

Chapter 3

Cohort 1 and 3 Comparative Analysis

Origin of Cohorts and Implementation Issues

The CSDE and random assignment began with the implementation of W-2 in the fall of 1997. Beginning July 9, 1998, an error in the CARES system inadvertently resulted in failure to assign any cases to the control group in Milwaukee County. Because the implementation study had found that both workers and participants notably lacked understanding of the pass-through policy, this situation was viewed as an opportunity to analyze outcomes for a group of cases that had entered after W-2 and the pass-through policy were more established. Additional training about the pass-through policy was provided to counties, and random assignment was restarted in January 1999, continuing through June 1999. Thus three cohorts of cases were created. The first cohort, cases entering prior to July 9, 1998, has previously been analyzed using both administrative and survey data. The second cohort, those cases that were assigned during the interim between the failure of random assignment and its restart, includes only cases from outside Milwaukee County, and thus is of limited use for analysis.³³ Cohort 3 is the second statewide cohort, and includes cases assigned during the first six months of 1999. Only administrative data are available for Cohort 3, as those cases were not included in the survey. The second CSDE report, *W-2 Child Support Demonstration Evaluation, Phase 1: Final Report* (2001), presented findings for the first cohort.

In addition to entering W-2 during different stages of implementation, Cohorts 1 and 3 also vary significantly demographically. Cohort 3 cases tend to have less experience with the welfare system or with the pre-TANF pass-through policy, and also tend to be less disadvantaged. Early comparisons of the two cohorts showed several differences in outcome patterns, and indicated that these differences may not be fully explained by demographic differences. In this report, we use more rigorous statistical methods to compare the cohorts and to control for demographic differences. Thus, we consider two sets of comparisons. We compare outcomes for the experimental and control groups within each cohort to evaluate the effects of the experiment in each period. We also compare the effects in the first cohort with the effects found in the later cohort.

Hypothesized Effects of Pass-Through Policy

Our primary focus is evaluating the effects of the experiment within each cohort. Our basic hypotheses are the same for both periods, and have been discussed in detail in previous reports (see, for example, *W-2 Child Support Demonstration Evaluation, Phase 1: Final Report* [2001]). To summarize, within each cohort the full pass-through and disregard of child support will have a direct, mechanical effect, increasing the amount of child support received by mothers and decreasing the amount of support retained by the government. In addition, the policy change has a direct effect on the incentives for fathers to pay support, and for mothers to pursue support orders. Thus, if they respond to the policy change, we hypothesize that fathers will be more likely to cooperate with paternity establishment, pay child support, and pay more support. We also hypothesize that mothers will be more motivated to establish paternity, and therefore to cooperate more fully with child support enforcement efforts in this regard.

³³Results for Cohort 2 are shown in Appendix 2.

Beyond these direct effects, the full pass-through is expected to have a set of indirect effects. Because these depend on behavioral response to the changes in child support paid or received (which is the expected response to the policy change), they are likely to be harder to detect, especially in the short term. We expect indirect effects on participation in public assistance programs, mothers' earnings and income, and fathers' earnings. For some of the outcomes we evaluate, the expected impact of the policy change is fairly clear. For example, if fathers face fewer disincentives to pay formal child support, we expect they will work more in the formal sector and less in the informal sector. In other cases the expected effects are more ambiguous. For example, while higher child support received may increase a mother's ability to make investments that allow her to work, it is also possible that the increase in unearned income will reduce her need to work.

Potential Differences in Effects between Cohorts

In addition to evaluating experimental impacts within each cohort, we also consider the difference in experimental effects between the early- and later-entering cohorts. There are at least five reasons why we might expect differences in the measured effects of the experiment in the two cohorts. First, we hypothesize that the direct effects of the treatment may be larger in the later cohort given improvements in implementation. A key motivation for restarting random assignment was the hope that additional training of case workers in Milwaukee, and the increased stability of the general welfare policy environment, would increase the chance that workers would understand and explain the experiment to clients. We hypothesize that this increased understanding should increase cooperation with paternity establishment, establishment of child support orders, and, to the extent the knowledge was shared with noncustodial parents, the payment and, therefore, receipt of child support.

The increased direct effects may also lead to larger indirect effects, though this varies across domains. For example, the experiment increases the incentives for fathers to work in formal employment, so we hypothesize that fathers of children in the experimental group may have higher formal earnings (and lower informal earnings). We expect that improved implementation and understanding of the new policy in the later cohort may increase the effect on father's earnings.³⁴ In contrast, consider mothers' receipt of cash assistance. On the one hand, the full pass-through is expected to help mothers in the experimental group make a transition to self-sufficiency and leave welfare more quickly. On the other hand, if mothers understand the experiment and realize that if they are in the experimental group they can receive child support *and* cash benefits, they may be less motivated to leave welfare. Thus, a more complete understanding of the experiment could be associated with a smaller effect in the later cohort for some outcomes.

Second, although an increased understanding of the *experiment* is expected to increase the direct effects, increased awareness of the full pass-through and disregard may reduce effects if it causes the staff of W-2 or child support agencies, participants, or others, to treat all cases as if they were subject to the full pass-through. This "contamination" of the control group may be more likely for the later cohort, not only because of the passage of time, but also because the later cohort included a smaller control group (only new cases for a six-month period were randomly assigned) and followed a period when no cases were assigned to the control group in Milwaukee. In a context when many workers had little

³⁴We are able to evaluate the effect of the experiment on formal earnings for both cohorts. Our measure of informal income is drawn from the survey, and thus is available only for the first cohort.

interaction with control-group participants subject to the reduced pass-through, it may be that the system reacted as if the full pass-through were universal. The implementation analysis reported in Chapter 2 suggests this may have been the case at the time field work was conducted in 2002. To the extent that *both* control- and experimental-group members in the later cohort faced a system with a new orientation toward child support and welfare, we might expect to see smaller effects of the experiment in the later cohort.

A third reason that effects may differ across cohorts relates to differences in the initial characteristics of the two groups. For example, the original CSDE found larger experimental effects among cases with less welfare history. The more recent cohort, by definition, had few individuals with substantial recent welfare history. Thus, even if the effects were the same for an individual with the same initial characteristics, a simple comparison of mean effects could show a different effect. In the analysis that follows we address this concern by using a pooled regression model to estimate effects using observations from both cohorts. The model includes control variables to account for observed differences in the individual characteristics of participants in each cohort, and an interaction term to allow for experimental effects to vary across cohorts after controlling for observed differences. Although the experimental effects are estimated separately for each cohort, our tests of the significance of the difference in effects across cohorts are derived from the joint estimates.

Fourth, external differences such as economic conditions may have changed the environment for the later cohort in a way that resulted in different effects. These differences could result in either larger or smaller experimental effects for the later cohort. For example, higher unemployment rates faced by the later cohort could reduce fathers' abilities to respond to incentives to pay child support, and thus result in smaller effects. Finally, because the sample size is so much smaller in the later cohort, our estimates of experimental effects are less precise. Thus, the same (or even a larger) estimated effect may not be statistically significant for the later cohort.

Analytic Approach

In the impact analysis that follows we compare outcomes for the experimental and control groups for each cohort, and between the two cohorts.

For a simple comparison of later outcomes between the experimental and control groups to be valid, the two groups must have been similar at the beginning of the policy change. To ensure that random assignment worked correctly, we did some statistical tests to determine whether experimental- and control-group members entered W-2 at different rates, or were assigned to different tiers. The results of this analysis (shown in Appendix 1) suggest that comparisons between experimental- and control-group cases that entered W-2 provide an appropriate measure of the experiment. However, because in Cohort 1 experimental-group members with higher child support were less likely to be placed in an upper tier than control-group members, direct comparisons of the experimental impact conditional on entry in the lower tiers should be interpreted with caution, particularly for Cohort 1. That is one of the reasons the analyses in this report use regression adjustments to control for these differences.

Although the initial characteristics of the experimental and control groups are not significantly different in most respects, we present regression-adjusted means, rather than simple means. This

procedure is consistent with the approach used in our second report, and allows us to adjust for any observed differences in the initial characteristics of the experimental and control groups. This approach has a number of advantages.

First, even if random assignment worked perfectly, there would be some chance differences in the initial characteristics of the experimental and control groups. Regression-adjusted means adjust for chance variation in characteristics included in the regression. The regression-adjusted difference reflects the estimated effect of experimental status (i.e., the coefficient on the indicator for experimental or control status) after accounting for differences in baseline characteristics. This approach will also adjust for any nonrandom differential assignment based on observable characteristics that are included among the control variables. Finally, to the extent that control variables account for the variance in the outcome of interest, we are more likely to be able to discern the effect of the experiment.

The regression control variables used are listed in the text box. We controlled for a variety of demographic characteristics, including mother's age, race/ethnicity, and number of children. We also controlled for historical variables that could be related to future behavior, such as prior receipt of AFDC, child support history, and employment and earnings history.³⁵ We did not control for economic conditions or other factors that could have changed between the early and later periods.³⁶

Regression Control Variables

The following control variables were used in all regressions. All variables are defined at sample entry:

- Assignment rate
- Child support history
- AFDC history
- Region
- Initial W-2 tier
- Mother's age
- Mother's race/ethnicity
- Number of children
- Mother's education
- Father's earning history
- Mother's employment history (not included in analyses of fathers' sample)
- Divorce or paternity case
- Number of legal fathers associated with mother
- Whether a child support order existed at entry

For specific definitions of control variables, see Appendix 1.

³⁵We included the mother's recent usage of AFDC as a control in the model since this reflects her exposure to the previous child support pass-through policy, but since Cohort 3 cases have, by definition, not been on AFDC in the year and a half preceding their start on W-2, this control has less meaning for Cohort 3 cases than for Cohort 1 cases. A comparison of cases' recent AFDC usage with their recent Food Stamps usage found that among Cohort 1 cases about 80 percent had similar experiences on Food Stamps as on AFDC in the preceding 24 months, but among Cohort 3 cases only about 50 percent had similar experiences.

³⁶A comparison of regression-adjusted estimates and the raw group differences found that predicted levels of outcomes appear to be relatively unaffected by the use of regression adjustment, not a surprising result given that experimental status was randomly assigned. We also compared findings using our relatively long list of regressions with findings generated using a shorter list. As expected, the longer list of regressions improved the accuracy of our

Because cases were randomly assigned, observed differences between the experimental and control groups can be attributed to the child support pass-through treatment. As described above, regression analysis was used to increase the precision of the estimates. However, because the cases were not randomly assigned to cohorts, and indeed, because the two statewide cohorts have very different demographic characteristics, it is less straightforward to determine the reasons for any observed differences in effects between the cohorts. Because we are primarily interested in any cohort differences that are attributable to changes in the effect of the policy net of changes in characteristics, we used regression analysis to attempt to isolate those differences. Separate regressions were done for Cohort 1 and Cohort 3 to estimate the experimental effects within each cohort. A joint regression model estimated with cases in both cohorts was used to estimate the differences in the effects between Cohort 3 and Cohort 1 and to determine the significance levels of those cohort differences. In examining the difference in experimental effects between the early and late cohorts, we control for the listed characteristics in the regression model, but we do not allow effects to vary by those characteristics (i.e., we do not include interaction effects between experimental status and initial characteristics). We do, however, look for experimental effects within certain key subgroups. The details of the procedure for estimating regression-adjusted means and differences are discussed in Appendix 1.

We measure effects over the research population as a whole. We also show results for key subgroups: those with no recent AFDC experience prior to entry (who are less likely to have recent experience with the child support system under the previous policy, and who therefore may be more responsive to reform), those with a history of higher child support payments, those who entered W-2 in a lower tier (as recipients of cash assistance, they are subject to the reduced pass-through if they are in the control group), and those who entered W-2 in a county other than Milwaukee. The text box on page 38 provides more specific definitions of these subgroups. Results for the full sample and the key subgroups are provided in Tables 3.2–39.

The results are organized by relative quarters—that is, by quarters since the case entered W-2—rather than by calendar quarter.³⁷ Since each cohort includes cases that entered over more than one quarter, the period of available follow-up varies by entry date. Using only data prior to September 2000, owing to the treatment error mentioned in Chapter 1 and discussed in Appendix 1, we have data for the quarter of entry and ten quarters following the entry quarter for the cases that entered earliest in Cohort 1, but we only have data for four quarters following the entry quarter for the cases that entered last in Cohort 3. For the main tables in this report, we show results for each cohort for five quarters—from the quarter of entry through the fourth quarter after entry. A more detailed description of the analytic approach can be found in Appendix 1.

estimates, leading to more findings of significant differences.

