Volume Title: Horizontal Equity, Uncertainty, and Economic Well-Being

Volume Author/Editor: Martin David and Timothy Smeeding, editors

Volume Publisher: University of Chicago Press

Volume ISBN: 0-226-13726-0

Volume URL: http://www.nber.org/books/davi85-1

Publication Date: 1985

Chapter Title: Variations in the Economic Well-Being of Divorced Women and Their Children: The Role of Child Support Income

Chapter Author: Andrea H. Beller, John W. Graham

Chapter URL: http://www.nber.org/chapters/c6159

Chapter pages in book: (p. 471 - 510)

15 Variations in the Economic Well-Being of Divorced Women and Their Children: The Role of Child Support Income

Andrea H. Beller
John W. Graham

15.1 Introduction

Female-headed families are a large and growing proportion of all families. Special concern for this population stems from the limited amount of resources available to the family unit. Divorce almost always results in a decline in the level of living for all parties involved, but the decline is larger for women than for men (Hoffman 1977). Female-headed families make up a disproportionate share of the poverty population and many have little choice but to rely upon the welfare system (Bradbury et al. 1979).

Between 1970 and 1981 the number of married-couple families increased only 10.1 percent while the number of female-headed families increased 62.4 percent, so by 1981 over 15 percent of all families were headed by a woman only (U.S. Bureau of the Census 1982, table 60). This rising rate of female headship is of special concern in part because female-headed families have lower incomes and are more likely to be classified as poor than are married-couple families. In 1980 the median income of married-couple families was $23,180 compared to $10,830 for female-headed fam-

Andrea H. Beller is associate professor of family economics at the University of Illinois at Urbana-Champaign. John W. Graham is assistant professor of economics at the University of Illinois at Urbana-Champaign.

This research was supported by Hatch funds from the University of Illinois Agricultural Experiment Station and by funds from the University of Illinois at Urbana-Champaign Research Board. The authors gratefully acknowledge the excellent research assistance of Kee-ok Kim Han and Lorraine Maddox and the computer programming assistance of John Boyd. Thanks are also due to Elizabeth Peters for sharing her computer program with us for preparation of the data extract and to Morey MacDonald for some early discussions. This chapter has benefited from comments by Irwin Garfinkel and the editors of this book and from presentation at the Labor Workshop at the University of Illinois. The authors alone take responsibility for errors and omissions.

ilies (U.S. Bureau of the Census 1982, table 717). Of the 6.2 million families with incomes below the poverty level in that year, almost 3 million were female headed (U.S. Bureau of the Census 1982, table 735), a phenomenon recently dubbed the "feminization of poverty."[1] Female headship also may be of special concern because of the large number of children involved. Between 1970 and 1980 the number of children living with two parents (not necessarily their natural ones) declined 20.6 percent, while the number living with one parent (overwhelmingly their mother) increased 67.1 percent. By 1982, 15.3 percent of white and 47.2 percent of black children lived with only their mothers (U.S. Bureau of the Census 1983, p. 5). For most this is a temporary arrangement, since a large majority of divorced women remarry. However, it has been estimated that "children born in the mid-1970s have about 45 chances in 100 of living in a one-parent family for a period of at least several months before they reach the age of 18 years." (Glick and Norton 1977).

Most mothers with children from an absent father head their own families at least for a time. Figure 15.1 shows the distribution by household status in April 1979 of mothers aged eighteen and over with children (under twenty-one years of age) from an absent father.[2] Of these 6.4 million mothers, 5.5 million had previously been married to the child's father, while 0.9 million had not. Among the ever married, 3.5 million are divorced or separated: 3.2 million of these head their own families and 0.3 million live as subfamilies with parents or other relatives. Another 2.0 million are remarried and 54 thousand are widowed after remarriage. Among the never married, most head their own families. In this chapter, we focus on the two largest of these groups, divorced or separated mothers heading their own families and remarried mothers, excluding the widowed.[3]

We investigate variations in several key components of the economic well-being of ever-divorced or currently separated mothers with children from an absent father. In large measure, the economic well-being of a divorced mother depends upon the amount of family support (child support and alimony) she receives from her ex-husband, her labor force participation, and how quickly she remarries, if at all. Whether family support is received or not and how much is received is subject to considerable uncertainty, both in amount and regularity of payments. Because many divorced mothers are awarded child support while few are awarded ali-

1. National Organization of Women president, Judy Goldsmith, *New York Times*, 1 September 1983.

2. The idea for this figure comes from Bradbury et al. 1979.

3. Subfamilies pose special problems of income sharing that we cannot readily handle. Never-married mothers differ in significant ways from ever-married mothers and thus must be considered separately. Women who are widowed after remarriage form a small group whose economic position may depend more upon their current circumstances than upon having been divorced.

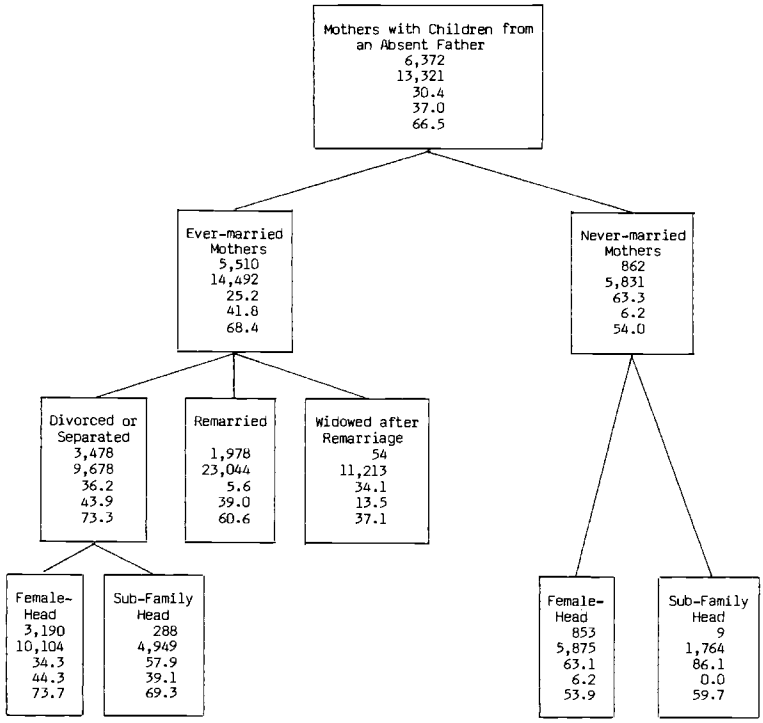

Fig. 15.1. Mothers eighteen and over with children from an absent father in 1979: number of women (in thousands); average total family income; percentage in poverty; percentage receiving child support; labor force participation rate. *Source:* Tabulations by authors from the computer tapes of the March/April Match File of the 1979 Current Population Survey.

mony, we shall devote much more attention to the former. A divorced mother is more likely to participate in the labor force than a married mother, since her earnings become crucial to the family's economic status. She also can seek to improve the position of her family by searching for a new mate to regain the economic well-being lost by divorce. One unique aspect of our study is that we pay particular attention to the effects of child support and alimony upon the probabilities of remarriage and labor force participation.

Figure 15.1 presents four measures of well-being for each household status group: average total family income; the percentage of families in poverty; the percentage of families receiving child support; and the labor force participation rate of mothers. In terms of economic status, ever-married are better off than never-married mothers, and remarriage clearly improves economic status. While the total family income of divorced (or

separated) mothers is only $9,678 and 36.2 percent of them live in poverty, family income of remarried mothers is $23,044 and only 5.6 percent of them live in poverty. The low economic position of currently divorced compared to remarried mothers occurs despite a higher proportion who receive child support (43.9 compared to 39.0 percent) and participate in the labor force (73.3 compared to 60.6 percent). These figures portray strong economic incentives for divorced mothers to remarry.

The data set upon which these population estimates are based and from which our sample is drawn is the March/April 1979 Match File of the Current Population Survey (CPS) (U.S. Bureau of the Census 1981b). Data on marital status, divorce history, and child support and alimony were collected on all women eighteen years of age and older in a special supplement to the April 1979 CPS. A file was created containing these data along with the income information from the March 1979 CPS. This file contains 1,579 currently divorced or separated female family heads and 1,005 remarried mothers. Population estimates for all mothers eligible for child support and alimony as well as descriptive analyses of them are presented in U.S. Bureau of the Census (1981a).[4]

A divorced mother will be better off if she is awarded and receives child support, if she participates in the labor force, and/or if she remarries. Women who are awarded child support are better off than those who are not, and their income is higher by more than the amount of child support received. In our sample, the total personal income in 1978 of women awarded child support was $7,970, of which child support comprised $1,115. For those not awarded child support, total personal income was $5,568. The difference is even greater between those who received child support and those who did not. Total personal income of those who received child support in 1978 was $9,425 while for those who did not it was $5,742. The average amount of child support received for those who received any was $1,901, much less than the difference in income. Women who participate in the labor market have higher personal income and receive more child support than those who do not. In 1978 the average personal income of currently divorced or separated mothers who worked outside the home was $9,632, while for those who did not it was $4,197; if they worked, they received $998 in child support, but if they did not, only $570. As shown in figure 15.1 above, although remarriage improves the economic well-being of divorced mothers the most, it appears to be associated with less child support received—$1,683 compared to $2,021 for currently divorced or separated mothers.

An important question raised by these figures is whether child support payments have a direct causal effect upon the decision to work and/or re-

4. The population estimates published in that report differ slightly from the ones we report in figure 15.1.

marry, or whether the observed association is simply simultaneously determined by other factors. To examine the interrelationships between child support and these other components of economic well-being, we postulate the theoretical model presented in section 15.2. Based upon that model, we examine in section 15.3 what factors influence the award and receipt of child support. Then in sections 15.4 and 15.5 we examine the impact of child support payments (holding constant other factors) upon remarriage and upon labor force participation, respectively.

15.2 Theoretical Framework

Before turning to our empirical work, we offer a short sketch of the theory upon which our analysis is based. We posit the following recursive system:

$$CSDUE = f^1(H^1, W^1, L^1). \tag{1}$$

$$CSREC = f^2(H^2, W^2, L^2, CSDUE). \tag{2}$$

$$RM = g[Y_d(CSREC_d, \ldots), Y_r(CSREC_r, \ldots), C]. \tag{3}$$

$$LF_d = k[W_h(CSREC_d, \ldots), W_m, V_d(CSREC_d, \ldots)]. \tag{4}$$

The first equation says that child support due (*CSDUE*) is a function of a vector of characteristics of the ex-husband's ability (and desire) to pay (H^1), the financial needs of the woman and children (W^1), and the legal environment at divorce (L^1).[5] The second equation says that support actually received (*CSREC*) depends upon the same three vectors of variables (H^2, W^2, and L^2) as well as upon the amount of support due. We label these vectors with different superscripts to suggest that they may contain somewhat different elements from those in the first equation. For example, W^1 may measure the judge's perception of the woman's needs, while W^2 measures the ex-husband's perception of her needs. A priori W^2 could depend in part upon the woman's current marital status (*RM*), but in our empirical work we offer evidence that this effect is limited. Past work (Gordon, Jones, and Sawhill 1978; Cassetty 1978) finds that the effect of H^2 upon *CSREC* is particularly strong where H^2 refers to the absent father's current financial status, measured perhaps by his current income or current employment status. L^2 includes child support enforcement laws which vary from state to state.

