 1st, the dummy variable is switched from zero to one in the following year. 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.

is rarely an issue for previously married mothers. Estimating separate models for previously married and never-married mothers assumes that the child-support enforcement variables do not affect the decision to divorce or have a child outside of marriage. Yet we already have evidence that child-support enforcement reduces divorce (Nixon 1997) and preliminary evidence that it reduces nonmarital childbearing (Plotnick, Garfinkel, Gaylin, McLanahan, and Ku 1999). If women who are deterred from divorcing or bearing children outside of marriage are more responsive to these policies than other women, then our estimated effects of the child-support policies are biased downward.

Several individual-level demographic characteristics of single mothers are included in the analysis. These demographic characteristics are included in an effort to control for differences in a mother's desire for child support and a father's willingness to pay child support. The race and ethnicity of single mothers are coded as two dummy variables—one if the single mother is black (non-Hispanic) and one if the single mother is Hispanic. The omitted category is white Non-Hispanic. Three dummy variables indicate different levels of education (the omitted category is less than twelve years of education). Age and age squared are included, as well as the number of children in the home (minus one), and whether any children are under the age of six.

State- and time-fixed effects are controlled for in each model by including dummy variables indicating the year in which the mother's data occurred and the state in which the mother lived. The year variables control for year-specific factors that do not vary across states; the state variables control for state-specific factors that do not vary across years.

Single mothers rely on other sources of income besides child support, such as welfare or their own employment, to care for their children. Thus, we wanted to control for factors thought to influence these decisions. Because of concerns about endogeneity between work, welfare, and child-support receipt, we include proxy measures for the welfare and work decisions rather than the actual observed characteristics. We include the maximum welfare 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>6</sup> To proxy a mother's propensity to work, we include the state unemployment rate in each year as well as the state unemployment rate lagged one and two years (these data are from the U.S. Department of Labor).

## **VI. Regression Results**

This section examines the extent to which the expansion of the childsupport enforcement system contributed to the rise in child-support receipt rates for previously married and never-married mothers. The logit results and the impact of specific policies are discussed first, followed by a discussion of the overall impact.

Table 1 reports the estimated coefficients for all of the variables in the multinomial logit model, except the state and year dummy variables. Looking first at the coeffi-

<sup>6.</sup> The maximum welfare benefit for a family of three is obtained from the Urban Institute's microsimulation model—Transfer Income Model version 2 (TRIM2), which includes detailed AFDC and TANF rules and benefit levels. It is adjusted for inflation, using prices in 2000.

	Previo	usly Married Mot	hers	Nev	er-married Mothe	rs
		Outcome =			Outcome =	
	Outcome =	Neither	Outcome =	Outcome =	Neither	Outcome =
Regressors	Welfare and child support	welfare nor child support	Child support only	Welfare and child support	welfare nor child support	Child support only
V-D expenditures per						
single mother (x100)	.0006**	0000.	0002	0002	0004	0000.
	(.0003)	(.0002)	(.0002)	(.0004)	(.0003)	(.0004)
State income tax in-						
tercept	$.2164^{**}$	.0159	.0059	.2202	0649	.0371
	(.1068)	(.0682)	(.0735)	(.1734)	(.0658)	(.1534)
Directory of new hires	.0898	.1044	8660.	0032	.0400	.0177
	(.1505)	(.1483)	(.1223)	(.1496)	(.1039)	(.1625)
\$50 pass-through	.7552***	0246	.0872	.4937***	0854	0463
	(.2135)	(.1591)	(.1478)	(.1649)	(.1121)	(.1680)
Immediate wage with-						
holding	.2753***	6690.	.1202	1745	0654	0447
	(.1013)	(.0705)	(.0862)	(.1211)	(.0681)	(.1088)
Presumptive guidelines	0650	.0271	.0081	2231	0556	.0585
	(.1142)	(.0791)	(.0716)	(.1531)	(0610)	(.1184)
In-hospital paternity es-						
tablishment	0301	1072	0412	.0964	.0458	.2670*
	(.1657)	(.0931)	(.1139)	(.1624)	(.0661)	(.1486)
Black	$7452^{***}$	$3497^{***}$	$-1.6787^{***}$	6977***	$3742^{***}$	$8984^{***}$
	(6260)	(.0659)	(.0621)	(.0792)	(.0723)	(.0864)
Hispanic	$5024^{***}$	2518	$-1.0576^{***}$	4252***	0762	$6933^{***}$
	(.1100)	(.2266)	(.2706)	(.1450)	(.2824)	(.2546)