³⁷Because of this, results are not directly comparable to those found in the Phase 1 Final Report, which used an analysis based on calendar years.

Subgroups

All outcomes were assessed for the four key subgroups described below.

Mother Has No Recent AFDC History

Mother was not on AFDC for any of the 24 months prior to W-2 entry.

Higher Child Support History

For mothers' sample: over the 12 months prior to W-2 entry, mother had \$1,000 or more in child support paid on her behalf. If there was more than one child support order for a case, payments were summed over all orders.

For fathers' sample: over the 12 months prior to mother's W-2 entry, father paid \$1,000 or more in child support on behalf of the mother.

Mother Entered in Lower Tier

Mother's first W-2 slot was either W-2 Transition or Community Service Job.

Mother Entered Outside Milwaukee

Mother's initial W-2 case was not in Milwaukee County.

Administrative Data Sample

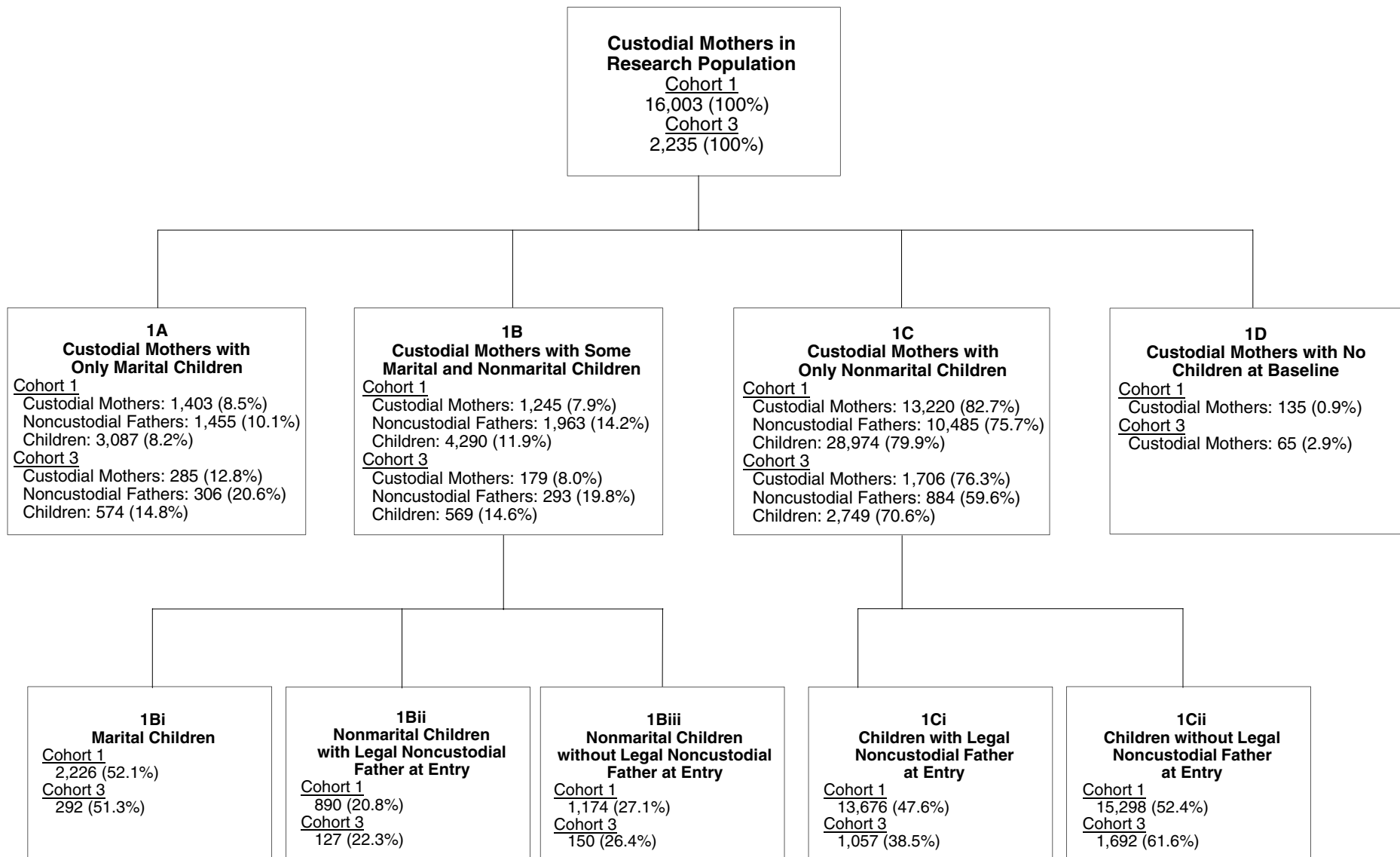
The basic research sample used in our analyses includes cases that received a random-assignment code; had entered W-2 either between September 1, 1997, and July 8, 1998 (Cohort 1), or between January 1 and June 30, 1999 (Cohort 3); were demographically eligible for child support (there was a living noncustodial parent);³⁸ had at least one child still under 18 at the end of the research period; met other sample criteria, primarily associated with timely progression in the intake process;³⁹ and in which the mother was the custodial parent.

Three main samples are drawn from the administrative data: custodial mothers, noncustodial fathers for whom paternity was legally established when the mother entered W-2 ("legal fathers"), and children—some with and some without legally established paternity at entry. Figure 3.1 shows the relationships among these three main samples from the administrative data. The 16,003 Cohort 1 mothers and 2,235 Cohort 3 mothers included in the first sample can be divided into those with only marital children when they entered W-2 (Box 1A, 8.5 percent of Cohort 1 mothers and 12.8 percent of Cohort 3 mothers), those with both marital and nonmarital children at entry (Box 1B, 7.9 percent of Cohort 1

³⁸We excluded cases in which records indicate that the fathers of all children are dead, and cases in which records indicate that all children live with both parents.

³⁹See Appendix 1 for more detail on other sample exclusions.

**Figure 3.1
Research Population, Phase 1**



Note: Percentages are weighted to reflect differential assignment rates over time.

mothers and 8.0 percent of Cohort 3 mothers), and those with only nonmarital children at entry (Box 1C, the vast majority of mothers in both cohorts, 82.7 percent of Cohort 1 mothers and 76.3 percent of Cohort 3 mothers). About 1 percent of Cohort 1 mothers and 3 percent of Cohort 3 mothers were pregnant when they entered W-2 and had no other children.⁴⁰

The derivation of the sample of legal noncustodial fathers can also be seen on the figure. Mothers with only marital children (Box 1A) are each associated with a noncustodial father, and a few are associated with more than one. Mothers with both marital and nonmarital children (Box 1B) are each associated with at least one legal father (from the marital children); the nonmarital children may or may not have a legal father at the time of W-2 entry. Finally, mothers with only nonmarital children (Box 1C) may be associated with no legal father, one legal father, or more. In the figure, the total sample of fathers is 13,903 in Cohort 1 and 1,483 in Cohort 3, primarily fathers of nonmarital children.

Finally, the sample of nonmarital children who did not have paternity established when they entered W-2 can be seen in boxes 1Biii and 1Cii. These analyses include 16,472 children in Cohort 1 and 1,842 in Cohort 3.

As mentioned earlier, beginning in September 2000, some cases were inadvertently made subject to the wrong pass-through policy for their treatment group. Because of the number of cases affected, and the difficulty of eliminating cases in such a way that the integrity of the original random-assignment design would be assured, our primary analysis was done using only data from the period prior to this error. Using the longest follow-up period available for all cases in both Cohorts 1 and 3, we look at the first five quarters of the experiment.

Characteristics of the Research Sample

Table 3.1 shows the initial characteristics of the custodial mothers included in Cohorts 1 and 3. Because of the different entry times of the two cohorts, about 70 percent of Cohort 1 mothers transitioned to W-2 from AFDC, whereas all of the Cohort 3 mothers entered W-2 directly. Differences in the length of time mothers had received AFDC prior to entry confirm that the two cohorts vary greatly in their experience with the welfare system; 87 percent of cases in Cohort 1 had received AFDC at some time in the 2 years prior to entry, and most had more than 18 months of AFDC receipt. Among Cohort 3 cases, only 17 percent had received AFDC at any time in the 2 years prior to entry. Cohort 3

Summary of Analytic Approach

- Outcomes for experimental group compared to control group, within cohorts
- Comparison of size of effect in Cohort 1 and Cohort 3
- Regression-adjusted differences presented to discern effects of experiment
- Examination of total sample and four key subgroups
- Examination of first year following the quarter of W-2 entry
- Analyses of mothers and fathers who had paternity established when their children entered W-2
- Data from administrative records

⁴⁰Under W-2 pregnancy does not qualify women for cash assistance, but they may qualify for other assistance. They become eligible for cash assistance when the child is born.

Table 3.1. Custodial Mothers in the CSDE, by Cohort

Characteristics	Cohort 1		Cohort 3	
	N	%	N	%
All Custodial Mothers	16,003	100.0	2,235	100.0
Case Type				
AFDC	11,355	71.0		
W-2	4,648	29.0	2,235	100.0
AFDC Receipt before Entry				
None	2,140	13.4	1,862	83.3
1-18 months	5,357	33.5	373	16.7
19-24 months	8,506	53.2		
Initial W-2 Assignment				
W-2 Transition	1,555	9.7	370	16.6
Community Service Job	8,104	50.6	624	27.9
Caretaker of Newborn	1,387	8.7	722	32.3
Upper tier	4,957	31.0	519	23.2
Age				
16-25	7,497	46.9	1,235	55.3
26-30	3,276	20.5	393	17.6
31-40	4,246	26.5	488	21.8
41 or more	981	6.1	119	5.3
Unknown	3	0.0		
Race/Ethnicity				
White	4,053	25.3	901	40.3
African American	9,743	60.9	1,061	47.5
Hispanic	1,215	7.6	138	6.2
Native American	368	2.3	59	2.6
Asian	290	1.8	20	0.9
Other	18	0.1	4	0.2
Unknown	316	2.0	52	2.3
Education				
Less than high school	8,382	52.4	962	43.0
High school diploma	5,835	36.5	962	43.0
Some beyond high school	1,559	9.7	299	13.4
Unknown	227	1.4	12	0.5
Language				
English-speaking	15,515	97.0	2,195	98.2
Non-English-speaking	487	3.0	40	1.8
Number of Children at Entry				
None (pregnant)	127	0.8	65	2.9
One	5,164	32.3	1,173	52.5
Two	4,649	29.1	519	23.2
Three or more	6,063	37.9	478	21.4
Age of Youngest Child at Entry				
Unborn child at entry	1,614	10.1	370	16.6
0-2	7,690	48.1	1,193	53.4
3-5	2,885	18.0	239	10.7
6-12	3,115	19.5	322	14.4
12-18	697	4.4	111	5.0
Missing birth date	2	0.0		
Location				
Milwaukee County	11,858	74.0	1,141	51.1
Rest of state	4,145	26.0	1,094	49.0

cases were also more likely than Cohort 1 cases to enter W-2 as a Caretaker of Newborn. Cohort 1 cases were more likely than Cohort 3 to enter in a Community Service Job, and slightly more likely to enter in an upper tier. The remaining panels of Table 3.1 show that Cohort 3 cases were more likely than Cohort 1 cases to be under 25, white, have a high school diploma or higher, have only one child, have a child under 2, and reside outside Milwaukee County. Most of these cohort differences indicate that Cohort 3 was less disadvantaged than Cohort 1, and also had much less experience with the welfare system and the child support pass-through policy before it was changed. Thus, the two cohorts might be expected to have different outcomes as a result of the pass-through policy change. We use regression analysis to attempt to isolate outcome differences between the cohorts that are net of measured demographic differences.

Notes on the Presentation of Data (in Tables 3.2–39)

Results are rounded. Dollar values are rounded to zero decimal places, percentages to one place, and probability values to three places. Because of rounding, the difference between the means of the experimental and control groups may not exactly equal the impact shown on the tables.

The probability values shown in the fourth, eighth, and last columns indicate the probability that each reported impact, and the difference between the two impacts, might have occurred by chance if no difference existed between the groups. The smaller the probability value, the more confidence can be placed in a conclusion that the impact was an effect of the experiment, or that the difference between the impacts was due to cohort differences (other than measured demographic differences). Probability values of 0.05 or less are indicated in **bold type** in the tables. All tables show regression-adjusted values for outcome variables.

