THE EFFECTS OF AFDC ON AMERICAN FAMILY STRUCTURE, 1940-1990

Steven Ruggles

The "end of welfare as we know it" in the United States was predicated on the belief that the welfare system was responsible for a dramatic upsurge of single-parent families. This article addresses the issue historically, examining the potential impact of interstate differences in Aid to Families with Dependent Children (AFDC) benefit levels on family structure from 1940 to 1990. The author's results reveal that the impact of AFDC on family structure was considerably smaller in the period from 1940 to 1970 than in 1980 or 1990. It is concluded that increasing welfare benefits cannot account for a significant portion of the increase in illegitimacy, divorce, or separation in the postwar period. Nevertheless, rising benefit levels are significantly associated with changes in the living arrangements of unmarried mothers.

On 1 November 1996, the Aid to Families with Dependent Children (AFDC) program officially ended and was replaced by the Temporary Assistance to Needy Families program. AFDC, which had started sixty years before under the name Aid to Dependent Children (ADC), provided a federal entitlement to economic support for single parents with children younger than 18 who fell below a threshold of assets and income. The single most important rationale for the abolition of AFDC was the argument that the program was responsible for a dramatic increase in unmarried motherhood. Legislators argued that such illegitimacy perpetuated a cycle of poverty from one generation to the next, because the children of AFDC mothers often had low achievement and high odds of becoming unmarried mothers themselves. Thus, many conservatives asserted, the AFDC program actually hurt the very people it was designed to help by luring them into a lifetime of dependence.

These ideas gained national currency with the publication of Charles Murray's *Losing Ground* in 1984.[1] Murray argued explicitly that the growth of female-headed families during the 1960s and 1970s was the result of increasing generosity and availability of AFDC. His proposed solution was radical: the elimination of welfare

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benefits to unmarried mothers and their children. Murray had only circumstantial evidence to support his case, and in the mid-1980s, most academics were not convinced. Nevertheless, Murray developed a following in the Reagan White House, among conservative legislators, and in the conservative think tanks.

The scholarly community reached very different conclusions. Dozens of separate investigations of the impact of AFDC benefit levels on family structure have been carried out during the past two decades.[2] The results of these studies uniformly suggest that the impact of benefit levels is small and often insignificant. As Moffitt put it, "[T]he failure to find strong benefit effects is the most notable characteristic of this literature."[3]

The analyses carried out to date have for the most part assessed the effects of interstate differences in AFDC benefit levels on family structure in the 1970s and 1980s. This article extends the existing literature backward by assessing the potential impact of AFDC on family structure from 1940 to 1990, virtually the entire period that the program existed. My analysis begins with discussions of the timing of changes in welfare programs and in family structure. I then turn to conventional logistic regression analysis of the effects of interstate differences in AFDC benefit levels on measures of family structure in each period.

In general, my findings for the recent period conform closely to those of previous work. However, my results reveal that the impact of AFDC on family structure was considerably smaller in the period from 1940 to 1970 than in 1980 or 1990. Indeed, it is implausible that the rise in welfare benefit levels—a change that took place from 1936 to 1972—can account for a significant portion of the increase in illegitimacy, divorce, or separation. However, even if rising benefit levels cannot explain increases in the *frequency* of unmarried mothers, it is highly plausible that they could entirely account for changes in the *living arrangements* of unmarried mothers.

THE TIMING OF CHANGES IN AFDC

One might expect that it would be a simple and straightforward matter to chart AFDC benefit levels over time. Unfortunately, it is not. The only consistently available measure of AFDC benefit levels over the entire span of the program is average benefit per family. This measure, adjusted for inflation, is shown as the solid line in Figure 1. The average benefit per family increased steadily from 1936 to 1968 and then dropped rapidly until 1980.

