Preliminary--Do Not Cite

A DYNAMIC ANALYSIS OF THE ECONOMIC COSTS OF GROWING UP IN A SINGLE PARENT FAMILY: DOES WELFARE HELP?

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1. Introduction

One of the United States' most striking social phenomena over the last fifty years is tremendous growth in single parent families. Between 1960 and 1995, the number of children living apart from one of their parents increased from 12% to almost 40% (McLanahan, 1997). During this same period, the rate of divorce increased by over 200% (Friedberg, 1998) and the fraction of children born out-of-wedlock rose from about 5% to over 30% (Cancian and Reed, 2000). Half of all American children today are expected to spend part of their childhood in a family headed by a mother who is divorced, separated, unwed or widowed (Bumpass and Raley, 1995).

What does this change in family structure mean for American children? In particular, to what extent are the economic resources available to children living in single parent families compromised by the absence of a second cohabitating adult? Numerous statistics document large differences in economic well-being across family types, and, presumably, a large portion of these differences result from differences in the number of potential wage earners. As other researchers have noted, however, it is difficult to determine the extent to which the observed gap is *caused* by the absence of a second parent. We know for example, that a child currently living in a single mother family has a 29% chance of being poor whereas a child living in a two parent family has a 7% chance of being poor (Cancian and Reed, 2000), but it may be that many of the poor children growing up in single parent families would be poor even if their parents were married. Unobservable family characteristics may be partly responsible for the variation in resource levels across family types.

The causal effect of family structure on a family's economic resources has important implications for public policy. Specifically, the Aid to Families with Dependent Children program (AFDC)), which used to be the primary cash assistance program in the United States, was targeted towards single parent families on the grounds that children in such families suffer economic losses as a direct result of their parents' marital status. Under the Temporary Assistance to Needy Families (TANF) program (which replaces AFDC) about one quarter of states continue to use marital status to determine program eligibility. If the losses to children growing up in single parent families are small, then the grounds for this type of targeting may be tenuous. If these losses are large, however, then targeted cash assistance may help to mitigate them. Understanding differences in the economic consequences of growing up in a single parent family across demographic groups may also be an important factor in developing and targeting future assistance programs.

Most studies have estimated the costs of growing up in a single parent family using cross-sectional data or, in the case of divorce, by comparing resources from a single "before" period to a single "after" period. Reliance on cross-sectional data makes it impossible to fully control for unobservable family characteristics that may be correlated with both family structure and economic status. Simple before and after comparisons go part way towards addressing this problem, but because the economic costs associated with growing up in a single parent family may vary over time, these estimates may not fully capture the economic consequences either. Children whose parents divorce, for example, may experience a short-term income reduction that is recouped in later years when their mothers remarry or become more active labor force participants. Quantifying

the time-path of economic losses following a divorce or out of wedlock birth is particularly important in the wake of TANF, which places a five year life-time limit on receipt of benefits, and requires that participants become members of the labor force within two years of initiating benefits. If the costs of growing up in a single parent family persist for many years, then these time limits may have serious implications for children's well-being.

This paper uses a dynamic framework to estimate both the short and long-term impacts of single parent status on the economic resources available to children. This study adds to the literature on the effects of family structure in several ways. First, we estimate a fixed effects model with longitudinal data from the Panel Study of Income Dynamics to control for unobservable differences between single parent families and two parent families that may bias previous estimates of family structure effects. We look separately at the impact of divorce and out-of-wedlock childbearing. Although other studies have estimated changes in family income following divorce, they have not made full use of the longitudinal nature of the PSID. To our knowledge, there have been no studies that have used a fixed effects model to estimate the resource costs associated with being born to a single parent. We find that controlling for unobservable family background characteristics is important. Simple cross-sectional family income comparisons between children born out-of-wedlock and children born into two parent families are almost 1.8 times bigger than our estimated cost of being born to a single mother. OLS regressions produce coefficient estimates that are biased upward by more than 30%.

Second, we trace out the losses associated with single parent status over an extended time interval, and show that the gains associated with marriage fall somewhat over time for children born out-of-wedlock. In addition, the initial losses experienced by children whose parents divorce are partially recovered in later years. Most of this recovery is explained by the fact that a substantial fraction of divorced mothers remarry. Differences in remarriage rates also explain much of the difference in the economic consequences of divorce across socioeconomic groups. Likewise, the pattern of gains experienced by out-of-wedlock children whose mothers marry can be explained by the fact that some of their mothers' marriages end.

Finally, using within-state variation in benefit levels from the former Aid to Families with Dependent Children program, we estimate the degree to which cash assistance helps mitigate the losses associated with single parent status. Our dynamic framework allows us to estimate the benefits of AFDC over multiple years, and thus provides insight into the potentially harmful effect of imposing time limits. Although there has been considerable research on the negative consequences of publicly provided cash assistance, there have been few studies of the benefits of cash welfare. One potential benefit of programs like AFDC and TANF is that they increase the economic resources available to disadvantaged children. Whether such programs are successful at achieving this goal will depend in part on the extent to which funds crowd-out other sources of support such as own labor supply, savings or transfers from others.

2. Estimating the Cost of Growing Up in a Single Parent Family

2.1 Background

It is well known that children growing up in single parent families have fewer economic resources than children living in single parent families. In 1999, for example, median family income for a two-parent family with children was $60,296, whereas median family income for a female-headed family with children was $22,418 (Census Bureau, March 2000 CPS). McLanahan and Sandefur (1994) estimate similar differences in assets across family types: using the PSID, they find that while 98 % of two parent families with an adolescent child own their own car, only 70% of similarly defined single parent families own a car. Likewise, only 50% of such families own their home, whereas 87% of two-parent families (with an adolescent) are home-owners. Many believe that these differences in resources can explain a significant part of the well documented differences in socioeconomic outcomes between adults who grew up in two parent families and adults who grew up in single parent families (McLanahan and Sandefur, 1994). What is less clear, however, is how much of the variation in resources across family types is caused by the difference in family structure and how much is related to other factors that are correlated with family structure. McLanahan and Sandefur show that even prior to marital dissolution median family income is lower for families that go through divorce than for families that remain intact. This suggests that part of the income difference across family types exists for reasons other than differences in family structure. Previous researchers have noted this problem, but have mostly addressed it by comparing changes in economic resources across two time periods (Hoffman and Holmes, 1976; Hoffman, 1977, McLanahan and Sandefur, 1994). Their samples are typically restricted to families who begin the period with two parents, so their estimates

pertain only to the effects of divorce. These analyses implicitly control for unobservable family variables but because the comparisons are restricted to only two points in time they overlook the possibility of dynamic adjustments to changes in marital status. Similar strategies have not been applied to estimate the resource costs for children born out-of-wedlock, presumably because it is difficult to come up with an appropriate comparison group in an "initial" period. Thus, the extent to which the absence of a second parent lowers the resources of out-of-wedlock children is unknown.

To our knowledge, Duncan and Hoffman (1985a, 1985b) provide the only dynamic analysis of the economic consequences following divorce.[1] Using the PSID, they trace out family income for a sample of children between the ages of one and five in the year prior to their parents' divorce, from the year before the divorce until five years after the divorce. Their study is based on divorces or separations that occurred between 1969 and 1975. The divorced sample's income in the years around the marital dissolution is compared to income for a sample of children in continuously married families between 1971 and 1977. Duncan and Hoffman find that the average income of children whose parents' divorce or separate falls by about 30% in the year after the divorce, but that within five years of the marital dissolution, their average income is close to its pre-divorce level. Most of this recovery can be explained by high rates of remarriage: for children whose mothers' remain unmarried throughout the observation period, income levels remain about 30% below their initial levels. Furthermore, although children whose mothers' remarry regain their previous levels of income, they

[1] Bane and Weiss (1980) and Weiss (1984) estimate the effects of divorce over multiple periods but their analysis is restricted to a sample of women who remain unmarried.

never catch up to their peers whose parents remain married because incomes in continuously married families grow throughout the period.

Our study is similar in spirit to that of Duncan and Hoffman, but it goes beyond their work by employing a more comprehensive statistical methodology. Our empirical framework allows us to control for macroeconomic factors whose omission may bias their estimates. Our study also extends the period of analysis by 12 years, which produces a much larger sample than was available to Duncan and Hoffman, and it includes children between birth and age 16 instead of between the ages of 1 and 5. Focusing on young children (and, therefore, young parents) could lead to biased estimates of the average divorce effect since earnings growth is steeper among young workers and since mothers' labor supply is lowest when their children are young.[2]

Our methodology also enables us to produce estimates of the economic consequences of being born to a single mother and subsequently growing up in a single parent family. Because this type of single parent family is formed by the birth of a child rather than by a change in marital status, researchers have not typically used changes in marital status to identify the effect of family structure on such children. Our model allows us to identify the economic gains resulting from mothers' marriage for a sample of children born out-of-wedlock. We interpret the negative of these estimates as upper bound estimates of the losses to these children of remaining in a single parent family. These upper bound estimates will be lower than previous estimates, however, because

[2] Since mothers' labor supply has been increasing over time, the divorce effect may be smaller in more recent years. Our ability to include 12 additional years of data, may therefore affect the average estimates as well.

unlike previous estimates, they are based on a model that controls for family fixed effects.

2.2 Econometric Model

Our basic approach is to use a fixed-effects estimator to control for unobserved family characteristics that may be correlated with family structure, using data for children whose parents' marital status changed at some point during our observation window and a comparison group of children whose parents' marital status did not change during the period. Specifically, given longitudinal data on family resources and marital histories, the effects of divorce on the economic resources available to children can be modeled in the following way:

$$\ln I_{it} = X_{it}\beta + D_{it}\delta + \alpha_i + \gamma_t + u_{it} \qquad (1)$$

where I_{it} is a measure of the economic resources available to child i in year t, X_{it} is a vector of child/family specific variables that vary over time and that may be correlated with the child's economic status, and D_{it} is a vector of dummy variables indicating that a divorce has taken place in a future, current, or previous year. The error term has three components, a child-specific fixed effect, α_i, a year-specific effect, γ_t, and a random component, u_{it}.