Cohort Comparison Results

Paternity Establishment and Child Support Orders

In order for a father to pay child support to a custodial mother, several things must happen if paternity has not already been formally acknowledged. A legal finding of paternity must be made in order to determine that this person is the father of a child residing in the mother's household. Then the court must order the father to pay a certain amount of child support, stated as either a fixed amount or as a percentage of the father's income. The full pass-through policy may affect each of these steps in the process leading to child support payments, in addition to affecting the payments themselves. As hypothesized at the beginning of the chapter, we expect that those in the experimental group will have a higher rate of paternity and order establishment than those in the control group. We first look at effects on paternity establishment, order establishment, and order amounts.

Paternity Establishment

Table 3.2 shows the differences in the rate of paternity establishment for children who entered the experiment without a father already legally determined. For Cohort 1, by the end of the first year after entry, slightly more children in the experimental group than in the control group had paternity

Table 3.2: Paternity Establishment among Children without Legal Fathers at Entry

Time Period	Cohort 1				Cohort 3				Cohort 3- Cohort 1
	Experimental Group (N=12,999)	Control Group (N=3,473)	Impact	P-value	Experimental Group (N=879)	Control Group (N=963)	Impact	P-value	P-value
Quarter Mother Entered W-2	3.7%	3.3%	0.4%	0.238	4.3%	3.6%	0.7%	0.452	0.994
1st Quarter after Entry	7.8	6.8	1.0	0.049	15.0	13.0	2.0	0.222	0.881
2nd Quarter after Entry	11.2	9.9	1.3	0.031	25.3	21.7	3.6	0.080	0.581
3rd Quarter after Entry	13.7	12.4	1.3	0.041	31.5	27.2	4.3	0.055	0.423
4th Quarter after Entry	16.2	14.7	1.5	0.039	37.0	32.6	4.4	0.061	0.377
1st Year after Entry	16.2%	14.7%	1.5%	0.039	37.0%	32.6%	4.4%	0.061	0.377

Table 3.3: Paternity Establishment among Children without Legal Fathers at Entry, by Subgroup

Subgroup	Cohort 1				Cohort 3				Cohort 3- Cohort 1
	Experimental Group	Control Group	Impact	P-value	Experimental Group	Control Group	Impact	P-value	P-value
Mother Has No Recent AFDC History	(N=1,270)	(N=563)			(N=698)	(N=822)			
1st Year after Entry	29.1%	22.3%	6.8%	0.006	39.4%	37.2%	2.2%	0.417	0.153
Higher Child Support History	(N=1,548)	(N=386)			(N=92)	(N=111)			
1st Year after Entry	17.1%	12.2%	4.8%	0.022	28.3%	36.5%	-8.2%	0.323	0.289
Mother Entered in Lower Tier	(N=8,142)	(N=2,147)			(N=359)	(N=397)			
1st Year after Entry	14.0%	12.8%	1.2%	0.151	27.2%	19.8%	7.4%	0.021	0.184
Mother Entered Outside Milwaukee	(N=2,634)	(N=798)			(N=354)	(N=402)			
1st Year after Entry	24.8%	22.0%	2.8%	0.128	46.9%	33.8%	13.1%	0.001	0.042

Notes: Regression-adjusted predictions. Differences that are statistically significant at the 0.05 level are shown in bold type. Legal fathers are those whose paternity was legally established when the mother entered W-2.

established, 16 percent compared to 15 percent. This difference is statistically significant. In Cohort 3, higher percentages of children (37 percent in the experimental group and 33 percent in the control group) had paternity established by the end of the year. Though the experimental difference is even larger in Cohort 3, it is only significant at the .06 level because of the smaller sample sizes. The final column examines whether the effect in the first cohort is statistically different from the effect in the third cohort, controlling for differences in the composition of cases. None of the effects differ significantly between the cohorts.

Table 3.3 shows the paternity establishment results for the various subgroups. The largest differences in Cohort 1 appear for children whose mothers were not recently on AFDC and for those whose mothers had received high levels of child support (presumably from the legally established fathers of other children in the household). The largest differences in Cohort 3 appear for those cases in which the mother had entered in the lower tier and the mother was outside Milwaukee. All of these differences are statistically significant, and the large difference in Cohort 3 cases outside of Milwaukee (13 percentage points higher for those in the experimental group than for those in the control group) is significantly higher than the 3-percentage-point difference in Cohort 1.

Order Establishment

Table 3.4 shows the effects of the experiment on the establishment of child support orders for mothers who did not have an order during the quarter they entered the experiment. Among Cohort 1 mothers, orders were established at a higher rate for experimental-group cases, but in Cohort 3 the control group had more orders established. These differences were fairly small (under 2 percentage points in the first year after entry) and are not significant. Examining the subgroups in Table 3.5 we again find no significant differences, but we do note that the higher orders for Cohort 3 control-group cases are limited to just those cases where the mother had not recently been on AFDC. In other Cohort 3 subgroups the experimental-group cases had higher rates of orders.

Amounts of Child Support Orders

Table 3.6 shows the amounts of current support owed to custodial mothers. These amounts sum the amounts of current child support which were due each quarter, but do not include amounts of child support which were due previously and might be in arrears. These order amounts include both orders which are stated in fixed amounts and orders which are stated as a percentage of the father's income (if the fathers' earnings are known from Unemployment Insurance records).

Cohort 1 mothers in the experimental group were owed an average of \$1,526 in current child support in the first year after their entry into the experiment, whereas mothers in the control group were owed \$1,499. The difference among Cohort 3 mothers was only slightly larger; mothers in the experimental group were owed \$1,539 and mothers in the control group \$1,457. These differences are still fairly small and not statistically significant.

In Table 3.7, the differences in child support owed across subgroups of both cohorts are on the same scale as the full sample, except among Cohort 3 mothers who had high child support paid to them in the year before they entered W-2. These mothers in the experimental group were owed \$467 more than were mothers in the control group. It may be that experimental-group mothers who had received significant child support in the past had the incentive to return to court to make sure that they were ordered to receive all the child support they were entitled to, whereas control-group mothers, who would

Table 3.4: Percentage of Mothers with Child Support Orders (Mothers with No Child Support Order in the Quarter of Entry)

Time Period	Cohort 1				Cohort 3				Cohort 3- Cohort 1
	Experimental Group (N=5,872)	Control Group (N=1,624)	Impact	P-value	Experimental Group (N=702)	Control Group (N=733)	Impact	P-value	P-value
Quarter Mother Entered W-2	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%		
1st Quarter after Entry	4.6	3.9	0.6	0.248	7.7	9.9	-2.2	0.137	0.066
2nd Quarter after Entry	9.4	7.9	1.5	0.062	17.8	17.8	-0.1	0.975	0.283
3rd Quarter after Entry	12.5	10.9	1.6	0.078	24.5	26.2	-1.8	0.457	0.093
4th Quarter after Entry	14.5	14.2	0.3	0.761	28.6	30.9	-2.3	0.359	0.313
1st Year after Entry	15.7%	15.2%	0.5%	0.641	30.9%	32.3%	-1.5%	0.564	0.440

Table 3.5: Percentage of Mothers with Child Support Orders (Mothers with No Child Support Order in the Quarter of Entry), by Subgroup

Subgroup	Cohort 1				Cohort 3				Cohort 3- Cohort 1
	Experimental Group	Control Group	Impact	P-value	Experimental Group	Control Group	Impact	P-value	P-value
Mother Has No Recent AFDC History	(N=1,141)	(N=458)			(N=624)	(N=659)			
1st Year after Entry	26.0%	25.4%	0.6%	0.822	30.5%	32.8%	-2.2%	0.405	0.356
Higher Child Support History	(N=182)	(N=40)			(N=27)	(N=32)			
1st Year after Entry	18.9%	13.3%	5.6%	0.448	27.2%	23.5%	3.8%	0.864	0.883
Mother Entered in Lower Tier	(N=3,547)	(N=960)			(N=272)	(N=304)			
1st Year after Entry	12.9%	13.5%	-0.6%	0.631	25.9%	25.2%	0.7%	0.858	0.792
Mother Entered Outside Milwaukee	(N=1,610)	(N=494)			(N=326)	(N=339)			
1st Year after Entry	26.5%	24.1%	2.3%	0.328	38.1%	36.9%	1.2%	0.767	0.725

Notes: Regression-adjusted predictions. Differences that are statistically significant at the 0.05 level are shown in bold type. Legal fathers are those whose paternity was legally established when the mother entered W-2.

Table 3.6: Amounts of Child Support Owed to Custodial Mothers

Time Period	Cohort 1				Cohort 3				Cohort 3- Cohort 1
	Experimental Group (N=12,542)	Control Group (N=3,461)	Impact	P-value	Experimental Group (N=1,126)	Control Group (N=1,109)	Impact	P-value	P-value
Quarter Mother Entered W-2	\$333	\$332	\$0	0.952	\$269	\$239	\$29	0.024	0.043
1st Quarter after Entry	350	349	0	0.940	317	298	19	0.212	0.187
2nd Quarter after Entry	376	365	11	0.114	376	354	22	0.240	0.502
3rd Quarter after Entry	393	384	9	0.208	414	394	20	0.320	0.556
4th Quarter after Entry	407	401	6	0.429	432	411	21	0.303	0.435
1st Year after Entry	\$1,526	\$1,499	\$27	0.312	\$1,539	\$1,457	\$82	0.228	0.378

Table 3.7: Amounts of Child Support Owed to Custodial Mothers, by Subgroup

Subgroup	Cohort 1				Cohort 3				Cohort 3- Cohort 1
	Experimental Group	Control Group	Impact	P-value	Experimental Group	Control Group	Impact	P-value	P-value
Mother Has No Recent AFDC History	(N=1,546)	(N=624)			(N=940)	(N=922)			
1st Year after Entry	\$1,155	\$1,081	\$74	0.306	\$1,454	\$1,406	\$47	0.532	0.780
Higher Child Support History	(N=2,303)	(N=583)			(N=231)	(N=216)			
1st Year after Entry	\$3,226	\$3,133	\$93	0.312	\$3,782	\$3,315	\$467	0.064	0.030
Mother Entered in Lower Tier	(N=7,589)	(N=2,070)			(N=500)	(N=494)			
1st Year after Entry	\$1,469	\$1,442	\$27	0.403	\$1,663	\$1,579	\$84	0.415	0.393
Mother Entered Outside Milwaukee	(N=3,193)	(N=952)			(N=551)	(N=543)			
1st Year after Entry	\$1,753	\$1,723	\$29	0.631	\$1,906	\$1,887	\$20	0.868	0.967

Notes: Regression-adjusted predictions. Differences that are statistically significant at the 0.05 level are shown in bold type.

not have received all the benefits of any extra child support paid (if they were receiving W-2 grants), did not have so strong an incentive.

Summary of Experimental Effects on Paternity and Orders

The experiment shows a strong and consistently significant effect on the establishment of paternity. It may be that mothers are more likely to pursue paternity establishment, and fathers are more likely to accept paternal responsibility when the full benefits of any child support which may be ordered will go directly to their children. The actual amounts of child support owed do not appear to be strongly affected by the full pass-through treatment, except perhaps in those cases where child support payments had previously been high.

Child Support Paid by Fathers

If a noncustodial father knows his children will benefit fully from his paying child support, he may be more likely to pay, and to pay higher amounts. In this section we compare the payment patterns of fathers in the experimental and control groups.

Child Support Payments by Noncustodial Fathers

Table 3.8 shows the percentage of noncustodial fathers who paid child support through the fourth quarter after the mother's entry into the experiment. Through the first year after entry, 52 percent of the Cohort 1 fathers in the experimental group paid some child support, whereas 50 percent of Cohort 1 fathers in the control group made a payment. Similar differences exist in most of the quarterly figures for Cohort 1, and the yearly figure is very close to the annual 1998 difference we reported for this cohort in the Phase 1 Final Report. The difference is fairly small and is statistically significant at conventional levels only in the fourth quarter, and even then only at $p=.087$.⁴¹

For Cohort 3 the overall percentage of fathers paying child support is higher, as we might expect, since Cohort 3 cases are more likely to be newer entrants to the child support system. For these cases, however, fathers in the control group show a higher likelihood of child support payment than do fathers in the experimental group, though the difference is small and not statistically significant. These results provide no support to the hypothesis that full pass-through policies will increase the likelihood that fathers will pay. Although these Cohort 3 differences are in the opposite direction from those in Cohort 1, the difference in the effects across the two cohorts is not significant.

