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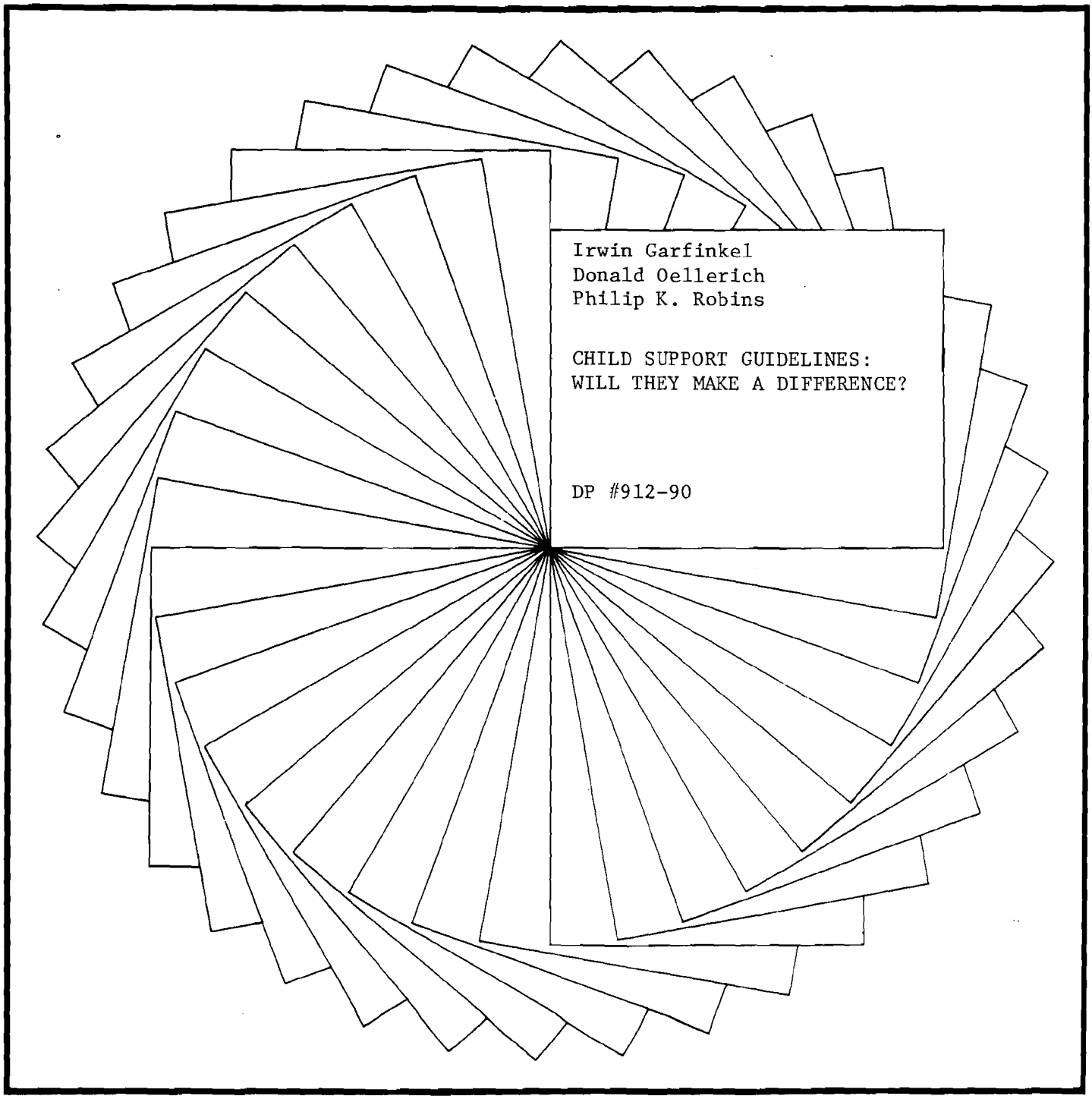

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CHILD SUPPORT GUIDELINES:
WILL THEY MAKE A DIFFERENCE?

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Child Support Guidelines: Will They Make a Difference?

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Abstract

This paper examines the new child support guidelines being developed by the states in response to the Child Support Amendments of 1984 and the Family Support Act of 1988. The major objectives of the paper are to determine the extent to which the new guidelines can be expected to increase child support awards and payments and the relative importance of using the new guidelines to either establish initial awards or update awards. The analysis focuses on the guidelines being developed in Wisconsin, Colorado, and Delaware, which are representative of those being implemented nationwide.

The results suggest that the new guidelines will increase child support payments by somewhere between 47 and 54 percent. Most of the increase is the result of higher child support awards, which we predict will increase by between 77 and 88 percent, depending on the guideline being considered. We also predict compliance with the new guidelines will be modest, averaging 61 percent across marital statuses, but this evidence is very tentative, based on an analysis of the current system, and the results may not carry over to the new system.

The results also suggest that simply implementing the new guidelines at the time of a divorce will not be enough to ensure an effective child support system. One of the major reasons why child support payments have been declining in real terms in recent years is that the awards are being eroded by inflation. Erosion occurs because the current system has no built-in mechanism for updating awards to keep up with the cost of living. The Family Support Act of 1988 requires states to develop mechanisms for periodic updating of awards. Our results suggest that updating is an important component of an effective child support system and that at least as much attention should be devoted to implementing this provision of the Family Support Act as to the other, more publicized, provisions.

Child Support Guidelines: Will They Make a Difference?

1. INTRODUCTION

It is now well established that the amount of child support awarded mothers who experience a marital disruption has been too low and is a contributing factor to the high rate of poverty among single-parent families (Robins, 1986, 1989, Garfinkel and McLanahan, 1986; Oellerich, Garfinkel, and Robins, 1989). According to data from a special supplement to the Current Population Survey (CPS), the average child support award in 1985 was about $210 per month per family, or $125 per child. This was considerably below the average poverty level of $800 per month for these families.