There are several disadvantages of this measure. First, it is affected by changes in the size of AFDC families, because larger families receive more benefits. From a low of 2.3 children in 1938, the average size of AFDC families increased gradually to a peak of 3.1 children in 1966 and then fell steadily, dropping below 2 children in 1981; since then, AFDC family size has been stable. Thus, part of the reason AFDC benefits were higher in the 1960s than before or afterward is simply because family size was larger. The adjacent dashed line adjusts for family size, assuming that on average benefits were increased by 25 percent of the base grant for each additional child. This figure is a guess, but it is very close to the average marginal benefit for additional children in the period 1970 through 1990, the only period for which reliable figures on the marginal benefit of additional children are available.[4]

A second disadvantage of these figures is that they could be affected by other income of the recipients: for every dollar earned by welfare recipients, their AFDC
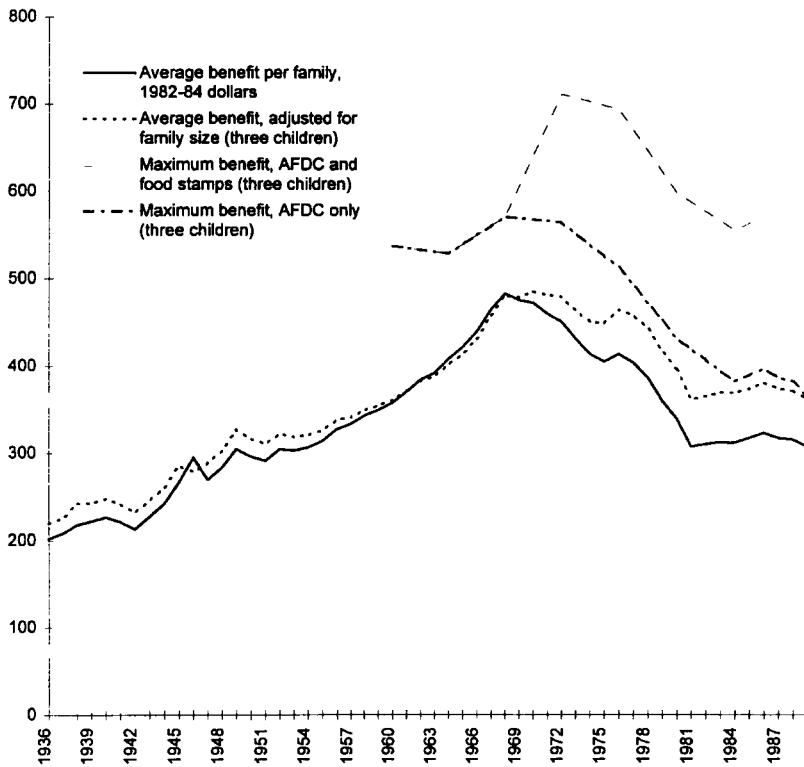
Figure 1. AFDC[a] Benefit Levels, 1936-1990

Source: Average benefit levels and family sizes: U.S. Social Security Administration, *Social Security Bulletin. Annual Statistical Supplement* (Washington, DC: GPO, 1962), 108; U.S. Social Security Administration, *Social Security Bulletin. Annual Statistical Supplement* (Washington, DC: GPO, 1992), 318; maximum benefit levels and food stamps: U.S. House of Representatives, Committee on Ways and Means, *Background Material and Data on Programs within the Jurisdiction of the Committee on Ways and Means* (Washington, DC: GPO, 1987), 662; U.S. House of Representatives, Committee on Ways and Means, *Background Material and Data on Programs within the Jurisdiction of the Committee on Ways and Means* (Washington, DC: GPO, 1990), 563. Benefit levels adjusted using the CPI-U series: U.S. Bureau of the Census, *Statistical Abstract of the United States: 1996* (Washington DC: GPO, 1996), 483; U.S. Bureau of the Census, *Historical Statistics of the United States: Colonial Times to 1970* (Washington DC: GPO, 1976, 210.
a. AFDC = Aid to Families with Dependent Children.

benefit is reduced. Prior to 1967, welfare recipients lost a full dollar of benefits for every dollar they earned, so very few of them worked. Then, in an effort to encourage beneficiaries to find jobs, the thirty-and-a-third rule was introduced, and beneficiaries were allowed to keep the first 30 dollars of monthly earnings with no cut in benefits and keep one-third of earnings above 30 dollars.[5] Although most welfare recipients did not take advantage of the new rule, it does mean that average benefit levels after 1967 could potentially be affected by changes in work opportunities. The amount of the exemption was not indexed for inflation, so the significance of the new rule diminished over time as prices rose. In 1981, the rule was sharply restricted, allowing recipients to keep one-third of outside earnings only for a four-month period.