5. Equation (1) might be viewed as a reduced form expression derived from equilibrating the mother's demand for with the absent father's supply of child support, where equilibrium is attained through either private negotiation or the court system. Viewed this way, one could investigate determinants of these demand and supply functions such as other anticipated sources of support (including alimony and property settlements) and the tax treatment of these alternative income sources. However, we choose not to pursue this line as our data are better suited to analyzing the reduced form than the structural equations.

Equation (3) states that the probability a divorced woman remarries (RM) depends negatively upon her real income (monetary plus nonmonetary) while divorced (Y_d), positively upon her expected real income if remarried (Y_r), and negatively upon the costs of marital search (C). Since child support payments are supposed to continue even after a woman remarries, $CSREC$ enters both Y_d and Y_r, although a priori we allow expected receipts to vary with marital status ($CSREC_d$ and $CSREC_r$). Ceteris paribus, an increase in child support payments will reduce the expected increase in income from remarriage (because, although portable, child support payments are a larger fraction of Y_d than of Y_r), but will raise the woman's attractiveness to potential marriage partners. Therefore, the net impact of child support on remarriage is ambiguous. It should be noted that public assistance benefits may be another important component of Y_d.

The final equation states that the probability a divorced woman is in the labor force (LF_d) depends negatively upon the value of her time at home (W_h), positively upon the value of her time in the market (W_m), and negatively upon nonlabor income (V_d), which itself depends upon child support payments ($CSREC_d$). If a woman uses child support payments to purchase for her children market goods that can be substituted for her home time, then W_h may depend negatively upon $CSREC_d$. In this case, the net effect of an increase in $CSREC_d$ on LF_d is ambiguous: it raises V_d which reduces LF_d, but it lowers W_h which raises LF_d.

To summarize, economic theory cannot determine the net impact of child support payments on either the probability of remarriage or the probability of labor force participation. Instead, this remains to be determined by empirical analysis.

15.3 Empirical Analysis of Child Support

Child support payments are in many cases an uncertain and inadequate source of income to divorced mothers. In this section we examine what factors determine whether a woman is awarded child support, and then, given its award, whether she actually receives it as well as how much she receives. Our study significantly improves upon previous studies of child support (Cassetty 1978; Gordon, Jones, and Sawhill 1978; and Sorensen and MacDonald 1981) by separating the question of award from receipt and by using a large national data set that samples the entire eligible population.

Excluding observations with missing values, our sample consists of up to 2,416 ever-divorced or currently separated women (eighteen years of age or over) with children (under twenty-one years of age) from an absent father. There are 389 black women and 2,027 nonblack, of which 7 percent are of Spanish origin. At divorce or separation, 72.6 percent of these women were awarded child support—77.5 percent of nonblacks and 47.6

percent of blacks.[6] For those who were due payment in 1978 the average annual amount due was $2,028.[7] Of these, 71.4 percent received partial or full payments averaging $1,899. While the large majority of those due support received at least partial payment, 45.4 percent reported receiving no payments or irregular payments. Means and standard deviations for various characteristics of this sample are summarized in the appendix, table 15.A.1.

In this section, we estimate determinants of the award and receipt of child support for currently divorced or separated and remarried women.[8] Because black women are much less likely than nonblack women to be awarded child support, we estimate the determinants of award probability separately by race. However, in analyzing the receipt of child support, we combine blacks and nonblacks because too few blacks are awarded child support to permit separate analysis.[9] The variables used in the regression equations are defined in the appendix, table 15.A.2.

15.3.1 Determinants of the Probability of Being Awarded Child Support

Child support awards may be either court ordered or informally agreed to, although even most voluntary agreements are formalized through legal contracts. Our theoretical analysis postulates that child support is more likely to be awarded the greater is the perceived need of the woman and children and the greater is the ability (or desire) of the absent father to pay. The probability of award also depends upon the legal environment at divorce which varies from state to state and over time, and may vary within a state across legal jurisdictions, as well as across individual judges. There is some evidence that in states with no-fault divorce, the amount of child support awarded is lower than in states without no-fault divorce (Peters 1982). For our sample we have only some of the desirable information on the needs of the mother and on the ability of the father to pay, and no information on the legal environment.[10]

6. Black mothers are significantly less likely to be awarded support even after controlling for other factors.

7. Around 17.2 percent of all mothers—16.8 percent of nonblacks and 21.6 percent of blacks—awarded child support were not due any in 1978 for a variety of reasons such as death of the previous spouse and children past the age of eligibility for support.

8. In separate regression equations we found no systematic differences between them in the estimated coefficients.

9. Equations estimated for the nonblack sample alone are nearly identical to those for all races combined, with the notable exception that the black intercept dummy is usually significant in the combined sample.

10. It would be especially desirable to have some direct information on the financial circumstances of the father at the time of divorce. For our sample, it is not possible to find a simple measure of the legal environment at divorce because the divorce year varies from 1945 to 1979. Ten percent of the sample were divorced in 1965 or earlier and 29 percent in 1970 or earlier. We could not in any case account for the individual variation from judge to judge in a study at the national level. For a study that takes account of such variation in a single state, see Chambers 1979.

Let P be the probability that child support is agreed to or awarded conditional upon a woman being ever divorced or currently separated. Then the logistic function

$$P = 1/(1 + e^{-\beta X - u}) \tag{5}$$

was estimated by maximum likelihood methods, where X is a vector of independent variables and β a vector of coefficients to be estimated. Table 15.1 presents the estimated partial derivatives of P with respect to each variable, found by multiplying the estimated βs by $\overline{P}(1-\overline{P})$, where $\overline{P}$ is the mean of the dependent variable.

Variables that may reflect the new family's financial need include the mother's age at divorce (*AGEDIV*), education (*EDUC* and *COLLGRAD*), number of children by the absent father (*PATERNR*) and age of the children (*KID6TO17*). While no direct information is available on the father's financial status at the time of divorce, his ex-wife's age (at divorce) and education will be positively correlated with his own and, consequently, with his ability to pay. Another proxy for his ability to pay is the value of the property settlement reached in the divorce proceedings (*SETVAL*). Finally, geographic location variables (*NEAST*, *NCENTR*, *SOUTH*, *SMSA*, and *CC*) may control for some of the variation in the legal environment that we are unable to capture.

It is important to distinguish divorced from separated (*SEP*) women in our sample. Fourteen percent of the nonblacks are currently separated, while 48 percent of the blacks are separated. Separated women may but are less likely to be awarded child support. According to our estimates, ceteris paribus, separated nonblack (black) women are 21 (29) percent less likely than comparable divorced women to have been awarded child support.

For nonblacks, the probability of being awarded child support increases as the number of dependent children increases (*PATERNR*), by 4.1 to 4.7 percent per child, and as one or more of these children tends to be older (*KID6TO17*). For the black sample, however, neither variable is significant.

EDUC is positive for both groups but significant only for nonblacks. In addition, the dummy variable *COLLGRAD* is negative and significant for nonblacks, suggesting that college-educated women are between 2.5 and 5.0 percent less likely than otherwise similar high school graduates to be awarded child support. As noted above, *EDUC* may serve both as a proxy for ex-husband's lifetime earnings potential and as a measure of the new family's financial needs. Although more education may enable a woman to support the children herself, thereby reducing needs, it also raises the standard of living to which the family is accustomed, thereby increasing needs. The positive sign on *EDUC* may reflect both this second effect as well as her ex-husband's ability to pay, while the negative coeffi-

Table 15.1 Child Support Award Probability

	Nonblack		Black	
Independent Variable	(1)	(2)	(3)	(4)
EDUC	.025	.019	.020	.016
	(4.91)	(3.60)	(1.67)	(1.27)
COLLGRAD	−.125	−.126	.022	.027
	(2.79)	(2.60)	(0.14)	(0.17)
SPANISH[a]	−.088	−.089	—	—
	(2.46)	(2.44)		
NEAST	−.086	−.074	−.055	−.092
	(3.00)	(2.44)	(0.54)	(0.88)
NCENTR	.018	.004	−.040	−.063
	(0.64)	(0.10)	(0.41)	(0.63)
SOUTH	−.055	−.059	−.058	−.069
	(2.06)	(2.10)	(0.65)	(0.76)
SMSA	.014	.008	.160	.155
	(0.60)	(0.32)	(1.61)	(1.53)
CC	−.024	−.016	−.179	−.170
	(0.88)	(0.55)	(2.16)	(2.00)
PATERNR	.047	.041	.022	.019
	(4.01)	(3.38)	(1.02)	(0.84)
KID6TO17	.053	.042	.025	.017
	(2.28)	(1.69)	(0.30)	(0.20)
NUMMAR	−.033	−.024	.042	.053
	(1.38)	(0.96)	(0.50)	(0.64)
REMAR	−.040	−.023	−.073	−.094
	(1.69)	(0.91)	(0.86)	(1.06)
AGEDIV	.001	−.001	.008	.006
	(0.84)	(0.39)	(2.33)	(1.68)
SEP	−.207	−.129	−.291	−.207
	(7.50)	(4.39)	(4.62)	(3.13)
SETVAL	—	.094	—	.151
		(6.90)		(2.51)
Constant	−.097	−.051	−.439	−.389
	(1.13)	(0.57)	(1.70)	(1.49)
Likelihood ratio test (chi-square)	180.9	241.7	48.6	49.8
N	2,027	1,907	389	373
Mean of dependent variable	.775	.769	.476	.453

Notes: Table represents all ever-divorced or currently separated women, age eighteen and over, with children under twenty-one years of age from an absent father, as of spring 1979.

The logistic function $P = 1/(1 + e^{-\beta X - u})$ was estimated by maximum likelihood methods and the coefficients reported above are $\beta\bar{P}(1 - \bar{P})$ where $\bar{P}$ is the mean of the dependent variable reported in the last row of the table. Asymptotic t-values are shown in parentheses.

[a]*SPANISH* was omitted from the equation for blacks because less than 1 percent of the sample was Spanish.

cient on *COLLGRAD* may reflect the competing effect of less need for support.