Table 1Multinomial Logit Results

Kid6	0093	$3774^{***}$	$5306^{***}$	.1160	3077 ***	$3715^{***}$
	(.0622)	(.0382)	(.0346)	(.0721)	(.0422)	(.0613)
Child18	$.0416^{*}$	4943***	$3451^{***}$	$.1089^{***}$	5369***	3623***
	(.0231)	(.0129)	(.0145)	(.0362)	(.0223)	(.0371)
Age	.0435*	.0723***	.2213***	$.2048^{***}$	$1097^{***}$	.2099***
)	(.0225)	(.0116)	(.0138)	(.0446)	(.0179)	(.0268)
Age squared	$0008^{***}$	$0006^{***}$	$0027^{***}$	$0035^{***}$	$.0019^{***}$	$0029^{***}$
	(.0003)	(.0002)	(.0002)	(.0007)	(.0003)	(.0004)
High school graduate	.3832***	.8317***	$1.4890^{***}$	$.3951^{***}$	.4421***	.8834***
	(.0475)	(.0324)	(.0306)	(.1087)	(.0361)	(.0706)
Some college	$.6526^{***}$	$1.1120^{***}$	$2.0402^{***}$	$.4960^{***}$	.7442***	$1.3568^{***}$
	(.0770)	(.0369)	(.0650)	(.1020)	(.0610)	(.0914)
College graduate	$.9430^{***}$	2.3285 * * *	3.4375***	$.8018^{***}$	$1.9414^{***}$	$2.5174^{***}$
1	(.1285)	(.0786)	(.0722)	(.2232)	(.1303)	(.1614)
Unemployment	.0233	.0065	.0123	0425	0088	0595
	(.0384)	(.0182)	(.0223)	(.0450)	(.0193)	(0390)
Unemployment lagged	0026	0217	0294	.0461	0268	.0112
one year						
2	(.0446)	(.0203)	(.0224)	(.0487)	(.0224)	(.0411)
Unemployment lagged	0103	0837***	0692***	0025	0362*	0645*
two years						
	(.0299)	(.0156)	(.0171)	(.0343)	(.0216)	(.0352)
Maximum benefit level in 2000	.0001	0012***	0011***	.0005	0008	0003
	(.0003)	(.0004)	(.0004)	(.0010)	(.0004)	(.0007)
Sample size		71,731			36,655	

Notes: Omitted outcome category is "Welfare only." Standard errors are in parentheses, standard errors are adjusted to account for state level variables. State and year dummies are included in both multinomial logit models. \*\*\* Denotes statistically significant at p < .01. \*\* Denotes statistically significant at p < .05\* Denotes statistically significant at p < .10

cients for the child-support policies for previously married mothers, Table 1 shows that several of the child-support policy variables have a statistically significant impact on the decision to receive "welfare and child support" (the first column of numbers) over "welfare only" (the omitted category), but no significant effect on the other two outcomes. These findings suggest that certain child-support policies are helping previously married mothers combine child support and welfare.

Table 1 also shows that only two child-support policies have had a significant impact on the receipt of child support for never-married mothers—the \$50 pass-through and the in-hospital paternity establishment program. Not surprisingly, the \$50 pass-through has significantly increased the likelihood that never-married mothers receive "welfare and child support" over "welfare only." The in-hospital paternity program has increased the likelihood of receiving "child support only" (the final column in Table 1) over "welfare only."

Turning to the individual-level characteristics, Table 1 shows that the estimated coefficients are nearly always statistically significant and have the anticipated signs. For example, the education variables indicate that mothers with more education are significantly more likely to receive child support with or without welfare than "welfare only." The state-level variables, other than the child-support policy variables, are generally not statistically significant.

#### A. Estimating the Impact of Individual Child-support Variables

We estimate the impact of individual child-support policies on single mothers' childsupport receipt by examining the conditional and unconditional probabilities of receiving child support for a marginal (or discrete) change in each child-support policy. Examining one policy variable at a time, however, probably underestimates the impact of these policies because they often work together to increase child support. The results are reported in Table 2.

Starting with child-support expenditures, we find mixed support for our hypothesis that child-support expenditures have benefited single mothers on welfare more than single mothers off welfare. For each additional \$100 of child-support expenditures per single mother, our analysis shows that the child-support receipt rates of previously married mothers on aid increased by one percentage point. We did not find a significant impact of child-support expenditures, however, on the child-support receipt rates of never-married mothers on aid. The point estimate indicates that each \$100 increase in child-support expenditures decreased child-support receipt rates of never-married mothers on aid by 0.3 percentage points. Additionally, we find that all single mothers off welfare have not benefited from the expansion in child-support expenditures.