In response to inadequate levels of child support awards, Congress has recently made sweeping changes in the nation's child support system. In 1984, the Social Security Act was amended to require states to develop numerical guidelines for the establishment of child support awards (the 1984 Child Support Amendments). The landmark Family Support Act of 1988 went further by requiring that the guidelines be presumptive[1] and by mandating periodic review of the award levels to ensure that the custodial parent continues to receive an appropriate share of the noncustodial parent's income for the child(ren).

These changes in the child support system are expected to significantly increase both the sizes of awards and the amounts paid.[2] In a previous paper (Oellerich, Garfinkel, and Robins, 1989), we used CPS data for 1983 to compare awards and payments in 1983 with those under the new guidelines. We found that the new guidelines represented a considerable departure from the current system. In particular, we estimated that if the guideline adopted by the state of Wisconsin were implemented nationwide in 1983, award levels would almost double.

The estimates in our previous paper, however, do not distinguish between the effects of utilizing guidelines to establish initial awards and the effects of utilizing the guidelines to update awards. Child support awards reported in the CPS were made up to eighteen years prior to the survey and therefore do not reflect current economic conditions.[3] In previous research, Garfinkel and Klawitter (1988) found that utilization of the Wisconsin standard would not have lead to an increase in initial child support awards made up to 9 years earlier in 20 counties in Wisconsin. This finding implies that the requirement for periodic review may be far more important than the requirement to use the new guidelines to establish initial child support awards.

It is important to ascertain the benefits of utilizing the new guidelines for setting initial awards as well as for periodically reviewing them. While there are no additional monetary costs associated with utilizing child support guidelines to establish or update awards, the act of updating could potentially be expensive. Previous law has discouraged updating of child support awards because of the expense to the courts (see Garfinkel and Melli, 1989, for further details). As a consequence, revisions of child support awards have been rare. The use of guidelines may reduce the cost of updating by delegating the process of review to an administrative agency and involving the court only when a change is warranted.

This paper examines the new guidelines as of 1985, determines whether they represent a significant departure from the existing award-setting system, distinguishes between their effects on establishing initial awards and updating of awards, and estimates their effects on child support payments. Our analysis indicates that the guidelines represent a significant departure from awards under the existing system. At least half of the difference is attributable to increases in the initial level of awards. The relative importance of updating varies substantially depending upon what factors are considered in the updating process and the extent to which these factors have changed over time. In addition, we estimate that compliance with the new awards is likely to be modest,

although this evidence is quite tentative and further research is needed before more definitive conclusions can be drawn. A very crude analysis suggests that for every $100 increase in award levels, somewhere on the order of between $50 and $75 will be paid. These results suggest that, assuming no other behavioral responses, the new guidelines should significantly raise the incomes of single-parent families.

The remainder of this paper is organized as follows. In Section 2, we briefly describe the new guidelines being developed, with particular emphasis on the guidelines in Wisconsin, Colorado, and Delaware. In Section 3, we compare the guidelines to the existing system, focusing on whether the guidelines can be expected to affect award and payment levels. In Section 4, we summarize our findings and provide suggestions for further research.

2. THE NEW GUIDELINES

Although the states are still refining their approaches to developing guidelines, two distinct approaches have emerged. These are the cost-sharing (CS) approach and the income-sharing (IS) approach.[4] The CS approach defines the child support award in terms of the cost of raising a child.[5] The IS approach defines the support award in terms of the incomes of one or both parents.[6]

Although the CS approach was most common under the old child support system, the IS approach is now prevalent. According to the National Center for State Courts (1988), models based on the IS approach have been adopted in all but three states (Delaware, Hawaii, and West Virginia). Although there is considerable variation in the IS formula, most of the states have adopted one of two versions; the percentage-of-obligor income (POI) model or the percentage of combined income (PCI) model.

Both the POI and PCI models are based on the premise that the child should receive the same proportion of parental income that he or she would have received if the parents lived together.[7] The two versions differ in how they treat custodial-parent income. Under the POI model, only the income of the noncustodial parent is considered.[8] Under the PCI model, the income of both the custodial and noncustodial parent is considered.[9] It is of interest to note that the Advisory Panel on Child Support Guidelines appointed by the federal Office of Child Support Enforcement officially recommends that states use either the CS approach or the PCI version of the IS approach as the basis for their child support guidelines.[10] By early 1989, the PCI model had been adopted in 24 states.

Although the PCI model has been "officially"recommended by the Advisory Panel on Child Support Guidelines, many states have chosen to adopt the POI model. In some states that have adopted the POI model, the percentage does not vary with the income of the noncustodial parent, whereas in others, the percentage varies either upward or downward with the income of the noncustodial parent. At the present time, 13 states have adopted the "flat" POI model and 10 states have adopted the "varying"POI model.

For purposes of this paper, we focus on the guidelines in three states: Wisconsin, Colorado, and Delaware. These three guidelines are prototypes of the ones being develop in virtually every other state. The Wisconsin guideline is an example of the flat POI model and is the simplest to implement in practice.[11] The award is based solely on the gross income of the noncustodial parent and the number of children for whom support is being paid, with no adjustments for taxes or special child-related expenses, such as child care or medical expenses. The Wisconsin award amount is 17 percent of the noncustodial parent's gross income for one child, 25 percent for two children, 29 percent for three children, 31 percent for four children, and 35 percent for five or more children.

The Colorado formula is an example of the PCI model. Under the Colorado formula, the award is based on a declining proportion of the combined gross income of both parents.[12] Once the basic child support obligation is determined, further adjustments are made for child care expenses, extraordinary medical expenses, extraordinary education expenses, shared physical custody, and split custody.[13]

The Delaware guideline is an example of the CS approach and is the most complicated of the guidelines considered here.[14] Like the Colorado PCI guideline, the Delaware CS guideline bases the child support award on the combined income of both parents, but unlike the Colorado guideline utilizes net (of taxes) income rather than gross income.[15]

Table 1 compares the three guidelines at various levels of net income of the parents, for a custodial family with two children. (The use of net income in the comparison is for convenience and does not imply that we believe it is appropriate to base child support awards on net rather than gross income.) In the table, three different assumptions are made about the custodial parent's net income: it equals zero, it equals one-half of the noncustodial parent's income (approximately the national average), and it equals the noncustodial parent's income. In panel 1 of the table, the award is presented as a percentage of the noncustodial parent's net income; and in panel 2 the award is presented as a percentage of the combined net incomes of both parents.

