Understanding the Relationship between Formal and Informal Child Support: Evidence from Fragile Families Three-Year Data

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I. Introduction

In this paper, using data from the Fragile Families and Child Wellbeing Study of parents with nonmarital births, we describe changes in child support outcomes from one to three years after the child's birth and examine the relationship between fathers' formal and informal child support payments and the effect of child support enforcement on this relationship. Although there is a large body of research on the effects of enforcement on fathers' payments, there has been scant empirical research focusing specifically on informal support, or, more importantly, on the interaction of formal and informal support.

Recent research, based on the Fragile Families 1-year follow up survey, reveals that very few fathers paid child support through the formal system, but that an overwhelming majority had contributed informally approximately one year after their child's birth (Nepomnyaschy 2003). Such low levels of involvement with the formal system may be explained by two related factors. First, 80% of these parents were in cohabiting and romantic relationships at the time of their child's birth, with 60% reporting these types of relationships at the one year follow up (Carlson, McLanahan and England Forthcoming; McLanahan et al. 2001). Because these parents continued to be so intimately involved, there was little reason to expect that mothers would pursue fathers through the formal system. Second, because of the short time since the children had been born (average of 15 months), parents had a very small window of possible exposure to the child support enforcement system. As the children age and parents' relationships begin to dissolve, more mothers will turn to the formal system for help in getting financial contributions for their children. This move to the formal system provides an opportunity to examine how the enforcement system affects the total package of support that mothers receive from fathers.

II. Prior Literature

Much prior research has found that improvements in child support enforcement have led to progress in all three steps of the formal child support process (establishing paternity, getting an award and receiving payments) (Bartfeld and Garfinkel 1996; Bartfeld and Meyer 1994; Beller and Graham 1993; Case, Lin and McLanahan 2000; Freeman and Waldfogel 1998; Garfinkel, Heintze and Huang 2000; Garfinkel and Klawitter 1990; Meyer et al. 1996; Miller and Garfinkel 1999; Mincy, Garfinkel and Nepomnyaschy 2003; Sorensen and Halpern 1999; Sorensen and Oliver 2002). However, there has been little research on informal support from fathers or on the effect of enforcement on informal contributions. The relationship between formal and informal support received by mothers is fraught with simultaneity, thus a causal effect cannot be directly estimated. If the two kinds of support are measured contemporaneously, the direction of causality cannot be determined, while the interaction with welfare receipt further compounds this endogeneity. First, mothers who are receiving informal support from the father on a regular basis have no interest in pursuing him through the formal system and therefore would not have a formal child support order. Second, mothers who are receiving formal support, may have pursued the father through the formal system because he was not paying informally. On the other hand, there may be fathers who are very committed to their children and are paying through the formal system and also making informal contributions.

Mothers on welfare, who must sign over to the state their right to child support in order to receive benefits, have much less control over what happens. The state will pursue the father and will keep any formal support collected on her behalf in order to offset the costs of TANF. If the father is making informal contributions to her, she has an incentive to not cooperate with child support by refusing to identify or help locate the father, although if caught she may lose her

benefits. Similarly, fathers associated with mothers on welfare, knowing that their children will receive none of their formal support payments, have an incentive to give the mother money informally. In most cases these fathers must make a choice between cooperating with the enforcement system in lieu of making informal contributions or working in the underground economy, under the radar of enforcement, in order to contribute to their families.

Although it is difficult to estimate the structural equation for the relationship between formal and informal support, we can estimate reduced form models, by analyzing the effect of child support enforcement on formal, informal and total support separately. For mothers with orders who are already involved with the formal system, stronger enforcement will increase formal support. We expect that increasing formal support will decrease informal support, since most fathers cannot afford to pay high levels of both. However, the a priori effect on total support cannot be determined and will depend on whether formal and informal support are perfect substitutes, in which case it will be zero; or if formal support increases more than informal support decreases, in which case the effect will be positive. For mothers without child support orders who are not currently involved with the formal system, child support enforcement should increase informal support. The threat of the formal child support system should compel fathers to pay more than they would without the presence of this threat (Graham and Beller 2002; Weiss and Willis 1985). The mother can use the formal system as a bargaining tool with which to induce the father to cooperate by contributing informally or in other ways (help with child care or visitation) (England and Folbre 2002).