The coefficient on the woman's age at divorce (*AGEDIV*) is positive for both races and significant for blacks. In part, her age is again a proxy for her ex-husband's ability to provide support. (It appears to be a better proxy for income of black ex-husbands than is her education.) But in addition, the variable is strongly positively correlated with the duration of the marriage.[11] Longer marriages may be more likely to result in child support awards for several reasons. Chief among them is that the father is likely to be more attached to his children and therefore more disposed toward providing them support. A longer duration of marriage might also suggest that the woman has invested more in this marriage, developing greater marriage-specific capital (Becker, Landes, and Michael 1977), and specialized more in home activities, developing less human capital valued in the market. Thus, she would be less able to support the children.

In neither racial sample of ever-divorced women is current marital status (*REMAR*) significant. This result is important in that it suggests that women who have remarried do not possess some unobserved traits that made them systematically more or less likely to be awarded child support at the time of their divorce.

For a slightly smaller sample of women, we were able to include an index of the value of property settlements (*SETVAL*) as a proxy variable for the financial well-being of the couple before divorce. Since property settlements and child support awards are determined together, the coefficient on *SETVAL* may be biased if any unobservable factors that affect the value of property settlements also affect the probability of being awarded child support. To the extent that *SETVAL* is a good proxy, its significant positive coefficient for both racial groups reinforces the hypothesis that father's ability to pay (and the original family's standard of living) is a strong determinant of child support awards. Note that the inclusion of *SETVAL* reduces the coefficients on *EDUC* and *AGEDIV*, other proxies for father's ability to pay.

For the sample of all women both awarded child support and expecting to receive it in 1978, we estimated equations on factors determining the amount due (results not shown). With a few notable exceptions, factors that determine whether or not child support is awarded also affect the amount due. Few child support awards are automatically indexed to the rising price level (Krause 1981, p. 24), and most are infrequently renegotiated; thus, we controlled for the number of years since the divorce (*YEARSDIV*) and found its coefficient to be negative and significant. We

11. We also estimated this equation for the sample of currently divorced (or separated) women only for which we know marriage duration (*DURMAR*). When we enter *DURMAR* as an independent variable in place of *AGEDIV*, its coefficient is positive and significant for nonblacks, but insignificant for blacks.

also introduced as an explanatory variable the woman's estimate of her ex-husband's current income (*HUSINC*); this considerably reduces the sample size because many women do not know *HUSINC*.[12] While the results from this smaller sample may be biased because of this self-selection, the means of the independent variables (reported in table 15.A.1) change very little from the full sample. We found the coefficient on *HUSINC* positive and significant, suggesting that each additional $5,000 in the absent father's 1978 income raises child support due by $219. The coefficient on *EDUC* declines in size, but remains significant, suggesting that *EDUC* stands for more than just his *current* ability to pay. We have argued that it serves as a proxy for his lifetime earnings potential upon which the support award is likely to be based. It may also indicate a higher standard of living to which the family is accustomed.

15.3.2 Determinants of the Probability of Receiving Child Support and of the Amount Received

Not all women due child support actually receive it. Of those expecting payment in 1978, only 71.4 percent received any. Moreover, those who receive it frequently receive less than what is due. Among women receiving some support, the mean receipt was $1,899 out of the $2,204 due them, around 86 percent. In this section we offer some evidence that the probability of actually receiving child support, unlike its award, depends less upon the needs of the woman and more upon the current financial status of her ex-husband.

This problem consists of two related issues: first, whether a divorced mother receives any child support and second, how much she receives. This second issue introduces the possibility of sample selection bias: estimates of the determinants of support received may be biased if some omitted factors that determine whether the woman gets into the sample (i.e., receives any child support) also determine how much she receives. To correct for this sample selection bias, we use a technique developed by Heckman (1979) that eliminates the bias by introducing a new independent variable λ (negatively related to the probability of receiving child support) into the regressions on amount of child support received. Using maximum likelihood probit, first we estimate determinants of the probability of receiving *any* child support in 1978, conditional upon some payment being due. Estimated partial derivatives of these factors are presented in columns (1) through (3) of table 15.2. Next we use the probit estimates to compute a

12. This variable is believed to be subject to considerable measurement error, which would increase its standard error. However, since the variable is measured in increments of $5,000, we believe that it provides a reasonably good indication of relative magnitudes of incomes among ex-husbands. If the woman knows what kind of job her ex-husband holds and whether or not he is employed, she should have a rough idea of what he earns, which is good enough for our purposes.

Table 15.2 **Receipt and Amount of Child Support**

	Probability of Receiving Child Support			Amount of Child Support Received for Those Who Received Any		
	(1)[a]	(2)[a]	(3)[a]	(4)[c]	(5)[c]	(6)[c]
BLACK	−.101	−.123	−.043	−299	−259	−56
	(2.69)	(3.03)	(0.73)	(2.49)	(1.70)	(0.38)
SPANISH	−.030	−.020	−.104	−346	−406	−926
	(0.61)	(0.38)	(1.39)	(2.83)	(3.02)	(3.60)
NEAST	.082	.081	.094	177	170	107
	(2.36)	(2.23)	(1.99)	(1.30)	(1.71)	(0.84)
NCENTR	.055	.065	.110	−50	−5	−139
	(1.85)	(2.12)	(2.83)	(0.67)	(0.05)	(1.08)
SOUTH	.042	.047	.060	−114	−71	−90
	(1.43)	(1.50)	(1.55)	(1.58)	(0.90)	(0.88)
SMSA	−.018	−.015	−.045	39	18	−67
	(0.70)	(0.54)	(1.35)	(0.66)	(0.29)	(0.77)
CC	.010	.012	.079	90	95	30
	(0.32)	(0.36)	(1.84)	(1.30)	(1.29)	(0.26)
EDUC	.015	.016	.013	0.2	6	−22
	(2.87)	(2.89)	(1.90)	(0.02)	(0.36)	(1.12)
AGE	.027	.022	.005	59	67	59
	(2.66)	(2.05)	(0.46)	(1.95)	(2.27)	(2.03)
AGESQ	−.0003	−.0002	−.0001	−0.6	−0.7	−0.6
	(2.12)	(1.52)	(0.45)	(1.64)	(1.90)	(1.61)
PATERNR	−.012	−.026	−.022	18	−13	83
	(1.05)	(2.13)	(1.54)	(0.63)	(0.38)	(2.03)
OTHERKID	−.079	−.069	−.087	89	49	140
	(2.78)	(2.35)	(2.35)	(1.01)	(0.51)	(1.06)
KID6TO17	.066	.087	.072	−64	−20	−253
	(2.02)	(2.55)	(1.76)	(0.74)	(0.19)	(2.18)
CSVOL	.222	.221	.155	173	271	−31
	(8.33)	(8.03)	(4.55)	(1.23)	(1.63)	(0.22)

NUMMAR	−.045	−.039	−.085	−198	−204	−180
	(1.59)	(1.40)	(2.73)	(2.69)	(2.74)	(1.47)
YEARSDIV	−.020	−.020	−.011	−7	−15	21
	(6.94)	(5.88)	(2.63)	(0.42)	(0.84)	(1.39)
REMAR	−.008	−.005	−.028	−159	−123	−53
	(0.30)	(0.17)	(0.80)	(2.63)	(1.92)	(0.62)
HUSCHD	—	−.012	—	—	−41	—
		(0.48)			(0.66)	
HUSINC	—	—	.027	—	—	−2.96
			(3.33)			(0.10)
CHSUPDUE	—	—	—	0.891	0.897	0.930
				(80.1)	(79.2)	(61.6)
$\lambda(1)^b$	—	—	—	198	—	—
				(0.45)		
$\lambda(2)^b$	—	—	—	—	433	—
					(0.82)	
$\lambda(3)^b$	—	—	—	—	—	−1,000
						(1.70)
Constant	−.521	−.430	−.068	−1,199	−1,547	−574
	(2.89)	(2.30)	(0.32)	(1.51)	(1.88)	(0.86)
$\bar{R}^2$	—	—	—	.877	.886	.901
Likelihood ratio test	219.0	195.9	100.8	—	—	—
N	1,461	1,259	648	1,043	931	521
Mean of dependent variable	.714	.739	.804	$1,899	$1,918	$2,146

Note: Figures are for ever divorced or currently separated women due child support in 1978.

[a]The coefficients reported in these columns are the probit maximum likelihood estimates (β) multiplied by the sample mean of normal density functions evaluated at $X_i\beta$, where X_i is the vector of independent variables for the i^{th} observation. These sample means are .297 for col. (1), .280 for col. (2), and .232 for col. (3).

[b]$\lambda = f(X_i\beta)/F(X_i\beta)$, where f and F are, respectively, the density and distribution function for a standard normal variable, and X_i and β are defined as in footnote a. See Heckman 1979, p. 156.

[c]Since we cannot reject the null hypothesis of no selection bias (i.e., that the coefficient on λ is zero), the usual OLS standard errors and t-statistics are appropriate. See Heckman 1979, p. 158.

λ-value for each mother who receives any child support and enter it in OLS regressions on amount of child support received, holding constant the amount due.[13] These results appear in columns (4) through (6) of table 15.2. Because previous researchers did not explicitly recognize the possibility of sample selection bias, their regression results on factors affecting child support received may be biased (see, for example, Cassetty 1978).

Ex post, we find only limited evidence of sample selection bias: the coefficient on λ is insignificantly different from zero in both columns (4) and (5) and only significant at a 10 percent level in column (6). The negative sign on λ in column (6) indicates that omitted factors that lower the probability of receiving child support (and therefore increase λ) also lower the amount received.

Black women are less likely to receive child support and, when they do, receive less than nonblack women, even after controlling for the lower amount they are due. However, these differences become insignificant for blacks who know their ex-husband's income. Although women of Spanish origin are equally likely to receive child support as non-Spanish women, they receive significantly less child support. The coefficient on *SPANISH* becomes even more negative for those few who know their ex-husband's income.