To control for change in the size of AFDC families and work opportunities, most analysts prefer to use the maximum benefit level, which is a hypothetical benefit for a mother with zero income, a specified number of children, and a standard set of other characteristics. Maximum benefit levels were set administratively at the state level, and before 1970 the federal government did not systematically gather such information. In 1987 the House Ways and Means Committee published some retrospective estimates of maximum benefits for families with three children in the 1960 and 1964.[6] The sources of these figures are poorly documented, but they are the only maximum benefit estimates available for the 1960s. The House estimates for the 1960s are shown in the upper dashed line in Figure 1, together with quadrennial estimates from 1970 to 1984 and biennial estimates thereafter. The estimates suggest a large gap between average benefits and maximum benefits in the early 1960s, but the two series converged by the mid-1970s. Perhaps the shift from a casework model of eligibility determination to a more bureaucratic system in the 1970s allowed increasing numbers of recipients to obtain maximum benefits.[7] It is also possible that the maximum benefit levels for the 1960s that were estimated retrospectively are not strictly comparable to the later estimates. Despite the considerable differences between the series of average benefits and the series of maximum benefits, however, both reveal the same general chronological pattern: benefits peaked in the late 1960s and declined sharply from 1972 to 1980.

None of these measures include the value of food stamps. Although AFDC is the only welfare program for which eligibility is directly determined by family structure, many analysts argue that the value of food stamps ought to be considered as well, because it is the size of the entire package that determines the attractiveness of unmarried parenthood. Therefore, the top line in Figure 1 shows the estimated combined value of maximum AFDC benefits and food stamps. In most states, food stamps were introduced between 1968 and 1972. The main effect of adding in food stamps is to shift the period of peak benefits from the late 1960s to the early 1970s. The impact of food stamps may be exaggerated in Figure 1, however, because in many areas food stamps simply replaced existing local food assistance programs.

Participation in AFDC has followed a similar pattern. As shown in Figure 2, the percentage of persons enrolled in AFDC increased fairly gradually from 1936 to the mid-1960s and then doubled between 1968 and 1972. Participation declined modestly in the late 1970s and then stabilized at about 4.5 percent. If we measure participation relative to the population of unmarried parents (Figure 3), the increase in participation in the 1960s does not appear quite so explosive, but it is still striking enough. On the other hand, this view suggests quite a dramatic drop in participation after 1975. Regardless of the measure, there is a fairly close general correspondence between benefit levels and participation, which makes a good deal of sense.[8]