In Table 3.9 we examine whether these differences are specific to certain subgroups. For Cohort 1 cases, the difference between experimental and control cases is highest when the mother had not been on AFDC in the 24 months prior to entering W-2; in these cases, 61 percent of experimental-group fathers but only 52 percent of control-group fathers had paid any child support. This may be because those new to the welfare system had not become accustomed to the old pass-through policy, and thus were more able to react to the new policy. This difference is large and statistically significant. Another

⁴¹In the Phase 1 Final Report, the 1999 annual difference in the percentage of fathers paying was statistically significant. This calendar period roughly matches the second year after entry for Cohort 1. Long-term results for Cohort 1, shown in Appendix 3, do show a payment rate that is three percentage points higher for experimental-group members in the second year after entry, matching the Phase 1 finding.

Table 3.8: Percentage of Legal Fathers Paying Child Support

Time Period	Cohort 1				Cohort 3				Cohort 3- Cohort 1
	Experimental Group (N=10,908)	Control Group (N=2,995)	Impact	P-value	Experimental Group (N=798)	Control Group (N=685)	Impact	P-value	P-value
Quarter Mother Entered W-2	22.5%	21.4%	1.1%	0.275	34.7%	34.3%	0.5%	0.884	0.683
1st Quarter after Entry	31.3	29.8	1.6	0.145	43.6	44.8	-1.3	0.675	0.407
2nd Quarter after Entry	33.2	33.4	-0.2	0.851	43.7	47.7	-4.0	0.177	0.229
3rd Quarter after Entry	32.5	31.7	0.8	0.481	45.5	50.1	-4.6	0.119	0.103
4th Quarter after Entry	34.9	32.8	2.1	0.046	47.4	50.9	-3.5	0.227	0.061
1st Year after Entry	52.4%	50.4%	2.0%	0.087	64.6%	67.9%	-3.3%	0.242	0.138

Table 3.9: Percentage of Legal Fathers Paying Child Support, by Subgroup

Subgroup	Cohort 1				Cohort 3				Cohort 3- Cohort 1
	Experimental Group (N=720)	Control Group (N=296)	Impact	P-value	Experimental Group (N=560)	Control Group (N=518)	Impact	P-value	P-value
Mother Has No Recent AFDC History 1st Year after Entry	61.0%	51.7%	9.3%	0.024	66.3%	70.5%	-4.3%	0.189	0.010
Higher Child Support History 1st Year after Entry	94.7%	91.8%	2.9%	0.012	99.3%	99.2%	0.1%	0.868	0.483
Mother Entered in Lower Tier 1st Year after Entry	48.9%	46.9%	2.1%	0.159	66.9%	66.9%	0.0%	0.993	0.739
Mother Entered Outside Milwaukee 1st Year after Entry	67.4%	64.1%	3.3%	0.124	70.8%	75.0%	-4.2%	0.238	0.117

Notes: Regression-adjusted predictions. Differences that are statistically significant at the 0.05 level are shown in bold type. Legal fathers are those whose paternity was legally established when the mother entered W-2.

subgroup that shows a difference that is statistically significant is the group in which the father had paid over \$1,000 of child support in the year before entry into the experiment. Among Cohort 3 cases in which the mother had no recent AFDC experience (these form a large part of Cohort 3 cases, since AFDC had ended over 12 months before these cases started W-2), the differences are again in the opposite direction from those in Cohort 1. For this subgroup the change in effect between the two cohorts is significant at a .01 level. In those subgroups in which the father had previously paid high child support and in which the mother had entered in a lower tier, the Cohort 3 experimental effects are actually positive, though small and not statistically significant. Finally, in cases outside Milwaukee in Cohort 3 we see a strong negative effect of the full pass-through. Still, these effects are not statistically significant; nor are they significantly different from Cohort 1 cases outside Milwaukee.

Amounts of Child Support Payments by Fathers

Although the experiment may not result in a change in the likelihood of fathers paying child support, it may have an effect on the amount that they pay. As shown in Table 3.10, Cohort 1 fathers in the experimental group paid an average of \$830 in child support to the mothers they owed, \$36 more per year than fathers in the control group paid. These amounts and the difference between them increased substantially for Cohort 3 cases; experimental-group fathers paid \$1,374, \$106 more than the control-group fathers. The experimental effect on annual payment amounts is not significant in either cohort, but the *increase* in the effect between Cohort 1 and Cohort 3 is significant. This is most notable when we consider that the effect of the full pass-through on the likelihood of paying child support was actually negative in Cohort 3 (though not statistically significant). It implies that among those who did pay child support the increase in the effect of the full pass-through policy was even greater than the effect across all cases.

In the subgroups shown in Table 3.11 the effect of the experimental policy is positive in all cases, but the strongest and only statistically significant effect is among Cohort 1 cases in which the mother had not recently been on AFDC. In general, the amounts of child support paid are larger in Cohort 3, and experimental-control differences in the amount range from about \$100 to \$250. Across these subgroups the changes in the experimental effect for the two cohorts are not statistically significant at conventional levels.

Summary of Payments by Fathers

These findings indicate that the overall trend in the effect of the experiment on the amount of child support paid seems to be similar across the two cohorts. In Cohort 1, more of this effect is accounted for by increases in the likelihood of fathers paying child support, whereas in Cohort 3 more is accounted for by increases in the amount paid by those who did pay. The final result appears to be a small (but sometimes statistically significant) increase in the amount of child support paid in the first year by fathers of children who were eligible for the full pass-through and disregard.

Child Support Paid on Behalf of Mothers

Child Support Payments on Behalf of Custodial Mothers

In addition to looking at the child support payment behaviors of individual fathers, we also examine the effect of the experiment on the child support paid to mothers. These figures are not equivalent because an individual mother may have child support paid on her account by a single father,

Table 3.10: Amounts of Child Support Paid by Legal Fathers

Time Period	Cohort 1				Cohort 3				Cohort 3- Cohort 1
	Experimental Group (N=10,908)	Control Group (N=2,995)	Impact	P-value	Experimental Group (N=798)	Control Group (N=685)	Impact	P-value	P-value
	Quarter Mother Entered W-2	\$167	\$160	\$7	0.365	\$303	\$269	\$34	0.196
1st Quarter after Entry	214	207	7	0.440	346	289	57	0.232	0.035
2nd Quarter after Entry	216	213	2	0.812	302	279	23	0.283	0.331
3rd Quarter after Entry	185	173	12	0.071	347	311	37	0.167	0.173
4th Quarter after Entry	216	202	14	0.097	379	390	-11	0.781	0.514
1st Year after Entry	\$830	\$795	\$36	0.150	\$1,374	\$1,268	\$106	0.282	0.200

Table 3.11: Amounts of Child Support Paid by Legal Fathers, by Subgroup

Subgroup	Cohort 1				Cohort 3				Cohort 3- Cohort 1
	Experimental Group (N=720)	Control Group (N=296)	Impact	P-value	Experimental Group (N=560)	Control Group (N=518)	Impact	P-value	P-value
	Mother Has No Recent AFDC History 1st Year after Entry	\$1,371	\$1,072	\$299	0.009	\$1,456	\$1,390	\$66	0.525
Higher Child Support History 1st Year after Entry	(N=3,229) \$2,396	(N=814) \$2,255	\$141	0.090	(N=311) \$2,892	(N=289) \$2,634	\$258	0.173	0.285
Mother Entered in Lower Tier 1st Year after Entry	(N=6,632) \$788	(N=1,829) \$732	\$56	0.077	(N=420) \$1,328	(N=364) \$1,246	\$81	0.474	0.408
Mother Entered Outside Milwaukee 1st Year after Entry	(N=2,692) \$1,264	(N=798) \$1,153	\$111	0.058	(N=454) \$1,635	(N=384) \$1,620	\$15	0.907	0.498

Notes: Regression-adjusted predictions. Differences that are statistically significant at the 0.05 level are shown in bold type. Legal fathers are those whose paternity was legally established when the mother entered W-2.

by multiple fathers, or by no father at all. Moreover, this figure includes payments made not only to those who had paternity established at entry into W-2, but also those who had paternity established after entry. In the following analyses, the amounts of child support include all amounts paid on the mother's account, regardless of whether the state later retains some of that amount in recompense for AFDC or W-2 payments to the mother.

In Table 3.12, child support payments viewed from the mother's perspective show results somewhat different from those seen from the father's perspective. Among mothers in both cohorts, whether they are in the experimental or the control group, the percentage receiving a child support payment is lower than the percentage of fathers making a payment. This is due, of course, to the number of custodial mothers who have no legal fathers for their children and cannot have a child support order. The effect of the experimental treatment on the percentage of mothers for whom child support is paid follows generally the same trend as for fathers' payments. In Cohort 1, child support was significantly more likely to be paid on behalf of mothers in the experimental group, and the difference in the percentage with a child support payment is larger than for fathers' payments (3 percentage points, compared to 2 for fathers). In Cohort 3 the effect of the full pass-through treatment is negative, but the size of the difference is noticeably smaller than in the case of fathers' payments. There is no significant difference in the effect across the two cohorts.

Table 3.13 examines payments on behalf of custodial mothers for subgroups. As with the fathers' payment results, the experimental effect is statistically significant ($p < .05$) only for those mothers in Cohort 1 who had a high amount of child support paid on their behalf, although two other subgroups show differences that are significant at the .06 level. Most surprisingly, given the fathers' results, the experimental treatment effect on the probability of payments made by fathers for mothers in the lower tier, although not statistically significant, is positive and higher in Cohort 3 than in Cohort 1. Thus, whereas overall experimental differences are negative in Cohort 3, this result appears to be concentrated among those cases where the mother entered W-2 in the upper tier, as well as among those with no recent AFDC history.

Amounts of Child Support Paid on Behalf of Custodial Mothers

The amounts of child support paid to custodial mothers shown in Table 3.14 resemble the pattern for the fathers' payments. The amounts paid are approximately equivalent for Cohort 1 cases, indicating that the mothers for whom child support was paid by more than one father may offset the mothers who have no possibility of child support because they have not established paternity. In Cohort 3, with a greater percentage of mothers new to the system, there are fewer mothers with more than one child and with multiple, associated noncustodial fathers. Thus, the amounts of child support are lower than when we examine support payments from the father's perspective.

The size of the experimental effect is not very different, whether it is seen from the mothers' or the fathers' perspectives. For mothers in both cohorts the full pass-through has a positive but insignificant effect, somewhat larger for Cohort 3, in the first year after entry. But the difference from the fathers' perspective was statistically significant. From the mothers' perspective, the difference in the effects across the two cohorts is not significant.

In Table 3.15, the pattern of experimental effects for subgroups is similar to that for the fathers, but in the mothers' case the strongest experimental difference appears among Cohort 3 cases in which the

Table 3.12: Percentage of Custodial Mothers for Whom Child Support Was Paid

Time Period	Cohort 1				Cohort 3				Cohort 3- Cohort 1
	Experimental Group (N=12,542)	Control Group (N=3,461)	Impact	P-value	Experimental Group (N=1,126)	Control Group (N=1,109)	Impact	P-value	P-value
Quarter Mother Entered W-2	15.1%	14.5%	0.6%	0.474	13.2%	13.6%	-0.4%	0.848	0.602
1st Quarter after Entry	25.1	23.9	1.2	0.220	24.8	25.1	-0.3	0.889	0.522
2nd Quarter after Entry	29.6	28.8	0.7	0.494	32.6	36.3	-3.7	0.128	0.086
3rd Quarter after Entry	30.1	29.4	0.6	0.527	38.7	40.0	-1.3	0.597	0.514
4th Quarter after Entry	33.8	32.2	1.6	0.134	44.4	44.4	0.0	0.988	0.456
1st Year after Entry	50.1%	47.5%	2.7%	0.022	58.6%	59.3%	-0.7%	0.793	0.258

Table 3.13: Percentage of Custodial Mothers for Whom Child Support Was Paid, by Subgroup

Subgroup	Cohort 1				Cohort 3				Cohort 3- Cohort 1
	Experimental Group	Control Group	Impact	P-value	Experimental Group	Control Group	Impact	P-value	P-value
Mother Has No Recent AFDC History	(N=1,546)	(N=624)			(N=940)	(N=922)			
1st Year after Entry	41.7%	37.7%	4.0%	0.164	55.3%	57.4%	-2.1%	0.449	0.099
Higher Child Support History	(N=2,303)	(N=583)			(N=231)	(N=216)			
1st Year after Entry	96.5%	94.3%	2.2%	0.019	99.9%	99.8%	0.1%	0.535	0.919
Mother Entered in Lower Tier	(N=7,589)	(N=2,070)			(N=500)	(N=494)			
1st Year after Entry	45.6%	42.8%	2.9%	0.059	61.8%	58.8%	3.1%	0.442	0.865
Mother Entered Outside Milwaukee	(N=3,193)	(N=952)			(N=551)	(N=543)			
1st Year after Entry	68.0%	63.9%	4.1%	0.051	73.9%	73.2%	0.7%	0.815	0.457

Notes: Regression-adjusted predictions. Differences that are statistically significant at the 0.05 level are shown in bold type. Payment to mothers differs from payment by fathers because it includes payments by one or more legal fathers or no legal father (paternity not established).