EDUC, *AGE*, and *AGESQ* may serve as proxies for the absent father's ability to pay. Education has a positive impact on the likelihood of payment but not on the amount. Advancing age increases both the probability of receiving payment and the amount paid at a decreasing rate (reminiscent of the manner in which earnings change with age). When *HUSINC* is included, these proxies for ability to pay become insignificant or less significant in the probability of receipt equation (col. 3), but age remains significant in the equation on the amount received (col. 6). Although *HUSINC* significantly increases the likelihood of payment, it has no significant effect upon the amount paid once we control for the amount due. Thus, we conclude that while the absent father's income is an important determinant of the amount of child support awarded (each $5,000 increment raises the amount by $219) and of whether or not he pays anything, it is not an important determinant of the portion of the award that he pays. This suggests that fathers with negative transitory income are likely to evade the support obligation altogether rather than pay a smaller portion of the amount due.[14]

13. The sample means (and standard deviations) for these λ variables are as follows:

λ(1)	.414(.246)
λ(2)	.378(.281)
λ(3)	.289(.212)

14. In a separate regression, we included child support due (*CHSUPDUE*) as an explanatory variable. Holding *HUSINC* constant, its coefficient is small but significantly positive: each additional $100 of support due increases the probability that some support will be received by .02 percent. If the absent father's permanent or lifetime income contributes posi-

Three measures of the impact of children are included. Holding constant the length of time since the divorce (*YEARSDIV*), having older children (*KID6TO17*) increases the probability of receiving support, consistent with the hypothesis that absent fathers are more likely to pay support for children whom they lived with longer. As the number of children due support increases (*PATERNR*), the probability that support will be paid appears to decline although this effect is significant only in the equation in column (2). This result is difficult to explain. If the woman has other children not fathered by her most recent ex-husband (*OTHERKID*), this significantly reduces by 7 to 9 percent the probability that he pays child support. This result is more understandable. Given the amount due, neither the number nor ages of the children affects the amount of support received, except in the sample that knows *HUSINC*. This group (col. 6) receives $83 more for each additional child but $253 less for older children, another result that is difficult to explain.

Women were asked whether their child support awards were court ordered or agreed to voluntarily. Those reporting voluntary agreements (*CSVOL*) are between 15 and 22 percent more likely to receive payments; however, given the amount agreed to, the effect of *CSVOL* on the amount received is positive but insignificant. Apparently voluntary initial agreement, which probably indicates something about the character of the father or of the relationship, has lasting effects.

If the marriage that ended in divorce was not the woman's first, her likelihood of receiving payment is reduced for each higher-order marriage (*NUMMAR*) by around 8.5 percent, at least when controlling for her ex-husband's income. Moreover, she receives up to $204 less support per higher-order marriage, controlling for the amount due. This is especially interesting in light of the finding that women in higher-order marriages seem to negotiate somewhat higher support awards (results not shown).

Absent fathers reported by their ex-wives to have other children to support (*HUSCHD*) are no less likely to pay child support. While new children may reduce his ability to support absent ones, the father's decision to remarry and have more children suggests he values family life and is apt to be more conscientious about providing support for his absent children.[15]

---

tively to the amount of child support awarded, then the significance of both *CHSUPDUE* and *HUSINC* in the same regression could indicate that his permanent income (*CHSUPDUE*) and current income (*HUSINC*) have separate effects upon his probability of paying support. Holding current income constant, absent fathers with higher permanent income are somewhat more likely to pay support. Holding permanent income constant, fathers with higher current income are much more likely to pay support. Again this is consistent with the hypothesis that current ability to pay has a strong impact upon child support payments.

15. Cassetty 1978 found that absent fathers who remarried were no more likely to pay child support, but paid significantly more. Since she does not control for amount due, her findings on amount received confound determinants of award amount with receipt amount, and thus are not directly comparable to ours.

Because of these competing effects, the insignificance of *HUSCHD* does not disturb our hypothesis that the probability of receiving child support is largely a function of the absent father's ability to pay.[16]

The variable *YEARSDIV* has a significant negative effect upon the probability of receiving child support, but not on the proportion received. Each additional year since the divorce reduces the probability of receiving support by approximately 2 percent. This relationship appears to be linear. The absent father may be less likely to pay support with each passing year if he loses physical or emotional contact with his children. (We have no information on whether he has visitation rights.) This explanation is reinforced by noting that the coefficient on *YEARSDIV* is much smaller in magnitude for the sample of women who know *HUSINC*, women who may be presumed not to have lost complete contact with their ex-husbands.

Whether the woman is remarried (*REMAR*) does not affect her likelihood of receiving any child support, but does appear to lower the amount she receives by up to $159, except for those (remarried) women who know *HUSINC*.[17] This suggests that when his ex-wife remarries, the absent father may reduce somewhat the amount of child support he pays, but not attempt to renegotiate the amount due (*REMAR* is insignificant in the equation on amount due—results not shown), nor stop paying altogether (*REMAR* is insignificant in cols. 1 through 3 of table 15.2). However, another possibility is that our regression suffers from reverse causality: women who receive less of the support they are due may be more likely to remarry. We examine this possibility in the next section.

15.4 Empirical Analysis of Remarriage

The majority of women in the United States who divorce eventually remarry. For example, in the 1979 CPS, 70 percent of divorced mothers remarried within fifteen years of their divorce. This identical remarriage rate for divorced women was found in the 1967 Survey of Economic Opportunity (SEO) data by Becker, Landes, and Michael (1977). In the CPS, one-half of all mothers remarried within five years of their divorce, and 29 percent within two years.[18]

16. Another reason why this coefficient is insignificant may be that this variable is measured with error.

17. Our results would appear to disagree with those of Cassetty 1978 which finds that remarried women are less likely to receive child support and also receive less child support. However, Cassetty's dependent variable combines child support and alimony income together. Since alimony stops with remarriage while child support is supposed to continue, her results would inevitably be negatively biased. We are fortunate to have data that enable us to separate child support from alimony income.

18. In the 1967 SEO, only 43 percent of women remarried within five years and 22 percent within two years. Either divorced mothers remarry more rapidly than divorced women in general or there has been a secular trend since 1967 toward shorter intervals between divorce and remarriage. We offer some evidence of the latter effect in our empirical estimates.

The modern theory of job search has recently been applied to marital search by, among others, Becker, Landes, and Michael (1977) and Hutchens (1979). Briefly, the probability of remarriage depends upon a woman's own search behavior and upon her attractiveness to potential marriage partners. A divorced woman can decide whether or not to engage in search, how intensively to search, and how long to search. These decisions depend upon her expected gain from remarriage, which is a function of her expected future flow of real income if single compared to her distribution of offers of real income if remarried, net of search costs. A divorced woman's distribution of offers will depend upon her attractiveness to potential mates, which will be a function of some characteristics we can observe such as age, some we cannot observe such as charm or beauty, and the amount of "marital-specific" capital (investments that are significantly less valuable when divorced, such as children) from her previous marriage. As Becker, Landes, and Michael (1977, p. 1155) point out, "positive" specific capital in one marriage may be "negative" specific capital in a subsequent marriage.

Some factors affect her search behavior and her attractiveness to others in opposite directions making it difficult to determine their net effect upon the probability of remarriage a priori. One example is a woman's portable (carries into marriage) nonwage income. A higher income if single would reduce the gain from remarriage, which might cause a woman to choose not to search or to search less intensely and longer. However, it also enhances her attractiveness to potential spouses, causing an increase in the mean of the offer distribution. This would tend to increase her probability of participation in search and have an indeterminant impact on intensity and duration of search (Hutchens 1979, p. 371). Hutchens cites Becker's theoretical analysis (1973, p. 891) as evidence that the latter effect tends to dominate the former. Thus, greater portable nonwage income is expected to increase both the probability of participation in and the duration of search.

The presence of children is another factor with competing effects. The greater the number of children, ceteris paribus, the greater the economic gain from remarriage; thus, the woman is likely to set lower standards for a new husband and to search more intensely. However, this greater specific capital from the previous marriage also reduces her attractiveness to potential marriage partners, which decreases the number and mean value of marriage offers.

We hypothesize that women will remarry quickly if they are either unusually attractive to potential mates or have established a low "reservation" set of characteristics for a new husband. Similarly, women will take longer to remarry (or never remarry) if they are either less attractive partners or have set a higher standard for a new husband.

We related the probability of remarriage by the nth year after termination of the previous marriage (n = 2, 5, 10, and 15) to the expected gain

from remarriage. We selected our sample so that all women were divorced (excludes separated) at least n years. (Thus, each successive sample is smaller than the previous one.)[19] We estimated a logistic function for each sample by maximum likelihood methods. Results for the $n = 15$ group are not shown because that sample contains less than 150 observations and because most of these women had remarried by $n = 10$. Partial derivatives of the logistic function with respect to each independent variable, evaluated at the sample mean, for divorce durations of two, five, and ten years are reported in table 15.3.

A higher age at divorce (*AGEDIV*) significantly reduces the probability of remarriage of divorced mothers at all three durations. The increase in the size of the coefficient with each successive duration suggests that age at divorce becomes an increasingly important determinant of remarriage probabilities at higher durations, possibly because it reduces a woman's attractiveness as a marriage partner. The greater her number of previous marriages (*NUMMAR*), the less likely a woman is to remarry, holding *AGEDIV* constant. Ceteris paribus, a greater number of previous marriages might reduce her attractiveness to potential marriage partners or her inclination to try again. This effect also becomes larger at higher durations.

We might expect to find a secular rise in the probability of remarriage because the divorce rate has been increasing, which makes available a greater pool of potential mates and reduces the stigma associated with being a divorced woman. Indeed, we find that for durations of five and ten years, given *AGEDIV*, the more recent the divorce (the lower *YEARSDIV*), the more likely is a woman to remarry. This effect is significant in the regressions in columns (3) and (5).

As discussed above, a greater number of children (*PATERNR*) will have the competing effects of raising search intensity but lowering potential marriage offers. (The former effect may be mitigated by the fact that a greater number of children probably increases her costs of search and reduces her need for additional companionship.) We find that the probability of remarriage within two years of divorce (col. 1) increases as the number of children increases to between two and three and decreases thereafter. The woman may have set her reservation standard low in order to remarry quickly for her children's sake, but too many children make it difficult to attract offers. At higher durations, the effect is linear: each additional

19. This structure is partly longitudinal in nature because we have marital histories for all divorced women, and partly cross-sectional because women who are recently divorced fall into the samples only for the shorter time intervals. Thus, this sequence of remarriage probabilities cannot be viewed precisely as the experience of a given cohort at two, five, or ten years after their divorce. Women divorced only two years today may behave differently by five years after divorce than women who today are already five years beyond their divorce. Within each equation, we control for differences in length of time since divorce, which should control for this cohort effect.

