

Child Support Demonstration Evaluation

**Difference-in-Difference Evaluation of the Wisconsin
Full Child Support Pass-Through Policy: Final Report**

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February 2006

This paper is based on a report prepared under Contract C-1980 between the Wisconsin Department of Workforce Development and the Institute for Research on Poverty. Any views expressed in this report are those of the authors and not necessarily those of the sponsoring institutions. The authors thank Patricia Brown, CSDE Data Manager, and programming staff of the Institute for Research on Poverty for their outstanding programming and construction of the data files used for this analysis. We thank Dawn Duren and Elizabeth Evanson for assistance in preparing this manuscript.

Executive Summary

This difference-in-difference evaluation makes use of the opportunity provided by the end of the child support pass-through experiment to assess the changes in outcomes for custodial and noncustodial parents associated with the full pass-through and disregard policy.

From September 1997 through June 2002, W-2 cases included in the Child Support Demonstration Evaluation were divided into two groups, and received either a full or partial pass-through of any child support paid, according to their group assignment. As of July 1, 2002, the full pass-through and disregard policy became universal, so all cases formerly receiving a partial pass-through of child support began to instead receive the full pass-through.

This analysis compares the differences in outcome means between the year prior to the policy change (July 2001-June 2002) and the second year after the policy change (July 2003-June 2004) for the group that consistently received a full pass-through and the group that formerly received a partial pass-through. Since the mechanical effect of the July 1 policy change is to provide a full pass-through of child support to those who formerly received a partial pass-through, we expect to see a larger pre-post change in the amount of child support received for the partial pass-through group than for the full pass-through group. We also hypothesize that the pre-post change in related outcomes, such as the rate of paternity establishment, the percentage of fathers paying child support, and the percentage of mothers receiving public assistance, will be larger for those formerly receiving a partial pass-through.

Although we found that, as in the first report, the difference in difference was consistently larger for those in the group formerly receiving a partial pass-through, only the difference arising from the mechanical effect on child support received by families was statistically significant, and that only for the larger first cohort of cases.

BACKGROUND

In 1997, Wisconsin began implementing the Wisconsin Works (W-2) program as replacement for the Aid to Families with Dependent Children (AFDC) program. One of the components of this new assistance program was a policy which allowed custodial parents who were receiving cash payments from the W-2 program to keep all current child support paid on behalf of their children, and disregarded this child support income in calculating the level of cash payments. This full pass-through and disregard of child support was a change from the child support policy under AFDC and is unique in the country. The new rules were allowed as part of a federal waiver which also required an evaluation of this policy change, the Child Support Demonstration Evaluation (CSDE).

From October 1997 through June 2002, the child support policy component of W-2 was operated as a waiver demonstration program with an experimental design based on the random assignment of participants into experimental and control groups. The experimental group received the full child support pass-through; while receiving W-2 payments the control group received only a partial pass-through of \$50 or 41 percent of any child support payment, whichever was greater. The Institute for Research on Poverty has conducted several evaluations comparing the results of the full and partial pass-through policies for new entrants into W-2 and following those entrants over time.¹

This report takes a different tack. It uses the opportunity presented by the ending of the experimental design to conduct a difference-in-difference evaluation of the child support pass-through policies. At the end of June 2002, the partial pass-through policy for the control group cases was discontinued and all cases were moved to the full pass-through and disregard policy. By comparing the

¹Meyer and Cancian (2001) evaluated the results of the experiment for those who entered W-2 in the first ten months of the program. Meyer and Cancian (2003) followed those initial entrants for a longer period and compared them to those who entered W-2 at a later stage. In addition, Meyer and Cancian (2002) presents the results of several nonexperimental evaluations of this program.

changes in outcomes for these control group cases moving from partial to full pass-through with the changes in outcomes for the experimental group cases remaining on a full pass-through policy, we can provide an additional evaluation of the effects of the full pass-through policy.

METHODS

In the analysis we look for differences in the 2-year changes on several outcome measures. Outcome measures we consider are (1) the rate of paternity establishment for children, (2) the percentage of noncustodial fathers paying child support and the average amount of support paid, (3) the percentage of custodial mothers receiving child support and the average amount of support received, (4) the percentage of custodial mothers participating in various public assistance programs (W-2, Food Stamps, Medicaid/BadgerCare, and child care), and (5) the employment and earnings of both custodial mothers and noncustodial fathers.

The primary mechanical effect of the ending of the partial pass-through is that those custodial parents who are in the control group and who are receiving W-2 cash payments should now receive all current child support paid to them. Thus, we expect to see a larger increase in child support received for the control group than for the experimental group. In addition, previous evaluations have found increases in paternity establishment, child support payment, and some reductions in program participation for cases entering into full pass-through, so we might find similar effects for the control group at the end of the experiment as they move to a full pass-through regime.

