Rarely can we view marital disruption and remarriage from the perspective of *both* ex-spouses despite the need to do so for understanding processes that leave many children without adequate support. Here, pairs of ex-spouses are tracked over time to observe the flow of resources from an absent father to his former family, how it shifts as the marital, economic, and geographic circumstances of the two ex-spouses change, and the extent to which it could be increased. This longitudinal view of the determinants of the flow is supplemented with a cross-sectional one. Although data limitations preclude definitive conclusions, the analysis suggests that remarriage by the custodial mother prompts sizable reductions in child support but remarriage by the absent father has no appreciable effect. Child support increases modestly with the absent father's income, but absent fathers tend to pay considerably less than maximal equitable levels of child support.

The Role of Economic Resources and Remarriage in Financial Assistance for Children of Divorce*

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The high rates of divorce in recent decades have placed many children in financially vulnerable positions, with only one parent – most typically the mother – present and a strong chance of little or no financial support from the absent father (Bumpass & Rindfuss, 1979; Duncan & Hoffman, 1985; Duncan & Rodgers, 1987; Epenshade, 1979; Furstenberg, Nord, Peterson, & Zill, 1983; Glick, 1980; Hill, 1983; Hofferth, 1985; Hoffman, 1977; Masnick & Bane, 1980). The difficult economic situation of children of divorce – and, even more so, of children of never-married mothers – has prompted changes in child support regulations. The changes (e.g., P.L.

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98-378, the Child Support Amendments of 1984, and, most especially, the Family Support Act of 1988) have been designed to better assure that an absent father shares income with his children and that the level of shared income is equitable to them as well as to him. The match between a father's ability to pay and the needs of his children is key to determining an equitable level of support. These circumstances are subject to change over time, however, and this dynamic element is rarely taken into account either in court-ordered support awards or in research on child support. Remarriage by either parent, particularly if it involves additional children, is a change that greatly complicates equity considerations.

This article addresses two major issues concerning child support in the context of divorce and changing circumstances following divorce:

1. How responsive are child support payments to remarriage or to changes in the economic resources of the absent father and the custodial mother?
2. To what extent could the economic situation of children be improved by increasing transfers from absent fathers to maximal equitable levels that take account of any new family formation following divorce?

Researchers, among them Beller and Graham (1985, 1986, 1988), Del Boca (1986), Sorenson and MacDonald (1983), Chambers (1979), and Cassetty (1978), have examined economic resources and remarriage as determinants of child support payments. Rarely, however, has anyone investigated how child support payments vary with the changing circumstances of *both* the absent father and the custodial mother. Because data sets usually lack direct measures of the absent father's circumstances, most researchers have focused on the custodial mother's family and used either indirect measures or proxy reports as indicators of the absent father's circumstances (see, for example, Beller & Graham, 1985, 1986, 1988; Sorenson & MacDonald, 1983). Researchers also have relied mostly on cross-sectional techniques, which are highly susceptible to biasing influences of unmeasured heterogeneity. This article takes a different tack by using longitudinal techniques in conjunction with direct reports of both the absent father's and custodial mother's postbreakup situations. The influence of unmeasured stationary heterogeneity—persistent interpersonal differences across ex-couples that affect the level of child support payments in the same manner throughout the postbreakup period—is eliminated by this approach.

This article also explores the poverty-reducing potential of extracting maximal equitable levels of child support from absent fathers. An important issue is the extent to which poor children have poor fathers, who can

transfer little income to them. This article presents ballpark estimates of the poverty-reducing potential of child support based on microlevel matches of ex-spouses and their postdivorce economic and familial situations.

The data track a national sample of ex-spouses across time, matching, on a year-by-year basis, the information for an absent father with that of children under age 18 living with his former wife. The Panel Study of Income Dynamics (PSID) is the source of the data, which cover divorces and separations during the period 1968-1980. More recent PSID data are available, but a PSID tracking rule—following both ex-spouses from a divorce only if they were married when the study began (1968)—means that, over time, the matched pairs of ex-spouses become less representative of divorcing couples.

DATA

SAMPLE AND UNITS OF ANALYSIS

The ideal data for assessing the sensitivity of children's financial well-being to the economic and marital circumstances of their divorced parents would (a) contain information about both the custodial mother and the absent father, (b) follow both over a time span covering their married years, their marital breakup, and all postmarital years until their children were no longer dependents, and (c) be gathered from a sizable and nationally representative sample of marital breakups.