The vector of divorce indicators (D_{it}) contains three types of variables: dummy variables that equal one in the years prior to the divorce, a dummy variable equal to one in the year that the divorce takes place, and a series of dummy variables indicating that a divorce took place in a previous year. The first set of indicator variables captures the possibility that family resources may begin to deteriorate prior to the actual divorce. This might happen if, for example, a divorce is precipitated by a parent's job loss: failure to

include "years prior" dummies would lead to a biased estimate of the effect of the divorce. Our model, therefore, includes a dummy variable for each of the two years preceding the divorce. The dummy variable indicating the year of the divorce captures the immediate effect of the divorce on family income and consumption, whereas the coefficients on the set of variables indicating that a divorce has taken place in a previous year will reflect the persistence of the divorce effect over time. Two methods will be used to define these post-divorce indicators. Initially, these variables will refer to the years that have elapsed since the child *first* experienced his parents' divorce. Later, we will define the variables with respect to years since most *recent* divorce. We follow the post-divorce period for six years, including a dummy variable indicating that six or more years have elapsed since the divorce took place.

The error term in the above equation contains a time-invariant child-specific effect, α_i, which captures anything about the child's family that is constant over time. Since most children in single parent families live with their mothers, this variable will primarily pick up characteristics of the child's mother that may be correlated with both divorce probabilities and the family's resources. If mothers with lower earnings capacity are more susceptible to divorce, then estimates of divorce effects that fail to control for α_i will be biased towards finding larger losses. As discussed above, other studies have estimated the resource losses associated with divorce by comparing family resources in a particular period before the divorce to family resources in a particular period after the divorce. This approach implicitly controls for family specific fixed effects, but may overstate or understate the average annual losses associated with the event, depending on which "before" and "after" years are chosen. The advantage of the model we employ is

that it traces out the economic consequences in each year following the divorce and allows us to estimate both the short-term and long-term effects, which may differ.

Because this model includes fixed effects, the variables in X that do not vary over time, such as race and mother's education, are eliminated from the model. The only variables included in X are the child's age, his age squared and family size. Equation (1) also includes a vector of calendar-year dummy variables (γ_t). These variables will control for economy-wide income and consumption changes over time, including both business cycle effects and trends in income and consumption over the period we study.

Unbiased estimates of the economic consequences of being born into a single parent family are even more elusive than unbiased estimates of divorce effects because unlike the case of divorce there is no obvious "before" period to compare the single parent family's resources. As a result, previous estimates have been based on cross-sectional data, with which it is impossible to control for unobserved family effects. We propose an alternative way of estimating these losses that allows us to incorporate family fixed effects. Specifically, using a longitudinal sample of children born out-of-wedlock we can estimate the parameters of the following model

$$\ln I_{it} = X_{it}\beta + M_{it}\delta + \alpha_i + \gamma_t + u_{it} \qquad (2)$$

Where M_{it} is a vector of dummy variables indicating that a marriage has taken place in a future, current, or previous year. The negative of these parameters can be interpreted as the loss associated with remaining in a single parent family that was formed by an out-of-wedlock birth. This model is essentially the inverse of equation (1) in that it compares changes over time in the resources available to children whose parents' married at some point during our observation window to changes over time in the resources of children

whose parents remained single. The advantage of this approach is that it allows us to control for unobservable child/family specific factors that may be correlated with both marital decisions and economic status.

Our estimates of δ provide information on the effects of changes in family structure on the children who experience them. In the language of Heckman, LaLonde, and Smith (1999) we estimate the effect of "treatment on the treated." If the impact of divorce or marriage would be different for children whose family structure remains constant over time then $\hat{\delta}$ will be a biased estimate of the average effect that divorce or marriage would have on the population. For example, if the gains to marriage are larger for women who choose to marry than for women who choose not to marry then our estimates of δ will be upward biased estimates of the costs to children of growing up in a single parent family formed by an out-of-wedlock birth. We show, however, that even with this upward bias our estimates are substantially smaller than estimates that do not control for fixed effects.

In the case of divorce, similar issues arise; we estimate the effects of divorce among those children whose parents do actually divorce. In this case, however, we argue that our estimates are of policy interest. We care about how much better off the "treated" children would be if their parents had not divorced. Estimates of the population-wide effect of divorce would not answer this question.

3. Welfare and the Resources Available to Children in Single Parent Families

Differences in the resources available to children growing up in single parent and two parent families have inspired many researchers to call for more generous welfare

programs. Although there is a vast literature on the disincentive effects resulting from publicly provided cash assistance (like the former AFDC program) there is little evidence on its potential benefits. The primary purpose of AFDC/TANF is to increase the economic resources available to children in single parent families, but we know little about the extent to which that goal is met. If public assistance crowds out private sources of support then TANF may do little to aid needy children.

Although many of the ongoing TANF evaluations are designed to assess the extent to which it affects participating children, the evaluations are still in their infancy. Furthermore, they focus on estimating the effects of recent reforms such as time limits and work requirements rather than on the effects of the cash assistance itself. We use state/year variation in AFDC benefits levels to estimate the degree to which cash welfare increases the resources available to needy children.

Two other studies directly examine the resource gains associated with AFDC. Pollack (1994) identifies the effect of AFDC generosity on the consumption of AFDC recipients in the PSID, using variation in AFDC benefit levels across states and over time (1981-1987). He finds that a 10% increase in program benefits raises the food consumption of AFDC recipients by approximately 7%. The Pollack study has two drawbacks, however. First, because it is confined to AFDC recipients, it suffers from a potential sample selection bias: women who choose to become AFDC recipients as AFDC becomes more generous may have different consumption patterns from women who participate at lower benefit levels. Second, within state changes in AFDC benefits may be correlated with state-level changes in the cost of living, and thus with

consumption expenditures. This may lead to an upward bias in the estimated consumption effect.

Gruber (2000) addresses both of these issues in a related paper which measures the extent to which AFDC smooths the consumption of women who have divorced in the last year. Like Pollack, Gruber identifies the effect of AFDC generosity on consumption using state/year (1965-1985) variation in AFDC benefit levels together with PSID data on family structure and consumption. He finds that for every additional $100 in potential AFDC benefits, consumption among newly formed single parent families falls by $28 less.

Our study extends this literature in several ways. First, we look at the effect of AFDC on income and income-to-needs as well as consumption on the grounds that these measures may more completely reflect family well-being. Second, we estimate the potential benefits of AFDC over a longer time period. The Gruber study estimates the effects of AFDC in the year following a divorce, but the effects of both marital dissolution and AFDC receipt may extend over a longer period and change over time, as the family adapts to a new household structure. Our dynamic model allows us to consider both the short-run and the long-run benefits of AFDC by including interaction terms between our divorce/marriage dummy variables and measures of AFDC generosity. Given that PRWORA places time-limits on welfare receipt, understanding the potential long-run benefits of cash assistance seems particularly important. The third contribution of our analysis is that it includes children born out-of-wedlock.

4. Data

Our data come from the 1968 through 1993 waves of the Panel Study of Income Dynamics, a longitudinal survey conducted by the University of Michigan's Institute for Social Research. The PSID began by interviewing a national probability sample of families in 1968 and has reinterviewed the members of those families every year since. The PSID also follows a subsample of families in poverty. We make use of both samples in order to increase the precision of the estimates, particularly for our subsamples of children of low-skilled mothers, who are most likely to be affected by cash assistance programs. Our regressions are weighted using the individual weights for the last year in which the individual is observed.

Since our primary interest is in how family structure, and policies targeted according to family structure, affect the economic resources available to children, our sample consists of children who are potentially followed from the year of birth until age 16. Our analysis is based on two samples: the first sample consists of children born into two parent families, and the second sample consists of children born into single parent families. We use the first sample to estimate the effects of divorce, and the second sample to estimate the losses associated with being born out-of-wedlock. Children who were born prior to the 1968 survey are excluded from the sample because we cannot determine whether they were born into a two-parent or single-parent family. After individuals turn 16 they are no longer followed, because we want to be sure that any observed changes in family structure are associated with their family of origin. Some PSID children are not present throughout the entire length of the survey. We include these individuals from birth until the first year they are missing data, but do not include them in any subsequent years even if they have valid data, because the missing years

make it impossible to determine parents' marital status in that year, and, therefore, to accurately ascertain the number of years since a change in family structure took place.

We use three different measures of the economic resources available to the family: the log of family income, the log of family income-to-needs, and the log of family consumption. Each of these measures has its pros and cons. Family income captures resources that are available to the family but are not consumed (i.e. savings) but does not include non-cash assistance (such as Food Stamps), which may affect children's well-being. In addition, changes in income that follow changes in family structure do not account for simultaneous changes in family composition and may thus overstate the per capita resource losses (gains) associated with divorce (marriage). Relative to income, income-to-needs may, therefore, be a more appropriate measure of the resources available to children, but it has a less straightforward interpretation.[3]

While in principle consumption measures have the advantage of including inputs to well-being beyond cash, information on consumption in the PSID is limited to food consumption.[4] Each year, respondents are asked how much their family "usually" spends on food at home and food away from home, as well as the amount of food paid for by food stamps. While a more complete measure of consumption would be preferable, there is no panel dataset available that would also allow us to examine the long-run response to changes in family structure. We include food consumption as an alternative

[3] Using the log of income as our dependent variable and including family size in the regression also allows more flexibility in how the equivalence scale works.

[4] Food consumption data are missing for 1973, 1988 and 1989. The PSID also includes information about expenditures on rent and mortgage payments, and utilities, but these data are missing additional years and so we do not use them. It would be difficult to compute housing consumption flows from owner occupied housing since some households have no mortgage payments.

outcome since food is the type of necessary expenditure that is of particular concern to those interested in the well-being of children living in families that are eligible for welfare and because it has been the focus of other studies.