THE TIMING OF CHANGES IN FAMILY STRUCTURE

The measure of family structure that had the politicians so worried is the unmarried fertility ratio. This measure, shown in Figures 4 and 5 for Whites and non-Whites, respectively, is the number of births to unmarried women per thousand births. The gap shown in 1980 reflects a shift in Census Bureau measurement techniques. By 1990, unmarried women accounted for 23 percent of births to Whites and 58 percent to non-Whites. Note that the scales differ on the two graphs. In the 1940s and 1950s, the
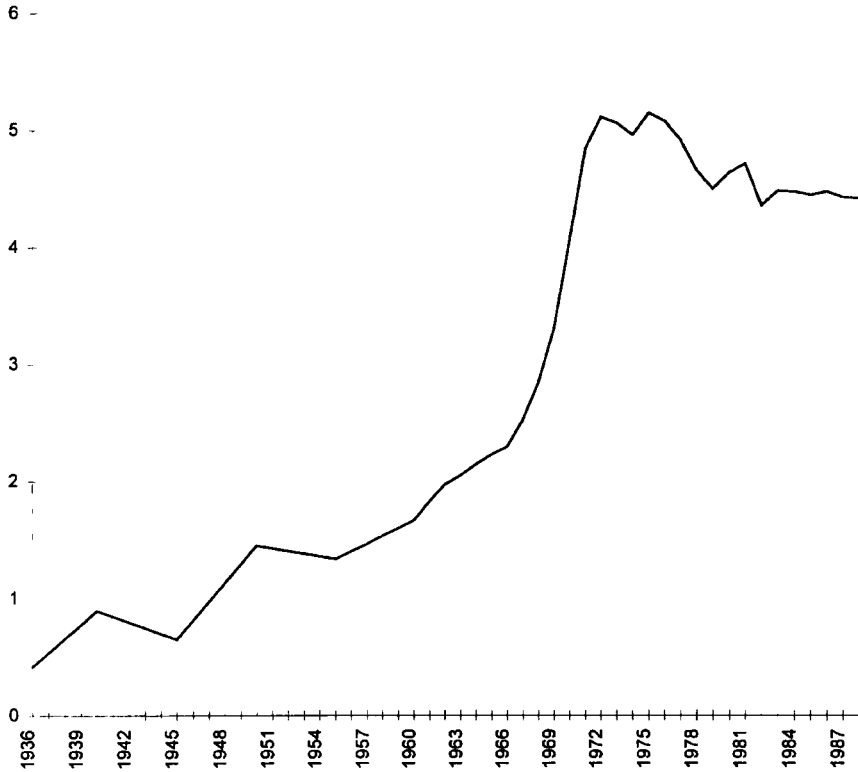
Figure 2. AFDC[a] Participation as a Percentage of the U.S. Population, 1936-1988
Source: U.S. Social Security Administration, Social Security Bulletin. Annual Statistical Supplement (Washington, DC: GPO, 1962), 108; U.S. Social Security Administration, Social Security Bulletin. Annual Statistical Supplement (Washington, DC: GPO, 1992), 318. Population data from the census.
a. AFDC = Aid to Families with Dependent Children.

unmarried fertility ratio for non-Whites was about ten times as great as the ratio for Whites; by 1990, however, the ratio for non-Whites was only 2.6 times as great as the ratio for whites.

As Charles Murray stressed, the rise in the unmarried fertility ratio for non-Whites accelerated between 1966 and 1972, the same years that the combined benefits for AFDC and food stamps went up dramatically. This chronological association is the main empirical foundation for Murray's contention that welfare is responsible for the rise in illegitimacy. As demographers have repeatedly pointed out, however, the unmarried fertility ratio is a poor measure if we are interested in assessing the causes of change in illegitimacy. The problem is that the measure is influenced not only by the fertility of unmarried women but also by the fertility of married women and by the proportion of women who are married. Recently, Smith, Morgan, and Koropeckyj-Cox carried out an analysis of the components of change of the unmarried fertility ratios since 1960, part of which is reproduced in Table 1.[9] The results indicate that much of the increase in the unmarried fertility ratio can be attributed to declining marital
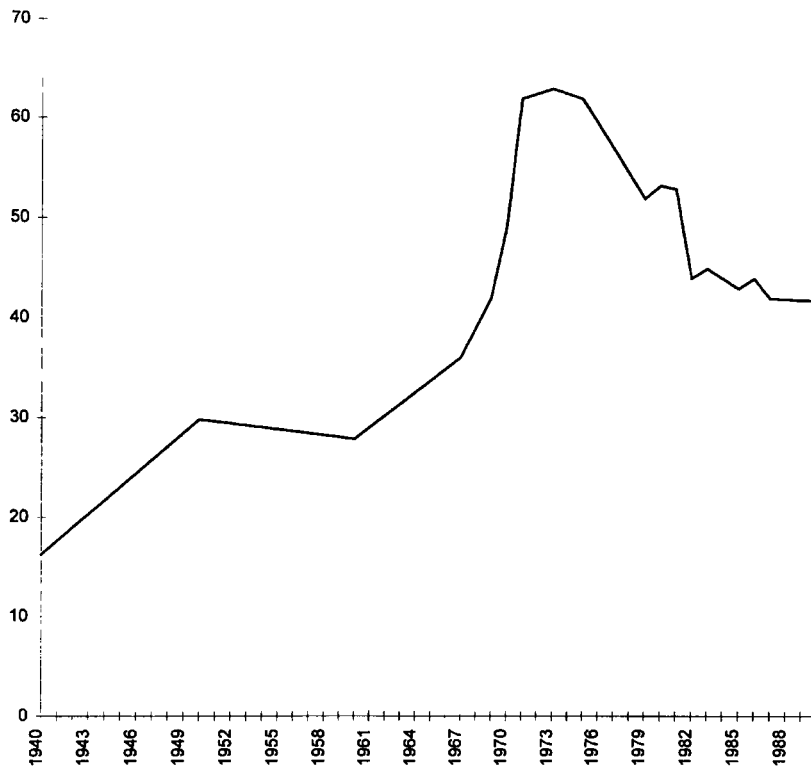
Figure 3. AFDC[a] Participation as a Percentage of Unmarried Mothers with Children Younger Than 18
Source: 1967-1987, Robert Moffitt, "Incentive Effects of the U.S. Welfare System: A Review." *Journal of Economic Literature* 30 (1992), 9; other years denominator tabulated from the Integrated Public Use Microdata Series (IPUMS), numerator same as Figure 2.
a. AFDC = Aid to Families with Dependent Children.