The PSID data used here have several, although not all, of these qualities. They track the pre- and postbreakup situations of former spouses, provide independent information about each of them, and match the information at the microlevel on a pairwise basis to represent both parts of the former couple. This is much more than other U.S. data sets on a national scale can do. However, the sample size is small: 114 ex-couples constitute the base in all cross-sectional analyses, and 100 ex-couples form the base in the change analysis. In addition, the ex-couples are limited to those married and living together in 1968 (a limitation needed to match information for both ex-spouses in the PSID), with both ex-spouses still being interviewed in 1982.[1] In addition, many of the ex-couples are followed for too short a period of time for their children to become financially independent adults. This is a shortcoming that currently cannot be overcome fully with any U.S. data set at a national level; even with 15 more years of PSID data (an added span longer than what is available currently), observations for many ex-couples would end prior

to their children's financial independence (or age 18) because the children were quite young at the time of divorce in the late 1970s or early 1980s. Additional years of data, however, could prove informative, and further analysis using additional waves is planned for the future.

Ex-couples form the basis of the sample, but the unit of analysis is the "ex-couple-year," defined as a calendar year following the breakup of a married couple, with a "breakup" identified when a 1968 wife becomes either a household head with marital status of "separated"[2] or "divorced" or a "remarried" wife. Two variants of the ex-couple year are used, one applies to cross-sectional analyses and the other applies to estimates of year-to-year change. The units span the calendar years 1969-1981. For the cross-sectional analyses the ex-couple year itself is the unit of analysis, and there are from 1 to 13 units per couple. For the change analysis, consecutive pairs of ex-couple years constitute the units of analysis; there are from 1 to 12 units per couple.

INCOME VARIABLE

To scale income equally across the different years, all dollar amounts have been converted to 1968 dollars via a Consumer Price Index adjustment. Throughout the observation period, child support payments reflect transfer amounts reported by the custodial mother and are measured as the sum of child support and alimony (combined because the early years of the PSID failed to differentiate them). In the analysis of determinants of payments, the dependent variable is the per-child amount of transfers from the absent father (equal to total transfers divided by the number of children under the age of 18 still living with the custodial mother).[3]

The PSID measure of child support involves potentially counteracting sources of bias. Reliance only on reports of child support by the recipient spouse (the custodial mother) may tend to bias downward the estimates of those payments, although work by Schaeffer, Seltzer, and Klawitter (1991) and Cherlin, Griffith, and McCarthy (1983) suggests that this influence is small. Operating in the opposite direction is a likely upward bias resulting from the necessity of combining alimony and child support payments into one variable. Bias from this source is not, however, uniform across all ex-couples because alimony awards are rare among low-income divorcing couples. Tests for effects of combining alimony with child support are included in the analysis of determinants of transfers.

To assess equitable levels of additional child support payments, we use a measure of family income relative to needs that is the ratio of family

money income to family money needs, with needs reflecting the standards used in official poverty figures and based on family composition. A ratio of family income-to-needs with a value of less than 1 means the family is poor according to the official definition of poverty.

Estimates of the absent father's economic resources, a key measure in all analyses, have potentially counterbalancing sources of bias. The restriction of the sample to marriages in or before 1968 lends a small upward bias to estimates of the absent father's economic resources,[4] as does attrition over the observation period (due especially to losses of absent fathers).[5] Adjustments for differential attrition, made when possible through the use of weights, helps counterbalance bias from the latter source.[6] An additional counterbalancing force enters the calculations because the absent father's income is likely to rise over time and ex-couple years long after the marital breakup are underrepresented.

DETERMINANTS OF CHILD SUPPORT

THEORETICAL FRAMEWORK

The theoretical framework for analysis of the determinants of child support payments is based on work by Beller and Graham (1985) and Cassetty (1978). Their theoretical models are merged and adapted to a dynamic perspective, with the following equation forming the basis of this expansion and synthesis:[7]

$$CS_{i,t} = b_{0,i,t} + b_{A,i,t}(A_{i,t}) + b_{N,i,t}(N_{i,t}) + b_{R,i,t}(R_i) + b_{B,i,t}(B_{i,t}) + e_{i,t} \qquad [1]$$

where

$CS_{i,t}$ is per-child child support paid by the absent father to the custodial mother in the ith ex-couple at time t,
$A_{i,t}$ is the ith absent father's ability to pay child support at time t,
$N_{i,t}$ measures the economic status (excluding child support received) at time t of the children living with the ith custodial mother,
R_i is a time-invariant factor—race—that (assuming no mixed-race marriages) reflects a characteristic of the ith ex-couple that tends to affect the earnings capacity of both the absent father and custodial mother as well as the potential marriage prospects of the custodial mother (it thus mixes persistent aspects of both the ability of the father to pay and the economic status of the custodial mother),

$B_{i,t}$ represents the strength of bonds at time t between the former family members of the ith ex-couple, and
$e_{i,t}$ is the error term.