Table 1 illustrates the differences in the guidelines. The major difference is that as a percentage of net income (either noncustodial or combined), the child support award in Wisconsin increases with net income while in Delaware and Colorado it decreases with net income.[16] Another difference is that, except at low levels of net income, the Wisconsin guideline results in higher awards, although it should be kept in mind that the figures in these tables do not consider the adjustments made in Colorado and Delaware for child care expenses, medical expenses, etc. Thus, depending on the prevalence of these other factors in practice, the awards

Table 1

Child Support as a Percentage of Noncustodial Parent's and Combined Parent's Net Income under the Wisconsin, Colorado, and Delaware Guidelines

Custodial Parent's Net Income	Panel 1 Noncustodial Parent's Net Monthly Income					Panels 2 Combined Parents' Net Monthly Income			
	$1,000	$1,500	$2,000	$2,500	$3,000	$1,000	$2,000	$3,000	$4,000
Zero	% of Noncustodial Parent's Net Income					% of Combined Parents' Net Income			
Wisconsin	35%	38%	40%	42%	44%	35%	40%	44%	45%
Colorado	40	36	35	33	32	40	35	32	31
Delaware	37	35	33	31	30	37	33	30	30
One-Half Noncustodial Parent Income									
Wisconsin	35%	38%	40%	42%	44%	32%	35%	40%	42%
Colorado	35	34	33	31	29	32	33	33	32
Delaware	36	31	30	28	28	35	30	30	28
Equal to Noncustodial Parent Income									
Wisconsin	35%	38%	40%	42%	44%	31%	36%	40%	42%
Colorado	32	31	30	27	25	23	33	30	27
Delaware	27	25	25	25	25	26	25	25	25

Note: Based on data given in U.S. Department of Health and Human Services (1987). Assumes two children. Child support awards for Colorado and Delaware do not include amounts allocated for child care expenses, extraordinary medical costs, shared physical custody, income from current spouses, or obligations for other dependents (these factors are not relevant for Wisconsin). Net income is gross income less appropriate federal and state income taxes.

could be much closer to the Wisconsin guideline at higher levels of net income. A third difference (seen most clearly in panel 1) is that the award level in Wisconsin does not vary with the net income of the custodial parent, while in Colorado and Delaware it declines as the custodial parent's net income increases.

3. COMPARING THE GUIDELINES TO THE EXISTING SYSTEM

Low child support awards are often cited as one of the more important factors contributing to the high rate of poverty and welfare dependence among custodial-parent families (Robins, 1986, 1989). For this reason, it is of critical importance to determine whether the new guidelines represent an improvement over the existing system. In assessing the importance of the new guidelines, three questions need to be answered. First, are awards under the new guidelines higher? Second, if they are higher, how much of the difference is attributable to higher initial awards and how much is attributable to updating old awards? Third, to what extent will higher awards translate into higher payments? In the remainder of this paper, we attempt to provide answers to these questions.

A. Distinguishing between Initial Awards and Updating

One way of comparing the magnitude of child support awards under the new and old systems is to use survey data on individual child support recipients. In a previous paper (Oellerich, Garfinkel, and Robins, 1989), we used reported child support awards from the Child Support Supplement to the 1984 CPS (covering the year 1983) to represent the existing system[17] and calculated awards under the Wisconsin and Colorado guidelines (for the same sample) to represent the new system. Our results indicated a significant increase in awards as a result of the new guidelines.

In our earlier study, however, we did not distinguish between the effects of the guidelines on establishing initial awards and the effects of updating them. The awards reported in the CPS were originally established up to 18 years prior to the survey date. Comparing these awards in 1983 to the awards in 1983 that would have resulted from the application of the new guidelines combines the effects of both changing initial award levels and updating those awards to reflect current economic conditions.

One simple way to estimate the importance of updating is to assume that (1) child support awards should be updated by holding constant their real value in dollar terms, that is to say, adjusting them for inflation only, and (2) past child support awards were not updated, so that reported awards are equal to initial awards. With these two assumptions, it is possible to update old awards by simply increasing them by the rate of inflation since they were made. The difference between the reported award and the "updated-for-inflation" award is one measure of the importance of updating.[18] It can be compared to the difference between the reported award and the award that would have resulted from the application of the new guidelines in order to estimate the relative importance of updating vis-à-vis establishing higher initial awards.

This first method has the virtue of simplicity. But it suffers from two weaknesses. First, although adjusting for inflation is one way to update child support awards, the Family Support Act of 1988 requires states to update child support awards by reapplying the child support guidelines at least every three years. This will complicate the exercise of distinguishing between the effects on initial awards and updating. For guidelines such as Wisconsin's, which are based on the POI model, only changes in the income of the absent parent are relevant for updating awards. For guidelines such as Colorado's, based on the PCI model, changes in the income of both parents are relevant. In neither case is inflation of direct relevance. Second, although most analysts agree

that updating of child support awards has been rare in the past, rather than assuming no updating it is preferable to allow for the possibility that some updating has occurred.

The second method involves statistically estimating the parameters of a model characterizing the guidelines that were implicit in the old system of establishing and updating child support awards. Once these parameters are estimated, they can be used to distinguish between initial awards and various methods of updating. How the distinctions are made is explained below after the model used to characterize the old system is described.

Characterizing the Old Child Support System. In characterizing the old child support system, we make use of CPS data for the years 1978, 1981, 1983, and 1985. The CPS for these years does not contain information about the date of the original award. Nor does it contain information about the characteristics of the mother and father at the time of the award. Therefore, it is necessary to make assumptions that will enable us to calculate of the real value of the original award. The key assumptions we make are that for divorced and separated women, the date of the marital disruption is a good proxy for the date of the award, and for never-married women, the date of birth of the youngest child is a good proxy for the date of the award.[19]

Using these assumptions, it is possible to specify an empirical model of the award determination process that allows identification of the influence of inflation, changing earnings of men and women, time, and the effects of being married for part of the survey year.[20]

The empirical model has the following form:

$$(1) \quad AWARD = a_0 + a_1DEM + + a_2PART + a_3INFL + a_4EARN + a_5TIME + e,$$

where AWARD is the real value of the child support award for a given family during the year covered by the CPS survey, DEM is a set of demographic variables for the family, PART is a dummy variable indicating the mother was married part of the survey year, INFL is the cumulative

rate of inflation from the date of the award to the date of the survey, EARN is relative earnings of the mother to the father at the time of the award, TIME is a set of calendar time variables, the a's are parameters to be estimated, and e is a random error term.