III. Data

This research uses the Fragile Families and Child Wellbeing Study which examines the conditions and capabilities of new unwed mothers and fathers and the wellbeing of their children. The baseline data, collected between 1998 and 2000, consist of 4898 births (3711 unwed and 1187 marital) in 75 hospitals in 20 U.S. cities[1] (15 states) with populations of 200,000 or more. The data in the national sample (16 of 20 cities) are representative of all unwed births and are nearly representative of marital births in such cities. Mothers and fathers were interviewed in the hospital shortly after their child's birth, approximately one year later, and when the child was three years old. For a detailed discussion of the Fragile Families study design, see Reichman et al (2001). These three waves of data are hereafter referred to as the baseline, one-year and three-year follow-up surveys, respectively. 4229 mothers and 3307 fathers were re-interviewed at the three-year follow-up. The main analyses in this paper are based on data from a subsample of approximately 1600 mothers with a nonmarital birth at baseline, who were interviewed at all three waves, and who were neither married nor residing with the father (of the focal child) at the time of the 3-year survey.

Outcomes

We examine several child support outcomes in this paper: whether paternity has been established for the child, whether there is a child support order, whether a mother receives formal, informal or any support and the amount of formal, informal and total support received. We measure these outcomes at both the 1 and 3 year surveys and we base all our child support measures on mothers' reports about fathers' behaviors. Because we are interested in examining child support outcomes from both waves of data, our sample is often limited to those who had no

[1] The following 20 cities in 15 states are included in the survey: Oakland, San Jose (CA); Austin, Corpus Christi, San Antonio (TX): Richmond, Norfolk (VA); Philadelphia, Pittsburgh (PA); Newark (NJ); New York (NY); Nashville (TN); Toledo (OH); Milwaukee (WI); Chicago (IL); Indianapolis (IN); Jacksonville (FL); Baltimore (MD); and Detroit (MI).

missing data for these outcomes at both time periods. For example, in the first year follow up, mothers who had formal child support orders were not asked about informal support in the 2nd version of the questionnaire which was administered to 18 out of 20 cities. In the third year follow-up, the first version of the questionnaire, administered to the first two cities, suffered from the same problem. We discuss these limitations further in the methods and findings sections.

Variable of Interest

In the majority of our analyses, the main explanatory variable of interest is child support enforcement, which is specified in several different ways. The primary variable is a state-level practice measure constructed using data from the March Current Population Survey (CPS). We construct an individual variable in the CPS, based on a sample of never-married mothers with at least one child under 18, indicating whether she received child support from a nonresident father in the past year. We regress this variable on a variety of demographics (her age, race/ethnicity, education, nativity, number of children, presence of children under 6 and urban residence), the maximum combined TANF and Food Stamp benefit in the state, and a set of state and year dummies. From this regression, we predict an individual level residual value (actual probability of having a child support payment minus the predicted probability) and then aggregate the residual at the state level using a 3-year average (1998, 1999, 2000). This constructed measure captures the difference between states in the probability that a never-married mother receives any child support, controlling for individual mothers' characteristics, welfare generosity and state-specific effects that are consistent over time. Although this is not a perfect measure, we believe that it is a good approximation of the strength of the child support enforcement system at the state level.

In addition to the state-level CPS residual, we consider two other measures of enforcement. One is the number of months since states enacted immediate wage withholding and the other is an aggregate city-level residual of the payment rate based on Fragile Families data. Although the federal government mandated immediate wage withholding for all new child support orders in 1988 as part of the Family Support Act, some states took longer than others to enact this provision. Therefore, there is quite a bit of variation in this variable, with Florida being one of the earlier states to enact it, in 1984; and Ohio being one of the later, in 1993. The Fragile Families city-level residual was constructed much like the CPS payment rate residual, except that we focused on the award rate and only controlled for individual characteristics. The value of this measure is that it takes into account differences in the strength of child support enforcement at the city level, while the other two measures can only explain differences at the state level.[2] Figure 1 graphically displays the standardized values (mean=0, sd=1) of these three measures for the 20 Fragile Families cities.[3]