Table 3.14: Amounts of Child Support Paid on Behalf of Custodial Mothers

Time Period	Cohort 1				Cohort 3				Cohort 3- Cohort 1
	Experimental Group (N=12,542)	Control Group (N=3,461)	Impact	P-value	Experimental Group (N=1,126)	Control Group (N=1,109)	Impact	P-value	P-value
Quarter Mother Entered W-2	\$164	\$158	\$6	0.418	\$227	\$196	\$31	0.093	0.084
1st Quarter after Entry	212	210	3	0.740	264	220	45	0.159	0.041
2nd Quarter after Entry	223	223	0	0.984	255	237	18	0.263	0.400
3rd Quarter after Entry	200	196	5	0.508	312	281	31	0.121	0.129
4th Quarter after Entry	240	228	12	0.157	366	368	-2	0.952	0.572
1st Year after Entry	\$876	\$856	\$20	0.408	\$1,197	\$1,105	\$92	0.191	0.209

Table 3.15: Amounts of Child Support Paid on Behalf of Custodial Mothers, by Subgroup

Subgroup	Cohort 1				Cohort 3				Cohort 3- Cohort 1
	Experimental Group	Control Group	Impact	P-value	Experimental Group	Control Group	Impact	P-value	P-value
Mother Has No Recent AFDC History	(N=1,546)	(N=624)			(N=940)	(N=922)			
1st Year after Entry	\$892	\$800	\$92	0.153	\$1,135	\$1,097	\$37	0.594	0.660
Higher Child Support History	(N=2,303)	(N=583)			(N=231)	(N=216)			
1st Year after Entry	\$2,826	\$2,754	\$72	0.460	\$3,703	\$3,123	\$580	0.035	0.007
Mother Entered in Lower Tier	(N=7,589)	(N=2,070)			(N=500)	(N=494)			
1st Year after Entry	\$814	\$762	\$52	0.081	\$1,279	\$1,160	\$119	0.206	0.283
Mother Entered Outside Milwaukee	(N=3,193)	(N=952)			(N=551)	(N=543)			
1st Year after Entry	\$1,342	\$1,248	\$94	0.100	\$1,613	\$1,639	\$-27	0.807	0.296

Notes: Regression-adjusted predictions. Differences that are statistically significant at the 0.05 level are shown in bold type. Payment to mothers differs from payment by fathers because it includes payments by one or more legal fathers or no legal father (paternity not established).

mother had a history of higher levels of child support. This experimental effect is significantly higher for the Cohort 3 mothers than it had been for Cohort 1 mothers.

Child Support Received by Custodial Mothers

The amount of child support received by each custodial mother depends on two factors: how much child support is paid by the noncustodial fathers who owe her support, and how much of that child support is retained by the state to reimburse the government for amounts paid to the mother through the AFDC and W-2 programs. Since the pass-through or retention of child support is the primary treatment of the CSDE experiment, we expect to see a purely mechanical effect of the experiment on the amounts of child support that mothers received.

The experimental impact is not, however, limited to this mechanical impact. On the one hand, to the extent that fathers in the experimental group pay more child support, the effects on receipts would be even greater. On the other hand, when mothers are in the upper tiers of W-2 or off W-2 altogether, the experimental and control groups are treated identically. Thus as time passes and more mothers leave the lower tiers of W-2, any experimental treatment effect on child support receipts may shrink.

Likelihood of Child Support Receipt

Table 3.16 shows the percentage of mothers receiving any child support. The levels of mothers receiving any support are generally lower than the percentage of fathers paying support, for two reasons: many mothers have no possibility of having support paid for them (since there is no father established for their children), and some mothers will have all of their child support retained.⁴² Like the results for the fathers, the experimental-control difference in the percentage of mothers receiving support is positive for mothers in Cohort 1 (and significant for the first year after entry), but negative for mothers in Cohort 3. These differences are on the same scale as is the percentage of fathers paying. Although the negative effect in Cohort 3 is not statistically significant, the estimated effects are marginally significantly different between the two cohorts.

In the subgroup results (Table 3.17), the difference in the direction of the effects between the two cohorts again appears especially strong among those cases with no previous AFDC experience. In this subgroup, the percentage of experimental-group mothers receiving child support is 5 percentage points higher than the control group in Cohort 1, but is 5 percentage points lower in Cohort 3. This difference is significant. In the other subgroups, the estimated effects and the differences between cohorts are substantially smaller and not statistically significant.

The mechanical treatment discussed above should not affect the percentage of mothers receiving child support, since even the mothers in the control group receive a portion of any child support paid on their account. The experimental effects here are solely the result of the impact on fathers' likelihood of paying, so it is not surprising that we see results similar to those found in Tables 3.8 and 3.9.

⁴²For example, if a noncustodial father pays for hospital expenses associated with the birth, the amount paid will be kept by the state rather than received by the custodial mother. In addition, child support payments are retained by the state, even for experimental-group cases when the noncustodial parent owed money to the state for unreimbursed assistance provided under AFDC.

Table 3.16: Percentage of Custodial Mothers Receiving Child Support

Time Period	Cohort 1				Cohort 3				Cohort 3- Cohort 1
	Experimental Group (N=12,542)	Control Group (N=3,461)	Impact	P-value	Experimental Group (N=1,126)	Control Group (N=1,109)	Impact	P-value	P-value
Quarter Mother Entered W-2	9.9%	9.4%	0.5%	0.464	7.0%	8.0%	-1.0%	0.451	0.313
1st Quarter after Entry	18.2	17.4	0.8	0.345	19.0	19.7	-0.8	0.700	0.396
2nd Quarter after Entry	23.2	22.3	0.9	0.337	26.9	28.8	-1.9	0.394	0.179
3rd Quarter after Entry	25.4	24.4	1.0	0.287	32.0	33.2	-1.2	0.610	0.317
4th Quarter after Entry	28.5	26.7	1.8	0.059	35.7	37.0	-1.2	0.594	0.153
1st Year after Entry	39.8%	37.2%	2.6%	0.022	47.3%	49.6%	-2.3%	0.353	0.062

Table 3.17: Percentage of Custodial Mothers Receiving Child Support, by Subgroup

Subgroup	Cohort 1				Cohort 3				Cohort 3- Cohort 1
	Experimental Group	Control Group	Impact	P-value	Experimental Group	Control Group	Impact	P-value	P-value
Mother Has No Recent AFDC History	(N=1,546)	(N=624)			(N=940)	(N=922)			
1st Year after Entry	34.4%	29.2%	5.1%	0.053	43.8%	48.8%	-5.0%	0.067	0.006
Higher Child Support History	(N=2,303)	(N=583)			(N=231)	(N=216)			
1st Year after Entry	91.5%	91.1%	0.4%	0.757	94.8%	93.7%	1.1%	0.612	0.659
Mother Entered in Lower Tier	(N=7,589)	(N=2,070)			(N=500)	(N=494)			
1st Year after Entry	35.6%	33.4%	2.2%	0.115	50.4%	50.9%	-0.5%	0.901	0.520
Mother Entered Outside Milwaukee	(N=3,193)	(N=952)			(N=551)	(N=543)			
1st Year after Entry	56.8%	54.5%	2.3%	0.301	62.3%	60.6%	1.7%	0.616	0.852

Notes: Regression-adjusted predictions. Differences that are statistically significant at the 0.05 level are shown in bold type.

Amounts of Child Support Received by Custodial Mothers

Differences between the control and experimental groups in the amount of child support received provide evidence of the mechanical effects of the experiment and of its effects on the amount of child support that fathers paid. In Table 3.18, these effects do appear and are quite strong and significant. Among Cohort 1 mothers, the cases in the control group received approximately \$30 less every quarter, for a total difference in the first year of \$134 (all differences are significant). For Cohort 3 cases the amounts of child support received were generally higher than for Cohort 1 and, as for Cohort 1, experimental cases in general received more child support. The effect is statistically significant for every quarter but one. The full-year difference is \$152 for Cohort 3; this is also significant. Although the p-values for Cohort 3 differences are generally smaller because of the smaller numbers of cases, the size of the effects is very similar, so it is not surprising to find no significant differences in the experimental effect between the two cohorts.

In the subgroups shown in Table 3.19, we find large and mostly significant differences in the amounts received within each subgroup in each cohort. Only in Cohort 3, again, do small sample sizes for some subgroups (mothers without AFDC experience and mothers outside Milwaukee) result in differences which are not significant. The effect of the experiment on child support received is particularly large (\$471 in the first cohort and \$657 in the third) among mothers who received large amounts of child support before they entered W-2. The size of the Cohort 3 experimental-control differences is, however, not dramatically different from those in Cohort 1. Thus, the difference in effects between the two cohorts is, unsurprisingly, insignificant for subgroups also.

Although it is not surprising to find significant differences in the amount of child support mothers received, the finding does give us confidence that the experiment worked as expected, at least for the time periods shown in these tables.

Summary of Effects on Child Support Payments and Receipts

Our results confirm the expectation that the experiment would lead to a difference in the amount of child support mothers would receive. In both cohorts, mothers in the full pass-through group received more child support than those in the partial pass-through group; in the first year after entry, the amount of child support received by mothers in the experimental group was 25 percent higher than that received by mothers in the control group for Cohort 1, and 18 percent higher for Cohort 3.

Although much of this difference is due to the mechanical effect of the experiment, the amount of child support noncustodial fathers paid is larger for fathers in the experimental group than for fathers in the control group (this difference is not significant in the first year after entry). Most notably, Cohort 1 fathers in the experimental group paid 4 percent more child support than fathers in the control group, but Cohort 3 fathers in the experimental group paid 8 percent more.

The impact of the full pass-through policy on the likelihood of child support payments, and thus on child support receipts, is less consistent across the two cohorts. Although none of the differences are significant, the results show that in Cohort 1 more fathers in the experimental than in the control group paid child support, but in Cohort 3 more fathers in the control group paid. The subgroup results indicate that this negative effect on the likelihood of child support payment in Cohort 3 appears to be concentrated in cases that started on the upper tier of the W-2 job ladder and therefore did not receive

Table 3.18: Amounts of Child Support Received by Custodial Mothers

Time Period	Cohort 1				Cohort 3				Cohort 3- Cohort 1
	Experimental Group (N=12,542)	Control Group (N=3,461)	Impact	P-value	Experimental Group (N=1,126)	Control Group (N=1,109)	Impact	P-value	P-value
Quarter Mother Entered W-2	\$119	\$90	\$29	<.0001	\$162	\$124	\$38	0.002	0.318
1st Quarter after Entry	141	102	39	<.0001	191	140	51	0.000	0.288
2nd Quarter after Entry	162	130	32	<.0001	221	190	31	0.036	0.924
3rd Quarter after Entry	177	147	29	<.0001	281	231	50	0.006	0.188
4th Quarter after Entry	194	162	32	<.0001	288	268	20	0.358	0.484
1st Year after Entry	\$675	\$541	\$134	<.0001	\$981	\$830	\$152	0.007	0.685

Table 3.19: Amounts of Child Support Received by Custodial Mothers, by Subgroup

Subgroup	Cohort 1				Cohort 3				Cohort 3- Cohort 1
	Experimental Group	Control Group	Impact	P-value	Experimental Group	Control Group	Impact	P-value	P-value
Mother Has No Recent AFDC History	(N=1,546)	(N=624)			(N=940)	(N=922)			
1st Year after Entry	\$788	\$606	\$182	0.002	\$960	\$844	\$116	0.063	0.519
Higher Child Support History	(N=2,303)	(N=583)			(N=231)	(N=216)			
1st Year after Entry	\$2,250	\$1,779	\$471	<.0001	\$3,050	\$2,393	\$657	0.002	0.196
Mother Entered in Lower Tier	(N=7,589)	(N=2,070)			(N=500)	(N=494)			
1st Year after Entry	\$619	\$425	\$194	<.0001	\$1,088	\$841	\$247	0.004	0.241
Mother Entered Outside Milwaukee	(N=3,193)	(N=952)			(N=551)	(N=543)			
1st Year after Entry	\$1,092	\$908	\$183	0.000	\$1,373	\$1,253	\$120	0.219	0.520

Notes: Regression-adjusted predictions. Differences that are statistically significant at the 0.05 level are shown in bold type.

cash assistance. This pattern is puzzling. Upper-tier cases should not experience a reduced pass-through, so it may be that this difference is merely the result of random variation in the sample.⁴³

Effects on Mothers' Participation in Public Assistance Programs

The primary effect of the full pass-through policy was to increase the amount of child support received by mothers while they were on W-2. We anticipated that this increased income might lead to lower levels of need among these mothers and therefore to lower usage of the W-2 program and other government public assistance programs, such as Food Stamps, Medicaid, BadgerCare, and child care subsidies. On the other hand, if mothers understand that they will receive their full child support only when they leave the lower tiers, the experiment may create an incentive for those in the control group to leave welfare faster. In the Phase 1 Final Report we found that there was a small but significant effect on the levels of W-2 received by custodial mothers in 1998; full pass-through mothers received less in W-2 grants than partial pass-through mothers. However, the effects on the other assistance programs were not statistically significant.