Economic resources are measured at the level of the PSID family unit. This means that if children are living with both their mother and their grandparents, and the mother and grandparents are pooling resources and expenses, then the grandparent's resource contributions are included as part of what is available to the child. This seems like the appropriate way of measuring children's economic well-being since single parents' living arrangements may be chosen as a way of maximizing their resources.[5]

The timing of the PSID questions varies across the different variables. Questions about family income clearly refer to the previous calendar year, whereas information about family structure is recorded at the point of the interview. Since a change in family structure recorded at the time of the interview may have occurred at any time in the previous year, we ignore the different frames of reference and match the family structure and income data from the same *survey* year.[6] The timing of the food consumption questions is ambiguous, but Zeldes (1989) argues that it refers to the point of the

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[5] An exception to this is that individuals who return to an extended family home after being out on their own continue to be interviewed by the PSID as a separate family unit. For example, an adult daughter of a PSID family who returns to her parents home after having a child will continue to be counted as a head of her own household.

[6] We have also conducted the analysis linking the current survey year's family structure information to the following survey year's income information and obtain very similar results.

interview rather than the previous year.[7] Again, we match the family structure information and the consumption information from the same survey year. We eliminate observations for which income or consumption data are imputed.

A limitation of the PSID is that it is difficult to identify relationships among sample members who are not household heads. This is probably not a serious problem for the sample of children who begin life in two parent families since the parents of most of these children are household heads or wives whose marital status is well documented, but it is potentially problematic for our sample of children born out-of-wedlock because a larger fraction of these children are living in families in which the household head is not the parent. We therefore use the PSID Relationship and Marital History files to carefully document transitions between marital (or cohabitating) states. We define a family as a two parent family if the child's custodial parent is married or living as a couple with another adult. Our definition of divorce includes married couples who are living in separate residences and unmarried couples who had been living together but are separated.

After deleting observations for which the income and consumption measures are imputed or missing, the sample of children beginning life in a two parent family contains 53,188 child-year observations, and 7,397 children, 1,352 of whom experience a parental divorce. The income sample of children born out-of-wedlock contains 12,945 child-year observations and 2,089 children, 483 of whose custodial parents marry sometime before they turn 16. These samples are slightly smaller when consumption is our dependent

[7] An exception is food expenditures paid for using food stamps. Before 1977, this is measured using average monthly food stamp expenditures last year, but after 1977 the question refers to food stamp expenditures in the month of the survey.

variable since the PSID is missing food consumption information in 1973, 1988 and 1989.

5. Results

5.A. The Economic Consequences of Marital Dissolution

Table 2 provides the estimated family income, income-to-needs and consumption losses that result from marital dissolution. The estimates in the left-hand columns of Table 2 are based on equation (1), and document the losses following the first divorce. The estimates on the right hand side of the table document the losses following the most recent divorce. In addition to controlling for family-specific fixed effects, the regressions also include year effects, the child's age, age-squared and family size. In the food consumption regressions we also control for food needs.

Beginning with the left side of Table 2, we see that divorce entails a substantial loss in the economic resources available to children. In the first year following a divorce, for example, family income falls by about 41%, income-to-needs falls by roughly 34%, and consumption falls by approximately 25%. The smaller decline in income-to-needs makes sense given that this measure of economic status adjusts for the change in needs resulting from the second parent's absence, although we control for family size in all regressions. The reduction in food consumption is 61% of the reduction in income. Previous studies have estimated the elasticity of food consumption with respect to income to be between 0.6 and 0.7.[8]

[8] See Tobin (1950), Maddala (1971), Izan (1980) and Magnus and Morgan (1997) for estimates of the income elasticity of food.

Over the course of the next six years, more than half of the loss in economic resources is recouped. Six or more years later, income and income-to-needs are 16-20% lower than they would have been if the divorce had not occurred. Food consumption is estimated to be seven percent lower than would be expected with no divorce. Two potential explanations for this recovery pattern immediately come to mind. First, mothers' human capital investment may increase family income over time. Second, some mothers will remarry, thus increasing the economic resources available to their children through the addition of a spouse's earnings. About 30% of the divorced parents in our sample ultimately remarry during our observation window.

We explore this possibility on the right side of Table 2, where the estimates are based on a specification in which the divorce dummies refer to the number of years since the *last* divorce. For years in which the child is (because of remarriage) again in a two parent household, all of the divorce dummies are set equal to 0, and a dummy variable indicating the child currently resides in a two parent family is set equal to 1. In other years, this latter variable equals 0. The coefficient estimates on the divorce dummies now indicate how much of the economic loss associated with divorce persists for children whose mothers do not remarry. Subsequent marriages explain a large portion of the recovery process: family income and income to needs of children whose mothers remain unmarried six or more years after the marital dissolution are 37 to 43% lower than they would have been if the divorce had not taken place. Food consumption remains reduced by approximately one-fifth. In addition, controlling for the most recent marital disruption increases the magnitude of the estimates pertinent to the year following a divorce. For

[9] The divorce dummies are all set to zero for years in which the mother is married.

example, one year after a divorce, family income is 50% lower than it would have been if the child's parents had remained together. This suggests that children whose parents experience multiple separations tend to experience larger losses.

Previous work has emphasized that changes in family structure are a common pathway into (and out of) poverty (Bane and Ellwood, 1986). Our results can be interpreted in this light to show that the average child whose parents divorce will have only a seven (food consumption) to 20 (income) percent long-run reduction in economic well-being. The size of the expected changes in income and consumption, however, are tied to subsequent changes in family structure. For those children whose parents remain in the divorced state, the average losses are much larger, ranging from 20 to over 40 percent. This emphasizes the important role that family structure plays in the material resources available to children.

At first glance, our estimated resource losses appear substantially larger than Duncan and Hoffman's estimates. Duncan and Hoffman emphasize the ratio of post-divorce to pre-divorce income (and income-to-needs) and find that in the year following separation children's family income is 32% lower than its pre-divorce level and that five years later it is four percent lower than its pre-divorce level. Our estimated losses of 41% (one year) and 24% (five year) are larger because our model explicitly accounts for income growth over the life-cycle. Assuming that parents who divorce have similar income trajectories as parents who remain together, Duncan and Hoffman's estimates suggest that children whose parents divorce experience a 37% decline in income in the year following a divorce, and that five years after the divorce takes place their income is

14% lower than it would have been. The small differences between these estimates and our own may result from our ability to control for macroeconomic conditions.

Tables 3 and 4 decompose the income and consumption losses by children's socioeconomic characteristics. In Table 3 we show results from regressions in which the vector of divorce dummies is interacted with indicators for whether the child is black, and in Table 4 we show results from regressions in which the divorce dummies are interacted with indicators for whether the educational attainment of the child's mother was a high school diploma or less. The top half of these tables provide the estimated divorce effects for non-blacks and children whose mothers have more than a high school education, and the bottom half of these tables shows the estimated interaction effects.

In combination, the two tables suggest that lower socio-economic status children incur larger relative losses when their parents divorce. For example, in the year after the divorce family income for non-black children is 40% lower than it would have been if their parents had stayed together, but it is 60% lower for black children.[10] Six or more years after the marital dissolution, the family income of black children remains 52% lower than it would have been if the parents had stayed together, whereas for non-black children family income is only 17% below its expected level. Food consumption shows a similar, though less dramatic pattern across races.

In our sample, 32% of non-blacks remarry whereas only 20% of blacks remarry. The right side of Table 3 shows that controlling for differences between non-blacks' and blacks' propensities to remarry accounts for some of the racial difference in the income loss associated with divorce. For income, and income-to-needs, the coefficient estimates

[10] This is somewhat surprising since, relative to white mothers, black mothers are more likely to be working outside the home.

on the later year interaction terms are about half as large when differences in remarriage rates are controlled. Even after accounting for racial differences in marriage, however, there remain substantial differences in the recovery patterns among blacks and non-blacks. For black and non-black children who remain in single parent families, the long-term effects (after six or more years) on income are 54 and 42 percent, respectively. The effects on the income-to-needs ratio are similar. There is no long-term difference in the effects of divorce on food consumption by race after controlling for differences in remarriage rates.

Table 4 tells a similar, but less dramatic story with respect to differences by mothers' education.[11] Although there is no evidence that children in less-educated families suffer larger losses in the first few years following marital dissolution, six or more years after the divorce children in less educated families show much less recovery than children living in more educated families. Less educated families' incomes, for example, remain 26% lower than they would have been if their parents had stayed together. In contrast, the family incomes of children in more educated families are just 11% below what they would have been if they had remained in a two parent family. After controlling for differences in the propensities to remarry, however, differences between the two groups are no longer statistically significant.

5.B. The Economic Losses for Children Born to Single Mothers

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[11] Remarriage is more common among more highly educated parents. Thirty six percent of the custodial parents in our sample with more than a high school education remarry whereas only 28% of those whose highest educational attainment is a high school diploma remarry.

Estimating the loss in economic resources for children born into single parent families is trickier than estimating the losses associated with divorce because the event that creates the single parent family does not provide a change in marital status to which the resources can be compared. As a result, most of what we know about the relative resources available to such children comes from cross-sectional comparisons. Table 1 indicates why this might be problematic. Compared to the mothers of children born into two parent families, the mothers of children born out-of-wedlock have typically completed lower levels of education and are much more likely to be black. Even within the sample of children who are born into single parent families there are differences in some observable characteristics between those mothers who eventually marry and those who do not. Single mothers who do eventually marry are less likely to have only a high school education, and are much less likely to be black. It is worth noting that while family income appears to be slightly higher for out-of-wedlock children whose parents do not marry in the year of their birth than for those who do eventually marry, in subsequent years this is not true of family income. For example, among children who are still in single parent families at the age of four, average family income is more than 15,000 among those who will later marry, but less than 13,000 among those whose parent is not observed to marry before the end of our sample. This income pattern appears to be driven by a few outliers, and may reflect changes in living arrangements over time. For example, a teenage mother may live with her parents during the year her baby is born but may subsequently move out. The source of this pattern deserves further investigation. Differences in the characteristics presented in the table may only hint at important differences in unobservable characteristics across groups. Our method of estimating the

income losses associated with single parenthood allows us to control for these characteristics.