Covariates

All of our models control for a variety of father characteristics (as reported by mothers), mother and child characteristics and several city and state level variables. Table 1 reports the descriptive statistics for all the covariates used in this paper for the subsample of mothers with nonmarital births, who are neither married nor cohabiting with the father at the 3-year interview and who have no missing values for any of these measures. Demographic characteristics were

[2] We experimented with several other measures of enforcement: the date that states enacted the New Hires Directory, the date that states made voluntary paternity establishment conclusive, and the total state administrative expenditures on enforcement. None of these measures were able to positively predict formal support received or the likelihood of having an award, and thus were not used in the final analyses. We also experimented with several specifications of the CPS residual: controlling for just demographics, controlling for demographics and welfare regime and controlling for demographics and state fixed effects. All the CPS residual measures had the expected effect and were equally effective at predicting formal support.

[3] Because the first two enforcement indicators are measured at the state level, cities in the same state have the same values for these two measures.

taken from the baseline survey, while most other characteristics are from the 1-year follow-up. Because we relied on mothers' reports about fathers, there are many variables about which mothers did not know the fathers' status. We created missing indicator variables for this group of measures and include them in the regression. For example, 10% of mothers did not know whether the father had ever spent time in jail, therefore the incarceration variable consists of 3 possible answers: yes, no and don't know. We repeat this process for father's education, current work status, disability status, alcohol or drug problem, married or cohabiting with new partner, and for presence of children with other mothers.

Table 1 demonstrates that a little over half of the fathers are currently working, more than 1 in 10 has a drug or alcohol problem, almost half have children with other mothers, and 4 out of ten have been incarcerated. If we assume that some portion of those fathers for whom there is missing information on these variables would also be included, these proportions may be substantially higher (e.g. 17% of mothers do not know if father has drug or alcohol problems, thus nearly 30% of fathers could have a problem). 43% of mothers report having children with other fathers, a little over half of mothers worked in the week prior to the interview, and almost all the mothers report that the focal child is in good, very good or excellent health. Finally, we observe that 57% of mothers have received TANF at any time between the baseline and 3-year surveys. We include two controls for the local economic climate, since these may affect a mother's need for child support and a father's ability to pay. The metropolitan area unemployment rate is for the year prior to the 3-year interview and ranges from 2.0 in Austin to 8.4 in San Jose. (U.S. Department of Labor 2002). The maximum combined TANF and Food Stamp benefit for a family of three is from 2000 and ranges from $520 in Tennessee to $913 in Wisconsin (SPDP 2001).

III. Analytic Strategy

Changes in Child Support Outcomes

Our first aim in this paper is to describe the changes in child support outcomes from 1 year to 3 years after a child's birth to unmarried parents. One difficulty with examining changes in child support outcomes over time is the instability in parents' living arrangements. In most cases, fathers who are cohabiting with their children are not obligated to pay child support for them, and married fathers are never obligated. Thus, changes in child support receipt over time may not necessarily be indicative of strength of enforcement or fathers' willingness to pay, but may be due to changes in parents' cohabitation. We first note the pattern of changes in parents' relationships from the 1 year to the 3 year survey. Then, we present our findings about the changes in child support outcomes broken down for four groups of mothers, based on their cohabitation status with the father over the two time periods.

Relationship between Formal and Informal Child Support

In this section, we focus on the group of mothers with nonmarital births who are not residing with the father at the time of the 3-year survey. We assume that the direction of causation between formal and informal support will be different depending on whether the mother has received TANF. We run separate models by ever TANF receipt, predicting whether a mother has a child support award at the 3-year follow-up with informal child support receipt from the 1-year survey as the main variable of interest. Using a lagged measure of informal receipt eliminates some of the endogeneity between formal and informal support. We expect that mothers with no TANF receipt, who were receiving informal support from fathers at the 1-year survey, will be less likely to pursue the father through the formal system. In contrast, for

mothers with TANF use, informal support receipt at 1-year should have little impact on their likelihood of having a child support award since the matter is essentially out of their control.