The methodology we use to assess these effects is referred to as a difference-in-difference model, or a before and after comparison with an untreated comparison group (see B. Meyer 1995).² For both the control and experimental groups we calculate the change in the average level of each outcome from the

²B. Meyer 1995 is a summary review of standard methodologies for pre-/post-treatment studies. The specific methodology discussed in the review and used here is a standard difference-in-difference model that has a long history in evaluations.

year before June 30, 2002 to two years later (July 2003-June 2004)—“the first difference,” and then compare the changes between the two groups—“the second difference.” When using the difference-in-difference approach in the context of an experiment, one randomly assigns cases to two different conditions and compares the before experiment/after experiment differences. Since the cases are randomly assigned, the two groups have similar characteristics and so there is no need to control for differences in characteristics between the two groups.

In the present analysis, however, although we have randomly assigned groups, we cannot assume that the two groups still have similar characteristics at the time of the policy change under consideration. Although the two groups were statistically similar at the beginning of the CSDE experiment, the effects of the experiment (as documented in previous IRP reports) means that the two groups are known to differ by the time we reach June 30, 2001 (one year before the partial pass-through ends). Full pass-through and disregard is known to have led to higher child support payments and lower public assistance participation among the experimental group. In order to compare the changes from before to after June 30, 2002, we need to control for these differences.

Therefore we present alternate estimates of the difference-in-difference estimator which show the effects of controlling for experimental-control differences in increasingly more stringent ways for each outcome. The first estimate shows the straightforward difference in difference with no controls as a point of reference. This estimate is calculated as:

$$\left(\bar{Y}_{\text{exp}}^{\text{Post}} - \bar{Y}_{\text{exp}}^{\text{Pre}} \right) - \left(\bar{Y}_{\text{control}}^{\text{Post}} - \bar{Y}_{\text{control}}^{\text{Pre}} \right) \quad (1)$$

The second estimator uses a multivariate model following B. Meyer (1995) which predicts outcomes in both the year before and the second year after June 30, 2002, with controls for Pre/Post, Experimental/Control, and the interaction of the two. The coefficient for the interaction term is equivalent to the first estimator, but the model allows us to add several controls to improve the precision of the

estimates. This model controls for the time period of assignment, location, mother's characteristics (age, race, and education), her previous experiences with the child support and AFDC systems, her employment history, and her initial tier on W-2. The models for fathers' outcomes add controls for some characteristics of the father: his income, child support order history, and numbers of children (a full list of the control variables in the model appears in the appendix). Since all of these characteristics are measured before random assignment, their addition to the model will not improve the validity of the estimator, but will improve its efficiency. The model takes the form:

$$y = \alpha + \beta_1[Post] + \beta_2[Experimental] + \beta_3[Exp * Post] + \beta_4 X + \varepsilon, \quad (2)$$

where X is a vector of all control variables.

In the above model, β_3 is our estimator of interest.

Finally we present an estimator that accounts for the differences in outcomes experienced by the two groups between random assignment and year before the end of the experiment on June 30, 2002. To account for these differences we add controls which account for the different levels of the outcomes that we observe in this time period. These include the total amount of child support received and total amount of child support paid³ during the interval between assignment and June 2001; the number of quarters with participation in W-2, Food Stamps, and Medical Assistance; and the overall earnings during this time period (again, see the appendix for a full list). This third estimator controls for these known differences which existed between the experimental and control groups when the experiment ended. The model used is:

³Reflecting the total amount of child support paid on behalf of a mother for the mother outcomes, and the total amount of child support paid by the father for the father outcomes.

$$y = \alpha + \beta_1[Post] + \beta_2[Experimental] + \beta_3[Exp * Post] + \beta_4X + \beta_5Z + \varepsilon, \quad (3)$$

which adds to model (2), Z indicating the controls for all of the postassignment differences. Again, β_3 is our estimator of interest.

In the case of binary outcomes (such as whether or not child support was received, or whether or not Food Stamp benefits were received), we cannot use a linear model as described above. For these binary outcomes the controls remain the same, but we use a probit model specification. In a nonlinear model such as a probit model, the coefficient of the interaction term may not be a reliable estimator of the true interaction effect (see Ai and Norton, 2003).⁴ We therefore calculate the predicted level of the outcome for experimental and control groups both in the year before (July 2001-June 2002) and the second year after the end of the experiment (July 2003-June 2004), setting the value of all control variables in the model to their population means. Significance levels in the probit models were confirmed by running linear versions of the same models.