The drawback to our approach is that, by relying on those women who marry, we will generate a type of selection bias on our estimates. If there is heterogeneity in the gains to marriage and, as seems likely, those women who do marry have larger gains from marriage than those who do not, our estimates will provide an upward biased estimate of the income gain associated with marriage. The estimated effects are unbiased estimates only of the gains to children whose parents actually do marry. In future work, we plan to explore some potential selection bias corrections, although it is difficult to find marriage predictors that are not otherwise associated with family income.

Using our sample of children born out-of-wedlock, we compare the income gains for children whose mothers eventually marry to the income gains for children whose mothers remain single, and interpret the negative of these estimates as the estimated resource loss associated with remaining in a single parent family. The results are presented in Tables 5-7 and are based on equation (2). In the year of a marriage family income increases by 87%. Family food consumption increases by only 20%, however. Six or more years after the observed marriage, family income and income-to-needs remain 67% higher than they would be if the children had remained in single parent families. The effects of marriage on consumption also seem to diminish with time, and are estimated at 11 percent 6 or more years after the initial marriage. In years two through five the effects on consumption are not statistically significant. These large and persistent gains in income indicate that children born into single parent families suffer substantive economic losses *as a direct result* of their parents' marital status. Cross-

sectional differences between the resources available to these children and those available to children in two parent families do not merely reflect differences in their parents' unobservable characteristics. At the same time, however, our estimates suggest that some of the income resource difference observed in cross-sectional data results from unobservable differences across family types, and that cross-sectional comparisons will substantially overstate the potential gains from marriage. For example, if we run a simple OLS regression using data from 1980 only and controlling for age, age-squared, family size, mother's education and whether the child is black, the estimated increase in income associated with marriage is much larger, at 118%, compared to our estimated gain of 67 to 87%.

The right side of Table 5 shows the effects of controlling for the possibility of the initial marriages breaking up and for subsequent marriages. In these regressions, the key variables indicate time elapsed in a two parent household; the dummy variables are set to zero during years in which the household returns to single parent status. An additional dummy variable is added to these regressions indicating that a child (born to a single parent) is currently between marriages. These results show that, for those children whose parents marry and remain married, there is a fairly stable increase in income of around 85 to 95%. This suggests that virtually all of the reduction in the gains to marriage occurs as a result of the original marriages breaking up.

For food consumption, this specification also suggests fairly steady increases in food consumption over the years of marriages, although, as before, most of the coefficients from years two through five are not statistically significant. In the first year of marriage consumption increases by 20% and for those who remain married for six or

more years, consumption is raised by 23%. Our results for this sample indicate a much lower elasticity of food consumption with respect to income than we found in the sample of children born into two parent families. In the initial year of a marriage, the consumption changes are roughly one-fourth the size of the estimated income changes. In subsequent years the consumption changes are even smaller as a proportion of income changes. This may reflect the fact that food consumption must be maintained at some minimal level even when income is at the very low levels found in many of these single parent households.

Breaking the estimated effects of marriage down by race and mothers' education reveals little evidence that the economic losses for children born into single parent families vary across these groups. These results are shown in Tables 7 and 8. Very few of the interaction effects are significantly different from zero. The interactions between the effects of marriage and black are generally positive for the income measures, but negative for the consumption measures, but are not close to statistical significance. The estimated coefficients on the interaction terms between high school or less education and the time since marriage in the income regressions are almost all between –0.2 and –0.3, suggesting that the gains to marriage for less educated families are smaller than for more educated families. These are also not statistically significant, although their lack of precision may simply reflect small sample sizes.

5.C. Does Welfare Help?

We next consider the role of welfare benefits in mitigating the losses associated with changes in family structure. For those children whose parents divorce, we ask to

what extent higher AFDC benefits reduce the losses in income and consumption associated with divorce. Similarly, for the sample of children born to single parent families, we ask by how much do higher AFDC benefits reduce the gains associated with marriage (by increasing income and consumption while in the single parent state). To estimate these effects, we add a set of interactions between the level of AFDC benefits available in the child's state of residence and the single- or two-parent dummy variables. For the children born to two parent families we modify equation (1) to get:

$$\ln I_{it} = X_{it}\beta + D_{it}\delta + \phi_1 MAXBEN_{st} + \phi_2 MAXBEN * D_{it} + \rho_s + \alpha_i + \gamma_t + u_{it} \qquad (3)$$

where MAXBEN*st* gives the maximum benefit available to a family of four in state s during year t. We also include a vector of state dummy variables (ρ_s), to control for unobserved state characteristics that may be correlated with both AFDC benefits and income levels.[13] Similarly, for children born to single parent families we add to equation (2) interactions between the dummies for two parent status and maximum benefits, as well as state fixed effects. This gives us

$$\ln I_{it} = X_{it}\beta + M_{it}\delta + \phi_1 MAXBEN_{st} + \phi_2 MAXBEN_{st} * M_{it} + \rho_s + \alpha_i + \gamma_t + u_{it} \qquad (4)$$

We now can interpret the coefficients on the interactions between maximum benefits levels and single-parent status (and the negative of the interactions with two-parent status in the case of children born to single parents) as the extent to which higher benefits mitigate the loss in resources associated with living in a single-parent family.

For this part of the analysis we begin by combining the variables for years after a divorce or marriage into a single variable. Now Dit in equation (3) above is a single

variable indicating that the child is in a single parent family, regardless of how long he or she has been in that type of household. In equation (4), Mit is a single variable indicating membership in a two parent family. In Table 8, we show the effects of benefits on income, income-to-needs and consumption losses due to residence in a single parent family. In Tables 8 and 9, the reported coefficients have been multiplied by 1000 so that the table entries give the effect on log income or consumption of a $1000 increase in annual AFDC benefits.

Beginning with the full sample of children born to two parents, an additional $1000 in the annual AFDC benefit maximum is estimated to increase family income by 2%. Average income in those families that eventually divorce (from Table 1) is $34,865, and the estimated log income loss with divorce is roughly .57, using the coefficient from Table 2 for six or more years after marriage. This implies that an increase in maximum benefits of $1000 would lead to an increase of $303 in family income of children in divorced households. Surprisingly, for children whose mothers have only a high school education or less, the estimated effect of maximum benefits levels is slightly smaller, at 1.4%. This implies an increase in income of approximately $271 from a $1000 increase in benefit maximums for children of less-educated women. The effects on the income-to-needs ratio are similar, at 1.7 and 1% for the full sample and the less-educated sub-sample. For food consumption, we find no statistically significant effect of benefit levels on food consumption, and the point estimates have the wrong sign.

We next turn to the sample of children born to single parents and consider how higher AFDC benefits affect the expected gains from marriage to income and

[13] Because we already include individual fixed-effects, the state effects have the effect of eliminating movements across states by individuals as a source of identification for the

consumption. For income in the full sample of children starting out in single parent homes, we estimate that a $1000 increase in annual AFDC benefits would lead to a 3% smaller increase in family income associated with marriage. Children whose parents eventually marry have average incomes, as reported in Table 1, of $17,218. The long-run gain in log income associated with marriage for these children is .66. Together these estimates imply that an increase of $1000 in annual AFDC benefit maximums raises the family income of children born to single parents by $483. There are slightly larger effects of AFDC on income among the less-educated sub-sample, as expected. For children born to single mothers with only a high school education or less, a $1000 increase in AFDC benefits reduces the gain from marriage by approximately 3.7%. Again, the results for the income to needs ratio are similar, and we find no significant effects on food consumption.

It is surprising that we find strong effects on income, but no statistically significant effects of higher AFDC benefit levels on food consumption. For children whose parents divorce, as noted above, we find that food consumption falls by roughly 60% as much as income falls as the result of divorce. In contrast, our estimated effects of AFDC on consumption are so small that an effect 60% of the size of the income effect is not contained in a standard confidence interval around the point estimate. For children born to single parents, the elasticity of food with respect to income implied by the estimates in Table 5 is much smaller, and so it is somewhat less surprising that the estimated effects of AFDC on income and food consumption are so different from one another.

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maximum benefit effect.

We have also estimated models including the entire set of dummy variables for time since a divorce interacted with AFDC benefit amounts. These results for children born to two parent households are shown in Table 9, and illustrate how the effects of AFDC may vary as time elapses since the divorce. In the first three columns of the table, we include interactions between AFDC and dummies for time since the parent's first divorce. In this case, the effect of AFDC rises over the first few years after the divorce from 1.2% (from a $1000 benefit increase) in the year of the divorce to 3.1% three years later, and then fall, becoming statistically insignificant in years four and later. The right hand side of the table shows that the fading effects of benefit levels reflects remarriage. When we control for time actually married (or time since the most recent marriage) and interact that with AFDC, the effects of benefit levels are stable at around 3% after the second year. An exception to this pattern is the coefficient in year four, although the effect returns to approximately 3% in years five and later. Thus, for children whose parents do not remarry, AFDC continues to significantly increase income for several years.

For food consumption, we again find no statistically significant coefficients on the AFDC interactions, and only years zero, four and five have the expected sign. In the initial year after divorce, the point estimate from the food consumption regression is 50 to 80% as large as the estimate from the family income regressions, but is not statistically significant. However, in subsequent years, the estimated effects are often negative, and are imprecisely estimated.

We do not present comparable results for children born to single-parent families, since we do not have any strong expectations about how or why the effects of AFDC

benefits should vary around the time since marriage. For completeness, however, we include these results in an appendix table.