W-2 Grants

In this report we examine the effects on participation rates in these assistance programs during the first year after entry. Table 3.20 shows the differences in participation in the lower tiers of the W-2 program, in which participants receive grants. As in the Phase 1 report, there is a small but significant difference in the rate of W-2 grant receipts in Cohort 1 with 82.8 percent of mothers in the experimental group and 84.8 percent of mothers in the control group receiving W-2 grants. In Cohort 3 there is no significant difference. In following the quarterly trends in W-2 grant receipt, we note that Cohort 3 mothers left W-2 cash assistance (i.e., moved to higher tiers or off W-2) substantially faster than the Cohort 1 mothers. By the fourth quarter after their initial entry onto W-2, only 18.6 percent of experimental Cohort 3 mothers were still receiving W-2 grants, while 33.2 percent of experimental Cohort 1 mothers were still in the lower tiers. This difference reflects the contrast between the two cohorts; all the Cohort 3 mothers were new entrants to W-2, with little recent AFDC experience, whereas Cohort 1 included mothers who were long-time participants in AFDC and less likely to leave the program easily.

Table 3.21 presents the differences in W-2 receipt across the subgroups. The differences in the effect of the experiment between the two cohorts are significant among cases in which the mother had over \$1,000 in child support paid by noncustodial fathers. In Cohort 1, mothers in this group receiving the full pass-through were significantly less likely to get a W-2 grant than mothers receiving the partial pass-through, but in Cohort 3 this difference is reversed. The Cohort 1 effect is consistent with increased child support receipt helping mothers in the experimental group move toward self-sufficiency and leave welfare sooner. On the other hand, the Cohort 3 effect is consistent with the possibility that mothers in the control group moved out of the lower tiers quickly so that they could receive full child support. Although we cannot be certain, it is plausible that improved understanding of the pass-through policy at the time the third cohort entered W-2 led control-group members in that cohort to understand the implications better and to respond by leaving W-2 more quickly in order to collect more child support.

⁴³As described in Appendix 1, a diversion analysis showed that in Cohort 3, there was no experimental-control difference regarding the tiers in which a case began.

Table 3.20: Custodial Mothers Receiving W-2 Grants

Time Period	Cohort 1				Cohort 3				Cohort 3- Cohort 1
	Experimental Group (N=12,542)	Control Group (N=3,461)	Impact	P-value	Experimental Group (N=1,126)	Control Group (N=1,109)	Impact	P-value	P-value
Quarter Mother Entered W-2	68.3%	69.4%	-1.1%	0.306	71.3%	72.0%	-0.7%	0.763	0.797
1st Quarter after Entry	75.4	77.4	-1.9	0.051	75.4	74.9	0.4	0.837	0.282
2nd Quarter after Entry	57.0	58.2	-1.3	0.247	35.7	34.5	1.2	0.572	0.249
3rd Quarter after Entry	42.3	42.5	-19.5	0.851	21.1	20.9	0.2	0.905	0.691
4th Quarter after Entry	33.2	34.6	-1.4	0.162	18.6	17.1	1.5	0.362	0.091
1st Year after Entry	82.8%	84.8%	-2.0%	0.014	79.8%	78.9%	0.9%	0.633	0.143

Table 3.21: Custodial Mothers Receiving W-2 Grants, by Subgroup

Subgroup	Cohort 1				Cohort 3				Cohort 3- Cohort 1
	Experimental Group	Control Group	Impact	P-value	Experimental Group	Control Group	Impact	P-value	P-value
Mother Has No Recent AFDC History	(N=1,546)	(N=624)			(N=940)	(N=922)			
1st Year after Entry	84.6%	88.2%	-3.6%	0.055	80.9%	79.7%	1.2%	0.559	0.053
Higher Child Support History	(N=2,303)	(N=583)			(N=231)	(N=216)			
1st Year after Entry	72.4%	77.7%	-5.3%	0.027	74.0%	64.8%	9.2%	0.082	0.007
Mother Entered in Lower Tier	(N=7,589)	(N=2,070)			(N=500)	(N=494)			
1st Year after Entry	94.6%	96.0%	-1.4%	0.009	89.3%	89.3%	0.0%	0.991	0.362
Mother Entered Outside Milwaukee	(N=3,193)	(N=952)			(N=551)	(N=543)			
1st Year after Entry	56.5%	57.6%	-1.1%	0.615	71.8%	66.8%	5.0%	0.112	0.114

Notes: Regression-adjusted predictions. Differences that are statistically significant at the 0.05 level are shown in bold type.

The next tables show the differences for Food Stamps, medical assistance, and child care subsidies. Although there is no direct relationship between participation in these programs and child support receipt in the experiment, participation in one program is often linked to participation in other programs, so that the effects of the experiment on W-2 participation might have trickle-through effects on participation in these related assistance programs.

Food Stamps

Tables 3.22 and 3.23 show the differences in Food Stamp participation. We see very little evidence that child support pass-through policies have any effect on the likelihood of Food Stamp participation in either the full sample or in any of the subgroups. It may be that the difference in the amount of child support received is not substantial enough to change the food stamp eligibility of many recipients, or it is possible that these additional child support payments are not being taken into consideration when food stamp eligibility is calculated. These results largely match those found in the Phase 1 Final Report. Food Stamp participation is quite high (over 90 percent) for both cohorts.

Medical Assistance (Medicaid and BadgerCare)

Tables 3.24 and 3.25 show the effects of the experiment on Wisconsin's two medical assistance programs for lower-income families, Medicaid and BadgerCare. Participation in these programs is nearly universal for both cohorts (over 98 percent in the first year after entry) and there is no significant difference between experimental and control cases in the likelihood of program participation in either cohort (except for a single quarter in each). Separate examination of the two programs also shows no significant differences. In Cohort 1, however, the cases in the experimental group tend to have lower levels of medical assistance receipt, whereas in Cohort 3 the cases in the control group have lower levels. The opposite directions of these effects in the two cohorts lead to significant differences when the effects across the two cohorts are compared. Participation in these programs is nearly universal in all subgroups, and there are no substantial differences in participation within either cohort or between them.

Child Care Subsidies

The levels of receipt of child care subsidies are much lower than for the other assistance programs, as shown in Tables 3.26 and 3.27. Only 40–46 percent of these W-2 mothers received any child care subsidies in the first year after entry, and quarterly participation rates were only about 25–30 percent. There are no experimental differences in the likelihood of receiving a child care subsidy. Since child support payments are not counted when determining eligibility for child care subsidies it is not surprising that we find no effect.

Earnings of Custodial Parents

As with participation in assistance programs, the experiment should have no direct effect on the earnings of custodial parents, but we may find that changes in the amount of child support that mothers receive or their use of public assistance programs may lead to changes in mothers' work and earnings. The effect of the experiment on mothers' labor supply could work in either direction. Mothers who are receiving more money because all child support is passed through to them may feel less need to work to earn additional income, or mothers may find that the additional income from child support enables them to meet the challenges of moving from welfare to work.

Table 3.22: Custodial Mothers Receiving Food Stamps

Time Period	Cohort 1				Cohort 3				Cohort 3- Cohort 1
	Experimental Group (N=12,542)	Control Group (N=3,461)	Impact	P-value	Experimental Group (N=1,126)	Control Group (N=1,109)	Impact	P-value	P-value
Quarter Mother Entered W-2	94.3%	94.0%	0.2%	0.569	85.9%	84.0%	1.9%	0.218	0.425
1st Quarter after Entry	89.1	88.7	0.4	0.530	83.4	81.0	2.3	0.159	0.322
2nd Quarter after Entry	82.0	80.3	1.7	0.032	67.0	68.8	-1.8	0.379	0.087
3rd Quarter after Entry	77.2	76.7	0.6	0.497	61.7	62.5	-0.8	0.697	0.502
4th Quarter after Entry	74.1	73.6	0.5	0.554	59.1	59.8	-0.8	0.715	0.551
1st Year after Entry	94.5%	94.0%	0.5%	0.216	90.4%	90.1%	0.2%	0.845	0.683

Table 3.23: Custodial Mothers Receiving Food Stamps, by Subgroup

Subgroup	Cohort 1				Cohort 3				Cohort 3- Cohort 1
	Experimental Group	Control Group	Impact	P-value	Experimental Group	Control Group	Impact	P-value	P-value
Mother Has No Recent AFDC History	(N=1,546)	(N=624)			(N=940)	(N=922)			
1st Year after Entry	85.2%	84.3%	0.9%	0.619	89.5%	89.4%	0.1%	0.927	0.784
Higher Child Support History	(N=2,303)	(N=583)			(N=231)	(N=216)			
1st Year after Entry	94.9%	95.6%	-0.7%	0.451	93.7%	89.2%	4.5%	0.100	0.095
Mother Entered in Lower Tier	(N=7,589)	(N=2,070)			(N=500)	(N=494)			
1st Year after Entry	95.9%	95.5%	0.4%	0.394	93.0%	93.8%	-0.8%	0.594	0.401
Mother Entered Outside Milwaukee	(N=3,193)	(N=952)			(N=551)	(N=543)			
1st Year after Entry	87.2%	87.3%	-0.1%	0.942	88.6%	87.3%	1.3%	0.509	0.528

Notes: Regression-adjusted predictions. Differences that are statistically significant at the 0.05 level are shown in bold type.

Table 3.24: Custodial Mothers Receiving Medicaid and BadgerCare

Time Period	Cohort 1				Cohort 3				Cohort 3- Cohort 1
	Experimental Group (N=12,542)	Control Group (N=3,461)	Impact	P-value	Experimental Group (N=1,126)	Control Group (N=1,109)	Impact	P-value	P-value
Quarter Mother Entered W-2	99.5%	99.6%	-0.1%	0.279	97.3%	96.9%	0.4%	0.587	0.314
1st Quarter after Entry	97.8	98.4	-0.6	0.022	98.4	97.7	0.7	0.208	0.024
2nd Quarter after Entry	95.2	95.7	-0.5	0.230	94.4	92.7	1.7	0.098	0.042
3rd Quarter after Entry	92.6	92.9	-0.3	0.595	91.3	88.6	2.8	0.031	0.044
4th Quarter after Entry	89.8	89.6	0.2	0.707	86.9	85.4	1.5	0.317	0.538
1st Year after Entry	98.8%	99.1%	-0.2%	0.182	99.6%	99.1%	0.5%	0.072	0.040

Table 3.25: Custodial Mothers Receiving Medicaid and BadgerCare, by Subgroup

Subgroup	Cohort 1				Cohort 3				Cohort 3- Cohort 1
	Experimental Group	Control Group	Impact	P-value	Experimental Group	Control Group	Impact	P-value	P-value
Mother Has No Recent AFDC History	(N=1,546)	(N=624)			(N=940)	(N=922)			
1st Year after Entry	98.4%	98.4%	0.0%	0.991	99.9%	99.8%	0.1%	0.073	0.248
Higher Child Support History	(N=2,303)	(N=583)			(N=231)	(N=216)			
1st Year after Entry	99.0%	99.3%	-0.3%	0.408	100.0%	100.0%	0.0%		0.091
Mother Entered in Lower Tier	(N=7,589)	(N=2,070)			(N=500)	(N=494)			
1st Year after Entry	99.1%	99.4%	-0.3%	0.175	99.8%	99.7%	0.2%	0.437	0.180
Mother Entered Outside Milwaukee	(N=3,193)	(N=952)			(N=551)	(N=543)			
1st Year after Entry	97.3%	97.9%	-0.6%	0.316	99.4%	99.1%	0.3%	0.432	0.349

Notes: Regression-adjusted predictions. Differences that are statistically significant at the 0.05 level are shown in bold type.