Turning to state income tax intercepts, Table 2 shows that previously married mothers on welfare benefited from the tax intercept program. If every state had implemented a tax intercept program, previously married mothers on welfare would have increased their child-support receipt rates by 3.5 percentage points. The estimated impact of tax intercepts was not statistically significant for never-married mothers (see Table 1), but the point estimates indicate that child-support receipt rates of never-married mothers on welfare would have increased by 3.1 percentage points.

#### Table 2

Percentage Point Impacts of Specific Child-Support Policies on Single Mothers' Child-Support Receipt Rates based on Conditional and Unconditional Probabilities

	Previously Married Mothers			Never-Married Mothers		
	On Welfare	Off Welfare	Total	On Welfare	Off Welfare	Total
Child-support expenditures	1.0*	-0.5*	-0.4*	-0.3	0.5	0.4
Tax intercepts	3.5*	-0.2*	0.0*	3.1	1.7	1.8
New hire directories	1.4	-0.2	0.1	0.0	-0.4	-0.3
\$50 pass-through	12.2*	2.5*	3.0*	7.2*	0.6*	1.5*
Wage withholding	4.2*	1.1*	1.4*	-2.8	0.4	-0.1
Child support guidelines	-1.1	-0.4	-0.4	-3.7	1.9	1.0
In-hospital paternity	-0.5	1.5	1.2	1.3*	3.5*	3.2*

Note: All percentages reflect a discrete change from 0 to 1 in the policy dummy variable except for the child support expenditures percentage, which reflects a discrete change from \$0 to \$100.

\* Indicates at least one of the estimated coefficients is statistically significant (see Table 1).

if every state had adopted a tax intercept program. In contrast, single mothers not on welfare did not benefit from this program.

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. The last set of states enacted this mandate in October of 1998 and thus it is not surprising that we did not find a statistically significant impact of new hire directories on child-support receipt rates. Additional years of data may affect this finding.

On the other hand, rescinding the federally mandated \$50 pass-through had a large impact on receipt rates. As noted earlier, 29 states have eliminated the \$50 pass-through since PROWRA abolished this federal mandate in 1996. We estimate that if the \$50 pass-through had been eliminated nationwide, that the likelihood of receiving child support would have declined by 12.2 percentage points for previously married mothers on aid and by 7.2 percentage points for never-married mothers on aid. The actual impact of rescinding the federally mandated \$50 pass-through is about half these figures, however, since 21 states (which include all of the largest states) have kept a \$50 pass-through.

Turning to policies that are hypothesized to affect all single mothers, Table 2 shows that immediate wage withholding has significantly increased child-support receipt rates for previously married but not never-married mothers. In particular, previously married mothers on welfare experienced a 4.2 percentage point increase in their child-support receipt rate because of immediate wage withholding. Since immediate wage withholding was only federally mandated for new child-support

orders outside of the IV-D system in 1994, it may be that gains from this enforcement tool have not been fully realized.

Presumptive guidelines have not had a statistically significant impact on the likelihood of receiving child support among previously married or never-married mothers. This finding is not particularly surprising, however, since the primary aim of presumptive guidelines was to reduce the variance in child-support orders, not to increase the likelihood of receiving child support.

The final policy examined in this paper is the voluntary in-hospital paternity establishment program. We find that this policy has clearly benefited never-married mothers, especially those not receiving welfare. We estimate that enacting this policy increased the likelihood of receiving child support by 3.5 percentage points for nevermarried mothers off welfare and by 1.3 percentage points for never-married mothers on welfare. 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 aid have benefited less from this program than never-married mothers off welfare, in part, because there is little incentive to voluntarily acknowledge paternity for mothers on welfare since nearly all of the child support collected on their behalf will go to the government to reimburse it for providing welfare.

### B. Estimating the 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 Wald test of our model, which measures the impact of constraining all of the policy variables to equal zero across all four outcomes. We found that the impact of the child-support enforcement variables in our model produced a test statistic that was statistically significant at the 1 percent level for both never-married and previously married mothers, meaning that the child-support enforcement variables significantly improved the fit of our model. We view this evidence as support of our hypothesis.