Role of Enforcement

In the final section, we examine the effect of child support enforcement on formal, informal and total support received. For this set of analyses, we run separate models for mothers with and without child support orders at the 3-year survey. We expect that for mothers with orders, child support enforcement (by increasing formal support) will have a negative effect on informal support, but will have either a positive or no effect on total support (since formal and informal should be substitutes). For mothers without orders, we expect that child support enforcement will increase both informal and total support, since it will enhance the mother's bargaining position vis a vis the father. Finally, we perform a robustness check by employing different measures of child support enforcement. Models examining the likelihood of receiving payments, a dichotomous outcome, are estimated with logistic regression and coefficients are expressed as odds ratios. Because of the substantial proportion of mothers who have no support, the continuous variable for the amount of support received is clustered at 0. Therefore, models predicting amount of payments are estimated with tobit regression and the coefficients are expressed as marginal effects, which are calculated by multiplying the tobit coefficients by the proportion of the sample that is nonzero on the outcome of interest (Greene 2000).

IV. Findings

Changes in Child Outcomes

Table 2 presents the changes in the relationships of parents with nonmarital births from the 1 to the 3 year surveys. We observe that 20% of those who got married by the 1-year survey

are no longer married by 3 years, 26% of those who were cohabiting at 1-year are no longer cohabiting by 3-years, and 17% of those who were in some other relationship at 1-year are either married or cohabiting by the 3-year survey. These figures demonstrate how difficult it is to pin down from one survey to the next which mothers should have consistently been receiving child support over the entire period. Complicating this picture further is that the relationship status captures only what mothers report at the time of the interview, therefore, even among the sub-group of mothers who were non-married and non-cohabiting at both time periods, there may have been periods of cohabitation between the two surveys.

Taking these complexities into consideration, we divide the group of mothers with nonmarital births into four distinct groups based on their residency status with the father of the focal child at the 1 and 3 year surveys: 1.) nonresident at both waves, 2.) resident at 1-year, but nonresident at 3-year, 3.) nonresident at 1-yr, but resident at 3-yr, and 4.) resident at both 1-yr and 3-yr. Table 3 describes the changes in several child support outcomes for these four groups of mothers from the 1 to the 3-year surveys. Paternity establishment rates are quite high for all four groups at the 3-year survey, with 72% of mothers who are non-resident at both waves (the group that should be the least likely) having paternity established. The 3-year paternity rate represents a substantial increase for all groups from the prior wave, with the highest increase for those who were nonresident at both waves. Paternity establishment, although a crucial first step in the child support process, is not necessarily the result of strict enforcement, but more often the result of the strength and quality of the parents' relationship.

The proportion of mothers with a child support order, an outcome that is very much related to enforcement, has also substantially increased. 44% of mothers who are nonresident at both waves have orders by the 3-year survey, an increase of 83% from the prior wave. Mothers

who were residing with the dad at one wave, but not the other, lag in 3-year award rates, but have improved greatly from the 1-year survey. As expected, mothers who are resident at both waves have the lowest award rates, since they are not a focus of the enforcement system and have little interest in pursuing the father formally. The proportion of mothers receiving any formal support from fathers mirrors the pattern of child support orders. Although the absolute numbers continue to be quite low (only 24% of nonresidents at both waves receive some formal support), there is substantial improvement from the prior wave (85% increase for nonresidents at both waves). Between 55% and 70% of mothers with child support orders across the four groups receive some formal support. The amount of formal support received since the agreement was reached, although still low, has also substantially increased for all groups of mothers.

The proportion of mothers receiving informal support from the father decreased for mothers who were nonresident at both waves. This effect would not be surprising since we believe that formal and informal support are substitutes; however, because of previously mentioned data limitations, we can only observe informal support at the 1-year survey for mothers who did not have child support orders and thus did not receive formal support. Therefore, the decrease in informal support receipt for this group of mothers (and the accompanying decrease in amount of informal support) must be related to a deterioration in parents' relationship, but not to a formal support obligation. Because cohabiting parents in the 1-year survey were not asked about informal support, we cannot make comparisons between the two waves for two of the groups. The group of mothers that was nonresident at 1-year, but resident at 3-year had a slight increase in informal support receipt, but this group started out much higher than the non-resident group, indicating that these fathers must have been quite close

and committed to the children even before they began to cohabit with the mother. Similarly, the amount of informal support for this group is much higher than for the non-resident groups.