We simplify this equation in a number of ways to derive both a cross-sectional and corresponding change equation to be estimated with the PSID data. First, we assume time invariance in the effects of the determinants of child support payments. This assumption reduces Equation (1) to

$$CS_{i,t} = b_{0,i,t} + b_{A,i}(A_{i,t}) + b_{N,i}(N_{i,t}) + b_{R,i}(R_i) + b_{B,i}(B_{i,t}) + e_{i,t}. \quad [2]$$

In this equation, R_i, representing race, remains constant over time; however, the theoretical constructs $A_{i,t}$, $N_{i,t}$, and $B_{i,t}$ can each be represented by a variety of both time-variant and time-invariant empirical variables. We restrict our measures of the ability of the absent father to pay child support, $A_{i,t}$, to time-variant variables consisting of the absent father's annual level of family income and number of children under the age of 18 living with him. In the category representing the economic status of the mother, $N_{i,t}$, is a time-variant variable measuring the custodial mother's annual level of family income exclusive of child support payments. Time-variant variables in the category representing the strength of the bonds between the ex-spouses, $B_{i,t}$, consist of the absent father's and custodial mother's remarriage status and residential location relative to each other (i.e., whether they are living in the same state). We represent the time-variant variables by $A_{i,t}$, $N_{i,t}$, and $B_{i,t}$, respectively.

Other variables in $N_{i,t}$ and $B_{i,t}$ vary from person to person but are time invariant. These include, in $N_{i,t}$, the custodial mother's level of education (actually, this could vary over time but is not observed to in our data set) and, in $B_{i,t}$, the number of children under the age of 18 present in the ex-couple's home just before the marital breakup. We represent these time-invariant variables by N^*_i and B^*_i, respectively.

One remaining set of variables measures dimensions of time. These variables are, in $N_{i,t}$, the age of the custodial mother and, in $B_{i,t}$, the number of years since the marital breakup. These two variables vary across ex-couples but are merely incremented by 1 unit as time progresses 1 year. We represent these as $AGE_{i,t}$ and $TIME_{i,t}$, respectively.

With this clarification of components, Equation (2) for the ith ex-couple becomes

$$CS_t = b_t + b_A(A_t) + b_N(N_t) + b_{N^*}(N^*) + b_{AGE}(AGE_t) + b_R(R) + b_B(B_t) + b_{B^*}(B^*) + b_{TIME}(TIME_t) + e_t. \quad [3]$$

Our cross-sectional analysis estimates Equation (3) with maximum-likelihood methods and per-child child support payments as the dependent variable.[8] This measure is censored at zero because child support payments cannot take on negative values. A large proportion of the observations (54.9% unweighted, 49.5% weighted) are limit cases; consequently, the normal assumptions of linearity in the ordinary least squares (OLS) regression model are not justified. This problem is circumvented by the use of maximum-likelihood TOBIT estimators. Predictor variables are contemporaneous with the dependent variable except for some misalignment due to different reference periods for family composition measures versus income measures (most interviews are taken in the spring but ask about the prior calendar year's income).

The Equation (3) specification, like that of other work on the topic, is subject to possible omitted variable bias due to unmeasured heterogeneity. Longitudinal data matching the situation of ex-spouses over time at the microlevel offers the opportunity to eliminate one form of this potential bias—unmeasured stationary heterogeneity—by allowing estimation of a first-difference specification of Equation (3). Unmeasured stationary heterogeneity could be problematic, for example, in identifying the true relationship between the level of child support and remarriage by the absent father. There may be something about remarriage itself that initiates changes in child support behavior (e.g., severing of ties between the absent father and his children living with his former wife or strengthening of ties to the new wife may either directly or indirectly discourage fulfilling responsibilities to his children). But an absent father being remarried could reflect things other than changes associated with the remarriage. Postdivorce marital status could be an indicator of the orientation of an absent father to family responsibilities, thus reflecting a characteristic of the father, not the remarriage. Separating a causal effect from the influence of interpersonal differences is less problematic in a properly specified change analysis than in cross-sectional analysis. Factors that both affect the level of child support in the same manner at different points in time and themselves remain constant over time for a given individual—stationary heterogeneity, both measured and unmeasured—drop out of a first-difference specification.