6. Conclusions

This study estimates the effect of family structure on family resources, looking separately at the resources available to children who begin life in a two parent family but later experience parental divorce and at children who are born into single parent families and subsequently have a parent marry. We find that both the short run and the long-run economic consequences of growing up in a single parent family are substantial. In the first year following divorce, childrens' economic resources fall by 25-41%, and this loss does not diminish substantially over time unless a second marriage occurs. Turning to our sample of children born to single parents, we find that the resources available to these children are increased by more than 80% in both the short-run and the long-run when their mothers marry and remain married. Because of non-random selection into marriage, this figure is likely to be an upper bound on the expected gains to marriage for a typical child born to a single parent.

Although these estimates are of considerable magnitude, our findings indicate that estimates that do not control for parents' unobservable characteristics may overstate the economic gains that would result from policies that encourage marriage. Our simple cross-section estimates, for example, imply that children born out-of-wedlock would experience even larger income gains if their parents were to marry. This statistic provides a misleading picture of the gains that would be expected to result from a policy that somehow required all single mothers to marry.

These findings suggest that the time-limits recently imposed as part of welfare reform could result in substantive reductions in economic well-being for children living in single parent families. The costs associated with growing up in such families are not temporary but continue until a marriage occurs. Most children in single parent families do not experience a parental marriage (or remarriage).

Finally, our estimates of the impact of AFDC focus on the potential role of cash assistance to single parent families in improving the welfare of children. Our preliminary results here are somewhat mixed. We find increases of between $300 and $500 in family income from raising the AFDC annual benefit maximums by $1000. For food consumption, however, we find little evidence that changes in these maximums significantly raises food consumption of children in single parent homes. We will continue to explore this finding in future work.

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Table 1. Sample Means in Year of Birth

	Born into Two Parent Family		Born into Single Parent Family	
	Remain in Two Parent Family	Parents Divorce	Remain in Single Parent Family	Parent Eventually Marries
Family Income	42212	34865	17907	17218
	(27057)	(27374)	(19081)	(15165)
Family Income to Needs	7.86	5.5	3.45	3.03
	(7.86)	(5.16)	(4.11)	(2.85)
Food Consumption	5925	5413	4430	4285
	(2814)	(2354)	(2795)	(2920)
Mother's ed <= High School	0.553	0.64	0.78	0.72
	(0.50)	(0.48)	(0.41)	(0.45)
Black	0.08	0.105	0.63	0.35
	(0.27)	(0.31)	(0.48)	(0.48)
Maximum AFDC Benefit for Family of Four	7802	7824	6657	7344
	(2988)	(3164)	(3004)	(3102)
Family Size	4.14	3.92	4.42	3.74
	(1.27)	(1.08)	(2.02)	(1.90)
Number of Children in Sample	6045	1352	1606	483

Note: Standard deviations in parenthesis

Table 2. Estimated Economic Consequences Associated with Single Parent Family Status Children Born into Two Parent Families

Years Before or After Divorce	Year Since First Divorce			Year Since Last Divorce		
	Log Income	Log Income/Needs	Log Consumption	Log Income	Log Income/Needs	Log Consumption
2 years before	**-0.021**	**-0.019**	**0.018**	**-0.013**	**-0.013**	**0.020**
	(0.035)	(0.035)	(0.032)	(0.035)	(0.035)	(0.032)
	-0.021	*-0.019*	*0.018*	*-0.013*	*-0.013*	*0.020*
1 year before	**0.023**	**0.023**	**0.010**	**0.035**	**0.032**	**0.012**
	(0.028)	(0.028)	(0.028)	(0.027)	(0.027)	(0.026)
	0.023	*0.023*	*0.010*	*0.036*	*0.033*	*0.012*
Year of Divorce	**-0.155**	**-0.213**	**-0.384**	**-0.174**	**-0.222**	**-0.399**
	(0.034)	(0.032)	(0.046)	(0.034)	(0.032)	(0.046)
	-0.144	-0.192	-0.319	-0.160	-0.199	-0.329
1 year after	**-0.533**	**-0.422**	**-0.290**	**-0.676**	**-0.514**	**-0.349**
	(0.040)	(0.039)	(0.051)	(0.042)	(0.042)	(0.055)
	-0.413	*-0.344*	*-0.252*	*-0.491*	*-0.402*	*-0.295*
2 years after	**-0.371**	**-0.291**	**-0.217**	**-0.593**	**-0.465**	**-0.282**
	(0.038)	(0.037)	(0.037)	(0.040)	(0.041)	(0.034)
	-0.310	*-0.252*	*-0.195*	*-0.447*	*-0.372*	*-0.246*
3 years after	**-0.293**	**-0.237**	**-0.200**	**-0.611**	**-0.487**	**-0.342**
	(0.037)	(0.036)	(0.042)	(0.036)	(0.035)	(0.048)
	-0.254	*-0.211*	*-0.181*	*-0.457*	*-0.386*	*-0.290*
4 year after	**-0.264**	**-0.205**	**-0.107**	**-0.590**	**-0.479**	**-0.198**
	(0.039)	(0.039)	(0.041)	(0.043)	(0.044)	(0.040)
	-0.232	*-0.185*	*-0.101*	*-0.446*	*-0.381*	*-0.180*
5 year after	**-0.268**	**-0.214**	**-0.134**	**-0.574**	**-0.453**	**-0.233**
	(0.043)	(0.043)	(0.037)	(0.046)	(0.047)	(0.047)
	-0.235	*-0.193*	*-0.125*	*-0.437*	*-0.364*	*-0.208*
6 or more years after	**-0.221**	**-0.177**	**-0.077**	**-0.569**	**-0.458**	**-0.214**
	(0.038)	(0.037)	(0.032)	(0.044)	(0.044)	(0.035)
	-0.198	*-0.162*	*-0.074*	*-0.434*	*-0.367*	*-0.193*

Note: Standard errors in parentheses. Percentage effect in italics.

Table 3. Estimated Economic Consequences Associated with Single Parent Family Status
Children Born Into Two Parent Families - by Race

Years Before or After Divorce	Year Since First Divorce: Log Income	Year Since First Divorce: Log Income/Needs	Year Since First Divorce: Log Consumption	Year Since Last Divorce: Log Income	Year Since Last Divorce: Log Income/Needs	Year Since Last Divorce: Log Consumption
2 years before	**-0.014**	**-0.012**	**0.055**	**-0.006**	**-0.006**	**0.054**
	(0.038)	(0.038)	(0.028)	(0.038)	(0.038)	(0.028)
% effect, non-blacks	*-0.014*	*-0.012*	*0.057*	*-0.006*	*-0.006*	*0.055*
1 year before	**0.048**	**0.050**	**0.020**	**0.060**	**0.058**	**0.019**
	(0.030)	(0.030)	(0.028)	(0.029)	(0.030)	(0.028)
% effect, non-blacks	*0.049*	*0.051*	*0.020*	*0.062*	*0.060*	*0.019*
Year of Divorce	**-0.121**	**-0.181**	**-0.395**	**-0.137**	**-0.185**	**-0.412**
	(0.034)	(0.033)	(0.050)	(0.035)	(0.033)	(0.050)
% effect, non-blacks	*-0.114*	*-0.166*	*-0.326*	*-0.128*	*-0.169*	*-0.338*
1 year after	**-0.504**	**-0.396**	**-0.291**	**-0.650**	**-0.486**	**-0.359**
	(0.041)	(0.040)	(0.055)	(0.044)	(0.044)	(0.060)
% effect, non-blacks	*-0.396*	*-0.327*	*-0.252*	*-0.478*	*-0.385*	*-0.302*
2 years after	**-0.328**	**-0.253**	**-0.193**	**-0.562**	**-0.432**	**-0.256**
	(0.038)	(0.037)	(0.037)	(0.039)	(0.040)	(0.032)
% effect, non-blacks	*-0.280*	*-0.224*	*-0.176*	*-0.430*	*-0.351*	*-0.226*
3 years after	**-0.250**	**-0.198**	**-0.186**	**-0.596**	**-0.468**	**-0.342**
	(0.039)	(0.038)	(0.045)	(0.039)	(0.038)	(0.053)
% effect, non-blacks	*-0.221*	*-0.180*	*-0.170*	*-0.449*	*-0.374*	*-0.290*
4 year after	**-0.218**	**-0.162**	**-0.107**	**-0.569**	**-0.454**	**-0.218**
	(0.042)	(0.041)	(0.043)	(0.047)	(0.048)	(0.043)
% effect, non-blacks	*-0.196*	*-0.150*	*-0.101*	*-0.434*	*-0.365*	*-0.196*
5 year after	**-0.232**	**-0.178**	**-0.119**	**-0.559**	**-0.429**	**-0.231**
	(0.045)	(0.045)	(0.039)	(0.050)	(0.051)	(0.052)
% effect, non-blacks	*-0.207*	*-0.163*	*-0.112*	*-0.428*	*-0.349*	*-0.206*
6 or more years after	**-0.185**	**-0.141**	**-0.061**	**-0.548**	**-0.430**	**-0.202**
	(0.039)	(0.038)	(0.034)	(0.048)	(0.048)	(0.038)
% effect, non-blacks	*-0.169*	*-0.132*	*-0.059*	*-0.422*	*-0.349*	*-0.183*

(cont'd)