Table 3.26: Custodial Mothers Receiving Child Care Subsidies

Time Period	Cohort 1				Cohort 3				Cohort 3- Cohort 1
	Experimental Group (N=12,542)	Control Group (N=3,461)	Impact	P-value	Experimental Group (N=1,126)	Control Group (N=1,109)	Impact	P-value	P-value
Quarter Mother Entered W-2	11.5%	11.4%	0.1%	0.909	11.1%	11.7%	-0.6%	0.649	0.774
1st Quarter after Entry	21.2	21.1	0.1	0.950	28.8	30.2	-1.4	0.489	0.698
2nd Quarter after Entry	24.7	24.1	0.6	0.470	31.6	32.2	-0.6	0.754	0.675
3rd Quarter after Entry	26.1	25.7	0.4	0.610	29.1	30.3	-1.2	0.556	0.566
4th Quarter after Entry	25.6	25.7	-0.1	0.874	27.7	28.4	-0.7	0.718	0.861
1st Year after Entry	40.6%	39.9%	0.7%	0.493	46.1%	46.3%	-0.3%	0.901	0.803

Table 3.27. Custodial Mothers Receiving Child Care Subsidies, by Subgroup

Subgroup	Cohort 1				Cohort 3				Cohort 3- Cohort 1
	Experimental Group	Control Group	Impact	P-value	Experimental Group	Control Group	Impact	P-value	P-value
Mother Has No Recent AFDC History	(N=1,546)	(N=624)			(N=940)	(N=922)			
1st Year after Entry	41.2%	42.1%	-0.9%	0.710	45.8%	46.5%	-0.7%	0.781	0.978
Higher Child Support History	(N=2,303)	(N=583)			(N=231)	(N=216)			
1st Year after Entry	38.5%	37.1%	1.4%	0.560	45.0%	44.9%	0.1%	0.987	0.878
Mother Entered in Lower Tier	(N=7,589)	(N=2,070)			(N=500)	(N=494)			
1st Year after Entry	37.6%	36.2%	1.4%	0.260	43.1%	40.0%	3.1%	0.361	0.654
Mother Entered Outside Milwaukee	(N=3,193)	(N=952)			(N=551)	(N=543)			
1st Year after Entry	40.2%	38.1%	2.1%	0.272	41.5%	44.3%	-2.8%	0.377	0.262

Notes: Regression-adjusted predictions. Differences that are statistically significant at the 0.05 level are shown in bold type.

Tables 3.28 and 3.29 show the effects of the experiment on the likelihood that custodial mothers will have any earnings reported in the Unemployment Insurance data over the four quarters after entry. Results here are similar to those reported for Cohort 1 in the Phase 1 Final Report. There are no significant differences in the likelihood of earnings in the full sample or in any of the subgroups. This remains true in Cohort 3.

Any effect on earnings may relate to the amount of earnings rather than the likelihood of earnings. Tables 3.30 and 3.31 examine the amount of earned income for mothers and show annual earnings generally in the \$4,000–\$6,000 range. As with the likelihood of earnings, there are no significant differences in the amount of earnings reported in Cohorts 1 or 3. Cohort 3 mothers with over \$1,000 of child support paid by noncustodial fathers who were getting the full pass-through reported earnings \$953 less than the control group (this difference is statistically significant only at the .07 level). It may be that these mothers who were getting larger amounts of child support passed through were able to work less.

Total Income of Custodial Mothers

Custodial parents in our sample may be receiving financial support for their families from a number of different sources. We have looked at the amounts of child support they have received, their participation in various public assistance programs, and their earnings. The ultimate goal of the full pass-through program is to improve custodial parents' overall economic well-being. To assess the effects of the experiment on mothers' overall income, we combined the child support that they received, their W-2 and Food Stamp payments, and the income they earned to get a measure of total income. In Tables 3.32 and 3.33 we report the differences in total income for the two cohorts.

In the first year after entry, mothers in both cohorts have about \$10,000 of income. Mothers in Cohort 1 receiving the full pass-through had \$177 more in total income than mothers receiving the partial pass-through. Although small (about 2 percent of control-group income), this difference is statistically significant. Cohort 3 mothers in the experimental group had an even larger addition to their income (\$284, almost 3 percent) but, owing to the smaller sample sizes in Cohort 3, this difference is not statistically significant.

Among the subgroups reported in Table 3.33, cases outside Milwaukee show the largest effect of the experiment on total income. Again, this effect is significant only in Cohort 1, but it is large in both cohorts. Overall, it does appear that full pass-through policies have increased the amount of resources available to custodial parents. It is possible that the higher income for mothers in the experimental group increases their ability to search for work and to maintain employment.⁴⁴

⁴⁴Given the small size of the effects on mother's total incomes we were curious as to how evenly distributed these impacts were across the income distribution. An analysis showed that the largest impacts of the experiment on total income occurred at the higher end of the income distribution in both cohorts, with the lower end of the income distribution demonstrating small or even negative experimental effects. To some extent this is not surprising: women who are better off are likely to have ex-partners who are themselves better off and more likely to have been paying at least some child support in the past. One would expect that these partners are the ones most likely to be able to react to the motivations provided by the experiment.

Table 3.28: Percentage of Custodial Mothers with Earnings

Time Period	Cohort 1				Cohort 3				Cohort 3- Cohort 1
	Experimental Group (N=12,539)	Control Group (N=3,460)	Impact	P-value	Experimental Group (N=1,125)	Control Group (N=1,108)	Impact	P-value	P-value
Quarter Mother Entered W-2	56.4%	55.2%	1.2%	0.277	56.7%	54.2%	2.5%	0.276	0.586
1st Quarter after Entry	53.7	54.0	-0.3	0.800	58.5	60.1	-1.5	0.475	0.429
2nd Quarter after Entry	58.9	59.2	-0.3	0.766	68.4	68.2	0.2	0.941	0.958
3rd Quarter after Entry	61.1	60.0	1.1	0.284	70.0	67.7	2.3	0.266	0.732
4th Quarter after Entry	60.8	61.8	-0.9	0.344	70.1	69.9	0.2	0.925	0.709
1st Year after Entry	81.7%	82.5%	-0.8%	0.321	87.2%	86.8%	0.5%	0.741	0.623

Table 3.29: Percentage of Custodial Mothers with Earnings, by Subgroup

Subgroup	Cohort 1				Cohort 3				Cohort 3- Cohort 1
	Experimental Group	Control Group	Impact	P-value	Experimental Group	Control Group	Impact	P-value	P-value
Mother Has No Recent AFDC History	(N=1,516)	(N=624)			(N=939)	(N=921)			
1st Year after Entry	84.6%	86.1%	-1.5%	0.390	87.5%	87.3%	0.1%	0.932	0.497
Higher Child Support History	(N=2,303)	(N=583)			(N=231)	(N=216)			
1st Year after Entry	82.8%	83.0%	-0.1%	0.937	87.1%	91.2%	-4.2%	0.174	0.228
Mother Entered in Lower Tier	(N=7,589)	(N=2,069)			(N=499)	(N=493)			
1st Year after Entry	71.7%	72.8%	-1.1%	0.337	81.6%	79.8%	1.8%	0.487	0.454
Mother Entered Outside Milwaukee	(N=3,193)	(N=952)			(N=551)	(N=542)			
1st Year after Entry	84.0%	85.2%	-1.2%	0.420	86.3%	87.4%	-1.1%	0.614	0.943

Notes: Regression-adjusted predictions. Differences that are statistically significant at the 0.05 level are shown in bold type.

Sample excludes cases with no recorded Social Security number.

Table 3.30: Amounts Earned by Custodial Mothers

Time Period	Cohort 1				Cohort 3				Cohort 3- Cohort 1
	Experimental Group (N=12,539)	Control Group (N=3,460)	Impact	P-value	Experimental Group (N=1,125)	Control Group (N=1,108)	Impact	P-value	P-value
Quarter Mother Entered W-2	\$778	\$756	\$22	0.231	\$728	\$715	\$13	0.756	0.719
1st Quarter after Entry	875	874	1	0.960	994	1,006	-11	0.838	0.841
2nd Quarter after Entry	1,115	1,111	5	0.861	1,576	1,537	39	0.592	0.624
3rd Quarter after Entry	1,284	1,236	48	0.111	1,683	1,666	17	0.815	0.576
4th Quarter after Entry	1,394	1,336	58	0.064	1,750	1,736	13	0.862	0.518
1st Year after Entry	\$4,668	\$4,557	\$111	0.233	\$6,003	\$5,945	\$58	0.804	0.764

Table 3.31: Amounts Earned by Custodial Mothers, by Subgroup

Subgroup	Cohort 1				Cohort 3				Cohort 3- Cohort 1
	Experimental Group	Control Group	Impact	P-value	Experimental Group	Control Group	Impact	P-value	P-value
Mother Has No Recent AFDC History	(N=1,516)	(N=624)			(N=939)	(N=921)			
1st Year after Entry	\$5,215	\$5,043	\$172	0.495	\$5,960	\$5,889	\$71	0.778	0.796
Higher Child Support History	(N=2,303)	(N=583)			(N=231)	(N=216)			
1st Year after Entry	\$5,268	\$5,312	\$-44	0.858	\$6,459	\$7,412	\$-953	0.110	0.064
Mother Entered in Lower Tier	(N=7,589)	(N=2,069)			(N=499)	(N=493)			
1st Year after Entry	\$3,272	\$3,232	\$41	0.704	\$4,874	\$5,244	\$-370	0.288	0.115
Mother Entered Outside Milwaukee	(N=3,193)	(N=952)			(N=551)	(N=542)			
1st Year after Entry	\$5,103	\$4,848	\$255	0.180	\$5,832	\$5,973	\$-141	0.657	0.229

Notes: Regression-adjusted predictions. Differences that are statistically significant at the 0.05 level are shown in bold type.

Sample excludes cases with no recorded Social Security number.

Table 3.32: Total Income of Custodial Mothers

Time Period	Cohort 1				Cohort 3				Cohort 3- Cohort 1
	Experimental Group (N=12,539)	Control Group (N=3,460)	Impact	P-value	Experimental Group (N=1,125)	Control Group (N=1,108)	Impact	P-value	P-value
Quarter Mother Entered W-2	\$2,251	\$2,198	\$54	0.013	\$1,833	\$1,754	\$79	0.080	0.670
1st Quarter after Entry	2,639	2,626	13	0.566	2,534	2,463	70	0.185	0.258
2nd Quarter after Entry	2,572	2,550	22	0.418	2,602	2,513	89	0.193	0.270
3rd Quarter after Entry	2,528	2,459	69	0.017	2,588	2,514	74	0.306	0.997
4th Quarter after Entry	2,533	2,459	73	0.016	2,598	2,548	50	0.500	0.738
1st Year after Entry	\$10,272	\$10,095	\$177	0.048	\$10,322	\$10,038	\$284	0.200	0.617

Table 3.33: Total Income of Custodial Mothers, by Subgroup

Subgroup	Cohort 1				Cohort 3				Cohort 3- Cohort 1
	Experimental Group	Control Group	Impact	P-value	Experimental Group	Control Group	Impact	P-value	P-value
Mother Has No Recent AFDC History	(N=1,516)	(N=624)			(N=939)	(N=921)			
1st Year after Entry	\$9,398	\$9,202	\$196	0.424	\$10,078	\$9,900	\$177	0.461	0.951
Higher Child Support History	(N=2,303)	(N=583)			(N=231)	(N=216)			
1st Year after Entry	\$12,038	\$11,785	\$252	0.282	\$12,775	\$12,604	\$171	0.762	0.802
Mother Entered in Lower Tier	(N=7,589)	(N=2,069)			(N=499)	(N=493)			
1st Year after Entry	\$9,920	\$9,840	\$80	0.448	\$10,215	\$10,159	\$57	0.864	0.817
Mother Entered Outside Milwaukee	(N=3,193)	(N=952)			(N=551)	(N=542)			
1st Year after Entry	\$9,125	\$8,695	\$430	0.024	\$9,905	\$9,578	\$327	0.298	0.699

Notes: Regression-adjusted predictions. Differences that are statistically significant at the 0.05 level are shown in bold type.

Sample excludes cases with no recorded Social Security number.