This report utilizes data extracted from the state CARES, KIDS, and UI data systems in January 2005. Samples used in the tables include a sample of resident mothers who have entered W-2, a sample of children of these resident mothers and a sample of nonresident fathers of these children that were legally established before the mother entered W-2. Each of these samples is divided into two cohorts according to when the resident mother entered W-2: Cohort 1 (entered W-2 between September 1, 1997 to July 8, 1998), Cohort 3 (entered W-2 between January 1, 1999 and June 30, 1999). These cohorts correspond with

⁴Using probit estimates to calculate difference-in-difference estimates for binary outcomes has long been a standard methodology, but recently concerns have been raised about the appropriateness of interpreting the coefficient on the interaction term as the true effect of the treatment in a difference-in-difference framework. To address this concern we calculated predicted values at the sample means for the two assignment groups both before and after the end of the experiment and used the standard errors associated with these predicted values to determine significance. The one implication of this method is that if we used a different sample with different means on the control variables we might come to different conclusions about significance.

different phases in the CSDE experiment. Estimators are calculated separately for Cohort 1 and Cohort 3.⁵

One important consideration in these analyses is that we would not expect to see any effect of the end of the experiment on cases which are no longer receiving W-2 cash payments since the control group received partial pass-through of child support only when they were receiving W-2 payments. Therefore we limit our analyses to those cases which received at least one month of cash payments during the year before the end of the experiment. Limiting the analysis to just those cases where we would expect to see any effect gives us a greater opportunity to detect any influence of the transfer to a full pass-through but, since the experiment may have influenced W-2 participation, this limitation may exacerbate the difficulties in comparing the experimental and control groups. In Model 3 we use controls to account for differences in W-2 (and other program) participation in the time period between the beginning of the experiment and June 2001, which should account for most of the difficulties this limitation may raise.

RESULTS

In Table 1 and Table 2 we present the results from the models for Cohort 1 and Cohort 3 respectively. Figures 1 and 2 present the results from Model 3 in graphical form. Under Model 1 (the simple uncontrolled difference in means), we show the mean level of each outcome for both the experimental and control groups for the year before and the second year after the experiment. For each group we then calculate the 2 year change in the outcome and then compare the changes between the two groups (as shown in the “E-C Difference-in-Difference” column). For Models 2 and 3, we show only the difference in difference.

⁵See Meyer and Cancian (2003), Appendix 1, for a complete description of how cases were selected from the CARES and KIDS datasets for inclusion in the analyses.

Table 1
Changes in Outcomes Two Years after Conversion to Full Pass-Through
Cohort 1 - Cases receiving W2 cash grants between July 1, 2001 to June 30, 2002

Sample and Outcome	Model 1 Uncontrolled Differences							E-C Difference in Difference	Model 2 Pre-Baseline Controls E-C Difference in Difference	Model 3 Pre- and Post- Baseline Controls E-C Difference in Difference
	Experimental			Control						
	Year Prior to Policy Change (2001-02)	2 Years After Policy Change (2003-04)	Change in Mean	Year Prior to Policy Change (2001-02)	2 Years After Policy Change (2003-04)	Change in Mean				
Children										
Paternity established By End of Year	71.7%	76.5%	4.8%	73.2%	77.0%	3.8%	1.0%	1.0%	0.7%	
Sample Size	19,623			5,270						
Fathers' child support outcomes										
Percentage of fathers paying child support	50.0%	47.7%	-2.3%	46.1%	46.3%	0.2%	-2.4%	-2.7%	-3.2%	
Average Amount of Child Support Paid	\$852	\$794	-\$58	\$728	\$769	\$41	-\$99	-\$99	-\$98	
Sample Size	7,802			2,162						
Mothers' child support and public assistance outcomes										
Percentage of mothers receiving child support	52.4%	55.0%	2.5%	50.7%	55.2%	4.6%	-2.0%	-2.3%	-2.4%	
Average Amount of Child Support Received	\$947	\$1,053	\$107	\$666	\$987	\$321	-\$214*	-\$214*	-\$214**	
Percentage receiving a W-2 grant	100.0%	45.1%	-54.9%	100.0%	46.5%	-53.5%	-1.4%	-0.8%	-0.7%	
Percentage receiving food stamps	99.2%	91.8%	-7.4%	99.4%	92.0%	-7.4%	0.0%	-0.5%	-0.4%	
Percentage receiving Medicaid/BadgerCare	99.9%	92.9%	-7.0%	100.0%	93.1%	-6.9%	0.0%	-0.2%	-0.2%	
Percentage receiving child care subsidies	50.3%	40.7%	-9.6%	52.0%	42.3%	-9.7%	0.1%	0.0%	0.0%	
Sample Size	6,118			1,670						
Mothers' earnings outcomes										
Percentage of mothers with earnings	66.2%	57.8%	-8.4%	66.7%	58.2%	-8.5%	0.1%	0.1%	0.4%	
Average Earnings	\$3,316	\$4,440	\$1,124	\$3,437	\$4,639	\$1,202	-\$78	-\$78	-\$78	
Sample Size	6,118			1,670						
Fathers' earnings outcomes										
Percentage of fathers with earnings	36.7%	32.0%	-4.7%	33.8%	30.5%	-3.4%	-1.3%	-1.5%	-2.6%	
Average Earnings	\$4,485	\$4,376	-\$109	\$4,296	\$4,286	-\$9	-\$99	-\$99	-\$99	
Sample Size	7,722			2,146						