Taking the first-difference of Equation (3) results in the time-invariant terms dropping out and the time-mirroring terms becoming part of the constant term. For the ith ex-couple, this reduces to

$$CS_t - CS_{t-1} = (b_t - b_{t-1}) + b_A(A_t - A_{t-1}) + b_N(N_t - N_{t-1}) + b_B(B_t - B_{t-1}) + (e_t - e_{t-1}). \quad [4]$$

In the change analysis, the dependent variable measures change in per-child child support payments from one year to the next. Because this variable can assume both positive and negative values, OLS regression is used to estimate Equation 4. Change in the absent father's ability to pay child support, change in the economic status (exclusive of child support) of the custodial mother's family, change in the strength of ties between the former family members as measured by remarriage of either or both ex-spouses, and movement to different states constitute the predictors in this specification. These predictors, like the dependent variable, are specified as change from one year to the next.

A change analysis would not be possible without multiple observations for the same ex-couples. However, there is a drawback to the multiple observation aspect of the data—it creates less independence across the sample than is indicated by a simple count of the ex-couple years. Both the change and cross-sectional analyses, consequently, involve non-independence of the error term. To adjust for this, t ratios are calculated taking account of possible design effects, including nonindependence of ex-couple years as well as features of the PSID sample design that deviate from simple random sampling. This is done by forming jackknife replications of the sample, based on sample design parameters, and then calculating the variance of the coefficients across all replicates (see Kish & Frankel, 1974). The regression analyses use direct calculations of t ratios adjusted for design effects. However, because maximum-likelihood methods are used for the cross-sectional analysis, their t ratios are calculated by dividing the maximum-likelihood t ratio by the square root of the design effect estimated with an analogous OLS regression.

Both weighted and unweighted estimates were attempted, but problems were encountered with weighted estimation in the cross-sectional maximum-likelihood procedures. We present weighted and unweighted results for the first-differences regression. For comparing the cross-sectional and change analysis results we concentrate on unweighted estimates.

EMPIRICAL FINDINGS

Table 1, in the three right-hand-side columns, presents the results of our empirical estimation of Equations (3) and (4). (The means and standard deviations of the variables used in this empirical estimation are given in the corresponding three columns on the left-hand side of Table 1.) In discussing these findings we focus on the results of the first-differences, or change, regression. Comparison of weighted and unweighted OLS estimates of the change equation indicates no large differences. With this

TABLE 1

Means, Standard Deviations, Coefficients, and *t* Ratios for Variables in Multivariate Analysis of Child Support per Child

Variable	*Mean (standard deviation)*			*Coefficient (t ratio)*[a]		
	Year-to-Year Change		*Cross Section*	*Year-to-Year Change*		*Cross-Section*
	Weighted	*Unweighted*	*Unweighted*	*Weighted*	*Unweighted*	*Unweighted*
Annual child support per child (in 1968 dollars)	–72.07	–50.62	373.83	–	–	–
	(476.35)	(432.67)	(606.14)			
Annual income of father's family (in thousands of 1968 dollars)	0.411	0.306	10.300	23.70**	16.65**	21.90***
	(4.016)	(3.778)	(6.583)	(2.29)	(2.20)	(5.04)
Number of children in father's family	0.06	0.05	0.74	–18.27	–21.83	–44.36
	(0.52)	(0.65)	(1.32)	(–0.62)	(–1.15)	(–1.57)
Annual income of mother's family (in thousands of 1968 dollars)	1.150	0.828	8.806	0.99	–1.65	–6.42**
	(8.755)	(6.588)	(8.057)	(0.45)	(–0.59)	(–2.51)
Father remarried	0.067	0.061	0.477	107.39	82.49	56.14
	(0.249)	(0.239)	(0.500)	(0.75)	(0.55)	(0.93)
Mother remarried	0.073	0.059	0.401	–361.97***	–361.69***	–367.86***
	(0.261)	(0.235)	(0.490)	(–2.67)	(–3.17)	(–5.08)
Father and mother in different states	0.041	0.039	0.237	–10.04	–24.83	–128.14***
	(0.199)	(0.193)	(0.426)	(–0.22)	(–0.65)	(–2.65)