Earnings of Noncustodial Fathers

We now turn to the possibility of experimental effects on the income of noncustodial fathers. We might expect that the full pass-through policy would increase fathers' measured earnings for a couple of reasons: fathers may be inclined to work more if they think that the income they receive is more likely to go to their children than to the state, and fathers may be more likely to take employment in the formal sector (which would be reported to Unemployment Insurance and therefore appear in our measures of income) if they feel that wages garnished for child support are directly benefitting their children.

In Tables 3.34 and 3.35 we report the effects of the experiment on the likelihood that fathers will have any earnings in the time period. In the full sample, there are no significant differences between experimental and control groups in either cohort, but among fathers associated with Cohort 1 mothers who had not recently been on AFDC, the fathers in the full pass-through group have a significantly higher probability of earnings than do fathers in the partial pass-through group. This difference is not repeated among the Cohort 3 cases with no recent AFDC history, and the difference in effects between the two cohorts is marginally significant ($p = .081$).

In the amounts of earnings of fathers reported in Tables 3.36 and 3.37, there are no significant differences among the full sample, but experimental-group fathers in Cohort 1 appear to earn less than the control-group fathers, whereas in Cohort 3 this effect is reversed. This is especially of note in the subgroups reported in Table 3.37. Among cases in which the mother is outside Milwaukee County in Cohort 1, fathers in the experimental group are earning \$600 less than fathers in the control group (a marginally significant difference), but in Cohort 3 they are earning \$100 more.

We hypothesized that noncustodial fathers in the experimental group would be more likely to have formal earnings and to have higher levels of earnings. We find no significant differences in either outcome for the sample as a whole. In some subgroups fathers are more likely to have earnings, while in others earnings are less.

Effects on Government Costs

Tables 3.38 and 3.39 show the difference in the total amount of assistance that was provided to custodial mothers on W-2. We are not able to measure assistance in all potential programs; for example, we do not have data on the Earned Income Tax Credit or Supplemental Security Income (SSI). Moreover, we do not have information on actual administrative costs, or taxes paid, etc. We do measure the assistance that was paid by the government to mothers who participated in W-2, Food Stamps, medical assistance, and child care subsidy programs. We subtract from this amount any child support payments by noncustodial fathers which are retained by the state (these include payments the father may make to offset Medicaid expenditures at his children's births). Since, of course, more child support will be retained by the state for mothers in the control group, we might expect the control group to have lower measured costs than the experimental group, but lower levels of program participation or lower amounts of assistance received might offset these amounts.

In Table 3.38 there is little evidence of any difference in net government costs because of the experiment. Costs to the government in the first year after entry are slightly higher for experimental-group members, but only by \$80 in Cohort 1 and \$176 in Cohort 3, differences that are not statistically significant.

Table 3.34: Percentage of Legal Noncustodial Fathers with Earnings

Time Period	Cohort 1				Cohort 3				Cohort 3- Cohort 1
	Experimental Group (N=10,711)	Control Group (N=2,940)	Impact	P-value	Experimental Group (N=778)	Control Group (N=674)	Impact	P-value	P-value
Quarter Mother Entered W-2	39.1%	39.2%	-0.1%	0.938	49.4%	51.4%	-2.0%	0.492	0.666
1st Quarter after Entry	38.8	38.9	-0.1	0.961	49.7	50.9	-1.3	0.666	0.819
2nd Quarter after Entry	39.3	39.5	-0.2	0.886	49.2	50.5	-1.3	0.667	0.798
3rd Quarter after Entry	39.5	39.1	0.4	0.714	48.3	51.7	-3.4	0.233	0.190
4th Quarter after Entry	38.6	37.3	1.2	0.251	47.2	47.6	-0.4	0.896	0.637
1st Year after Entry	50.4%	50.1%	0.4%	0.745	68.7%	67.1%	1.7%	0.535	0.667

Table 3.35: Percentage of Legal Noncustodial Fathers with Earnings, by Subgroup

Subgroup	Cohort 1				Cohort 3				Cohort 3- Cohort 1
	Experimental Group (N=704)	Control Group (N=285)	Impact	P-value	Experimental Group (N=546)	Control Group (N=508)	Impact	P-value	P-value
Mother Has No Recent AFDC History 1st Year after Entry	63.1%	53.9%	9.1%	0.020	70.6%	70.8%	-0.2%	0.943	0.081
Higher Child Support History 1st Year after Entry	74.6%	75.3%	-0.7%	0.742	3.0%	86.7%	2.3%	0.479	0.556
Mother Entered in Lower Tier 1st Year after Entry	48.7%	48.0%	0.7%	0.632	67.0%	62.1%	4.9%	0.199	0.356
Mother Entered Outside Milwaukee 1st Year after Entry	58.2%	60.0%	-1.8%	0.403	72.4%	74.5%	-2.0%	0.545	0.928

Notes: Regression-adjusted predictions. Differences that are statistically significant at the 0.05 level are shown in bold type. Legal fathers are those whose paternity was legally established when the mother entered W-2. Sample excludes cases with no recorded Social Security number.

Table 3.36: Amounts Earned by Legal Noncustodial Fathers

Time Period	Cohort 1				Cohort 3				Cohort 3- Cohort 1
	Experimental Group (N=10,711)	Control Group (N=2,940)	Impact	P-value	Experimental Group (N=778)	Control Group (N=674)	Impact	P-value	P-value
Quarter Mother Entered W-2	\$1,455	\$1,495	\$-40	0.356	\$2,032	\$1,976	\$56	0.649	0.269
1st Quarter after Entry	1,426	1,447	-20	0.636	2,268	2,231	37	0.779	0.473
2nd Quarter after Entry	1,522	1,556	-34	0.448	2,406	2,304	101	0.450	0.153
3rd Quarter after Entry	1,575	1,557	18	0.705	2,241	2,303	-62	0.650	0.703
4th Quarter after Entry	1,591	1,589	2	0.970	2,192	2,223	-31	0.829	0.931
1st Year after Entry	\$6,114	\$6,149	\$-35	0.838	\$9,107	\$9,061	\$46	0.923	0.665

Table 3.37: Amounts Earned by Legal Noncustodial Fathers, by Subgroup

Subgroup	Cohort 1				Cohort 3				Cohort 3- Cohort 1
	Experimental Group	Control Group	Impact	P-value	Experimental Group	Control Group	Impact	P-value	P-value
Mother Has No Recent AFDC History	(N=704)	(N=285)			(N=546)	(N=508)			
1st Year after Entry	\$9,455	\$9,449	\$6	0.994	\$10,056	\$10,044	\$12	0.983	0.815
Higher Child Support History	(N=3,209)	(N=810)			(N=311)	(N=284)			
1st Year after Entry	\$14,377	\$14,392	\$-15	0.980	\$15,856	\$14,867	\$989	0.341	0.493
Mother Entered in Lower Tier	(N=6,502)	(N=1,793)			(N=410)	(N=358)			
1st Year after Entry	\$5,901	\$5,825	\$77	0.719	\$8,857	\$8,649	\$208	0.751	0.952
Mother Entered Outside Milwaukee	(N=2,652)	(N=788)			(N=439)	(N=381)			
1st Year after Entry	\$7,099	\$7,690	\$-591	0.093	\$10,508	\$10,407	\$101	0.876	0.210

Notes: Regression-adjusted predictions. Differences that are statistically significant at the 0.05 level are shown in bold type. Legal fathers are those whose paternity was legally established when the mother entered W-2. Sample excludes cases with no recorded Social Security number.

Table 3.38: Net Government Costs for Custodial Mothers

Time Period	Cohort 1				Cohort 3				Cohort 3- Cohort 1
	Experimental Group (N=12,542)	Control Group (N=3,461)	Impact	P-value	Experimental Group (N=1,126)	Control Group (N=1,109)	Impact	P-value	P-value
Quarter Mother Entered W-2	\$2,578	\$2,536	\$41	0.049	\$1,954	\$1,874	\$80	0.063	0.520
1st Quarter after Entry	3,116	3,089	27	0.347	2,683	2,627	56	0.365	0.632
2nd Quarter after Entry	2,892	2,867	25	0.455	2,290	2,233	56	0.395	0.594
3rd Quarter after Entry	2,733	2,706	27	0.455	2,095	2,065	30	0.675	0.849
4th Quarter after Entry	2,563	2,563	0	0.990	1,943	1,908	35	0.615	0.630
1st Year after Entry	\$11,304	\$11,224	\$80	0.470	\$9,010	\$8,834	\$176	0.432	0.613

Table 3.39: Net Government Costs for Custodial Mothers, by Subgroup

Subgroup	Cohort 1				Cohort 3				Cohort 3- Cohort 1
	Experimental Group	Control Group	Impact	P-value	Experimental Group	Control Group	Impact	P-value	P-value
Mother Has No Recent AFDC History	(N=1,546)	(N=624)			(N=940)	(N=922)			
1st Year after Entry	\$7,746	\$7,898	-\$151	0.493	\$8,473	\$8,446	\$27	0.909	0.575
Higher Child Support History	(N=2,303)	(N=583)			(N=231)	(N=216)			
1st Year after Entry	\$10,918	\$10,583	\$336	0.227	\$9,282	\$8,322	\$960	0.095	0.281
Mother Entered in Lower Tier	(N=7,589)	(N=2,070)			(N=500)	(N=494)			
1st Year after Entry	\$12,420	\$12,347	\$73	0.612	\$10,210	\$9,665	\$545	0.118	0.252
Mother Entered Outside Milwaukee	(N=3,193)	(N=952)			(N=551)	(N=543)			
1st Year after Entry	\$7,581	\$7,331	\$250	0.175	\$7,652	\$6,997	\$656	0.029	0.186

Notes: Regression-adjusted predictions. Differences that are statistically significant at the 0.05 level are shown in bold type.

All Cohort 3 subgroups in Table 3.39 show higher differences between experimental and control cases, but only among those cases outside Milwaukee is the difference statistically significant. Cohort 3 control-group cases, as we saw, had lower levels of participation in W-2 and Medicaid than did experimental-group cases. It is likely that the larger differences in government costs in Cohort 3 are due to the lower levels of public assistance use in Cohort 3 than in Cohort 1.

Summary of Results

We find that the experiment had the expected direct impact of increasing the amount of child support that mothers received among both of the cohorts analyzed (Table 3.18). Early cohort mothers in the full pass-through group received \$134 more in the first year after entry than mothers in the partial pass-through group; later cohort mothers received \$152 more. Larger effects were seen for mothers who entered in the lower tier and among mothers who had received over \$1,000 of child support in the previous year (Table 3.19). These results reflect the direct mechanical effect of the full pass-through treatment, but may also incorporate the other effects of the experiment on paternity establishment and child support payment.

When we evaluate other direct effects we also generally find similar impacts for the two cohorts, though the experimental impacts are harder to identify for the later period given the smaller sample. For children who enter W-2 without a legally identified father, in both cohorts we find that children in full pass-through families are more likely to have paternity established; paternity establishment rates were 1.5 percentage points higher in the first cohort and 4.4 percentage points higher in the later cohort (Table 3.2). The effects on the payment of child support by noncustodial fathers are not consistent. For the early cohort we find a significantly higher proportion of noncustodial fathers paid support in the first year. The effect is particularly large for fathers associated with mothers without recent welfare history (9.3 percent). However, we find no significant impacts for the later cohort (Table 3.9). We also found a marginally significant increase ($p < .01$) in the in the annual amounts of child support paid by legal fathers in the first cohort among all subgroups (Table 3.11).

The effect of the experimental treatment is less consistent for our secondary issues. We found in the early cohort that full pass-through treatment reduced the likelihood of receiving W-2 benefits in the first year after entry (Table 3.20). However, for the later period we found no reduction in receipt of W-2 benefits by the full pass-through group. The receipt of Food Stamps, Medicaid, BadgerCare, and child care subsidies were generally not affected for either cohort, although in some subgroups there are results that suggest higher program participation among the experimental group in the later cohort.

We generally find few significant impacts of the full pass-through on the earnings of mothers and fathers. We do find a positive impact on mothers' total incomes in the early cohort—average income is \$177 greater for the full pass-through mothers. The later cohort shows an even larger increase in income (\$284) but this is not statistically significant. The increases in income reflect the increases in the amounts of child support received, but also reflect increases in income from other sources such as earnings and other public assistance programs.

Finally, we do not find any significant difference in the overall government costs for the full pass-through and partial pass-through policies. Although more child support is passed through to those in the experimental group and is therefore not kept by the government, some of this money comes from additional support that would not have been paid in the absence of the full pass-through.