*p<0.05, **p<0.01. Differences are rounded

Table 2
Changes in Outcomes Two Years after Conversion to Full Pass-Through Cohort 3
Cases Receiving W-2 Cash Grants between July 1, 2001 to June 30, 2002

Sample and Outcome	Model 1 Uncontrolled Differences							E-C Difference in Difference	Model 2 Pre-Baseline Controls E-C Difference in Difference	Model 3 Pre- and Post- Baseline Controls E-C Difference in Difference
	Experimental			Control						
	Year Prior to Policy Change (2001–02)	2 Years After Policy Change (2003–04)	Change in Mean	Year Prior to Policy Change (2001–02)	2 Years After Policy Change (2003–04)	Change in Mean				
Children										
Paternity established By End of Year	71.5%	76.2%	4.8%	69.0%	75.3%	6.4%	-1.6%	-1.4%	-0.2%	
Sample Size	1,415			1,293						
Fathers' child support outcomes										
Percentage of fathers paying child support	52.3%	50.2%	-2.1%	53.2%	50.2%	-3.0%	0.9%	1.0%	1.7%	
Average Amount of Child Support Paid	\$1,025	\$1,020	-\$6	\$1,013	\$1,009	-\$4	-\$2	-\$2	\$2	
Sample Size	566			526						
Mothers' child support and public assistance outcomes										
Percentage of mothers receiving child support	44.7%	49.8%	5.1%	41.9%	52.5%	10.6%	-5.5%	-6.2%	-6.7%	
Average Amount of Child Support Received	\$969	\$1,140	\$171	\$705	\$1,125	\$420	-\$249	-\$249	-\$249	
Percentage receiving a W-2 grant	100.0%	45.8%	-54.2%	100.0%	47.5%	-52.5%	-1.7%	0.8%	0.8%	
Percentage receiving food stamps	97.1%	88.0%	-9.1%	98.9%	88.7%	-10.2%	1.1%	1.4%	0.9%	
Percentage receiving Medicaid/BadgerCare	100.0%	93.5%	-6.5%	99.2%	91.7%	-7.5%	1.0%	2.1%	1.4%	
Percentage receiving child care subsidies	50.3%	40.7%	-9.6%	52.0%	42.3%	-9.7%	0.1%	0.0%	0.0%	
Sample Size	550			530						
Mothers' earnings outcomes										
Percentage of mothers with earnings	72.0%	66.9%	-5.1%	76.2%	63.4%	-12.8%	7.7%	7.8%	8.2%	
Average Earnings	\$3,908	\$4,997	\$1,089	\$4,358	\$5,084	\$726	\$363	\$363	\$363	
Sample Size	550			530						
Fathers' earnings outcomes										
Percentage of fathers with earnings	45.2%	36.3%	-8.9%	43.8%	40.0%	-3.8%	-5.1%	-5.2%	-8.1%	
Average Earnings	\$6,022	\$5,773	-\$249	\$6,049	\$6,005	-\$44	-\$205	-\$205	-\$205	
Sample Size	562			520						

*p<0.05, **p<0.01. Differences are rounded

First we note that across all of the outcomes analyzed, only the mechanical effect of the increase in child support received showed a statistically significant difference, and this only in Cohort 1. Since we are only examining the outcomes for cases which were receiving W-2 payments in the year before the end of the experiment, our sample size is smaller than that used in the CSDE Phase I and Phase II final reports.⁶ Also, many of these cases (about 50 percent) did not receive any child support in the year before the end of the partial pass-through (July 2001-June 2002) or in the second year after (July 2003-June 2004), so there was no change in child support received for these cases. These facts limit the ability of this analysis to detect significant differences in the changes in the outcomes.