In the above model, the INFL variable is intended to capture the cumulative effects of inflation on the real value of the award. If less than perfect updating had been occurring under the old child support system, the coefficient a_3 will be negative. If no updating occurred under the old system, the coefficient would imply an effect equivalent to simply updating awards by the actual rate of inflation that occurred since the time the award was made. Thus with less than perfect updating, the older the award, the lower its real value, all else constant. Similarly, the EARN variable is intended to capture the effects of earnings of the mother relative to the father on the real value of the award. If female earnings played a significant role in lowering award levels under the old system, the coefficient a_4 will also be negative. The TIME variable captures a residual effect, and as Robins (1989) argues, it is possible that the coefficient a_5 captures effects of the Child Support Enforcement (IV-D) system over the time period covered by the data.[21]

The sample consists of all women with an award in the CPS data for 1978, 1981, 1983, and 1985.[22] The results of estimating the model are presented in Table A.1 of the Appendix. They indicate that inflation erodes the real value of the award, that the award is lower for women married part of the survey year, that awards have generally drifted downward over time (although not significantly)[23], and that the award decreases as the earnings of the mother increase relative to the earnings of the father at the time of the marital disruption.[24]

The estimated parameters of the model describe the old child support system and can be used to predict initial award levels as well as the consequences of updating awards by the rate of inflation, by changes in male earnings, or by changes in male and female earnings. We use only the 1985 CPS sample for this "simulation" exercise. To capture the effect of updating by inflation

alone, we set the values of all the variables in the model equal to their values in the year of the award, except the inflation variable, which is set equal to zero. This gives us a predicted child support award that has been updated for inflation. Unlike the estimate obtained from the first crude method, however, this estimate allows for the possibility that some awards under the old system have been updated. Therefore, we expect this estimate to be lower than that obtained from the first method. Similarly, to capture the effects of updating by changes in male earnings, we set the values of all variables in the model equal to their values in the year of the child support award, except for the male earnings variable (the denominator of EARN), which is set equal to its 1985 value. Finally, to capture the effects of updating by changes in both male and female earnings and inflation, we predict an award amount for each 1985 sample member using the values of their individual characteristics (see Table A.1) at the time of the 1985 survey. Thus, the value of the inflation variable is set to zero, the value of the time variable is set equal to 1985, and the value of the relative earnings variable is set to its 1985 value.[25] In all cases, to adjust for the effects of being married during part of 1985, the part-year married variable is set equal to zero.

Calculating the Award under the New Guidelines. An award is calculated for each woman in the 1985 CPS sample, under the Wisconsin, Colorado, and Delaware guidelines, using the published formulas for each state.[26] However, one critical piece of information needed to calculate the award amount under each of these guidelines is missing in the CPS, namely the income of the father (noncustodial parent). Therefore, we predict the income of the father using the methodology developed by Oellerich and Garfinkel (see Oellerich, 1984; Oellerich and Garfinkel, 1983; and Garfinkel and Oellerich, 1989). The method uses the characteristics of the women as proxies for the men's characteristics and an adjusted estimated relationship between wives' characteristics and husbands' income.[27] Additional information needed to calculate the

Delaware guideline (new spouse and new dependent children) are estimated in a similar fashion (see Oellerich, forthcoming, for details).

Results. Table 2 compares child support awards under the old system to awards that would result from the new guidelines. Row 1 presents reported CPS awards. The average award amount in the CPS is $2,486. The awards tend to be highest for divorced women ($2,847) and lowest for never-married women ($1,429).

Rows 2, 3, and 4 present average awards under the Colorado, Delaware, and Wisconsin guidelines. The average awards under the three new guidelines are respectively 1.77, 1.77, and 1.88 times higher than reported awards. Clearly, using the new guidelines to update old awards and establish new ones will lead to substantial increases in child support awards. With one exception, the average award amount is somewhat higher under the Wisconsin guideline. The Delaware guideline provides a substantially higher award for the never married. Note also that the awards for never-married women under the Colorado and Wisconsin guidelines are not much higher than the reported awards.

Rows 5 and 6 update reported awards by the rate of inflation during the years subsequent to the establishment of the initial award. The fifth row uses the crude method of assuming that there has been no updating of past awards and simply increases the CPS reported award by the cumulative rate of inflation since the year of the award. The sixth row uses the statistical model for characterizing the old system and thereby allows for some updating of past awards. As expected, with the exception of the never married, the regression-adjusted estimates are smaller than the crude adjusted estimates. But the difference is quite small--6 percent--suggesting that there has been very little updating for inflation in the past.

The figures in rows 5 and 6 are roughly halfway--40 percent and 52 percent--between reported CPS awards (row 1) and predicted awards (rows 2,3, and 4) under the new guidelines.

Table 2

Average Child Support Awards in 1985--Reported Awards, Updated Awards, and New Awards According to Guidelines

	All	Divorced	Remarried	Separated	Never Married
1. Reported CPS award	$2,486	$2,847	$2,208	$2,497	$1,429
New guidelines					
2. Colorado	4,409	4,864	4,625	3,643	1,677
3. Delaware	4,392	4,932	4,259	3,508	2,248
4. Wisconsin	4,662	5,126	4,941	3,747	1,790
CPS updated for inflation[a]					
5. Simple adjustment	3,470	3,782	3,438	3,009	2,238
6. Regression-adjusted estimate[b]	3,262	3,571	3,093	2,956	2,261
7. CPS awards updated for changes in male earnings[b]	3,195	3,509	3,008	2,931	2,209
8. CPS awards updated for changes in male and female earnings[b]	2,772	3,084	2,544	2,716	1,725

Note: Amounts are in 1985 dollars and are averages over women in the 1985 CPS sample.