Number of children in family the year of marital breakup	–	–	2.7	–	–	–36.59*
			(1.6)			(–1.80)
Number of years since marital breakup	–	–	5.67	–	–	–23.59**
			(2.99)			(–2.04)
Age of mother	–	–	36.5	–	–	–2.25
			(6.7)			(–0.39)
Mother's education						
Less than high school	–	–	0.316	–	–	–110.22**
			(0.465)			(–1.99)
High school (excluded)	–	–	–	–	–	–
Some college or more	–	–	0.165	–	–	211.79**
			(0.371)			(2.08)
[chi-square test]	–	–	–	–	–	[25.2***]
Whether Black	–	–	0.276	–	–	–165.90**
			(0.448)			(–2.07)
Constant	–	–	–	–62.08	–36.07	188.78
Number of observations	595	595	709	595	595	709
R-squared	–	–	–	.075	.062	–

a. The Year-to-Year Change columns measure the variables in terms of change in status or change in annual flows from one year to the next. The Cross Section columns measure the variables as status (at date of interview or at time of marital breakup) or as an annual flow (over the calendar year preceding the date of interview). The coefficients in the Year-to-Year column are OLS regression coefficients and the *t* ratios reflect corrections for design effects. The coefficients in the Cross-Section column are the product of TOBIT coefficients and the unweighted proportion of the sample with a nonzero value on the dependent variable (.451). The *t* ratios in the Cross-Section column are based on OLS regression estimates of design effects. All corrections for design effects use the jackknife approach to correct for all survey design effects (including the pooling of ex-couple years).

*Significant at .10 level; **significant at .05 level; ***significant at .01level.

in mind, our discussion focuses on unweighted estimates when making comparisons with the cross-sectional estimates. There are many similarities between the change and cross-sectional findings but also some striking differences.

The change-equation results show that different aspects of the two ex-spouses' economic and family situations are predictive of child support levels. There is a clear asymmetry. Remarriage alters child support payments only when it is the custodial mother remarrying, and changes in the annual family income of the absent father are relevant, but those of the custodial mother are not.

The results indicate an approximate $20 increase in annual per-child child support for every $1,000 increase in the absent father's annual income (2 cents to the dollar). This suggests that, although father's income has been playing a role in child support payments, substantial increases in the absent father's income have been needed to prompt detectable changes in the economic well-being of his children. Child support levels have not been sensitive to changes in the financial needs of the custodial mother, as evidenced by small and insignificant coefficients on the variable representing the income of the custodial mother's family in the change regression. These results regarding the economic resources of each parent are fairly consistent with cross-sectional findings by other researchers (see Beller & Graham, 1985; Cassetty, 1978; Del Boca, 1986).

The event of remarriage on the part of the custodial mother is a *strong* predictor of change in child support payments. This event leads to a persistent reduction in per-child child support of about $360. On the other hand, the absent father's new family formation prompts no appreciable change in child support levels. This can be seen in the results regarding the absent father's remarriage and his addition of children. A possible explanation for the lack of effect of father's new family formation is the existence of counterbalancing influences, with new family formation both weakening ties to children from the prior marriage and strengthening guilt about ignoring them.

The literature yields mixed results regarding the role of each parent's new family formation (see, for example, Beller & Graham, 1985, 1986; Cassetty, 1978; Chambers, 1979; Eckhardt, 1965; Goode, 1965). It is possible that effects of new family formation are sensitive to the equation specification and the underlying assumptions of the estimation technique, suggesting that special care should be taken in interpreting the results. An added concern in the case of the results reported here for mother's remarriage is the possibility of the observed effects being dominated by the loss of alimony when an ex-wife remarries. To test for this, we redid

all analyses to perform a crude test for differences in effects with and without alimony included with child support. The outcome suggested that alimony was not driving the results.[9]

Although the cross-sectional results tend to be quite similar to those of the change analysis, there are some exceptions. One concerns the role of mother's income. The cross-sectional analysis yields a coefficient statistically significant at conventional levels, whereas the change analysis does not. This set of findings is more indicative of an unmeasured persistent difference between low- and high-income custodial mothers than of any causal influence of the mother's need for financial assistance. Custodial mothers at the upper end of the income distribution appear to have some unmeasured and persistent characteristic that custodial mothers at the lower end of the income distribution do not have and that facilitates securing larger child support payments from their ex-husbands. It could be that custodial mothers leaving wealthy marital unions have better access to effective legal assistance, with both higher court awards and more effective enforcement. It is unlikely that the effect is directly due to the absent father's having higher income because that is controlled in the cross-sectional specification. We should note, that regardless of the cause, the association between mother's income and child support payments is weak. Even in the cross section the coefficient is quite small.