That said, we do find that most of the changes in outcomes are bigger for the control group than for the experimental group, as we would expect. In Cohort 1, custodial mothers in the control group had a 4.6 percentage point increase in child support receipt, whereas those in the experimental group increased only 2.5 percentage points. Similarly, the amount of child support received increased by \$321 for the control group mothers, and only \$107 for the experimental group mothers. The amount of child support payment for noncustodial fathers actually decreased for those in the experimental group, while increasing by \$41 for those in the control group. For most of the outcomes where the pre-post differences were positive, the control group difference is larger. For most of those outcomes where a desirable pre-post outcome would be positive, but the actual differences are negative (percentage of fathers paying child support, fathers with earnings, and amount of fathers' earnings), the difference was less negative for the control group; only the percentage of mothers with earnings shows a larger drop for experimental cases.

The columns reflecting the difference-in-difference results for the models that control for preassignment characteristics (Model 2) and for postassignment differences (Model 3) show very little difference from the results derived from the simple means. The adding of controls to the models does

⁶Results using the full sample (including cases not receiving W-2 cash payments in the preceding year) are generally similar, although, as expected, the differences are smaller, and none of the differences are statistically significant.

reduce the standard errors on the difference-in-difference estimates for most results, but still does not make any more of the estimates statistically significant. Figure 1 shows graphically that the control group tended to have larger changes in outcomes. This figure used results from Model 3, which vary slightly from the Model 1 results shown in Table 1.

In Table 2, the general pattern of results for Cohort 3 is very similar to that we saw in Cohort 1. As Meyer and Cancian (2003) found, the levels of child support payments and income are higher for Cohort 3 than for Cohort 1. This is due to the fact that Cohort 3 entrants have not been on W-2 for so long, but the difference is ameliorated by the fact that we have limited both cohorts to just those cases who were receiving W-2 payments in 2001–2002. The Cohort 3 cases in this analysis also have an extended period of experience with W-2.

In Cohort 3, the E-C difference in the change in child support received was even larger than in Cohort 1 (\$420 greater increase for the control group, compared to \$171 for the control group in Cohort 1), but because of the smaller sample sizes this greater difference is not statistically significant. In Cohort 3, paternity establishment actually rose more for the control group than for the experimentals, and the percentage of mothers with earnings fell more for the control group than the experimentals. Some other effects in Cohort 3 are also larger than in Cohort 1: the percentage of control group mothers receiving child support increased by 6 percentage points more than experimental group mothers in Cohort 3 (compared to only 2 percentage points in Cohort 1). Contrary to expectations the percentage of noncustodial fathers paying child support decreased slightly more for the control group than the experimental group, leading to a 1-percentage-point difference in difference for Cohort 3 (Cohort 1 was 2.4 percent in the opposite direction), and, finally, fathers' earnings showed a \$205 difference in difference for Cohort 3 compared to only \$99 in Cohort 1.

As in Cohort 1, the addition of controls in Models 2 and 3 make little difference to the E-C difference-in-difference estimates. Figure 2 shows the differences from Model 3 graphically.

Figure 1
Cohort 1 - Cases Receiving W-2 Grants between July 1, 2001 to June 30, 2002
Experimental and Control Two Year Changes, Model 3