[a]Also adjusted for the effects of being married part of the year and for calendar time effects.

[b]Based on the results reported in the Appendix, Table A.1.

This suggests that, given our recent history of inflation, updating is about as important as increasing the initial level of awards.

Row 7 uses the statistical model of the old child support system to update awards by the rate of increase in absent-parent incomes during the years subsequent to the establishment of the initial award. This is the kind of updating that would result from using the Wisconsin guideline. Note that the average award is slightly lower than that in rows 5 and 6, which updated the award by the rate of inflation. This is because inflation increased somewhat more rapidly in the recent past than did average earnings of males (real earnings of males actually declined during this period). Still, updating by absent-parent incomes accounts for about one-third of the difference between reported awards and the awards predicted under the new guidelines.

Row 8 in Table 2 presents estimates of initial child support awards under the guidelines implicit in the old child support system, had these implicit guidelines been used to establish the initial award in 1985. The figures are striking. The average award level is only about 12 percent higher than the reported awards. This implies that the bulk of the difference between the old system and the new guidelines is attributable to the difference in initial awards. Updating is relatively unimportant.

How can these results be so different from those reported in rows 5-7? Unlike the figures in rows 5, 6, and 7, those in row 8 update awards not only for changes in inflation and male earnings but also for changes in female earnings. Due to the combination of a slight decline in the real earnings of men and a large increase in the average hours worked by women during the past 18 years, the ratio of women's earnings to men's earnings has risen dramatically. Because child support awards under the guidelines implicit in the old child support system depended upon the relative earnings of custodial mothers and noncustodial fathers, updating old awards to take

account of the increase in female earnings leads to a decrease in award levels that offsets the increase in awards due to inflation and rising nominal earnings of men.[28]

What then are we to conclude about the relative importance of updating? First, unlike the estimates based on Wisconsin data, which suggested that the new guidelines would not increase initial child support awards and that therefore failure to update alone accounted for the low awards under the old system, even our highest estimate here of the importance of updating suggests that only about half of the difference between existing awards and awards that would be forthcoming under the new guidelines is attributable to the failure to update. Because the Wisconsin results are based on a restricted sample that had data on income of the absent parent, and because Wisconsin may not be representative of the rest of the country, we are inclined to view the simulated results reported in this paper as more reliable.[29]

Second, not surprisingly, the importance of updating depends upon what factors are considered for the purposes of updating and how much these factors change. If awards are updated to take account of either inflation or increases in absent-parent earnings, so long as inflation is not negligible--say, at least 4-5 percent per year--the effects of updating on average award levels will be significant. A large part of the gap between existing child support awards and those that would be forthcoming under the new child support guidelines is attributable to the failure to update child support awards by either increases in the cost of living or absent-parent income. On the other hand, if awards are updated to take account of increases in the earnings of both custodial and noncustodial parents, the effects of updating may not be as large because changes in one parent's earnings may be offset by changes in the other parent's earnings. Given the guidelines implicit in the old system as well as the explicit new guidelines in Colorado and Delaware, however, it requires a very large increase in the earnings of the custodial parent relative to the noncustodial parent to hold average award levels nearly constant. Although our

analysis suggests that this is exactly what happened during the 18 years prior to 1985, the period was quite atypical, and it is unlikely that we will experience such a large increase in the ratio of female to male earnings in the foreseeable future. Thus, even if the Colorado or Delaware guidelines are used to update awards in the future, they are likely to lead to larger increases in average award levels than the estimates in row 8 suggest.

In summary, our results suggest that the new guidelines will significantly increase initial child support award amounts. However, they also illustrate the importance of developing a mechanism for updating awards. Under the old system, our results suggest that awards were rarely updated, and as a result they were significantly eroded by inflation. It would thus appear that policymakers should devote as much attention to developing workable mechanisms for updating awards as they are to developing workable mechanisms for setting initial awards. Without such a mechanism, the gains achieved by the guidelines could diminish over time.

B. Will Payments Be Higher?

Although our analysis suggests that the new guidelines will significantly increase child support award amounts, they are certainly not expected to lead to equivalently higher child support payments. Current child support awards are not paid in full and there is no reason to believe that increases in awards will be paid in full. In the CPS (for the years 1978, 1981, 1983, and 1985), 27 percent of the women having a child support award received nothing while 84 percent of the total owed was paid among those who received something. Overall, including both those who receive something and those who receive nothing, the compliance rate was about 61 percent.

For purposes of evaluating the guidelines, what we wish to know is how much child support payments will increase per dollar increase in child support awards, holding constant such factors as

the income of the absent parent and his commitment to his child. Previous research provides some evidence. In a study using court record data for Genesee County, Michigan, Beron (1988) controls for a host of other factors, including the income of the absent parent, and finds that increasing child support awards by $100 will increase the amount paid by $89, implying a compliance rate of .89.

Beron's results, however, are probably an overestimate of the expected national marginal compliance rate, because Michigan has one of the most efficient child support systems in the country and, according to Chambers (1979), Genesee County has one of the best compliance records in the state. Furthermore, Beron does not control for the possibility that obligors with higher awards are more willing to pay child support. If this is so, then omitting willingness to pay from the compliance model would bias the estimated compliance rate upward.

In order to provide further evidence on this issue, we performed an analysis of compliance similar to Beron's, using national data. The following compliance model was estimated:

$$(2) \quad PAYM = b_0 + b_1X + b_2AWARD + b_3(AWARD)^2 + u,$$

where PAYM is the child support payment, X is a vector of variables assumed to influence payment levels, and AWARD is the amount of the child support award. A quadratic specification for AWARD is used to allow the compliance ratio to vary nonlinearly with the level of the award.[30]

Because many women with child support awards receive nothing, there are numerous observations at zero. Therefore, conventional least squares techniques cannot be used to estimate equation (2). Instead a two-step technique is adopted. In the first step, an equation is estimated to predict whether or not a family received any child support payment (using the full sample of those having an award). In the second step, the sample is restricted to women who received some

child support during the year covered by the CPS data and an equation is estimated to predict the amount paid. The second-step estimation uses the results from the first step to correct for the selectivity bias associated with restricting the sample to women receiving child support. This is a valid procedure if the error terms in equation (2) and the selectivity equation are normally distributed. Models were estimated for the total sample and separately for each of the marital subgroups (divorced, (re)married, separated, never married). CPS samples for the years 1978, 1981, 1983, and 1985 are used.