Turning now to total support, the consistently non-resident mothers are less likely to be receiving any support and have no increase in the total amount of support, despite the very substantial increase in formal support receipt. For this group of mothers (the largest group) it appears that an increase in formal support has made them no better off. As a matter of fact, it is probable that mothers on welfare (almost 60% of this group), are now worse off since the state may be keeping the formal support collected on their behalf and they may be losing some of the informal support that they were receiving from the father. The only group that is getting more informal support is the group of mothers that has moved to cohabitation with the father.

Relationship between Formal and Informal Support

In this section, we investigate the relationship between formal and informal support further, by controlling for a variety of factors and examining the interaction of child support with welfare receipt. We regress the likelihood that a mother has a child support order at 3-years on whether she received informal child support from the father at the 1-year survey. Because mothers who were cohabiting with the father at the 1-year survey were not asked about informal support, we limit our sample in this analysis to those who were not cohabiting at either wave (1st column of Table 3: 48% of all mothers with nonmarital births). Also, as mentioned previously, because of data limitations, mothers with child support awards at the 1-year survey were not asked about informal support, thus this analysis is only for mothers who did not have orders at the 1-year follow-up. Table 4 presents results separately for mothers who have received any welfare since the child's birth and for those who have not. As expected, mothers who have not received TANF since the child's birth are much less likely (50% less) to have a child support

order by the 3-year survey if they were receiving informal support at the prior wave. These mothers have no interest in pursuing the father through the formal child support system since he is cooperating by contributing informally. Mothers associated with younger fathers, those with more education and those who are working are more likely to have orders. Native-born mothers are much more likely to have orders, as are mothers who live in states with stronger child support enforcement.

For mothers who have received TANF at some time since birth, prior receipt of informal support has no significant effect on whether she has a child support order, since the state may step in to establish an order on her behalf. For this group of mothers, parents' baseline relationship is an important predictor of an order at 3-years, with mothers who were cohabiting at baseline being two times more likely to have an order than mothers who were not in any relationship with the father. Fathers who are not working, have a disability, and have spent time in jail are less likely to have orders. Curiously, mothers who report that a father has a drug or alcohol problem are more likely to have an order as are mothers with a male child. As expected, mothers living in a state with stronger enforcement are again more likely to have an order, but unexpectedly, the effect is weaker than for mothers who have not received welfare.

Reduced Form Models

In this final section, we estimate reduced form models of the effect of child support enforcement on the likelihood of receiving and the amount received of formal, informal and total child support. We present models for all mothers with nonmarital births who are not cohabiting with the father of the focal child at the 3-year survey (regardless of cohabitation status at the 1-year survey) and then separately for mothers with and without child support orders. Table 5 presents results for these outcomes for the three groups of mothers (formal and total support

analyses are not done for mothers without child support orders, since they only have informal support). The top panel of Table 5 examines the results for mothers with child support orders. For these mothers, we expected that strong enforcement would increase formal support and would decrease informal support receipt, since fathers would substitute formal support for informal support. The effect on total support should be the sum of these two effects and may be either 0 if they are perfect substitutes or somewhat positive if enforcement is a better predictor of formal than informal support. It appears that the effects are all in the expected directions; however, none of the coefficients are significant. Living in states with strong enforcement increases the likelihood of formal support receipt and the amount of support and decreases the likelihood and amount of informal support. The effect on total support is approximately the sum of the formal and informal coefficients

For mothers without child support orders, we expect that strong enforcement would contribute to more informal support receipt, since mothers could threaten the father with the formal system if he does not cooperate. Again the coefficients are in the expected direction (positive), but they are not significant. Panel 3 of Table 5 examines the results for the two groups of mothers combined. We see that the strength of enforcement is positively and significantly related to receipt of formal support, with mothers living in a state that is one standard deviation above the mean in the payment rate residual being 21% more likely to receive formal support and receive $70 more of formal support (for example, from Figure 1, a mother living in Indianapolis as compared with a mother living in San Antonio). The effect of enforcement on informal support for all mothers is negative (although not significant), thus the effect for mothers with orders dominates even though they are in the minority. Finally, the effect on total support is positive, although again insignificant.