Years Before or After Divorce	Year Since First Divorce			Year Since Last Divorce		
	Log Income	Log Income/Needs	Log Consumption	Log Income	Log Income/Needs	Log Consumption
2 years before * black	**-0.110**	**-0.104**	**-0.390**	**-0.105**	**-0.108**	**-0.362**
	(0.057)	(0.057)	(0.195)	(0.061)	(0.060)	(0.203)
% effect, blacks	*-0.117*	*-0.110*	*-0.285*	*-0.105*	*-0.108*	*-0.265*
1 year before * black	**-0.295**	**-0.302**	**-0.110**	**-0.298**	**-0.313**	**-0.080**
	(0.055)	(0.056)	(0.065)	(0.060)	(0.060)	(0.071)
% effect, blacks	*-0.219*	*-0.223*	*-0.086*	*-0.212*	*-0.225*	*-0.059*
Year of Divorce * black	**-0.398**	**-0.385**	**0.095**	**-0.421**	**-0.419**	**0.145**
	(0.092)	(0.083)	(0.079)	(0.099)	(0.091)	(0.083)
% effect, blacks	*-0.405*	*-0.432*	*-0.259*	*-0.428*	*-0.453*	*-0.234*
1 year after * black	**-0.410**	**-0.367**	**0.005**	**-0.303**	**-0.326**	**0.092**
	(0.109)	(0.109)	(0.106)	(0.108)	(0.108)	(0.104)
% effect, blacks	*-0.599*	*-0.534*	*-0.249*	*-0.614*	*-0.556*	*-0.234*
2 years after * black	**-0.553**	**-0.498**	**-0.287**	**-0.339**	**-0.348**	**-0.222**
	(0.132)	(0.137)	(0.156)	(0.123)	(0.127)	(0.140)
% effect, blacks	*-0.586*	*-0.528*	*-0.381*	*-0.594*	*-0.542*	*-0.380*
3 years after * black	**-0.559**	**-0.516**	**-0.182**	**-0.201**	**-0.235**	**-0.013**
	(0.075)	(0.076)	(0.098)	(0.074)	(0.075)	(0.094)
% effect, blacks	*-0.555*	*-0.510*	*-0.308*	*-0.549*	*-0.505*	*-0.299*
4 year after * black	**-0.588**	**-0.557**	**-0.018**	**-0.237**	**-0.267**	**0.098**
	(0.082)	(0.083)	(0.103)	(0.081)	(0.082)	(0.098)
% effect, blacks	*-0.553*	*-0.513*	*-0.118*	*-0.553*	*-0.514*	*-0.113*
5 year after * black	**-0.502**	**-0.493**	**-0.187**	**-0.202**	**-0.259**	**-0.037**
	(0.102)	(0.104)	(0.099)	(0.093)	(0.094)	(0.097)
% effect, blacks	*-0.520*	*-0.489*	*-0.264*	*-0.533*	*-0.497*	*-0.235*
6 or more years after * black	**-0.541**	**-0.521**	**-0.229**	**-0.227**	**-0.273**	**-0.088**
	(0.083)	(0.082)	(0.080)	(0.081)	(0.081)	(0.082)
% effect, blacks	*-0.516*	*-0.484*	*-0.252*	*-0.539*	*-0.505*	*-0.252*

Note: Standard errors in parentheses. In top half of table, numbers in italics are percentage effects of divorce for non-blacks. In lower half of table, numbers in italics are percentage effects of divorce for blacks

Table 4. Estimated Economic Consequences Associated with Single Parent Family Status Children Born Into Two Parent Families - by Education

	Year Since First Divorce			Year Since Last Divorce		
Years Before or After Divorce	Log Income	Log Income/Needs	Log Consumption	Log Income	Log Income/Needs	Log Consumption
2 years before	**-0.102**	**-0.102**	**0.048**	**-0.094**	**-0.097**	**0.047**
	(0.067)	(0.067)	(0.054)	(0.067)	(0.067)	(0.054)
% effect, > h.s.	*-0.097*	*-0.097*	*0.049*	*-0.090*	*-0.092*	*0.048*
1 year before	**0.081**	**0.077**	**0.078**	**0.090**	**0.082**	**0.078**
	(0.042)	(0.042)	(0.042)	(0.042)	(0.042)	(0.042)
% effect, > h.s.	*0.084*	*0.080*	*0.081*	*0.094*	*0.085*	*0.081*
Year of Divorce	**-0.233**	**-0.266**	**-0.525**	**-0.254**	**-0.278**	**-0.534**
	(0.060)	(0.056)	(0.090)	(0.058)	(0.055)	(0.087)
% effect, > h.s.	*-0.208*	*-0.234*	*-0.408*	*-0.224*	*-0.243*	*-0.414*
1 year after	**-0.574**	**-0.47**	**-0.478**	**-0.717**	**-0.562**	**-0.514**
	(0.080)	(0.078)	(0.101)	(0.085)	(0.085)	(0.109)
% effect, > h.s.	*-0.437*	*-0.375*	*-0.380*	*-0.512*	*-0.430*	*-0.402*
2 years after	**-0.373**	**-0.298**	**-0.176**	**-0.584**	**-0.450**	**-0.269**
	(0.062)	(0.061)	(0.046)	(0.070)	(0.072)	(0.048)
% effect, > h.s.	*-0.311*	*-0.258*	*-0.161*	*-0.442*	*-0.362*	*-0.236*
3 years after	**-0.259**	**-0.217**	**-0.207**	**-0.571**	**-0.468**	**-0.322**
	(0.060)	(0.057)	(0.048)	(0.060)	(0.060)	(0.047)
% effect, > h.s.	*-0.228*	*-0.195*	*-0.187*	*-0.435*	*-0.374*	*-0.275*
4 year after	**-0.216**	**-0.171**	**-0.097**	**-0.547**	**-0.453**	**-0.173**
	(0.066)	(0.066)	(0.054)	(0.075)	(0.077)	(0.070)
% effect, > h.s.	*-0.194*	*-0.157*	*-0.092*	*-0.421*	*-0.364*	*-0.159*
5 year after	**-0.284**	**-0.254**	**-0.107**	**-0.560**	**-0.462**	**-0.143**
	(0.076)	(0.077)	(0.050)	(0.082)	(0.086)	(0.062)
% effect, > h.s.	*-0.247*	*-0.224*	*-0.101*	*-0.429*	*-0.370*	*-0.133*
6 or more years after	**-0.118**	**-0.088**	**-0.061**	**-0.495**	**-0.367**	**-0.188**
	(0.057)	(0.055)	(0.044)	(0.075)	(0.075)	(0.064)
% effect, > h.s.	*-0.111*	*-0.084*	*-0.059*	*-0.390*	*-0.307*	*-0.171*

(cont'd)

Years Before or After Divorce	Year Since First Divorce			Year Since Last Divorce		
	Log Income	Log Income/Needs	Log Consumption	Log Income	Log Income/Needs	Log Consumption
2 years before	**0.130**	**0.134**	**-0.045**	**0.129**	**0.133**	**-0.043**
* High School	(0.078)	(0.077)	(0.068)	(0.077)	(0.077)	(0.067)
% effect, h.s. or less	*0.028*	*0.033*	*0.003*	*0.036*	*0.037*	*0.004*
1 year before	**-0.091**	**-0.083**	**-0.104**	**-0.086**	**-0.078**	**-0.100**
* High School	(0.054)	(0.055)	(0.053)	(0.054)	(0.054)	(0.054)
% effect, h.s. or less	*-0.010*	*-0.006*	*-0.026*	*0.004*	*0.004*	*-0.022*
Year of Divorce	**0.124**	**0.084**	**0.228**	**0.126**	**0.088**	**0.221**
* High School	(0.067)	(0.063)	(0.102)	(0.066)	(0.063)	(0.099)
% effect, h.s. or less	*-0.103*	*-0.166*	*-0.257*	*-0.120*	*-0.173*	*-0.269*
1 year after	**0.067**	**0.079**	**0.319**	**0.068**	**0.080**	**0.283**
* High School	(0.087)	(0.085)	(0.113)	(0.090)	(0.090)	(0.121)
% effect, h.s. or less	*-0.398*	*-0.324*	*-0.147*	*-0.477*	*-0.382*	*-0.206*
2 years after	**0.002**	**0.011**	**-0.067**	**-0.017**	**-0.025**	**-0.017**
* High School	(0.074)	-0.074	(0.069)	(0.080)	(0.082)	(0.065)
% effect, h.s. or less	*-0.310*	*-0.249*	*-0.216*	*-0.452*	*-0.378*	*-0.249*
3 years after	**-0.062**	**-0.036**	**0.013**	**-0.067**	**-0.033**	**-0.033**
* High School	(0.074)	(0.071)	(0.081)	(0.070)	(0.069)	(0.090)
% effect, h.s. or less	*-0.275*	*-0.224*	*-0.176*	*-0.472*	*-0.394*	*-0.299*
4 year after	**-0.088**	**-0.061**	**-0.016**	**-0.077**	**-0.048**	**-0.046**
* High School	(0.078)	(0.077)	(0.079)	(0.085)	(0.087)	(0.083)
% effect, h.s. or less	*-0.262*	*-0.207*	*-0.107*	*-0.464*	*-0.394*	*-0.197*
5 year after	**0.025**	**0.069**	**-0.048**	**-0.026**	**0.015**	**-0.149**
* High School	(0.086)	(0.086)	(0.072)	(0.093)	(0.096)	(0.090)
% effect, h.s. or less	*-0.228*	*-0.169*	*-0.144*	*-0.443*	*-0.360*	*-0.253*
6 or more years	**-0.180**	**-0.154**	**-0.025**	**-0.107**	**-0.131**	**-0.035**
after * High School	(0.069)	(0.067)	(0.061)	(0.086)	(0.086)	(0.074)
% effect, h.s. or less	*-0.258*	*-0.215*	*-0.082*	*-0.452*	*-0.392*	*-0.200*

Note: Standard errors in parentheses. In top half of table, numbers in italics are percentage effects of divorce for those with mothers' education greater than high school. In lower half of table, numbers in italics are percentage effects of divorce for those with mothers' education high school or less

Table 5. Estimated Economic Consequences Associated with Single Parent Family Status Children Born into Single Parent Families