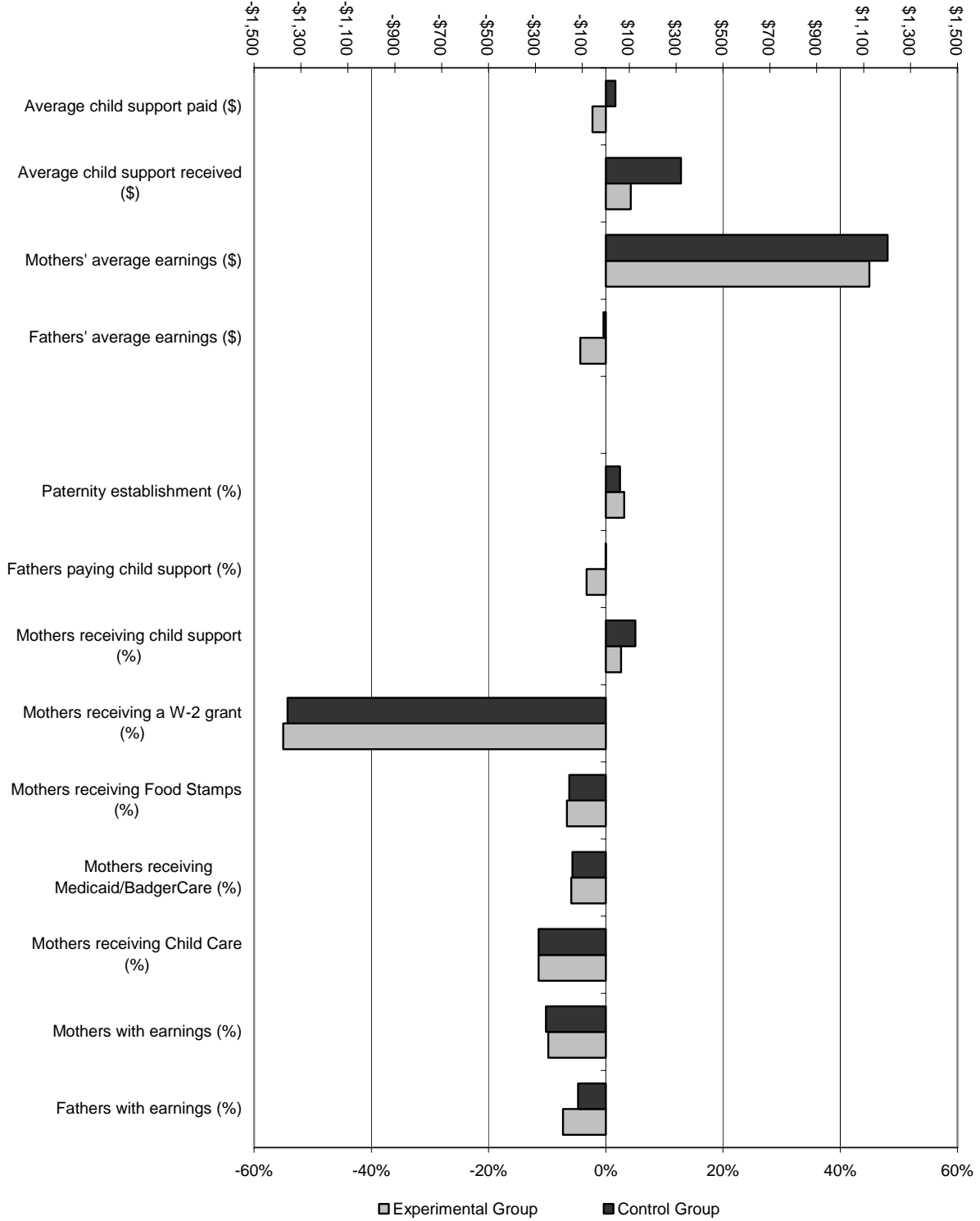


Figure 2
Cohort 3 - Cases Receiving W-2 Grants between July 1, 2001 to June 30, 2002
Experimental and Control Two Year Changes, Model 3