Assuming normality for the error term in equation (2), it can be shown that an estimate of the compliance rate based on this model is given by

$$(3) \quad COMP = (b_2 + 2b_3*AWARD)*P,$$

where P is the fraction of women with awards who currently receive some child support (.73 for the total sample, .75 for divorced women, .68 for (re)married women, .81 for separated women, and .74 for never-married women). The interpretation of this compliance rate is that it represents the expected increase in child support payments resulting from a one-dollar increase in the award amount, for a randomly selected woman having an award.[31]

Estimates of the child support compliance model are presented in the Appendix Tables A.2 (for the full sample) and A.3 (for the marital-status subgroups).[32] They indicate that for the full sample, the compliance rate declines with the amount of the award, but the rate of decline is extremely small. For two of the marital-status subgroups (divorced and never married), the compliance rate is estimated to increase with the amount of the award. The results also indicate (see Table A.2, column 3) that the probability of receiving any child support at all decreases with the size of the award, but again the rate of decline is very small (less than 1 percentage point for awards in the relevant range).

These results were used to estimate compliance rates associated with an increase in the mean award by $100 (see equation (3)). These compliance rates are presented in Table 3. They indicate modest compliance rates (of about .61) that decline only slightly with the level of the initial award. These results are much smaller than those obtained by Beron (1988) and suggest that the new guidelines are likely to lead to a significant amount of noncompliance. However, it should be kept in mind that these compliance rates are extrapolations based on the current system (that is, they continue the current rate of compliance/noncompliance) and may not be applicable to the new system.

There are several reasons, for example, why these compliance rates, even though much lower than Beron's, may still be too high. As with the Beron study, our model does not control for the absent parent's willingness to pay child support. In addition, as noted above, the CPS does not contain information regarding the absent parent's income. Although the vector of custodial-parent variables includes potentially good proxies for the absent parent's income, such as years of schooling, age, race, and geographic location of the custodial parent, it would still appear likely that holding constant these factors, the income of the noncustodial parent will be positively correlated with both the child support award and child support payments. Thus, while the use of national data can get rid of the potential upward bias in Beron's results arising from use of a sample from Genesee County, Michigan, the CPS data introduce a potential upward bias resulting from lack of information on the absent parent's income.

On the other hand, there are reasons for believing that we may be underestimating compliance rates associated with increased child support obligations. Routine income withholding (mandated by the Family Support Act of 1988) should increase compliance with child support obligations. Garfinkel and Klawitter (1988) estimate, for example, that routine income withholding will increase the ratio of the amount paid to the amount owed by between 11 percent

Table 3

Predicted Compliance Behavior as a
Result of Higher Awards

Marital Status	Change in Payment If Award Is Increased by $100 from an Initial Award of $1,000	$2,000	$3,000	$4,000	$5,000
Divorced	$61	$61	$62	$62	$62
Re(married)	51	50	50	50	49
Separated	69	70	71	71	71
Never married	59	63	67	72	76
All	61	61	60	60	60

Note: Based on results reported in the Appendix, Tables A.2 and A.3

and 30 percent. Moreover, it is possible that the guidelines themselves will increase payments by reducing horizontal inequities and thereby increasing perceptions of absent parents that child support obligations are fair. Indeed, it is also possible that the increasing public attention being paid to child support enforcement will strengthen norms with respect to paying child support and thereby increase the psychic costs associated with absent parents' failure to pay child support.

4. CONCLUSIONS

Policymakers have begun to recognize that low child support awards are a contributing cause of poverty and welfare dependence among single-parent families. With the passage of the Child Support Amendments of 1984 and the Family Support Act of 1988, the means for addressing this problem are being put into place. The results of this paper suggest that the new child support guidelines should increase child support income of single-parent families by somewhere between 47 and 54 percent (based on an average compliance rate of 61 percent across marital statuses). Most of the increase will be the result of higher child support award levels, which we predict will increase between 77 and 88 percent, depending on the guideline being adopted. We also predict that compliance with the new guidelines will be modest, ranging from between 50 and 76 percent, but the evidence in support of this is based on an analysis of the current system and may not carry over to the new system.

Our results also suggest that simply implementing the new guidelines will not be enough to ensure an effective child support system. One of the major reasons why child support payments have been declining in real terms in recent years is that awards are being eroded by inflation. Erosion occurs because the current system has no built-in mechanism for updating awards to keep up with the cost of living. The Family Support Act of 1988 requires states to develop mechanisms for periodic review of awards. Our results suggest that this is an important component of an

effective child support system and that at least as much attention should be devoted to implementing this provision of the Family Support Act as to the other, more publicized, provisions.

There are several factors not considered in this paper that could alter the results presented. First, there may be significant behavioral responses to the increases in child support payments. For example, the increased child support payments could affect the work effort of custodial and noncustodial parents, as well as the rates of marriage and divorce, and perhaps even the fertility rate. Second, the results of this paper depend critically on the method used to impute incomes for noncustodial parents. It is quite possible that other methods would yield significantly different results. Finally, a different method for adjusting CPS awards to reflect the current system may yield different results. The potential behavioral effects of increased child support payments, as well as alternative methodologies for measuring awards and payments under the new and old systems, must be considered before more definitive conclusions can be drawn about the effects of child support guidelines on the economic well-being of families in which one parent is absent from the home.