The final table, Table 6, compares results found above with those employing alternate measures of enforcement. The first alternate measure is the number of months since states enacted immediate wage withholding and the second measure is the Fragile Families aggregate city-level payment rate residual (construction described in data section) (see Figure 1). These results are presented only for mothers with orders. The pattern for these measures is basically similar to the one discussed above, with a positive effect on formal support and mostly a negative effect on informal support. The only significant results are found using the legislative measure of enforcement, which predicts positive and significant (though small) effects on formal and total support.

VII. Conclusion

In this paper, we examine the changes in child support outcomes from one to three years after mothers experience a nonmarital birth. We attempt to understand the relationship between formal and informal support receipt, and look at the effect of child support enforcement on the receipt of both types of support. Our first finding is that changes in mothers' cohabitation status with the fathers of their children may be more strongly related to their child support outcomes than the strength of enforcement, and that examining all single mothers, without disaggregating by residency status, can mask important increases and decreases in the support that they receive. We find that all mothers experience a tremendous increase in child support awards and in formal support receipt, although the absolute numbers are still quite low (only 24% of mothers who are not cohabiting with the father at both waves receive formal support). At the same time, we see a substantial drop in informal support receipt, even for those mothers who have no child support orders (and thus no formal support), which must be related to the deterioration in parents'

relationships. Finally, despite the improvements in formal support receipt, the figures for total support show that the only group of mothers that experiences positive financial growth is the group that moves from nonresidency to co-residency with the father of the child.

Our reduced form models confirm the fact that stronger child support enforcement increases formal support received for all mothers (through increasing award rates). The effect of enforcement on informal support is consistently negative for mothers with orders, although never significant, and is weakly positive for mothers without orders, although again never significant. There is also some evidence that stronger enforcement contributes to an increase in total support that mothers receive, but the increase is quite small in absolute terms.

This paper points to the fact that stronger child support enforcement certainly can increase the prevalence and amount of formal support that mothers receive, but it comes at the expense of informal contributions from the father. Mothers who are on public assistance are especially vulnerable to this shift, since these mothers are a specific focus of child support enforcement and since they do not receive the support collected on their behalf (in most states). It is very likely that the loss of informal support which accompanies this increase in formal support will make these mothers much worse off. Finally, there is some evidence that fathers' informal contributions are positively related to their investment in and connection to their children (Greene and Moore 2000). If this decrease in informal support is accompanied by a decrease in paternal involvement and commitment to the child, then the benefit of increased formal support may be negated by a decrease in overall wellbeing for children in fragile families. This question calls for further research in the area of father involvement, father's financial contributions and child support enforcement policies for these types of families.

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Table 1: Sample Description, Mothers w/Nonmarital Births, Not Cohabiting w/ Father at 3-year Survey N = 1611 (%, except where indicated)

Fathers' Demographics (from baseline survey)	
Less than 21	20
21-29	57
30+	23
Non-Hispanic White	10
Non-Hispanic Black	66
Hispanic	22
Other race	2
Less than high school	34
High school	41
Some college or more	19
Education unknown	6
Parents are of the same race	86
Parents are of the same age	36
Cohabiting at baseline	32
Romantically involved at baseline	42
Other relationship at baseline	26
Other Father Characteristics (from 1-year survey)	
Currently working	55
Not currently working	30
Work status unknown	15
Has work-limiting disability	7
No work-limiting disability	77
Disability status unknown	16
Has alcohol/drug problem	11
No alcohol/drug problem	72
Alcohol/drug problem unknown	17
Married or cohabiting w/new partner	15
Not married or cohabiting with new partner	76
New partner status unknown	9
Children w/other mothers	47
No children w/other mothers	47
Other children unknown	6
Spent some time in jail/prison	41
No time spent in jail/prison	51
Prior prison status unknown	8
Mother/Child Characteristics (from 1-year survey)	
US-born (baseline)	93
Children w/other fathers	43
Other children w/this father	27
Worked last week	54
Male child (baseline)	53
Child in good or better health	97
Mother on TANF anytime b/w baseline & 3-year	57
City/State level variables	
MSA unemployment rate (1 yr.prior to 3-yr.survey)	4.8
Max TANF/Food Stamp benefit in 2000 ($)	719