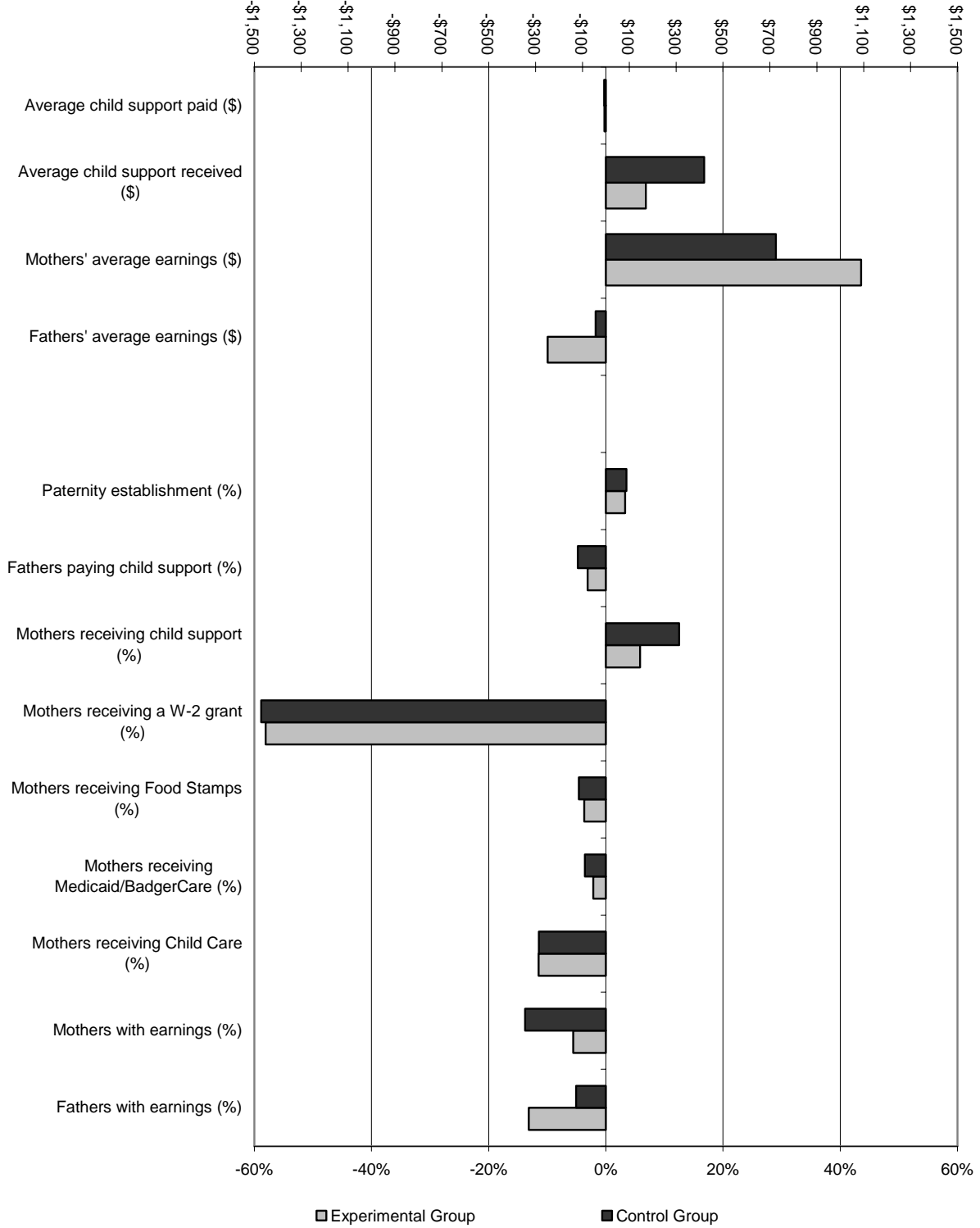


Table 3 shows child support payments outcomes divided by the source of noncustodial fathers' payments. While we do not find significant difference-in-differences among any of the specific sources of child support payments (even among voluntary payments), we do note that voluntary payments increase over the two years, and increase more for the control group than the experimental in both cohorts, while other types of payments fall.

CONCLUSIONS

Although the ending of the partial pass-through presented an opportunity for a further evaluation of the effects of the full pass-through and disregard policy, the limited caseloads still receiving W-2 payments at the time of the end of the experiment make it difficult to detect significant effects at this change in policy. Cases who underwent a change from partial pass-through to full pass-through saw larger increases in the amounts of child support they received than did cases which started and remained on full pass-through. The other effects, although not significant, are largely in the direction expected: participation in various assistance programs dropped more for the cases changing from partial to full pass-through, and child support payment by fathers dropped less (or even increased) for those changing from partial to full pass-through.

We consider whether the findings in this report are consistent with the findings in the CSDE Phase I and Phase II final reports. Unfortunately the smaller number of cases, especially for cohort 3, mean that we are unable to make definite findings about the changes in outcomes associated with end of partial pass-through, other than to note that the mechanical effect of the experiment—the retention of some of control groups' receipts—is shown to come to an end as a significant effect in cohort 1, and as an equally large but insignificant effect in cohort 3. Other changes in outcomes were not significant, but generally conform in direction with the findings in the final reports. In the previous reports we expected the full pass-through to be associated with increases in child support payment in fathers and we found higher likelihood of payment and amounts of payments among cohort 1 experimental cases (although no higher likelihood of payment among cohort 3 cases). Here the direction of effects on child support

Table 3
Changes in Outcomes Two Years after Conversion to Full Pass-Through
Comparison of Different Sources of Child Support Payments by Non-Resident Fathers
Cases Receiving W-2 Cash Grants between July 1, 2001 to June 30, 2002