We do find a very large coefficient in the cross section for a different variable—residential mobility of the ex-spouses. This is another variable showing no relationship to child support payments when examined from the change perspective. The change results suggest that residential mobility placing the ex-spouses in different states has no *immediate* impact on child support payments. This does not rule out *long-term* effects, however. It may be that the bonds between the absent father and his children do not become severely weakened until after several years of distant residence. It may be that such long-term effects are reflected in the cross-sectional finding of annual per-child child support levels tending to be about $130 lower if the ex-spouses are in different states (last column of Table 1). However, it is possible, instead, that this result reflects an unmeasured and persistent quality of the absent father. It may be that absent fathers willing to reside in different states than their children have always felt less responsibility toward their children than have absent fathers continuing to reside in the same state. The findings here cannot entirely sort out the underlying causal mechanism regarding residential mobility; they do indicate no short-term causal effect. The literature (see Cassetty, 1978; Chambers, 1979; Sorenson & MacDonald, 1983) indicates cross-sectional findings similar to those in Table 1. An unmeasured-heterogeneity expla-

nation is further supported by findings indicating that visits and payments to children are complimentary (Seltzer, Schaeffer, & Charng, 1989) and that absent fathers' motivation to provide support is important to levels of support (Teachman & Polonko, 1989).

IMPROVING THE RELATIVE ECONOMIC BALANCE BETWEEN EX-SPOUSES

Indications are that, although the effect of father's income on child support is statistically significant, it is modest in magnitude. This raises questions about its *maximum potential size* and the extent to which children's economic situation could be improved through increased transfers from absent fathers. In addressing these questions it is important to take account of remarriage by ex-spouses because remarriage introduces complexities in equity considerations, especially if ex-spouses have acquired additional children. Here we explore the implications of raising child support to what are *maximal equitable levels*. This is an empirical exercise designed to estimate the economic improvements for children that could be achieved by transferring enough income from the absent parent to place the current families of both ex-spouses on an even par economically. Using cross-sectional information, we measure economic status in terms of the ratio of family money income to family money needs, with a value of 1.0 being the poverty threshold. New family formation by either ex-spouse enters into this assessment because both income and needs are measured at the family level.

Absent fathers are likely to form new families with children within a few years of the marital breakup (Bane & Goldstein, 1984); hence, they may well have financial obligations to two sets of children. Because of this, equitable treatment of *all* of a man's children becomes an issue. The custodial mother may have a new family as well, with remarriage providing income from a new husband, and, as we have seen, the absent father tending to reduce his financial assistance. If the goal is improving children's economic situation and achieving equity between children with the same father, then a pooling of both the family money income and the needs of the ex-spouses should form the basis of the transfers from the absent father to the children living with the custodial mother.[10] A transfer of just enough money to make the family income-to-needs ratio of the absent father's family the same as that of the custodial mother's family would mean that all children in these two families would be equally well off.

This approach provides, in many respects, a ceiling for improvements for the children in the custodial mother's family and tackles some, but not all, equity issues. Although it places all children of the absent father on an equal par economically, it assumes that the income of any new spouse, of the absent father or the custodial mother, is available to achieve this. A new spouse might well find this an unfair arrangement. In addition, the transfer of income from the absent father's family to the custodial mother's family is assumed to be free of transactions or enforcement costs, and such costs would mean less assistance if the parties involved had to cover such costs.

Comparing the economic well-being of the custodial mother and the absent father, we find that couples start, in the year prior to marital breakup, with an average ratio of family income-to-needs equal to 3.8, but then over the postbreakup period (but not including the year closest to the breakup), the custodial mother's family averages a 3.5 level, whereas the absent father's family averages a 5.1 level. If we add the income and needs of the two current families of the ex-spouses, with the possibility of a new spouse or additional children for either one or even both them, we find that the combined ratio of income-to-needs averages 4.0 across ex-couple years (exclusive of the year in which the marital breakup occurred). This finding of good potential for improving the economic situation of children of divorce by further transfers from absent fathers is consistent with other research (see Cutright, 1986; Garfinkel & Uhr, 1984; Garfinkel & Wong, 1987; Lerman, 1987; Robins, 1986).

The figures given above pertain to the average situation of ex-couples, but much of the concern about the child support system focuses on poor children. The PSID data indicate that although one tenth (8.6%) of the postbreakup years examined were ones with the custodial mother's family in poverty, only one tenth (7.5%) of *those situations* involved an absent father in poverty. Thus, by far, the largest portion of the times when the custodial mother's family is poor are times when the absent father has enough income to keep himself, and any new family he has, out of poverty. This conclusion is also reached by Garfinkel and Oellerich (1989), with less direct methods. But an important additional question is whether the *absent fathers of poor children* have enough income to move *those children out of poverty*, particularly if the increased child support is used to replace welfare payments.