fertility and growth in the size of the unmarried population relative to the married population. Indeed, among Blacks, the growth in the proportion of persons unmarried accounts for 84 percent of the increase in the unmarried fertility ratio between 1960 and 1990. The effect of unmarried fertility is negative for Blacks, which means that the proportion of unmarried Black women giving birth actually declined between 1960 and 1990.

The unmarried fertility rate—that is, births per thousand unmarried women—is shown for Whites and non-Whites in Figures 6 and 7, respectively. Among Whites, unmarried fertility increased smoothly from 1940 through 1970, dropped for a few years because of the *Roe vs. Wade* decision, and then accelerated rapidly after 1976. Ironically, much of the very rapid increase of recent years can be attributed to the successful efforts of social conservatives to bring down the number of abortions.

The chronological fit between changing White unmarried fertility rates and AFDC benefit levels is poor. During the period of most rapid increase in White unmarried fertility—from 1980 onward—AFDC benefit levels and participation have been
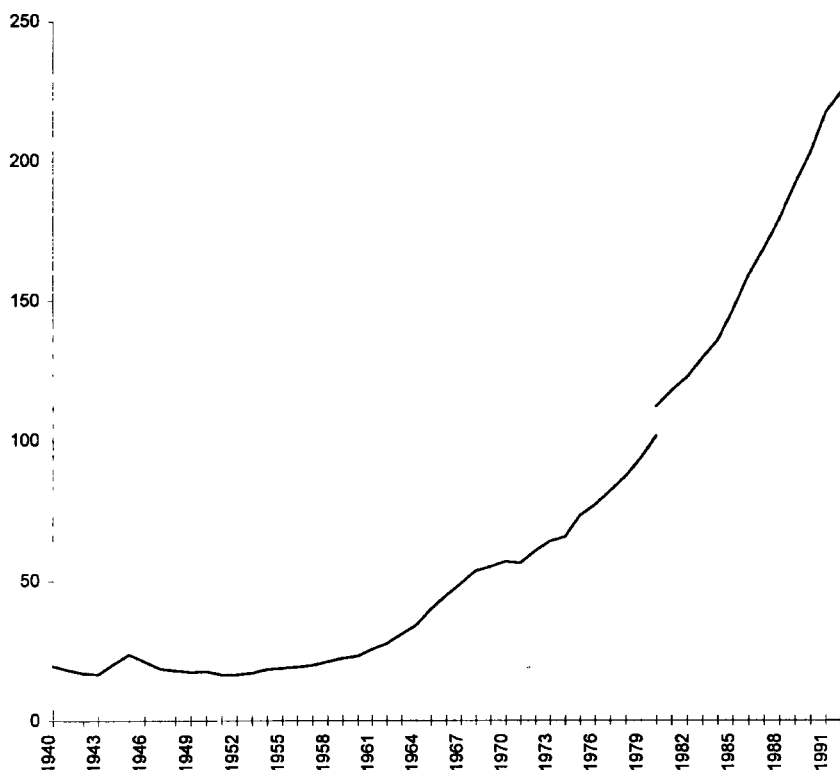
Figure 4.   Births to Unmarried Women per Thousand Births: Whites, 1940-1992
Source: U.S. Bureau of the Census, *Vital Statistics of the United States. Natality* (Washington, DC: GPO, 1971), I-27; U.S. Bureau of the Census, *Vital Statistics of the United States. Natality* (Washington, DC: GPO, 1991), 199.