	Year Since First Marriage			Year Since Last Marriage		
Years Before or After Marriage	Log Income	Log Income/Needs	Log Consumption	Log Income	Log Income/Needs	Log Consumption
2 years before	**0.125**	**0.139**	**-0.062**	**0.134**	**0.146**	**-0.067**
	(0.091)	(0.088)	(0.079)	(0.091)	(0.088)	(0.079)
	0.133	*0.149*	*-0.060*	*0.143*	*0.157*	*-0.065*
1 year before	**0.033**	**0.058**	**0.014**	**0.045**	**0.066**	**0.009**
	(0.119)	(0.118)	(0.055)	(0.118)	(0.117)	(0.054)
	0.034	*0.060*	*0.014*	*0.046*	*0.068*	*0.009*
Year of Marriage	**0.627**	**0.514**	**0.186**	**0.640**	**0.525**	**0.178**
	(0.077)	(0.075)	(0.052)	(0.076)	(0.074)	(0.052)
	0.872	*0.672*	*0.204*	*0.896*	*0.690*	*0.195*
1 year after	**0.606**	**0.574**	**0.031**	**0.620**	**0.589**	**0.079**
	(0.084)	(0.082)	(0.060)	(0.082)	(0.080)	(0.058)
	0.833	*0.775*	*0.031*	*0.859*	*0.802*	*0.082*
2 years after	**0.571**	**0.553**	**-0.002**	**0.662**	**0.637**	**0.094**
	(0.088)	(0.085)	(0.065)	(0.084)	(0.082)	(0.067)
	0.770	*0.738*	*-0.002*	*0.939*	*0.891*	*0.099*
3 years after	**0.487**	**0.483**	**0.034**	**0.653**	**0.629**	**-0.002**
	(0.084)	(0.086)	(0.065)	(0.086)	(0.086)	(0.073)
	0.627	*0.621*	*0.035*	*0.921*	*0.876*	*-0.002*
4 year after	**0.481**	**0.480**	**0.080**	**0.672**	**0.646**	**0.085**
	(0.090)	(0.086)	(0.063)	(0.090)	(0.086)	(0.067)
	0.618	*0.616*	*0.083*	*0.958*	*0.908*	*0.089*
5 year after	**0.444**	**0.455**	**0.078**	**0.653**	**0.635**	**0.111**
	(0.089)	(0.086)	(0.068)	(0.093)	(0.090)	(0.069)
	0.559	*0.576*	*0.081*	*0.921*	*0.887*	*0.117*
6 or more years after	**0.511**	**0.518**	**0.111**	**0.664**	**0.650**	**0.209**
	(0.097)	(0.095)	(0.071)	(0.109)	(0.107)	(0.074)
	0.667	*0.679*	*0.117*	*0.943*	*0.916*	*0.232*

Note: Standard errors in parentheses. Percentage effect in italics.

Table 6. Estimated Economic Consequences Associated with Single Parent Family Status
Children Born Into Single Parent Families - by Race

Years Before or After Marriage	Year Since First Marriage: Log Income	Year Since First Marriage: Log Income/Needs	Year Since First Marriage: Log Consumption	Year Since Last Marriage: Log Income	Year Since Last Marriage: Log Income/Needs	Year Since Last Marriage: Log Consumption
2 years before	**0.163**	**0.177**	**-0.100**	**0.170**	**0.182**	**-0.106**
	(0.135)	(0.132)	(0.107)	(0.136)	(0.132)	(0.108)
% effect, non-blacks	*0.177*	*0.194*	*-0.095*	*0.185*	*0.200*	*-0.101*
1 year before	**0.016**	**0.053**	**-0.015**	**0.021**	**0.055**	**-0.022**
	(0.184)	(0.183)	(0.074)	(0.184)	(0.183)	(0.073)
% effect, non-blacks	*0.016*	*0.054*	*-0.015*	*0.021*	*0.057*	*-0.022*
Year of Marriage	**0.618**	**0.515**	**0.160**	**0.624**	**0.518**	**0.163**
	(0.116)	(0.114)	(0.070)	(0.115)	(0.113)	(0.069)
% effect, non-blacks	*0.855*	*0.674*	*0.174*	*0.866*	*0.679*	*0.177*
1 year after	**0.643**	**0.621**	**0.080**	**0.648**	**0.632**	**0.132**
	(0.122)	(0.119)	(0.079)	(0.116)	(0.114)	(0.075)
% effect, non-blacks	*0.902*	*0.861*	*0.083*	*0.912*	*0.881*	*0.141*
2 years after	**0.480**	**0.482**	**0.003**	**0.610**	**0.605**	**0.094**
	(0.123)	(0.121)	(0.084)	(0.122)	(0.120)	(0.083)
% effect, non-blacks	*0.616*	*0.619*	*0.003*	*0.840*	*0.831*	*0.099*
3 years after	**0.452**	**0.460**	**0.057**	**0.604**	**0.597**	**0.014**
	(0.119)	(0.117)	(0.082)	(0.123)	(0.121)	(0.095)
% effect, non-blacks	*0.571*	*0.584*	*0.059*	*0.829*	*0.817*	*0.014*
4 year after	**0.454**	**0.468**	**0.087**	**0.618**	**0.608**	**0.101**
	(0.121)	(0.117)	(0.078)	(0.122)	(0.179)	(0.080)
% effect, non-blacks	*0.575*	*0.597*	*0.091*	*0.855*	*0.837*	*0.106*
5 year after	**0.392**	**0.406**	**0.102**	**0.592**	**0.578**	**0.121**
	(0.123)	(0.121)	(0.083)	(0.127)	(0.124)	(0.083)
% effect, non-blacks	*0.480*	*0.501*	*0.108*	*0.808*	*0.782*	*0.129*
6 or more years after	**0.521**	**0.535**	**0.162**	**0.608**	**0.604**	**0.252**
	(0.131)	(0.129)	(0.086)	(0.144)	(0.142)	(0.086)
% effect, non-blacks	*0.684*	*0.707*	*0.176*	*0.837*	*0.829*	*0.287*

(cont'd)

Years Before or After Marriage	Year Since First Marriage			Year Since Last Marriage		
	Log Income	Log Income/Needs	Log Consumption	Log Income	Log Income/Needs	Log Consumption
2 years before * black	**-0.105**	**-0.102**	**0.113**	**-0.099**	**-0.096**	**0.115**
	(0.171)	(0.166)	(0.145)	(0.172)	(0.167)	(0.146)
% effect, blacks	*0.060*	*0.078*	*0.013*	*0.074*	*0.090*	*0.009*
1 year before * black	**0.521**	**0.535**	**0.162**	**0.608**	**0.604**	**0.252**
	(0.131)	(0.129)	(0.086)	(0.144)	(0.142)	(0.086)
% effect, blacks	*0.711*	*0.800*	*0.158*	*0.876*	*0.933*	*0.259*
Year of Marriage * black	**0.017**	**-0.007**	**0.077**	**0.037**	**0.015**	**0.041**
	(0.146)	(0.143)	(0.093)	(0.145)	(0.142)	(0.096)
% effect, blacks	*0.887*	*0.662*	*0.267*	*0.937*	*0.704*	*0.226*
1 year after * black	**-0.113**	**-0.135**	**-0.131**	**-0.097**	**-0.135**	**-0.151**
	(0.160)	(0.143)	(0.109)	(0.158)	(0.156)	(0.103)
% effect, blacks	*0.699*	*0.626*	*-0.050*	*0.735*	*0.644*	*-0.019*
2 years after * black	**0.252**	**0.198**	**-0.002**	**0.152**	**0.096**	**-0.008**
	(0.158)	(0.152)	(0.122)	(0.148)	(0.143)	(0.128)
% effect, blacks	*1.079*	*0.974*	*0.001*	*1.143*	*1.016*	*0.090*
3 years after * black	**0.096**	**0.066**	**-0.060**	**0.143**	**0.096**	**-0.066**
	(0.146)	(0.142)	(0.119)	(0.146)	(0.144)	(0.121)
% effect, blacks	*0.730*	*0.692*	*-0.003*	*1.111*	*1.000*	*-0.051*
4 year after * black	**0.075**	**0.039**	**-0.010**	**0.196**	**0.148**	**-0.071**
	(0.168)	(0.159)	(0.108)	(0.157)	(0.149)	(0.115)
% effect, blacks	*0.697*	*0.660*	*0.080*	*1.257*	*1.130*	*0.030*
5 year after * black	**0.160**	**0.159**	**-0.066**	**0.222**	**0.217**	**-0.049**
	(0.155)	(0.150)	(0.117)	(0.153)	(0.149)	(0.111)
% effect, blacks	*0.737*	*0.759*	*0.037*	*1.257*	*1.214*	*0.075*
6 or more years after * black	**-0.048**	**-0.064**	**-0.168**	**0.221**	**0.193**	**-0.197**
	(0.155)	(0.151)	(0.098)	(0.165)	(0.161)	(0.109)
% effect, blacks	*0.605*	*0.602*	*-0.006*	*1.291*	*1.219*	*0.057*

Note: Standard errors in parentheses. In top half of table, numbers in italics are percentage effects of divorce for non-blacks. In lower half of table, numbers in italics are percentage effects of divorce for blacks

Table 7. Estimated Economic Consequences Associated with Single Parent Family Status
Children Born Into Single Parent Families - by Education