To answer this, we look at ex-couple years during the period 1970-1981 when a custodial mother's family was prewelfare poor ($N = 168$), that is, having income less than needs when welfare income is subtracted from

total income. (We start with the prewelfare poor because we are interested in the role of welfare payments in preventing poverty as well as the ability of child support transfers to do so.) We then vary assumptions about access to income. With existing welfare and child support regulations and enforcement, poverty was quite prevalent. Almost three quarters (74.6%) of the ex-couple years examined were years of poverty despite welfare receipt, and 9 of 10 (91.4%) were, at best, years of near-poverty (having family income no more than 25% above family needs). Assume now that the welfare system is abolished and replaced with a system that succeeds in transferring income from absent fathers in a way that equates the ratio of income-to-needs of the families of the custodial mother and absent father. The result is considerably fewer postbreakup years of poverty for children: The percentage of ex-couple years in poverty drops from three quarters to half (48.5%), and the percentage of years in near-poverty declines from 9 of 10 to 6 of 10 (59.8%). However, this still leaves a sizable proportion—about half—of the postbreakup years ones of poverty, even assuming what is probably the maximum desirable level of child support transfer and no administrative costs.

Now suppose that families of custodial mothers are allowed to retain all of the welfare income they had been receiving. The complete retention of welfare support along with maximal child support means that about one quarter (21.8%) of the pre-welfare-poor postbreakup years for custodial mothers' families are years of poverty and about 4 in 10 (36.0%) are years of near-poverty. This is a nontrivial improvement over the situation with maximal child support and no welfare, which is, itself, a nontrivial improvement over the situation of the 1970s and early 1980s. It still leaves many children in poverty, however, a result consistent with the findings of Garfinkel and Wong (1987) and Lerman (1987).

Effects on the economic well-being of absent fathers should be considered as well. However, an absent father becoming poor as result of providing sufficient transfers to achieve economic equality between him and his children is rare. In only about 1.5% of the PSID ex-couple years would the absent father have become poor as a result of increased child support payments.

DISCUSSION

Although data limitations—a small sample size and inability to fully distinguish alimony from child support payments—preclude definitive conclusions, the findings from this investigation are intriguing. The level

of financial support of absent fathers for their former family responds quite differently to the two ex-spouses' changing circumstances. Remarriage by the custodial mother prompts sizable reductions in the absent father's assistance. But new family formation on the part of the absent father does not cause changes. In addition, while the level of assistance is not responsive to changes in the custodial mother's family income, it does increase, although modestly, with increases in the absent father's income.

The effect of mother's remarriage is large enough to raise concern that enforcement of child support is more difficult after the mother remarries. Enforcement problems could increase either because the absent father feels less obligation to his children when someone else is in the day-to-day role of "father," or because the custodial mother does not push as hard for financial assistance from her former spouse once she remarries. For policy purposes, it would be helpful to know which, if any, of these forces is most relevant.

The modest response of an absent father's financial assistance to changes in his level of income, the tendency for absent fathers to be able to pay more in child support than they currently do, and the tendency for a very unequal match between children's economic status and that of their absent father point to a clear policy prescription—closer ties of child support payments to ability to pay, with larger fractions of income earmarked for child support and payment levels designed to increase as the absent father's economic situation improves over time. It may well be that part of the lack of response to ability to pay in the past was due to institutional factors such as courts failing to change award levels when the absent father's ability to pay changed. Many new formulas for setting higher child support awards and more strictly enforcing them would move in the direction of the policy prescription.

Focusing specifically on the low end of the income distribution, the research presented in this article strongly suggests that poor children do not necessarily have poor fathers and that their absent fathers have the potential to provide large enough child support payments to substantially reduce their years of poverty, even taking account of the needs of children that the absent father has in a new marriage. However, a sizable segment of childhood years would remain years of poverty for children of divorce, especially if increased child support payments merely replaced welfare support. These conclusions ignore some equity issues and administrative and enforcement costs, which may be nontrivial especially among cases with the custodial mother receiving AFDC (MacDonald, 1979, for example, makes the point that enforcement costs may be quite high in situations where the absent father is the ex-spouse of a mother receiving AFDC). In

addition, this does nothing to address childhood poverty not attributable to parental divorce or separation (e.g., due to out-of-wedlock births, death of a parent, or unemployment of parents), and even in the case of separations, judicial support orders are difficult to obtain. Thus, although the potential for achieving improvements in children's economic well-being through greater child support is good, it alone is not sufficient to entirely eliminate childhood poverty, a conclusion also reached by Robins (1984). Additional assistance would be needed to accomplish this. A discussion of expanding options for achieving financial security for children is beyond the scope of this article; see Hill and Morgan (1991) for such a discussion.