Table 15.3 **Probability of Remarriage, by Duration of Time Since the End of Previous Marriage**

Independent Variables	Duration of Time Since End of Previous Marriage (in years)				
	2	5		10	
	(1)	(2)	(3)	(4)	(5)
EDUC	−.010	−.014	−.011	−.010	−.008
	(1.78)	(1.89)	(1.47)	(0.97)	(0.73)
BLACK	−.215	−.312	−.320	−.178	−.149
	(4.20)	(5.21)	(5.46)	(2.25)	(1.93)
SPANISH	−.042	−.107	−.120	.097	.105
	(0.73)	(1.44)	(1.58)	(0.87)	(0.91)
NEAST	−.081	−.122	−.116	−.115	−.081
	(2.04)	(2.33)	(2.27)	(1.53)	(1.08)
NCENTR	.001	−.024	−.052	.043	.036
	(0.00)	(0.53)	(1.15)	(0.61)	(0.53)
SOUTH	.003	−.025	−.035	.089	.105
	(0.10)	(0.56)	(0.79)	(1.25)	(1.49)
SMSA	−.036	−.067	−.042	−.038	−.018
	(1.26)	(1.69)	(1.08)	(0.61)	(0.30)
CC	−.049	−.107	−.090	−.230	−.221
	(1.39)	(2.31)	(1.98)	(3.39)	(3.29)
PATERNR	.116	−.039	−.042	−.096	−.082
	(2.16)	(2.19)	(2.35)	(3.49)	(2.99)
PATSQ	−.024	—	—	—	—
	(2.16)	—	—	—	—
AGEDIV	−.012	−.017	−.019	−.021	−.023
	(6.24)	(6.59)	(7.63)	(5.24)	(5.78)
YEARSDIV	−.0002	−.004	−.012	−.009	−.017
	(0.10)	(1.09)	(2.93)	(1.31)	(2.44)

Table 15.3 (continued)

Independent Variables	Duration of Time Since End of Previous Marriage (in years)				
	2	5		10	
	(1)	(2)	(3)	(4)	(5)
NUMMAR	−.052	−.168	−.142	−.253	−.237
	(1.45)	(3.22)	(2.71)	(3.08)	(2.85)
AWARDAL	−.007	−.041	−.082	−.105	−.162
	(0.20)	(0.81)	(1.59)	(1.28)	(2.02)
SETVAL	−.007	.002	—	−.006	—
	(0.69)	(0.17)		(0.26)	
AWARDCS	−.053	−.042	.188	−.047	.180
	(1.72)	(1.00)	(3.42)	(0.80)	(2.39)
CHSUP78	—	—	−.227	—	−.291
			(3.81)		(3.40)
PCCSDUE	—	—	$-.834*10^{-4}$	—	$-.327*10^{-4}$
			(2.53)		(0.66)
Constant	.350	1.129	1.202	1.542	1.608
	(3.00)	(7.28)	(7.85)	(6.01)	(6.22)
Likelihood ratio test (chi-square)	123.2	170.0	237.1	112.2	132.0
N	1,570	1,069	1,150	474	500
Mean of dependent variable	.298	.512	.504	.658	.656

Note: See table 15.1, second paragraph of *Notes*.

child reduces the probability of remarriage within five years by 3.9 percent (col. 2) and within ten years by 9.6 percent (col. 4). When we control for child support due per child (*PCCSDUE*), the coefficient on *PATERNR* is still negative and significant at both durations. This suggests that what is unattractive about a greater number of children is more than just the cost of caring for them. The increase in the size of the coefficient on *PATERNR* with increasing divorce duration suggests that the woman's attractiveness as a marriage partner becomes an increasingly important determinant of remarriage the longer she has been divorced.

Alimony is nonportable income; that is, it stops with remarriage. As such, it should have a negative effect upon the probability of remarriage. *AWARDAL* is negative at all divorce durations, becomes larger at higher durations, but is significant only at ten years in the regression controlling for child support due (col. 5). Women awarded alimony are 8.2 percent less likely to have remarried five years after divorce and 16.2 percent less likely ten years after. This finding is consistent with findings by Hutchens (1979, p. 377) that nonportable transfers tend to reduce remarriage probabilities. Unfortunately, this is the only information about alimony we have that is relevant to the remarriage decision.

Child support income is legally portable between the single and married status. As such, it has the competing effects discussed above of decreasing the gain from remarriage but of increasing the woman's attractiveness to potential mates; therefore, theoretically its effect upon remarriage is indeterminate. Where Hutchens (1979, p. 377) was unable to draw any conclusions on the relationship between portable nonwage income and remarriage, we are able to do so. Two additional considerations make it likely that child support income will decrease the gain from remarriage more than other income. First, if a divorced mother spends child support income on the children, in part on goods and services substitutable for child care time, then it reduces the benefits to be derived from the sexual division of labor in the care of children. Second, although legally portable, in practice child support income may be only partly portable. We showed in table 15.2 that for otherwise identical women due the same amount of child support annually, remarried women receive up to $159 less than divorced women. If fully anticipated, this reduction in payments would serve to further reduce the expected gain from remarriage.

Women awarded child support (*AWARDCS*) are 5.3 percent less likely to remarry within the first two years after divorce, but this effect is significant only at the 10 percent level (col. 1). If not awarded child support, a woman stands to gain a great deal more from a quick remarriage than a woman awarded support. Consequently, she may search more intensely and set lower standards for a new husband.

In the equations of columns (3) and (5), we add measures of whether child support was due in 1978 (*CHSUP78*) and of the amount of child sup-

port due per child (*PCCSDUE*).[20] Women awarded child support *and* had it due to them in 1978 were 3.9 percent less likely to have remarried five years after the termination of their previous marriage and 11.1 percent less likely ten years after than women not awarded child support. For those awarded and due child support in 1978, each additional $500 due per child reduces the probability of remarriage within five years by 4.2 percent. Within ten years, the effect is smaller and statistically insignificant, but this may be due to the high correlation between *CHSUP78* and *PCCSDUE* in this sample. On net, child support income reduces the gain from remarriage more than it increases the woman's attractiveness to potential mates, probably because several factors work in this direction. Thus, we conclude from these findings on child support that this type of portable nonwage income reduces the probability of remarriage.

Holding constant whether and how much child support is due in 1978, *AWARDCS* becomes positive and significant. Women awarded child support but due none in 1978 (around 20 percent of the sample) are 18 to 19 percent more likely to remarry than women not awarded support, even though women both awarded and due support are less likely to remarry. If a woman is due child support or due more support, she searches longer before remarrying and may not remarry at all. But if her child support income stops, she is much more likely to remarry than if it were never awarded at all.

Two other variables that have the competing effects of reducing the woman's gain from remarriage but of increasing her attractiveness to others are her wealth at divorce (*SETVAL*) and her education (*EDUC*). *SETVAL* is insignificant in all regressions; *EDUC* is consistently negative, but significant only at the 10 percent level for durations of two and five years.

AFDC and other public assistance benefits available to single mothers are other important forms of nonportable income that would reduce the gain from remarriage and prolong the duration of divorce. Because remarriage occurs in many different years in our sample, we have no simple measure of the relevant public assistance benefits when each woman was deciding upon remarriage.[21] However, some of our variables may be interpreted as proxies for the likelihood a divorced woman received AFDC.

20. Theory would suggest that the relevant variable in the decision to remarry is dollars of child support (or alimony) received when divorced. But this variable is not available for women who have remarried. For remarried women, the best proxy for child support received when divorced is child support due now, since most child support awards are rarely renegotiated; for currently divorced women, child support due and child support received are correlated 0.88.

21. Had we restricted our sample to remarriages that took place within say the last two years instead of n years after divorce, we could have included measures of AFDC (as did Hutchens 1979). But for the problem we are interested in, our specification (similar to that of Becker, Landes, and Michael 1977) is more appropriate.

For example, by five years after termination of the marriage, black women (*BLACK*) are 32 percent less likely to have remarried than similar nonblack women. If black women, women in the northeast (*NEAST*) or in central cities (CC), and women with many children are somewhat more likely AFDC candidates than other women, then our results support previous findings (Hutchens 1979) that welfare reduces the probability of remarriage.

15.5 Empirical Analysis of Labor Force Participation

Although differences in female labor force participation rates have narrowed recently, unmarried women are still more likely to be in the labor force than married women. Among our sample of 1,503 currently divorced or separated mothers, 73.9 percent were either working or looking for work in March 1979, compared with 60.3 percent of our sample of 936 remarried mothers. The greater labor force attachment of divorced mothers is an obvious response to their loss of other family income. In this section we examine factors affecting the variation in labor force participation rates among divorced mothers, paying special attention to the influence of family support—child support and alimony.

The probability of labor force participation should depend negatively upon the value of a woman's time at home, positively upon the value of her time in the market, and negatively upon nonlabor income. The presence of younger children or more children raises her time value at home, while education and job experience raise her value more in the market than in the home. In addition, if market work imposes fixed entry costs, then a woman may elect not to participate unless her desired hours of employment exceed some critical minimum. And since hours of work depend negatively upon nonlabor income, a ceteris paribus increase in such income should reduce the likelihood a woman participates in the labor force. For divorced mothers, most nonlabor income consists of income from property, earnings of other family members, public welfare, and alimony and child support payments from her ex-husband.

In contrast to the other sources of nonlabor income, child support payments might exert an additional and opposite influence upon labor force participation. Since this income is awarded to support the children, a woman may feel explicitly or implicitly constrained to spend it entirely on goods and services for them. If these commodities (such as day care for small children) can substitute for her own home time, then she may be able to reduce her hours of work in the home and raise her desired hours of employment beyond the critical minimum required for labor force entry. If this occurs, then the net impact of child support payments on labor force participation is ambiguous. On the one hand, child support has an income effect of raising leisure, reducing desired hours of work, and

Table 15.4 **Likelihood of Labor Force Participation of Currently Divorced (or Separated) Women, March 1979**

Independent Variables	(1)	(2)	(3)
BLACK	−.085	−.076	−.076
	(2.31)	(2.05)	(2.06)
SPANISH	−.101	−.103	−.105
	(1.99)	(2.02)	(2.06)
NEAST	−.130	−.127	−.126
	(3.36)	(3.28)	(3.25)
NCENTR	−.027	−.030	−.033
	(0.70)	(0.78)	(0.84)
SOUTH	.015	.028	.025
	(0.30)	(0.53)	(0.47)
SMSA	.021	.019	.019
	(0.60)	(0.54)	(0.55)
CC	−.062	−.057	−.059
	(1.73)	(1.58)	(1.62)
KIDLT3	−.127	−.128	−.128
	(3.21)	(3.22)	(3.23)
KIDLT6	−.063	−.062	−.062
	(2.19)	(2.13)	(2.16)
KIDLT18	−.026	−.025	−.025
	(1.81)	(1.75)	(1.72)
NUMMAR	−.037	−.033	−.040
	(1.27)	(1.17)	(1.38)
EDUC	.053	.053	.052
	(8.72)	(8.79)	(8.76)
NADULT	.044	.045	.044
	(1.75)	(1.76)	(1.73)
AGE	.023	.023	.024
	(2.33)	(2.25)	(2.35)
AGESQ	−.0003	−.0003	−.0003
	(2.57)	(2.43)	(2.52)

therefore reducing the probability of labor force participation. On the other hand, child support has a substitution effect of increasing the quantity of goods devoted to children, decreasing the amount of time spent on them, and therefore raising the likelihood of labor force participation.