Table 2: Changes in Relationship Status of Mothers with Nonmarital Births from 1 Year to 3 Years after Birth (20 City Sample) N = 2997

	3-Year Relationship Status			1- Year Totals
	Married	Cohabiting	Other Rel	
1-Year Relationship Status				
Married	80	8	13	9
Cohabiting	13	61	26	41
Other Relationship	2	15	83	50
3-yr Totals	14	33	53	100

Table 3: Child Support Outcomes from 1 and 3-year Follow-Ups for 4 Groups of Mothers with Nonmarital Births

	Non-Resident at both periods		Resident at 1-year, but nonresident at 3year		Non-resident at 1-yr, but resident at 3-year		Resident at both 1 year and 3 year		N
	1 yr	3yr	1 yr	3 yr	1 yr	3yr	1yr	3yr	
Child Support Outcomes									
Paternity Established	53	72	79	90	68	87	82	93	2536
Presence of Order [a]	24	44	12	32	19	31	10	15	2420
Any Formal Child Support [a]	13	24	8	20	9	20	7	11	2377
Amount of Formal Support ($) [a]	172	469	116	244	183	368	86	174	2354
Any Informal Child Support [b c]	53	34	--	59	76	78	--	88	893
Amount of Informal Support ($) [b c]	666	515	--	656	1331	2578	--	4378	757
Any Support [c]	55	46	--	63	71.89	77	--	77	2423
Total Support ($) [c]	739	798	--	782	1283	2223	--	3615	2097
N = 2601 (% of total)	48		14		8		30		

[a] First version of 1-year questionnaire (2cities) skipped cohabitors out of order and formal support questions
[b] Second version of 1-year questionnaire (18 cities) and first version of 3-year questionnaire skipped those with a formal order out of informal support questions. All informal support figures are for mothers without orders at the 3-year survey.
[c] Mothers who were cohabiting with father at 1-year survey were not asked about informal support

Table 4: Likelihood of Having an Order at 3-year Survey for Mothers with Nonmarital Births who are Not Residing with the Father of the Focal Child