To measure how much single mothers have benefited from the expansion of the child-support enforcement program, we examine predicted probabilities from the two multinomial logit models (one for previously married mothers and one for nevermarried mothers) where all policy variables are equal to zero, but other variables take on their actual values. These predicted probabilities represent the child-support receipt rates that would have resulted if the child-support enforcement policies in the model had not been implemented, but all the other factors in the model were allowed to change. To measure the impact of these policies on child-support receipt rates, we compare these predicted probabilities with the actual trend in child-support receipt rates for previously and never-married mothers.

Starting with previously married mothers, Figure 2 shows that child-support receipt increased among these mothers by 7.6 percentage points between 1976 and 2000, from 36.0 percent to 43.6 percent (the top line). It also shows that if the childsupport enforcement policies had not been implemented, the predicted probability of receiving child support would have increased by only 5.0 percentage points, to 41.0 percent in 2000 (the second line from the top). The difference between these two lines measures the impact of the child-support policy variables in the model. Thus, according to our model, child-support policies increased the likelihood of receiving child support among previously married mothers by 2.6 percentage points in 2000 (43.6-41.0). We divide this percentage point figure by the actual percentage point change in the child-support receipt rate of previously married mothers to measure the extent to which these child-support policies contributed to their gains in child-support receipt. We find that these child-support policies have accounted for 34 percent (2.6/7.6) of the rise in the child-support receipt rate among previously married mothers.

As shown in Figure 2, the child-support policies in our model began to affect child-support receipt rates for previously married mothers in 1985, the year the first major federal efforts were made to reform child-support enforcement. The positive effect of the child-support policies on previously married mothers peaked in 1994. At that time, child-support receipt rates among previously married mothers had increased by 5.9 percentage points as a result of the child-support policies in our model. Since then, however, the percentage point benefit has declined, resulting, in part, from the elimination of the mandatory \$50 pass-through.

Turning our attention to never-married mothers, Figure 2 shows that the percent of never-married mothers who received child support increased 18.7 percentage points, from 4.6 percent in 1976 to 23.3 percent in 2000 (the third line from the top). It further shows that if the child-support policies had not been enacted, the predicted probability of receiving child support would have only increased by 10.2 percentage points, to 14.8 percent in 2000 (the bottom line). That is, implementing these child-support enforcement policies increased the likelihood of receiving child support among never-married mothers by 8.5 percentage points (23.3 - 14.8). Using the same method as above, we estimate that the child-support enforcement variables included in the model explain 45 percent of the rise in child-support receipt rates among never-married mothers (8.5/18.7).

Figure 2 also shows that never-married mothers began to benefit from the expansion of the child-support enforcement system in 1985, just as previously married mothers. Never-married mothers' percentage point gain from the child-support policies in the model, however, has increased throughout the time period analyzed.

Our second hypothesis is that the expansion of the child-support enforcement system had a greater impact on child-support receipt rates for single mothers on welfare than among those not on welfare. As we discussed above, child-support enforcement has been historically targeted toward welfare recipients. To test this hypothesis, we examined the predicted probability of receiving child-support conditional on the receipt of welfare.

We find evidence to support our hypothesis for previously married mothers. Figure 3 shows that child-support receipt rates among previously married mothers on welfare increased 5.4 percentage points, from 14.8 percent to 20.2 percent between 1976 and 2000 (the line with triangles). It also shows that if the child-support enforcement policies had not been implemented, the predicted probability of receiving child support would have decreased by seven percentage points, to 7.8 percent in 2000 (the line with black circles). In other words, without the expansion of the child-support program, the likelihood of previously married mothers on welfare receiving child



# Figure 2

Actual Proportion and Predicted Probabilities of Single Mothers Receiving Child Support



# Figure 3

Actual Proportion and Predicted Probabilities of Single Mothers on Welfare Receiving Child Support

support would have fallen by seven percentage points. Thus, the child-support policies in this model increased the likelihood of receiving child support among previously married mothers by 12.4 percentage points in 2000 (20.2 - 7.8). Hence, these child-support policies can explain the entire increase in child-support receipt among previously married mothers on welfare.

Figure 3 also shows that the child-support policies in this model had their largest effect on the likelihood of receiving child support among previously married mothers on welfare in 1995. Most of the subsequent decrease in the impact is the result of eliminating the \$50 pass-through. Nonetheless, we estimate that the percent of previously married mothers on welfare receiving child support is 12.4 percentage points higher in 2000 than it would have been without the child-support policies in this model.