stagnant or declining. For non-Whites, shown in Figure 7, the fit is even worse. Non-White unmarried fertility rates increased sharply from 1940 until the late 1950s, peaked in 1958 to 1962, and then generally declined until the mid-1980s. By contrast, AFDC benefit levels peaked in 1968-1970, or in 1972 if you count food stamps. The period of most rapid increase in benefit levels and AFDC participation was a period of declining rates of unmarried fertility for non-Whites. On the face of it, then, the chronological mismatch between changes in AFDC benefit levels and the unmarried fertility rates of both Whites and Blacks offers no support for claims that welfare is responsible for the rise of illegitimacy.

There are other mechanisms, of course, by which AFDC might influence the frequency of single-parent families. In particular, women who had borne children within marriage might choose to divorce or separate because of the availability of AFDC support, and divorced or separated women might choose not to remarry if it meant loosing AFDC benefits. Figures 8 and 9 show the percentage of White and Black women aged 20 to 39 listed as divorced, separated, or married-spouse-absent from 1880 to 1990 as tabulated from the census. The category of legal separation was introduced in 1950; prior to that time, most separated women were listed as married-
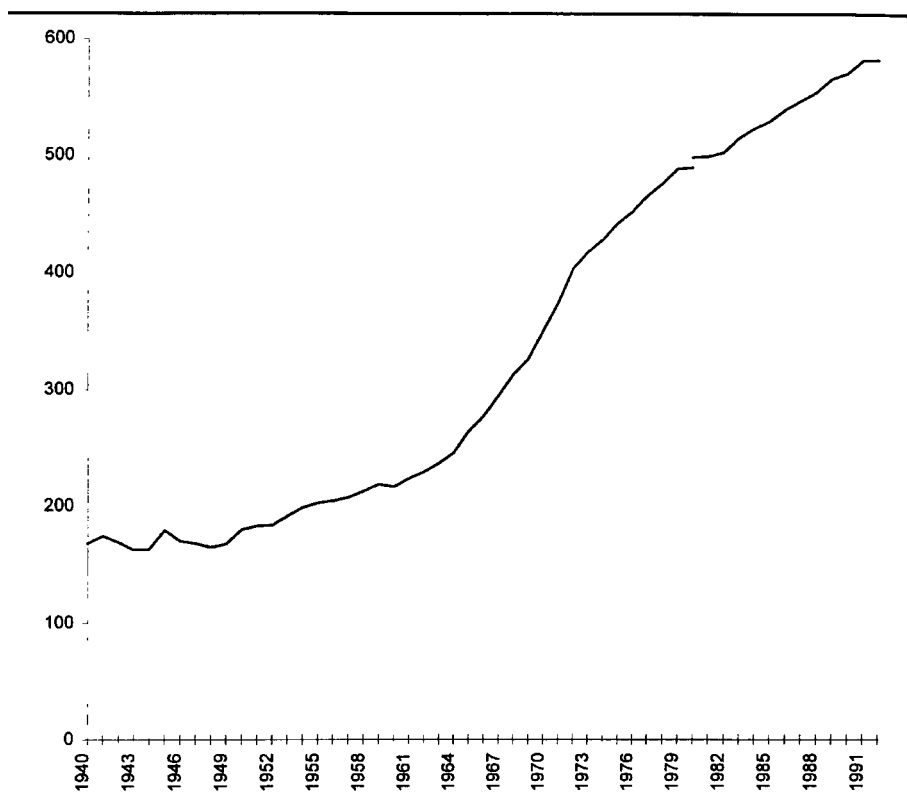
Figure 5.   Births to Unmarried Women per Thousand Births: Non-Whites, 1940-1992
Source: U.S. Bureau of the Census, Vital Statistics of the United States. Natality (Washington, DC: GPO, 1971), I-27; U.S. Bureau of the Census, Vital Statistics of the United States. Natality (Washington, DC: GPO, 1991), 199.