Sample and Outcome	Model 1 Uncontrolled Differences						E-C Difference in Difference	Model 2 Pre-Baseline Controls E-C Difference in Difference	Model 3 Pre- and Post- Baseline Controls E-C Difference in Difference
	Experimental			Control					
	Year Prior to Policy Change (2001-02)	2 Years After Policy Change (2003-04)	Change in Mean	Year Prior to Policy Change (2001-02)	2 Years After Policy Change (2003-04)	Change in Mean			
Cohort 1									
All Payments									
Percentage of fathers paying child support	50.0%	47.7%	-2.3%	46.1%	46.3%	0.2%	-2.4%	-2.7%	-3.2%
Average Amount of Child Support Paid	\$852	\$794	-\$58	\$728	\$769	\$41	-\$99	-\$99	-\$98
Tax Intercepts									
Percentage of fathers paying child support	19.3%	15.1%	-4.2%	18.1%	16.2%	-1.9%	-2.2%	-2.2%	-2.1%
Average Amount of Child Support Paid	\$196	\$150	-\$46	\$167	\$155	-\$12	-\$35	-\$35	-\$34
Income Withholding									
Percentage of fathers paying child support	39.5%	36.7%	-2.8%	36.9%	35.2%	-1.7%	-1.2%	-1.3%	-1.3%
Average Amount of Child Support Paid	\$525	\$491	-\$34	\$453	\$459	\$6	-\$40	-\$40	-\$40
Voluntary Payments									
Percentage of fathers paying child support	8.2%	8.7%	0.6%	8.7%	10.1%	1.4%	-0.8%	-0.8%	-0.7%
Average Amount of Child Support Paid	\$44	\$64	\$20	\$43	\$84	\$41	-\$21	-\$21	-\$21
Sample Size	7,802			2,162					
Cohort 3									
All Payments									
Percentage of fathers paying child support	52.3%	50.2%	-2.1%	53.2%	50.2%	-3.0%	0.9%	1.0%	1.7%
Average Amount of Child Support Paid	\$1,025	\$1,020	-\$6	\$1,013	\$1,009	-\$4	-\$2	-\$2	\$2
Tax Intercepts									
Percentage of fathers paying child support	19.8%	16.6%	-3.2%	22.4%	18.6%	-3.8%	0.6%	0.9%	1.2%
Average Amount of Child Support Paid	\$185	\$165	-\$20	\$218	\$157	-\$61	\$41	\$41	\$42
Income Withholding									
Percentage of fathers paying child support	40.3%	38.2%	-2.1%	39.9%	38.8%	-1.1%	-1.0%	-1.0%	-1.1%
Average Amount of Child Support Paid	\$668	\$649	-\$19	\$651	\$670	\$19	-\$38	-\$38	-\$38
Voluntary Payments									
Percentage of fathers paying child support	11.0%	12.7%	1.8%	7.2%	11.0%	3.8%	-2.0%	-1.4%	-1.1%
Average Amount of Child Support Paid	\$87	\$106	\$18	\$41	\$71	\$30	-\$12	-\$12	-\$8
Sample Size	566			526					

*p<0.05, **p<0.01.

payment are in similar directions (with the outcome this time better for controls than for experimentals), again with the exception of the likelihood of payment in cohort 3 cases. In general we find suggestive but not conclusive evidence confirming the results of previous reports.

Appendix:
List of Control Variables Used in Regression Models

The following variables are added to Models 2 and 3 to control for possible differences between the experimental and control group. To calculate predicted outcomes shown in tables and figures all control variables are set to their mean values.

Model 2 control variables:

- Time Period of Assignment
 - Aug. 1997–March 16, 1998 when 80% of cases were assigned to full pass-through (omitted)
 - March 17–May 8, 1998 when 70% of cases were assigned to full pass-through
 - May 9–July 8, 1998 when half of cases were assigned to full and half to partial pass-through
- Child Support history; amount paid on behalf of the mother in the one-year period before mother entered W-2
 - \$0 (omitted)
 - \$1–\$999
 - \$1,000 or more
- Mother’s age
 - 25 or younger (omitted)
 - 26–30 years
 - 31 or older
- Mother’s race/ethnicity
 - White (omitted)
 - African American
 - Other
- Months of AFDC receipt during the 24-month period before mother entered W-2
 - 0 months (omitted)
 - 1–18 months
 - 19–24 months
- Region
 - Milwaukee County
 - Other urban counties
 - Rural counties (omitted)
- Initial W-2 tier
 - Upper tier (omitted)
 - Lower tier
 - Caretaker of Newborn
- Age of child; for the mothers and fathers, this is the age of the youngest child. For the mothers this variable is based on the natural and adoptive children of the mother; for the fathers it is based on the natural and adoptive children of the couple. For nonmarital children this is the age of each child.
 - 0–2 years (omitted)
 - 3–5 years
 - 6 or older

- Mother's education
 - Grade 11 or less
 - High school diploma or equivalent
 - Post high school (omitted)
- Father's average annual earnings during the two-year period before mother entered W-2; for mothers, if there is more than one father, this is based on the highest-earning father
 - \$0–\$14,999 (omitted)
 - \$15,000 or more
- Mother's employment history; number of quarters employed during the two-year period before mother entered W-2 (not included in analyses of the fathers' sample)
 - 0 quarters (omitted)
 - 1–6 quarters
 - 7–8 quarters

Model 3 control variables (in addition to Model 2 control variables):

- Percentage of children with paternity established before June 2001
- Total amount of child support between assignment and June 2001 (for mothers this is the total amount received, for fathers the total amount paid)
- Number of quarters mother receives W-2 cash payments between assignment and June 2001
- Number of quarters mother receives food stamp benefits between assignment and June 2001
- Number of quarters mother is eligible for Medicaid or BadgerCare between assignment and June 2001
- Total earnings of mother or father between assignment and June 2001

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