One conclusion of a methodological nature is that cross-sectional analyses are not always sufficient for understanding the underlying determinants of financial support from absent fathers. The results here indicate that, although cross-sectional findings can accurately reflect underlying processes—as in the role of the absent father's income and custodial mother's remarriage—this is not always true. The positive cross-sectional relationship between the custodial mother's income and child support payments appears to be due to some unmeasured quality of mothers that is associated with their income levels rather than child support payments responding to the financial needs of the mother. Unmeasured differences across absent fathers may also be at the root of cross-sectional findings of a negative association between child support payments and ex-spouses residing in different states. The change results tend to rule out the possibility of a short-term causal influence of residential mobility, although long-term causal influences are still possible.

There is much left to investigate. For example, an issue raised by the findings reported here, in conjunction with Beller and Graham (1985), is the role played by the absent father's decision to provide *any* child support versus *no* child support. This decision is not directly addressed in this article, and it may be that there are major differences in the factors that affect the whether-to-give-any decision as opposed to the how-much-to-give-given-that-some-is-given decision. This is a major topic for future research. At the descriptive level, it would also be helpful to investigate the patterns of on-again/off-again payments over time.

The possibility of lags in the effects of changes in family status is also an issue for future research. Although we find no evidence of short-term effects of changes in the absent father's family status, effects may not become discernible for several years following the event. There may also be lags in the causal effects of geographic mobility. Very little is known

about these changes, as Bianchi and Seltzer (1986) point out in their analysis of children's contact with absent parents. What we do find with regard to geographic mobility suggests that the fact that the ex-spouses are living in separate states is a strong indicator of either persistent aspects of the strength of the bonds between the father and his children or persistence in the father's orientation toward taking responsibility for his children.

In conclusion, economic resources and remarriage play interesting and complex roles in the financial circumstances of children of divorce. The combination of dynamic change and cross-sectional perspectives, in conjunction with the tracking of matched pairs of ex-spouses, provides considerable insight into these roles, but further work is needed to fully identify the mechanisms and processes underlying their effects.

NOTES

1. The 1982 wave marks the end of the observation period primarily because the 1968-1982 file was the most readily available one for the original creation of a special file linking the PSID's pairs of ex-spouses. The special-file creation process was quite complex.

2. "Separation" in the PSID indicates that spouses are living apart, but that does not necessarily signify marital dissolution. A couple may separate, for example, because one spouse must leave for a military tour of duty or for a jail sentence. Due to ambiguity in interpreting "separation," all couples who reunited after living apart, regardless of the reason for separate living arrangements, are omitted from the analysis.

3. The number of children under the age of 18 from the 1968 marriage who are still living with the custodial mother is the smaller of the number of individuals under the age of 18 currently with the custodial mother and the number of individuals under the age of 18 in the family just prior to the divorce or separation.

4. A SEARCH analysis predicted, from among a base of *all* custodial mothers divorcing or separating from 1968-1982, whether the mother was married as of 1968 or became married more recently. Predictors included demographic and economic factors in the year following divorce or separation. The absent father's income was positively associated with being married in 1968.

5. A SEARCH analysis predicting whether or not the absent father left the sample by 1982 was performed with predictors including several economic measures prior to and just after the marital split. A primary predictor was the education level of the absent father; those with lower levels of education tended to be underrepresented in the PSID sample.

6. The weights reflect both initial probability of falling into the sample and differential attrition. In addition to the standard PSID adjustments for differential attrition, the weights used in this article incorporate special adjustments based on the predicted probability of attrition determined in the SEARCH run described in the previous footnote.

7. This model has no control for one important determinant—the level of payments stipulated in a court settlement or an informal agreement. No such measure is available in the data, and, if it were, it would be zero for a sizable portion of the sample because they did

not litigate. Still, it would be desirable to control for the likely level of agreed-upon child support.

8. It should be kept in mind that although these variables are labeled as "predictors," reverse causal ordering of the relationship or two-way causality may be possible. The change analysis yields clearer causality linkages.

9. We reestimated the model redefining the dependent variable to exclude alimony in the later years of the study when alimony and child support were distinguishable and adding both (a) a dummy variable indicating whether the ex-couple year was one in which the PSID combined alimony with child support, and (b) an interaction term that took on a value of 1 if and only if the ex-couple-year was one in which the PSID combined alimony and child support and the custodial mother remarried. We rejected the hypothesis that alimony was driving the Table 1 results because the mother's remarriage alone continued to have a large, negative and significant coefficient, whereas the new interaction term showed a positive and insignificant coefficient, indicating that mother's remarriage had no stronger negative effect in years when alimony was included in the dependent variable than in years when it was not.

10. For this pooling, the actual level of financial assistance from the absent father is subtracted from his income, but economy-of-scale adjustments in the needs assessment are not altered.

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