On the other hand, the child-support receipt rates of previously married mothers not on welfare have increased only slightly as a result of the child-support policies in this model. Their actual child-support receipt rate has declined slightly since 1977 (shown in Figure 1). This decline, however, is not attributable to the child-support policies in this model. If these child support policies had not been implemented, child support receipt rates among previously married mothers would have declined another 1.9 percentage points (not shown).

When we turn our attention to never-married mothers, we do not find evidence to support our hypothesis that child support policies have benefited welfare recipients more than those not on welfare. We find that the child support receipt rates of nevermarried mothers on welfare increased as a result of the child support policies in the model until 1996, but since then they have not. Figure 3 shows that child support receipt rates among these mothers increased from 3.5 percent to 16.2 percent between 1976 and 1996 (the line with clear circles). We estimate that if the child-support policies in this model had not been in place, their receipt rate would have only increase to 11.9 percent in 1996 (the line with plus signs). Hence, in 1996, the childsupport policies in this model added 4.3 percentage points to the child-support receipt rate of never-married mothers on welfare (16.2 - 11.9). Since then, the actual childsupport receipt rate for never-married mothers on aid and the predicted child-support receipt rate, where the child-support policies in the model had not been enacted, have been practically the same. Hence, never-married mothers on welfare no longer benefit from the child-support policies in this model.

The only policy changes captured in this model occurring since 1996 are the rescission of the federally mandated \$50 pass-through and the enactment of New Hire Directories. Never-married mothers on welfare are not significantly affected by the New Hire Directories, but they are significantly negatively affected by the rescission of the federally mandated \$50 pass-through.

Alternatively, never-married mothers off welfare have seen their child-support receipt rates increase as a result of the child-support policies in this model, especially since 1994 when in-hospital paternity establishment was federally mandated (see Figure 1). By 2000, 24.2 percent of never-married mothers off aid received child support, up from 7.5 percent in 1976. If the child-support policies in this model had not been implemented, we estimate that their child-support receipt rate would have increased from 7.5 percent to 14.4 percent in 2000 (not shown). Hence, child-support

policies in this model increased the child-support receipt rate of never-married mothers off welfare by 9.8 percentage points (24.2 - 14.4).

#### **VII.** Conclusions

This research finds that the expansion of the child-support enforcement system has significantly increased the child-support receipt rates of previously married and never-married mothers. We estimate that the child-support policies in our model explain 34 percent of the increase in child-support receipt rates for previously married mothers and 45 percent for never-married mothers.

We also find, however, that these gains are largely confined to two groups of single mothers—previously married mothers on welfare and never-married mothers off welfare. If the child-support policies in our model had not been enacted, we estimate that, in 2000, the child-support receipt rate would have been 12.5 percentage points lower for previously married mothers on welfare and 9.8 percentage points lower for never-married mothers off welfare. On the other hand, the child-support receipt rates of the other two groups of single mothers—previously married mothers off welfare and never-married mothers on welfare—were largely unchanged in 2000 as a result of the child-support policies in this analysis.

Previously married mothers on welfare were expected to benefit from the childsupport policies in this analysis because welfare recipients have been the primary target population for child-support services for the past 25 years. These mothers' child-support receipt rates increased as a result of immediate wage withholding, the tax intercept program, the federally mandated \$50 pass-through and the increase in child-support expenditures.

The only child-support policy that we examine here that was expected to benefit never-married mothers off welfare more than other groups of single mothers is the voluntary in-hospital paternity establishment programs, federally mandated in 1993. According to our results, child-support receipt rates for never-married mothers not on aid are 3.5 percentage points higher in 2000 as a result of this program.

We expected that previously married mothers off welfare would benefit very little from the child-support policies in this analysis because they have not been targeted for services by the child-support program. According to our analysis, these mothers' child-support receipt rates would have been 1.9 percentage points lower if the childsupport policies in this analysis had not been implemented.

We did not expect to find that the child-support policies in this analysis have not benefited never-married mothers on welfare since 1996, the year Congress enacted comprehensive welfare reform (PRWORA). As part of welfare reform, Congress rescinded the federally mandated \$50 pass-through. Without this policy, the other child-support policies in this analysis do not appear to have a positive impact on the child-support receipt rate of never-married mothers on welfare.

These findings suggest that the 25-year expansion of the child-support program has achieved a great deal. Nonetheless, if Congress wants to increase the childsupport receipt rate of never-married mothers on welfare they may want to consider reinstating the federally mandated \$50 pass-through. In addition, they may want to consider other policies, besides child-support enforcement, to increase the childsupport receipt rates of never-married mothers on welfare, such as increasing the capacity of noncustodial fathers to pay child support.

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