Table 15.4 reports estimated partial derivatives from logistic models on factors affecting the likelihood of labor force participation in March 1979 for our sample of divorced mothers.[22] All three variations contain the same economic and demographic variables but different child support and alimony variables. The coefficients on the common set of independent variables change very little across functional forms.

22. We also estimated equations with labor force participation for any part of 1978 as the dependent variable. The results—particularly on the child support and alimony variables—were virtually identical.

Table 15.4 (continued)

Independent Variables	(1)	(2)	(3)
YEARSDIV	−.006	−.006	−.007
	(2.07)	(2.08)	(2.19)
OTHFINC	$-.115*10^{-4}$	$-.117*10^{-4}$	$-.120*10^{-4}$
	(2.98)	(2.98)	(3.04)
AFDCMAX	$-5.35*10^{-4}$	$-4.84*10^{-4}$	$-4.87*10^{-4}$
	(2.77)	(2.51)	(2.52)
CHSUPDUE	$.305*10^{-4}$	—	—
	(2.99)		
ALIMDUE	$-.272*10^{-4}$	—	—
	(2.37)		
CHSUP78	—	.113	.144
		(3.70)	(4.12)
ALIM78	—	.006	−.040
		(0.10)	(0.88)
CHSUPREC	—	$-.016*10^{-4}$	—
		(0.17)	
ALIMREC	—	$-.254*10^{-4}$	—
		(1.75)	
CSREGULR	—	—	−.061
			(1.61)
Constant	−.448	−.506	−.508
	(2.22)	(2.49)	(2.51)
Likelihood ratio test (chi-square)	361.8	368.6	368.0
N	1,503	1,503	1,503
Mean of dependent variable	.739	.739	.739

Note: See table 15.1, second paragraph of *Notes*.

The pattern of coefficients on the number of children under eighteen years by age groups is consistent with findings from studies for married, spouse-present women (Smith 1980). Compared with having at home one child age eighteen to twenty, having one child age six to seventeen (*KIDLT18*) reduces the probability of participation by 3 percent; having one child age three to five (*KIDLT6*) reduces participation another 6 percent; and having one child under three (*KIDLT3*) reduces participation another 13 percent. Small children raise the value of the woman's home time and reduce her likelihood of labor force entry. Each additional adult in the household (*NADULT*) who might share in child care duties increases her labor force participation by up to 4.5 percent.

As the woman becomes more valuable in the market, her labor force participation increases. Each additional year of education (*EDUC*) raises her entry probability by over 5 percent. Advancing age (and presumably experience) raises entry at a declining rate (*AGE* is positive and *AGESQ* is negative). Finally, women who have been divorced a longer time

(*YEARSDIV*) are less likely to enter the job market. This result appears counterintuitive if labor market entry is viewed as one possible way to restore economic well-being lost at divorce (where remarriage is another possible way). One explanation consistent with this result is that mothers who are likely candidates for public assistance and therefore less likely to be working remain divorced (or separated) for a longer time than do other mothers to maintain their eligibility. Alternatively, this result may reflect the secular trend toward rising labor force participation among younger (more recently divorced) women.

Black women (*BLACK*) are around 8 percent and women of Spanish origin (*SPANISH*) around 10 percent less likely to participate in the labor force than other divorced mothers. This may reflect cultural differences and/or discrimination against minority women in the labor market. Women in the northeast (*NEAST*) are 12 to 13 percent less likely than other women to participate, while women in central cities (*CC*) are 6 percent less likely to participate. Since women with these characteristics make up a disproportionate share of the AFDC population, these results also suggest that an increased likelihood of being on public assistance reduces labor force participation, findings consistent with those of other studies such as Keeley et al. (1978).

AFDCMAX equals the maximum amount of monthly AFDC payments that a woman with a given number of children in a particular state could receive if she does not work (and has no other income) as of July 1978. (Data on *AFDCMAX* were obtained from U.S. Department of Health, Education, and Welfare 1979.) In other words, it represents potential, not actual, welfare benefits. Generous public assistance benefits, ceteris paribus, should be expected to reduce labor force participation. Our finding indicates that each additional $100 per month in benefits reduces the likelihood of labor force participation by around 5 percent. When these potential benefits are replaced by actual benefits received, the regression fits even better but it then suffers from an obvious simultaneity bias.[23]

As expected, the coefficient on other family income excluding child support, alimony, and public assistance (*OTHFINC*) is negative and significant; each additional $1,000 in annual income deters labor market entry by slightly more than 1 percent. The coefficient on amount of alimony due (*ALIMDUE*) is also negative and significant, but each additional $1,000 of alimony deters entry by 2.7 percent (col. 1). Controlling for whether or not alimony is due in 1978 (*ALIM78*), the coefficient on amount received (*ALIMREC*) is virtually identical to the one on *ALIMDUE* (col. 2). One reason that alimony appears to reduce participation more than other income is that its coefficient may be biased downward. Women

23. In addition, the size and significance of the coefficients on *BLACK*, *SPANISH*, *NEAST*, *CC*, *KIDLT3*, *KIDLT6*, *KIDLT18*, and *YEARSDIV* are reduced. This is consistent with our notion that each of these variables serves in part as a proxy for the probability of going on public assistance.

awarded alimony are probably less likely to have worked in the labor market during their marriage and thus, with less previous job experience, less likely to be working now. Therefore, the coefficient on alimony may reflect both an income effect and an "experience" effect.[24]

Unlike alimony, child support income appears to be positively associated with labor force participation. This is consistent with past work demonstrating a positive simple correlation between labor force participation and the receipt of child support (Grossman and Hayghe 1982), but extends it by showing that even when other characteristics (such as race, age, education, and family size) are held constant, the positive association persists. The coefficient of .0000305 on *CHSUPDUE* (col. 1) indicates that among women due child support in 1978, one who is due the average amount (slightly over $2,100) is 6.4 percent more likely to participate in the labor force than an otherwise identical woman due no child support. Furthermore, each additional $1,000 of support due raises participation by 3.0 percent. The positive sign is consistent with our hypothesis that child support payments are used to purchase goods and services that substitute for mother's home time and thus facilitate her labor force participation.

In columns (2) and (3) we enter alternative measures of child support due and/or received. Women due child support in 1978 (*CHSUP78*) are 11 to 14 percent more likely to participate in the labor force than women not due support. One reason why this effect appears so large is that the coefficient on *CHSUP78* may be biased upward. At divorce, women who anticipate future labor force participation may seek to obtain child support, which is nontaxable income, instead of alimony, which is taxable. Once we control for whether it is due, the amount of child support received (*CHSUPREC*) has no significant additional effect on participation (col. 2). However, for the 58 percent of divorced mothers due child support in 1978 who received it regularly (*CSREGULR*), the difference in labor force participation over women due no support is 6.1 percent less, but this effect is insignificant (col. 3). This suggests that the uncertainty created by receiving child support payments on an irregular basis may cause a greater increase in the labor force participation of divorced mothers than if payment were regular.

15.6 Summary and Conclusions

In this section we summarize our most important findings and discuss their implications for the formation of public policy. Also, we suggest promising directions for future research.

24. However, for a sample of recently divorced (or separated) mothers for whom we are able to control for whether or not they were in the labor force prior to the termination of their marriage (in March 1975), the coefficient on alimony due is virtually identical to the one reported here, suggesting that the "experience" bias may be negligible for this particular sample.

Like other forms of nonlabor income, child support payments were found to lower the probability of remarriage. But unlike other forms of nonlabor income, child support payments were found neither to raise nor to lower labor force participation. Each of these findings is consistent with our hypothesis that child support income serves as a substitute for the absent father. If a divorced mother receives child support, her economic incentive to remarry is reduced. This allows her to increase the duration of marital search which should improve the quality of the match and thus the likelihood that the new marriage will last. In addition to these long-run benefits, child support payments do not deter a divorced woman's labor force participation, which raises her family's income and well-being in the short run. Thus, child support payments are found to have both immediate and future benefits.

It is interesting to contrast the effects of child support, a private transfer, with AFDC payments, a public transfer. Previous work (Hutchens 1979) has found that AFDC reduces remarriage rates, just as we found that child support does. Other previous work (Keeley et al. 1978) has found that AFDC reduces labor force participation, unlike our finding that child support does not. While this may be evidence that child support income does not create the same work disincentive as AFDC, it is also possible that women not awarded child support, who are more likely candidates for AFDC, exhibit a fundamentally different response to nonwage income.

Within the limitations imposed by our data, we found that somewhat different factors affect the award of child support than its receipt. The likelihood of being awarded child support depends upon the needs of the mother and her children, and upon the absent father's long-term ability to pay. There appears also to be substantial racial differences: black women are less likely to be awarded support. In contrast, the likelihood of receiving child support due depends less upon the race or the circumstances of the woman and more upon the current financial well-being of the ex-husband. His income was found to affect whether or not any child support is actually paid, but not how much is paid. Apparently, absent fathers with low current incomes evade payment altogether, instead of partially cutting back on payments. This suggests that one effective strategy for child support enforcement may be to get nonpaying fathers to pay at least some portion of the child support they owe.

Given the beneficial effects of child support upon the well-being of female-headed families, it is unfortunate that such support is not awarded to or received by more divorced mothers and their children. Recent state and federal legislation has attempted to improve the enforcement of existing child support contracts. In future work we plan to study the effects of these new laws on child support receipts. However, no degree of enforcement can improve the well-being of a family never awarded child support

in the first place. More effort needs to be placed on improving the system of awards. Initial work in this direction has been accomplished by Garfinkel (1982). Our analysis of determinants may help to provide a foundation for improving both the enforcement and award of child support.

Finally, let us conclude with an appeal for developing better data. The March/April 1979 CPS Match File (or the forthcoming 1982 version) represents the most comprehensive data base yet assembled for studying the determinants and consequences of child support payments, but it is far from ideal. We have argued that the award and receipt of child support depend upon both the needs of the mother-only family and the ability of the absent father to provide support. While data on the former are abundant, data on the latter are limited to a few responses provided by the woman. An ideal data set would match responses obtained directly from the woman on her family's well-being with responses obtained directly from her ex-husband on his financial condition. In assessing the impact of child support and alimony payments upon remarriage and labor supply, we were limited to data pertaining to the previous year only. An ideal data set would include a more complete history of family support awarded and received. It would include data on family support due and received in the year prior to remarriage for remarried women. It would also include the amount of family support awarded at the time of the divorce or separation, as well as whether the award was subsequently readjusted, and if so, why, and by how much. These data would permit us to investigate more fully the impact of past receipts (or nonreceipts) on current behavior of individuals in families headed by women.