Appendix

Table A.1

Determinants of Child Support Award Amounts in CPS Data

Explanatory Variable	Mean	Coefficient	Standard Error
Constant term	1.0	522.8	438.0
1 = Northeast	.19	303.8***	112.0
1 = Northcentral	.24	71.1	99.7
1 = West	.24	-161.9	101.4
1 = Black	.24	-385.4***	126.1
1 = Spanish	.08	-255.2*	165.2
Years of education	11.9	197.8***	17.5
1 = (Re)married	.29	20.1	86.2
1 = Separated	.15	287.0	130.0
1 = Never married	.21	-740.6***	194.0
Number of children	1.7	717.2***	43.1
Age of mother	33.3	38.9***	5.7
1 = Separated part of year	.11	-481.0***	122.0
Cumulative rate of inflation since disruption	54.2	-16.3***	1.4
Year of disruption (if prior to 1976)	4.0	-27.3	36.3
Year of disruption (if after 1975)	12.5	-9.8	37.5
Female-male earnings ratio at time of disruption	.28	-5649.7**	2498.8
Sample size	7,265		
Mean of dependent variable	2,824		
Adjusted R-square	.10		
t-test for selectivity bias	1.42		

Note: CPS data for the years 1978, 1981, 1983, and 1985. See Robins (1989) for a description of the CPS match files used in estimation. Sample is restricted to women with child support due in the appropriate year.

*Significant at the 10% level.
**Significant at the 5% level.
***Significant at the 1% level.

Table A.2

Estimates of Child Support Compliance Model
(All Marital Statuses Combined)

Variable	Mean	Coefficient (Standard Error) Probability of Receiving a Payment	Coefficient (Standard Error) Amount of Payment
Constant	1.0	-1.35*** (.15)	451.7 (637.9)
1 = Northeast	.194	.09* (.05)	42.7 (60.7)
1 = Northcentral	.255	-.15*** (.04)	37.5 (58.5)
1 = West	.240	-.25*** (.04)	139.3** (73.0)
1 = Black	.112	-.13*** (.05)	-124.7* (76.6)
1 = Spanish	.048	-.20*** (.07)	55.8 (101.6)
1 = SMSA	.614	.07* (.004)	--
1 = Married part of year	.142	.31*** (.06)	--
Years of education	12.5	.05*** (.008)	-6.8* (15.8)
Number of children	1.76	-.06*** (.02)	37.2 (24.4)
Age of mother	34.6	.01*** (.002)	9.9** (4.3)
Year of disruption (If prior to 1972)	3.4	.04*** (.004)	-22.2 (13.9)
Years of disruption (If after 1975)	14.2	.04*** (.004)	-19.8* (11.6)
Award amount	3,025	.014***(.001)	.83*** (.01)
(Award amount)^2/10^6	19.6	.002***(.0002)	-1.1*** (.25)
Selectivity correction term	.428	--	-931.2**(424.5)
Sample size	5,312	7,265	5,312

Note: Dependent variable is annual child support payment (mean = $2,547). The adjusted R^2 = .77.

*Significant at 10% level.
**Significant at 5% level.
***Significant at 1% level.

Table A.3

Estimates of Child Support Compliance Model by Marital Status

Variable	Divorced	(Re)Married	Separated	Never Married
Constant	1,284.4	-802.6	738.3	197.7
	(988.7)	(1,671)	(1,076)	(328.0)
1 = Northeast	115.2	-113.3	238.2*	-135.6
	(72.2)	(153.2)	(123.6)	(112.1)
1 = North Central	24.1	16.8	437.1***	157.0
	(76.6)	(110.0)	(169.7)	(149.3)
1 = West	162.7*	115.6	-446.9***	-252.9
	(91.3)	(154.8)	(168.9)	(205.2)
1 = Black	36.6	-596.8**	-70.7	-84.7
	(162.6)	(243.1)	(146.9)	(94.4)
1 = Spanish	125.0	-39.8	201.6	157.4
	(152.4)	(256.7)	(183.9)	(214.1)
Years of education	-17.6	17.4	-25.4	-1.6
	(23.5)	(40.9)	(27.3)	(19.1)
Number of children	-42.2	224.9***	1.2	53.3
	(29.8)	(56.1)	(50.1)	(44.3)
Age of mother	4.5	20.0	11.8	2.0
	(6.1)	(14.1)	(6.4)	(6.7)
Years of disruption (if prior to 1976)	38.2*	4.4	-22.1	6.7
	(20.4)	(27.8)	(32.1)	(14.0)
Years of disruption (if after 1975)	33.3*	-1.7	34.6	-4.8
	(17.9)	(23.1)	(27.5)	(7.7)
Award amount	.82***	.76***	.85***	.74***
	(.01)	(.03)	(.02)	(.07)
$(\text{Award amount})^2/10^6$	1.3***	-2.6***	-3.5***	28.8**
	(.3)	(.5)	(.7)	(11.9)
Selectivity correction term	-1,267.9*	-533.2	-1,475.1*	202.9
	(659.9)	(939.9)	(782.8)	(495.8)
Adjusted R^2	.82	.65	.92	.79
Mean of dependent variable	2,763	2,298	2,827	1,232
Sample size with a payment	2,744	1,679	625	264
Sample size with an award	3,665	2,473	771	356

Note: Dependent variable = amount of payment.

*Significant at 10% level.
**Significant at 5% level.
***Significant at 1% level.

Notes

[1]By presumptive it is meant that judges can only depart from the guidelines upon written evidence that the guideline is inappropriate in a particular circumstance.

[2]The new guidelines are also expected to increase equity across awards by reducing much of the arbitrariness of the award-setting process. We do not address the equity issue in this paper.

[3]Consider the following example. Suppose a woman with two children was divorced in 1975 and reported an award of $200 per month in the 1983 CPS. Suppose also that in 1975, her ex-husband's income was $800 per month. Thus, at the time of the award, her child support obligation represented 25 percent of her ex-husband's income. Now assume that her award had never been updated and that her husband's income had remained the same in real terms. Because her husband's nominal income would be $1,480 in 1983 (prices in 1983 were 85 percent higher than in 1975), her award in 1983 represented only 13.5 percent of her ex-husband's current income. Assigning her an award based on the Wisconsin guideline would have increased her award to $370. Is it correct to say that the new guideline gives awards that are twice as large as the old guideline? It appears that the deficiency in the old system was not that the award was too low but rather that the system failed to provide a mechanism for updating the award to reflect changing economic conditions.