Years Before or After Marriage	Year Since First Marriage			Year Since Last Marriage		
	Log Income	Log Income/Needs	Log Consumption	Log Income	Log Income/Needs	Log Consumption
2 years before	**0.263**	**0.269**	**-0.061**	**0.261**	**0.265**	**-0.074**
	(0.099)	(0.092)	(0.135)	(0.097)	(0.090)	(0.135)
% effect, > h.s.	*0.301*	*0.309*	*-0.059*	*0.298*	*0.303*	*-0.071*
1 year before	**0.254**	**0.272**	**0.004**	**0.250**	**0.265**	**-0.011**
	(0.096)	(0.093)	(0.085)	(0.095)	(0.093)	(0.085)
% effect, > h.s.	*0.289*	*0.313*	*0.004*	*0.284*	*0.303*	*-0.011*
Year of Marriage	**0.750**	**0.617**	**0.170**	**0.764**	**0.618**	**0.170**
	(0.090)	(0.092)	(0.076)	(0.089)	(0.090)	(0.075)
% effect, > h.s.	*1.117*	*0.853*	*0.185*	*1.147*	*0.855*	*0.185*
1 year after	**0.747**	**0.704**	**-0.001**	**0.772**	**0.732**	**0.098**
	(0.094)	(0.089)	(0.095)	(0.094)	(0.089)	(0.083)
% effect, > h.s.	*1.111*	*1.022*	*-0.001*	*1.164*	*1.079*	*0.103*
2 years after	**0.752**	**0.734**	**0.009**	**0.855**	**0.824**	**0.078**
	(0.098)	(0.094)	(0.083)	(0.098)	(0.095)	(0.079)
% effect, > h.s.	*1.121*	*1.083*	*0.009*	*1.351*	*1.280*	*0.081*
3 years after	**0.607**	**0.606**	**0.054**	**0.739**	**0.718**	**-0.047**
	(0.115)	(0.112)	(0.113)	(0.122)	(0.120)	(0.131)
% effect, > h.s.	*0.835*	*0.833*	*0.055*	*1.094*	*1.050*	*-0.046*
4 year after	**0.616**	**0.568**	**0.075**	**0.690**	**0.640**	**0.066**
	(0.117)	(0.111)	(0.105)	(0.113)	(0.105)	(0.115)
% effect, > h.s.	*0.852*	*0.765*	*0.078*	*0.994*	*0.896*	*0.068*
5 year after	**0.606**	**0.604**	**0.190**	**0.723**	**0.710**	**0.056**
	(0.112)	(0.114)	(0.128)	(0.119)	(0.116)	(0.115)
% effect, > h.s.	*0.833*	*0.829*	*0.209*	*1.061*	*1.034*	*0.058*
6 or more years after	**0.636**	**0.645**	**0.090**	**0.713**	**0.714**	**0.175**
	(0.102)	(0.099)	(0.109)	(0.106)	(0.103)	(0.099)
% effect, > h.s.	*0.889*	*0.906*	*0.094*	*1.040*	*1.042*	*0.191*

(cont'd)

Years Before or After Marriage	Year Since First Marriage			Year Since Last Marriage		
	Log Income	Log Income/Needs	Log Consumption	Log Income	Log Income/Needs	Log Consumption
2 years before	**-0.200**	**-0.188**	**0.000**	**-0.182**	**-0.171**	**0.010**
* High School	0.158	0.152	0.166	0.156	0.151	0.167
% effect, >= h.s.	*0.065*	*0.084*	*-0.059*	*0.082*	*0.099*	*-0.062*
1 year before	**-0.316**	**-0.307**	**0.014**	**-0.291**	**-0.283**	**0.029**
* High School	0.186	0.183	0.107	0.185	0.183	0.107
% effect, >= h.s.	*-0.060*	*-0.034*	*0.018*	*-0.040*	*-0.018*	*0.018*
Year of Marriage	**-0.193**	**-0.152**	**0.024**	**-0.176**	**-0.133**	**0.012**
* High School	0.136	0.136	0.095	0.135	0.133	0.095
% effect, >= h.s.	*0.745*	*0.592*	*0.214*	*0.800*	*0.624*	*0.200*
1 year after	**-0.203**	**-0.186**	**0.046**	**-0.217**	**-0.203**	**-0.026**
* High School	0.143	0.138	0.113	0.139	0.135	0.102
% effect, >= h.s.	*0.723*	*0.679*	*0.046*	*0.742*	*0.697*	*0.075*
2 years after	**-0.261**	**-0.261**	**-0.013**	**-0.281**	**-0.273**	**0.025**
* High School	0.145	0.140	0.111	0.143	0.140	0.114
% effect, >= h.s.	*0.634*	*0.605*	*-0.004*	*0.775*	*0.735*	*0.108*
3 years after	**-0.174**	**-0.179**	**-0.028**	**-0.122**	**-0.127**	**0.068**
* High School	0.153	0.149	0.128	0.166	0.159	0.148
% effect, >= h.s.	*0.542*	*0.533*	*0.026*	*0.853*	*0.806*	*0.021*
4 year after	**-0.195**	**-0.130**	**0.008**	**-0.037**	**-0.006**	**0.029**
* High School	0.161	0.154	0.117	0.158	0.150	0.131
% effect, >= h.s.	*0.523*	*0.550*	*0.087*	*0.921*	*0.885*	*0.100*
5 year after	**-0.233**	**-0.211**	**-0.139**	**-0.109**	**-0.116**	**0.073**
* High School	0.153	0.153	0.137	0.163	0.160	0.129
% effect, >= h.s.	*0.452*	*0.481*	*0.052*	*0.848*	*0.811*	*0.138*
6 or more years	**-0.181**	**-0.187**	**0.032**	**-0.071**	**-0.095**	**0.051**
after * High School	0.145	0.141	0.116	0.166	0.162	0.114
% effect, >= h.s.	*0.576*	*0.581*	*0.130*	*0.900*	*0.857*	*0.254*

Note: Standard errors in parentheses. In top half of table, numbers in italics are percentage effects of divorce for those with more than high school education. In lower half of table, numbers in italics are percentage effects of divorce for those with mothers with high school education or less.

Table 8. Effects of Maximum Benefit Levels on Income and Consumption Changes with Family Structure Changes

	Children Born to Two Parent Families			Children Born to Single Parent Families		
	Log Income	Log Income/Needs	Log Consumption	Log Income	Log Income/Needs	Log Consumption
All Children (*1000)	**0.020**	**0.017**	**-0.010**	**-0.030**	**-0.033**	**0.004**
	(0.006)	(0.006)	(0.007)	(0.013)	(0.012)	(0.010)
Mothers' education High School or Less (*1000)	**0.014**	**0.010**	**-0.002**	**-0.037**	**-0.037**	**0.005**
	(0.008)	(0.007)	(0.010)	(0.016)	(0.016)	(0.012)

Table 9. Effects of Maximum Benefit Levels on Income and Consumption Changes with Family Structure Changes

Children Born to Two Parent Households						
	Year Since First Marriage			Year Since Last Marriage		
Years Before or After Marriage	Log Income	Log Income/Needs	Log Consumption	Log Income	Log Income/Needs	Log Consumption
Year of Marriage	**0.012**	**0.009**	**0.006**	**0.011**	**0.008**	**0.009**
* Maximum Benefit	(0.012)	(0.011)	(0.012)	(0.011)	(0.011)	(0.012)
1 year after	**0.017**	**0.020**	**0.007**	**0.019**	**0.024**	**-0.007**
* Maximum Benefit	(0.010)	(0.010)	(0.013)	(0.012)	(0.011)	(0.014)
2 years after	**0.029**	**0.028**	**0.000**	**0.028**	**0.025**	**-0.005**
* Maximum Benefit	(0.011)	(0.100)	(0.010)	(0.012)	(0.012)	(0.011)
3 years after	**0.031**	**0.027**	**-0.016**	**0.036**	**0.034**	**-0.022**
* Maximum Benefit	(0.010)	(0.009)	(0.011)	(0.011)	(0.011)	(0.015)
4 year after	**0.005**	**0.004**	**0.006**	**0.010**	**0.010**	**0.001**
* Maximum Benefit	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)	(0.014)
5 year after	**0.004**	**0.003**	**0.011**	**0.033**	**0.028**	**0.022**
* Maximum Benefit	(0.012)	(0.011)	(0.012)	(0.015)	(0.014)	(0.019)
6 or more years	**-0.001**	**0.000**	**-0.018**	**0.031**	**0.023**	**-0.019**
* Maximum Benefit	(0.011)	(0.011)	(0.009)	(0.014)	(0.014)	(0.013)

Note: Coefficients multiplied by 1000.

Appendix Table 1. Effects of Maximum Benefit Levels on Income and Consumption Changes with Family Structure Changes

Children Born to Single Parent Household

	Year Since First Event			Year Since Last Event		
Years Before or After Marriage	Log Income	Log Income/Needs	Log Consumption	Log Income	Log Income/Needs	Log Consumption
Year of Marriage	**-0.009**	**-0.018**	**0.020**	**-0.008**	**-0.017**	**0.020**
* Maximum Benefit	(0.018)	(0.018)	(0.014)	(0.017)	(0.017)	(0.014)
1 year after	**-0.026**	**-0.024**	**0.014**	**-0.025**	**-0.023**	**0.008**
* Maximum Benefit	(0.021)	(0.020)	(0.016)	(0.021)	(0.021)	(0.015)
2 years after	**-0.058**	**-0.053**	**0.026**	**-0.031**	**-0.031**	**0.008**
* Maximum Benefit	(0.023)	(0.022)	(0.020)	(0.020)	(0.019)	(0.021)
3 years after	**-0.004**	**-0.005**	**0.006**	**-0.008**	**-0.013**	**-0.001**
* Maximum Benefit	(0.022)	(0.021)	(0.018)	(0.023)	(0.022)	(0.021)
4 year after	**-0.023**	**-0.022**	**0.019**	**-0.027**	**-0.025**	**0.009**
* Maximum Benefit	(0.026)	(0.025)	(0.018)	(0.028)	(0.027)	(0.021)
5 year after	**-0.041**	**-0.037**	**0.011**	**-0.064**	**-0.068**	**-0.006**
* Maximum Benefit	(0.022)	(0.021)	(0.018)	(0.024)	(0.023)	(0.019)
6 or more years	**-0.033**	**-0.034**	**0.008**	**-0.051**	**-0.057**	**0.023**
* Maximum Benefit	(0.023)	(0.023)	(0.016)	(0.027)	(0.027)	(0.018)