References

Becker, Gary S. 1973. A theory of marriage: Part 1. *Journal of Political Economy* 81: 813–46.

Becker, Gary S., Elisabeth M. Landes, and Robert T. Michael. 1977. An economic analysis of marital instability. *Journal of Political Economy* 85: 1141–87.

Bradbury, Katherine, Sheldon Danziger, Eugene Smolensky, and Paul Smolensky. 1979. Public assistance, female headship, and economic well-being. *Journal of Marriage and the Family* 41: 519–35.

Cassetty, Judith. 1978. *Child support and public policy*. Lexington, Mass.: D. C. Heath.

Chambers, David L. 1979. *Making fathers pay*. Chicago: University of Chicago Press.

Garfinkel, Irwin. 1982. *Child support: Weaknesses of the old and features of a proposed new system*. Vol. 1. Institute for Research on Poverty.

Glick, Paul C., and Arthur J. Norton. 1977. Marrying, divorcing, and living together in the U.S. today. *Population Bulletin* 32: 3–39.

Gordon, Nancy M., Carol A. Jones, and Isabel V. Sawhill. 1978. The determinants of child support payments. Working paper no. 992-05. Washington D.C.: The Urban Institute.

Grossman, Allyson Sherman, and Howard Hayghe. 1982. Labor force activity of women receiving child support or alimony. *Monthly Labor Review* 105: 39–41.

Heckman, James J. 1979. Sample selection bias as a specification error. *Econometrica* 47: 153–61.

Hoffman, Saul. 1977. Marital instability and the economic status of women. *Demography* 14: 67–76.

Hutchens, Robert M. 1979. Welfare, remarriage, and marital search. *American Economic Review* 69: 369–79.

Keeley, Michael C., Philip K. Robins, Robert G. Spiegelman, and Richard W. West. 1978. The estimation of labor supply models using experimental data. *American Economic Review* 68: 873–87.

Krause, Harry D. 1981. *Child support in America: The legal perspective.* Charlottesville, Va.: Michie Co.

Peters, Elizabeth. 1982. The impact of regulation of marriage, divorce, and property settlements in a private contracting framework. Paper presented at the Workshop in Applications of Economics, University of Chicago.

Smith, James P., ed. 1980. *Female labor supply: Theory and estimation.* Princeton: Princeton University Press.

Sorensen, Annemette, and Maurice MacDonald. 1981. Child support: Who pays what to whom? In *Child support: Weaknesses of the old and features of a proposed new system*, vol. 3, appendixes. Institute for Research on Poverty.

U.S. Bureau of the Census. 1981a. *Child support and alimony, 1978.* Current Population Reports, series P-23, special studies no. 112. Washington, D.C.: GPO.

_____. 1981b. Current Population Survey, March/April 1979 Match File [machine-readable data file]. Conducted by the Bureau of the Census for the Bureau of Labor Statistics. Washington, D.C.: Bureau of the Census [producer and distributor].

_____. 1982. *Statistical abstract of the United States, 1982–83.* 103d edition. Washington, D.C.: GPO.

_____. *1983. Marital status and living arrangements, March 1982.* Current Population Reports, series P-20, no. 380. Washington, D.C.: GPO.

U.S. Department of Health, Education, and Welfare. 1979. *AFDC standards for basic needs, July 1978.* Social Security Administration, Office of Policy. ORS Report D-2. Washington, D.C.: GPO.

Table 15.A.1 Means and Standard Deviations for All Regression Samples

	All Ever-Divorced or Currently Separated Women		Women Supposed to Receive Child Support in 1978			Women Who Received Child Support in 1978			Women Who Have Been Divorced at Least N Years			Currently Divorced or Separated Women
	Nonblack	Black	All races			All races			$N=2$	$N=5$	$N=10$	All Races
Sample size	2,027	389	1,461	1,259	648	1,043	931	521	1,570	1,150	500	1,503
AWARDCS	.775	.476	1.0	1.0	1.0	1.0	1.0	1.0	.779	.765	.716	—
	(.418)	(.500)							(.415)	(.424)	(.451)	
RECCS	—	—	.714	.740	.804	1.0	1.0	1.0	—	—	—	—
			(.452)	(.439)	(.397)							
EDUC	11.920	11.026	12.069	12.087	12.389	12.270	12.286	12.582	11.957	11.902	11.546	11.685
	(2.395)	(2.702)	(2.291)	(2.270)	(2.254)	(2.295)	(2.269)	(2.204)	(2.348)	(2.421)	(2.567)	(2.637)
COLLGRAD	.086	.041	—	—	—	—	—	—	—	—	—	—
	(.281)	(.199)										
SPANISH	.074	.005	.052	.046	.031	.047	.042	.023	.050	.051	.058	.073
	(.261)	(.072)	(.222)	(.210)	(.173)	(.212)	(.200)	(.150)	(.217)	(.221)	(.234)	(.261)
NEAST	.188	.180	.171	.168	.159	.183	.177	.165	.159	.169	.172	.226
	(.391)	(.385)	(.377)	(.374)	(.366)	(.387)	(.382)	(.372)	(.365)	(.375)	(.378)	(.418)
NCENTR	.259	.237	.273	.280	.292	.272	.280	.301	.257	.272	.288	.248
	(.438)	(.426)	(.446)	(.449)	(.455)	(.445)	(.449)	(.459)	(.437)	(.445)	(.453)	(.432)
SOUTH	.256	.460	.262	.260	.270	.260	.259	.271	.283	.279	.280	.279
	(.436)	(.499)	(.440)	(.439)	(.444)	(.439)	(.438)	(.445)	(.451)	(.449)	(.449)	(.449)
SMSA	.531	.805	.559	.556	.542	.557	.555	.545	.547	.571	.598	.625
	(.499)	(.397)	(.497)	(.497)	(.499)	(.497)	(.497)	(.498)	(.498)	(.495)	(.491)	(.484)
CC	.207	.663	.235	.228	.207	.228	.221	.213	.248	.254	.278	.341
	(.405)	(.473)	(.424)	(.420)	(.405)	(.420)	(.415)	(.410)	(.432)	(.435)	(.449)	(.474)
PATERNR	1.766	2.229	1.878	1.851	1.881	1.887	1.841	1.871	1.743	1.741	1.654	—
	(.960)	(1.311)	(1.025)	(.993)	(1.031)	(1.013)	(.973)	(.997)	(.960)	(.989)	(.930)	

Table 15.A.1 (continued)

	All Ever-Divorced or Currently Separated Women		Women Supposed to Receive Child Support in 1978			Women Who Received Child Support in 1978			Women Who Have Been Divorced at Least N Years			Currently Divorced or Separated Women
	Nonblack	Black	All races			All races			$N=2$	$N=5$	$N=10$	All Races
KID6TO17	.787	.828	.821	.817	.804	.831	.830	.814	—	—	—	—
	(.410)	(.378)	(.383)	(.387)	(.397)	(.375)	(.376)	(.390)				
NUMMAR	1.155	1.108	1.146	1.158	1.164	1.135	1.147	1.132	1.129	1.100	1.088	1.184
	(.412)	(.350)	(.399)	(.414)	(.428)	(.387)	(.403)	(.392)	(.373)	(.333)	(.311)	(.457)
REMAR	.426	.144	.371	.369	.355	.345	.347	.336	.298	.504	.656	0
	(.495)	(.352)	(.483)	(.483)	(.479)	(.476)	(.476)	(.473)	(.458)	(.500)	(.476)	
AGEDIV	29.246	30.319	29.758[d]	30.024[e]	30.714	—	—	—	28.645	27.946	26.922	—
	(7.821)	(8.290)	(7.540)	(7.602)	(7.774)				(7.563)	(7.216)	(6.814)	
DURMAR	10.285[a]	9.915[a]	—	—	—	—	—	—	—	—	—	—
	(7.666)	(7.339)										
SEP	.142	.476	—	—	—	—	—	—	0	0	0	—
	(.349)	(.500)										
SETVAL	.986[b]	.257[c]	1.151[f]	—	—	—	—	—	1.019	.854[g]	.641[h]	—
	(1.544)	(.867)	(1.600)						(1.504)	(1.348)	(1.081)	
BLACK	0	1.0	.100	.085	.066	.084	.069	.061	.112	.124	.126	.222
			(.300)	(.297)	(.249)	(.278)	(.253)	(.240)	(.316)	(.330)	(.332)	(.416)
YEARSDIV	—	—	5.518	5.289	4.556	4.949	4.811	4.280	7.638	9.731	13.568	4.970
			(4.427)	(4.214)	(3.773)	(4.072)	(3.764)	(3.505)	(4.847)	(4.345)	(3.860)	(4.761)
NEWDIV	—	—	.173[d]	.188[e]	.223	—	—	—	0	0	0	—
			(.378)	(.391)	(.416)							
HUSCHD	—	—	—	.291	—	—	.268	—	—	—	—	—
				(.454)			(.443)					

HUSINC	—	—	—	—	3.553	—	—	3.716	—	—	—	—
					(1.877)			(1.923)				
AGE	—	—	35.141	35.211	35.244	35.369	35.372	35.108	—	—	—	36.321
			(7.928)	(8.023)	(8.198)	(7.776)	(7.888)	(7.961)				(9.245)
AGESQ	—	—	1,298	1,304	1,309	1,311	1,313	1,296	—	—	—	1,405
			(604)	(612)	(636)	(596)	(606)	(617)				(730)
OTHERKID	—	—	.236	.233	.204	.198	.200	.175	—	—	—	—
			(.424)	(.423)	(.403)	(.398)	(.400)	(.380)				
CSVOL	—	—	.320	.343	.378	.395	.417	.430	—	—	—	—
			(.467)	(.475)	(.485)	(.489)	(.493)	(.496)				
CHSUPDUE	—	—	2,023	2,061	2,294	2,205	2,225	2,447	—	1,052	698	1,292
			(2,080)	(2,184)	(2,243)	(2,344)	(2,434)	(2,398)		(1,360)	(1,040)	(1,883)
CHSUPREC	—	—	—	—	—	1,899	1,918	2,146	—	—	—	915
						(2,263)	(2,345)	(2,399)				(1,755)
CSREGULR	—	—	—	—	—	.764	.773	.806	—	—	—	.355
						(.425)	(.419)	(.396)				(.479)
AWARDAL	—	—	—	—	—	—	—	—	.129	.130	.108	—
									(.335)	(.337)	(.311)	
PATSQ	—	—	—	—	—	—	—	—	3.960	—	—	—
									(4.773)			
CHSUP78	—	—	1.0	1.0	1.0	1.0	1.0	1.0	—	.581	.472	.611
										(.494)	(.500)	(.488)
PCCSDUE	—	—	—	—	—	—	—	—	—	654	442	—
										(908)	(668)	
ALIMDUE	—	—	—	—	—	—	—	—	—	—	—	247
												(1,135)
ALIM78	—	—	—	—	—	—	—	—	—	—	—	.106
												(.308)
ALIMREC	—	—	—	—	—	—	—	—	—	—	—	199
												(1,041)
AFDCMAX	—	—	—	—	—	—	—	—	—	—	—	286
												(113)

Table 15.A.1 (continued)

	All Ever-Divorced or Currently Separated Women		Women Supposed to Receive Child Support in 1978			Women Who Received Child Support in 1978			Women Who Have Been Divorced at Least N Years			Currently Divorced or Separated Women
	Nonblack	Black	All races			All races			$N=2$	$N=5$	$N=10$	All Races
INLF79	—	—	—	—	—	—	—	—	—	—	—	.739 (.439)
KIDLT3	—	—	—	—	—	—	—	—	—	—	—	.153 (.409)
KIDLT6	—	—	—	—	—	—	—	—	—	—	—	.410 (.680)
KIDLT18	—	—	—	—	—	—	—	—	—	—	—	1.820 (1.221)
NADULT	—	—	—	—	—	—	—	—	—	—	—	1.400 (.716)
OTHFINC	—	—	—	—	—	—	—	—	—	—	—	2,222 (4,253)

Note: Standard deviations appear in parentheses.