[4]The CS and IS approaches and the rationales for them are described in Dodson (1987), Douglas (1985), Garfinkel and Melli (1989), Gordon and Garfinkel (1989), National Center for State Courts (1988), Thompson and Paikin (1985), U.S. Department of Health and Human Services (1987), Williams (1985, 1987), and Williams et al. (1988).

[5]In states that are currently using the CS approach, adjustments are usually made (either upward or downward) for the standard of living of both parents. The result is an award that is not "pure" cost sharing.

[6]Some versions of the IS approach make adjustments for child care expenditures and/or extraordinary medical expenditures, and hence have elements of the CS approach, while others are "pure" income sharing.

[7]A third version of the IS approach utilizes a sharing formula that "equalizes" the incomes of the custodial and noncustodial parents. This version, termed the income equalization (IE) model, redistributes combined family income in proportion to the number of persons in each family unit in an attempt to allow the children to maintain a standard of living equal to the predivorce level. The IE model was first presented by Judith Cassetty and Frank Douthitt (1984) and is reprinted in U.S. Department of Health and Human Services (1987). For a variant, see Sawhill (1983). In general, the IE model leads to child support awards considerably above the other IS models. For this reason, the IE model is not presently being used in any of the states.

[8]The POI model was originally developed by the state of Michigan, but is now most closely associated with the state of Wisconsin (see Chambers, 1979 and Garfinkel and Melli, 1989) for a discussion of the history of the POI model.

[9]The PCI model has its intellectual roots in the influential study of Espenshade (1984).

[10]See U.S. Department of Health and Human Services (1987, p. I-15). For a dissenting opinion, see Garfinkel and Melli (1989).

[11]The simplicity of the Wisconsin guideline has been used as a rationale for its widespread adoption (see Garfinkel and Melli, 1989).

[12]Actually, adjusted gross income is used, with adjustments made for means-tested public assistance programs, separate maintenance (such as alimony), and the employee cost of health insurance (see U.S. Department of Health and Human Services, 1987).

[13]We do not use these adjustments in our examination of the Colorado guideline in this paper.

[14]The Delaware guideline was developed by Judge Edward F. Melson, Jr., and has been in use since 1979.

[15]The Delaware guideline is applied in the following manner. First, the net income of both parents is determined. Second, a "self-support reserve" of at least $450 per month is subtracted from net income. Third, a "primary support amount" is calculated based on the subsistence cost of rearing a child ($180 per month for the first child, $135 for the second and third children, and $90 for each additional child), with an adjustment (not considered in this paper) for work-related child care expenses and/or extraordinary medical expenses. This primary support amount is then allocated between the parents based on their proportion of the combined net income. Fifth, the award is increased by a "standard of living allowance" (SOLA) based on the remaining net income of the noncustodial parent (15 percent for one child, 25 percent for two children, 35 percent for three children, and an additional 5 percent for each additional child). Finally, the Delaware guideline makes further adjustments for custody arrangements, other dependents, and current spouses.

The adjustments for other dependents and current spouses are incorporated into the estimates presented in this paper, whereas the adjustments for custody arrangements are not. See Oellerich (forthcoming) for details of how these adjustments are made.

[16]If gross rather than net income had been used as the base, the Wisconsin guideline would be constant (as a percentage of income) and the Colorado and Delaware guidelines would decrease even further with income.

[17]The reported child support award in the CPS is the amount due in a particular calendar year and may not equal the true award amount if it includes arrearages or other adjustments to normal payments.

[18]This measure is, of course, a reflection of past rates of inflation, which may not be the same in the future. See the discussion below.

[19]The Child Support Supplement to the 1988 CPS (which was not available when this study was undertaken) contains for the first time information about the date of the original child support award and could be used to test the validity of these assumptions.

[20]A significant portion of the CPS sample--about 11 percent according to Robins (1989)--was separated for only part of the survey year. Because of this, the reported child support awards only apply to part of the previous year, and treating them as applying to the whole year would tend to bias them downward.

[21]For further details on the interpretation of this model see Robins (1989).

[22]Confining the estimation sample to those with an award could lead to a selectivity bias. A test of selectivity bias was performed and indicated selection bias was not present (see Robins, 1989).

[23]The results indicate that the downward drift is slower subsequent to 1975, when the Child Support Enforcement program was established.

[24]Attempts were made to estimate separate equations for divorced, separated, (re)married, and never-married women. However, the sample sizes for separated and never-married women were too small to yield reliable estimates of the effects of inflation and relative earnings. Hence, the effects of these variables were constrained to be the same for all marital-status groups.

[25]The value of EARN in 1985 was .419; see Robins (1989, Table 2).

[26]Recall that adjustments are not made in Colorado and Delaware for child care expenses, medical expenses, and the other optional factors.

[27]For details of the methodology see Oellerich, Garfinkel, and Robins (1989, Appendix A).

[28]For further discussion of the role played by female earnings in establishing award amounts, see Robins (1989).

[29]The Wisconsin results are based upon court record data so that the initial child support award is likely to be better measured than in the CPS. On the other hand, about half of the cases lacked information on income of the absent parent, and these cases were thrown out. Moreover, absent parents who report their income to the courts have an incentive to underreport. Underreporting would bias upward the estimate of the award relative to income. There are also reasons to believe that Wisconsin secured awards higher than the rest of the nation. In general, Wisconsin has had one of the strongest child support enforcement records in the country (see, for example, Oellerich, forthcoming).

[30]An alternative model in which the compliance ratio (PAYM/AWARD) was the dependent variable was also tested and yielded similar results.

[31]Note that the compliance rate for a randomly selected woman already receiving some child support will generally be higher than this compliance rate, and the compliance rate for a randomly selected woman in the child-support-eligible population (that is, not conditioned on having an award) will generally be lower than this compliance rate.

[32]For the model that combines all marital statuses, the results for both the first and second equations are presented in Table A.2. For the separate models by marital status, only the results for the second equation are presented in Table A.3. The results for the first equation are available on request from the authors.

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