	No TANF Receipt Since Birth		Any TANF Receipt Since Birth	
	Odds	Z	Odds	Z
Informal Child Support Receipt at 1-year	**0.51**	-(2.26)	1.20	(0.79)
Father Characteristics				
Less than 21	**2.94**	(2.54)	**2.52**	(2.76)
21-29	**1.79**	(1.94)	**1.65**	(1.99)
Non-Hispanic Black	0.78	-(0.72)	1.08	(0.20)
Hispanic	0.95	-(0.14)	1.05	(0.10)
Other race	0.93	-(0.10)	0.51	-(0.85)
Less than high school	**0.55**	-(1.89)	0.62	-(1.62)
High school	0.77	-(1.01)	0.91	-(0.35)
Education unknown	**0.22**	-(1.85)	**0.30**	-(2.24)
Parents are of the same race	0.92	-(0.27)	**0.63**	-(1.65)
Parents are of the same age	**0.64**	-(1.80)	**0.48**	-(3.55)
Cohabiting at baseline	1.25	(0.69)	**2.14**	(2.82)
Romantically involved at baseline	1.20	(0.58)	**1.53**	(1.70)
Not currently working	**0.61**	-(1.65)	0.89	-(0.52)
Work status unknown	0.73	-(0.72)	**0.47**	-(2.38)
Has work-limiting disability	0.56	-(1.12)	**0.49**	-(1.85)
Disability status unknown	1.21	(0.27)	**0.46**	-(1.75)
Has alcohol/drug problem	1.08	(0.18)	1.65	(1.61)
Alcohol/drug problem unknown	0.74	-(0.45)	**2.11**	(1.73)
Cohabiting w/new partner	0.74	-(0.82)	**2.37**	(3.01)
New partner status unknown	0.45	-(1.00)	1.15	(0.36)
Children w/other mothers	1.13	(0.50)	1.37	(1.54)
Other children unknown	0.85	-(0.24)	1.32	(0.57)
Spent some time in jail	0.86	-(0.58)	**0.69**	-(1.80)
Prior prison status unknown	0.72	-(0.65)	1.07	(0.17)
Mother/Child Characteristics				
US-born	**3.86**	(2.57)	2.01	(1.29)
Children w/other fathers	1.22	(0.83)	0.74	-(1.58)
Other children w/this father	1.39	(1.20)	1.03	(0.16)
Worked last week	1.24	(0.86)	1.26	(1.26)
Male child	1.02	(0.08)	**1.71**	(2.93)
Child in good or better health	1.34	(0.33)	0.89	-(0.26)
City/State level variables				
MSA unemployment rate	1.12	(1.03)	0.96	-(0.40)
Max TANF/Food Stamp benefit ($100)	1.02	(0.17)	1.12	(1.25)
Child support enforcement	**1.50**	(3.56)	**1.20**	(1.85)
N	567		718	

Table 5: Effect of Enforcement on Formal, Informal and Total Support Received for Mothers with Nonmarital Births who are Not Cohabiting with the Father

	Any Formal Support	Amount of Formal Support	Any Informal Support Received	Amount of Informal Support	Any Support Received	Amount of Total Support Received
	Odds	Marg. Eff	Odds	Marg. Eff	Odds	Marg. Eff
Panel 1: Mothers with Orders						
CPS Payment Rate State-Level Residual	1.08 (0.75)	72.09 (1.10)	0.89 -(1.20)	-17.90 -(0.81)	0.99 -(0.11)	44.97 (0.62)
Mean Values	0.61	1066	0.27	165	0.70	1230
N	566	550	566	550	566	550
Panel 2: Mothers without Orders						
CPS Payment Rate State-Level Residual [a]			1.08 (0.88)	5.43 (0.08)		
Mean Values			0.46	722		
N			925	849		
Panel 3: All Mothers						
CPS Payment Rate State-Level Residual	**1.21** (2.81)	**69.55** (2.62)	0.95 -(0.83)	-43.59 -(1.06)	1.07 (1.11)	29.93 (0.60)
Mean Values	0.23	419	0.39	503	0.55	922
N	1491	1399	1491	1399	1491	1399

Coefficients for the amount of support models come from tobit regressions and are converted to marginal effects by multiplying the tobit coefficient by the proportion of the sample that is non-zero on the outcome of interest

[a] Mothers without orders only have informal support . **Bold** figures indicate significance at the 10% level. (z-statistics)

Table 6: Effect of Alternate Measures of Enforcement on Formal, Informal and Total Support Received for Mothers with Nonmarital Births who are Not Cohabiting with the Father

	Any Formal Support	Amount of Formal Support	Any Informal Support	Amount of Informal Support	Any Support Received	Amount of Total Support
	Odds	Marg. Eff	Odds	Marg. Eff	Odds	Marg. Eff
Mothers with Orders						
# of Months since State Enacted Immediate Wage Withholding	**1.01** (3.09)	**6.51** (2.78)	1.00 -(0.09)	0.58 (0.70)	**1.01** (1.73)	**6.27** (2.39)
Fragile Families City-Level Aggregate Payment Rate Residual	1.07 (0.61)	23.81 (0.35)	0.93 -(0.69)	-9.33 -(0.38)	1.05 (0.48)	5.55 (0.07)
Mean Values	0.61	1066	0.27	165	0.70	1230
N	566	550	566	550	566	550

Bold figures indicate significance at the 10% level. (z-statistics)

Figure1: Standardized Child Support Enforcement Measures