[a]For currently divorced women only.

[b]Sample size is 1,907.

[c]Sample size is 373.

[d]Sample size is 1,453.

[e]Sample size is 1,253.

[f]Sample size is 1,345.

[g]Sample size is 1,069.

[h]Sample size is 474.

Table 15.A.2 Definition of Variables

Variable	Definition
AWARDCS	= 1 if child support is awarded and 0 otherwise.
RECCS	= 1 if child support is received and 0 otherwise.
EDUC	= number of years of school completed by the woman.
COLLGRAD	= 1 if woman is a college graduate and 0 otherwise.
SPANISH	= 1 if woman is of Spanish origin and 0 otherwise.
NEAST	= 1 if woman lives in the Northeast and 0 otherwise.
NCENTR	= 1 if woman lives in North Central states and 0 otherwise.
SOUTH	= 1 if woman lives in the South and 0 otherwise.
SMSA	= 1 if woman lives within an SMSA and 0 otherwise.
CC	= 1 if woman lives within the central city of an SMSA and 0 otherwise.
PATERNR	= number of children under twenty-one, fathered or adopted by ex-husband, who are living with their mother.
PATSQ	= *PATERNR* squared.
KID6TO17	= 1 if there are one or more children age six to seventeen present and 0 otherwise.
NUMMAR	= number of the marriage that ended in divorce.
REMAR	= 1 for remarried women and 0 otherwise.
AGEDIV	= woman's age at divorce.
DURMAR	= duration of the marriage that ended in divorce.
SEP	= 1 for currently separated women and 0 otherwise.
SETVAL	= index of property settlement with 0 = none; 1 = less than $5,000; 2 = $5,000–9,999; 3 = $10,000–19,999; 4 = $20,000–29,999; 5 = $30,000–39,999; 6 = $40,000–49,999; 7 = $50,000–74,999; 8 = $75,000 plus.
BLACK	= 1 if woman is black and 0 otherwise.
YEARSDIV	= years since the divorce.
NEWDIV	= 1 if the divorce occurred since January 1978 and 0 otherwise.
HUSCHD	= 1 if ex-husband has other children to support and 0 otherwise.
HUSINC	= woman's estimate of her ex-husband's income in $5,000 increments, where 1 equals less than $5,000 and 6 equals $25,000 plus.
AGE	= woman's current age (April 1979).
AGESQ	= *AGE* squared.
OTHERKID	= 1 if woman has any children not fathered by her ex-husband and 0 otherwise.
CSVOL	= 1 if child support was agreed to voluntarily and 0 otherwise.
CHSUPDUE	= dollars of child support due in 1978.
CHSUPREC	= dollars of child support received in 1978.
CSREGULR	= 1 if child support received regularly and 0 otherwise.
AWARDAL	= 1 if alimony was awarded.
CHSUP78	= 1 if child support due in 1978 and 0 otherwise.
PCCSDUE	= *CHSUPDUE/PATERNR*.
ALIMDUE	= dollars of alimony due in 1978.
ALIM78	= 1 if alimony is due in 1978 and 0 otherwise.
ALIMREC	= dollars of alimony received in 1978.
AFDCMAX	= maximum monthly AFDC payments by state and number of children.

Table 15.A.2 (continued)

Variable	Definition
INLF79	= 1 if woman was working or looking for work in March 1979 and 0 otherwise.
KIDLT3	= number of children under three years old.
KIDLT6	= number of children under six years old.
KIDLT18	= number of children under eighteen years old.
NADULT	= number of adults in the household.
OTHFINC	= total family income excluding child support received, alimony received, and public assistance income.

Comment

Irwin Garfinkel

"Variations in the Economic Well-Being of Divorced Women and Their Children" by Andrea H. Beller and John W. Graham reports on a series of empirical investigations motivated by the observation that the economic well-being of divorced women is effected primarily by how much they work, how much child support and alimony they receive, and whether or not they remarry. Although the chapter examines the determinants of remarriage and labor force participation as well as the determinants of child support, the central focus is on child support. When child support is not the dependent variable, it is the key independent variable. This focus makes the chapter both original and interesting.

In view of the focus on child support, the data set used, the March/April 1979 Match File of the Current Population Survey (CPS), is appropriate. The April 1979 CPS contained a special supplement that gathered data from all women eighteen years of age or older on potential child support eligibility, child support and alimony awards and payments, property settlements, and the income of absent fathers as reported by custodial mothers. Data from the April supplement were matched with the March 1979 CPS.

Beller and Graham limit their sample to ever-divorced and separated women. They estimate: (1) the probability of receiving a child support award; (2) conditional upon having an award, the probability that child support is received; (3) conditional upon receiving some support, the amount of support received; (4) the probability of remarriage within two, five, and ten years of divorce; and (5) the probability of labor force participation. In all regressions, they use maximum likelihood to estimate logistic functions. Their independent variables include age, race, location,

Irwin Garfinkel is director of the School of Social Work and a research fellow at the Institute for Research on Poverty, University of Wisconsin, Madison.

number of children, several variables on marital history, a host of variables on child support, alimony and property settlements, and the custodial parents estimate of the absent father's income. The last is available for only one-third of the sample.

In summarizing their results, Beller and Graham stress three. First, a child support award is a function both of the absent father's ability to pay and the needs of the children and custodial mother, while child support payments depend primarily on the current financial status of the ex-husband. With respect to the second and third conclusion on remarriage and labor force participation, respectively, I quote from the conclusion "Like other forms of nonlabor income, child support payments were found to lower the probability of remarriage. But unlike other forms of nonlabor income, child support payments were found to raise labor force participation." I have trouble with all three major conclusions.

The most important piece of evidence in support of the contention that the needs of the children and custodial parent have no effect on child support payments is that remarriage of the custodial mother has no effect on the probability of receiving child support. Note, however, that they find that remarriage significantly decreases the amount of child support received for those who receive any at all. So at best the evidence they present is ambiguous. More important, by restricting the sample used to estimate the probability of receiving child support to those who were due support in 1978, the effects of remarriage on the probability of receiving child support are underestimated. Of all those who received child support awards at divorce about 20 percent responded that they were not due child support in 1978. The CPS did not ask respondents to explain the discrepancy. I have been puzzled about this off and on for quite some time. Two reasons are that the child was over age eighteen or twenty-one and therefore no longer eligible for support or that the ex-husband had subsequently died. After reading and puzzling over the Beller-Graham paper for the second or third time, I realized that a third and for this paper a critical reason was that the custodial parent had remarried. Child support awards may be adjusted any time there is a significant change in circumstances. In some cases, the new husband may formally adopt the children thereby legally releasing the absent father from any financial obligation. Even without formal adoption, the parties may agree to end the support obligation of the absent father. In any case, although remarried women make up just a bit over one-third of all those with support awards in the CPS, they account for one-half of all those with awards who are due no support in 1978.

One final comment on the conclusion that child support payments are unrelated to the needs of the custodial parent. Most absent parents, judges, researchers, and other people, would be reluctant to conclude that need has little effect on payments when the current income of the custodial parent is not included in the regression.

Although Beller and Graham assert that child support payments reduce remarriage and increase labor force participation, the results they report show significant effects on remarriage and labor force participation, not of child support payments but rather of child support awards at divorce or eligibility for support in 1978. Normally economists are concerned with the influence of income and prices on behavior. Child support payments are a form of income. Child support awards are obligations or promises. What the Beller-Graham analysis sheds light on, therefore, is not the effect of a particular kind of income on behavior but rather the effect on behavior of promises, promises, promises. No theoretical justification for their use of promises rather than payments is presented. Indeed, they treat the two as if they are interchangeable. As we shall see, however, they are not.

Beller and Graham find that having a child support award increases the probability of remarriage, while being due support in 1978 decreases the probability of remarriage by a larger amount than the award increases it. If as discussed above remarriage leads some with awards at the time of divorce to lose eligibility for child support, this is precisely what we would expect to find. Imagine that there is no relationship between child support awards and remarriage. By including dummy variables both for those with awards and for those due support in 1978, the awards variable picks up the positive correlation between remarrying and losing child support eligibility. The child-support-due variable picks up the corresponding negative relationship between not remarrying and retaining child support eligibility. I have no explanation for why the amount of the award per child is negatively related to remarriage within five years and unrelated to remarriage within ten years. And it may well be that child support payments decrease the probability of remarriage. Beller and Graham provide no evidence either way.

Finally, Beller and Graham recognize that in their labor force participation equation, the amount of child-support-due variable may be positively biased because women expecting to work would negotiate for child support rather than alimony. The former is not taxable while the latter is. For some reason they never consider that this same bias will lead the alimony-expected coefficient to be too negative. More important, given their countertheoretical finding that the child-support-due variable is positively correlated with labor force participation, why should we believe that there is anything more to this relationship than the bias? Indeed, when a dummy for child support due is entered along with a variable measuring child support received, the former is positive and significant while the latter is not significantly different from zero. A reasonable interpretation is that the former picks up most, but not all, of the positive bias. In any case, in this instance where Beller and Graham use child support received, they find no

significant relationship between it and labor force participation. Perhaps if the child-support-due variable were not included in the regression, there would be a positive and significant relationship between payments received and labor force participation. Again Beller and Graham fail to present evidence on the most important relationship.

In short, although this chapter deals with an important and interesting topic, it suffers from a failure to define clearly the variable of central interest: child support.

This Page Intentionally Left Blank