Table 1
Components of Change in the Unmarried Fertility Ratio, 1960-90

	Whites		Blacks	
	Absolute Change	% of Change	Absolute Change	% of Change
Total change	178.1	100.0	411.8	100.0
Effects of components				
Proportion married	79.0	44.4	346.8	84.2
Unmarried fertility	102.2	57.4	−22.9	−5.6
Marital fertility	12.1	6.8	105.4	25.6
Age composition	−15.2	−8.5	−17.5	−4.2

Source: Calculated from Smith, Morgan, and Koropeckyj-Cox, "A Decomposition of Trends in the Nonmarital Fertility Ratios of Blacks and Whites on the United States, 1960-1992," Demography 33 (1996), 145-46.

spouse absent. The chronological association between these measures of marital instability and welfare benefit levels is less implausible than in the case of illegitimacy, but there are still discrepancies. Among Whites, the biggest increase in divorce and
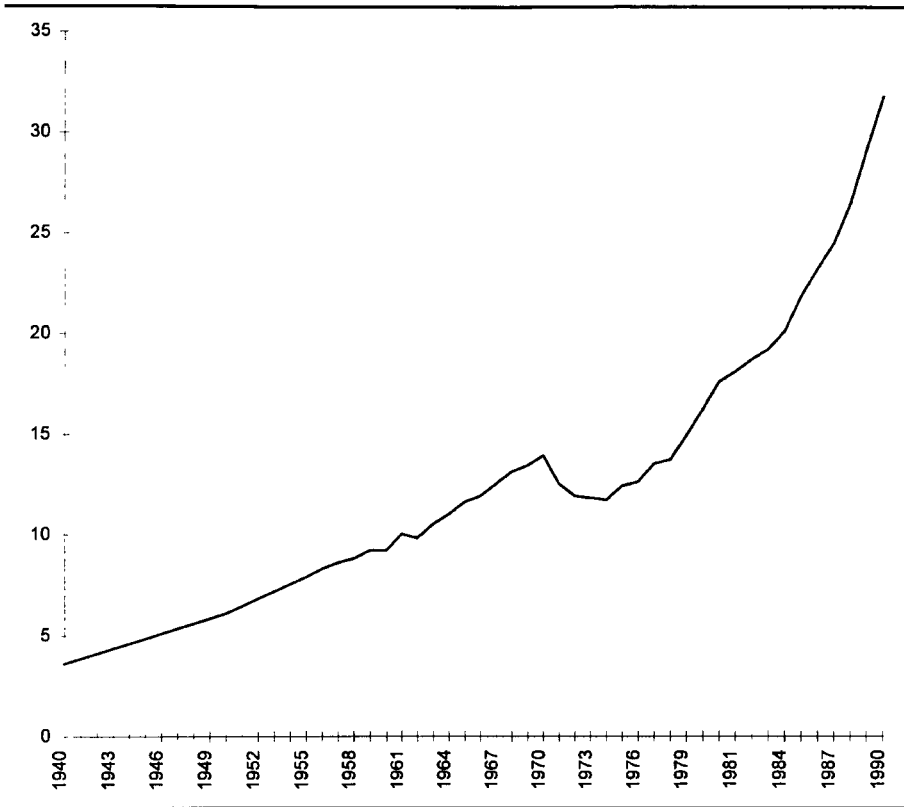
Figure 6.   Unmarried Fertility Rate: Whites, 1940-1990
Source: U.S. Bureau of the Census, *Vital Statistics of the United States. Natality* (Washington, DC: GPO, 1971), I-27; U.S. Bureau of the Census, *Vital Statistics of the United States. Natality* (Washington, DC: GPO, 1991), 199.

separation came between 1970 and 1980, despite the significant drop in welfare benefit levels during that decade. Among Blacks, the most rapid increases came from 1920 to 1950 and from 1970 to 1990. During the period 1950 to 1970, when benefit levels expanded most dramatically, the frequency of divorce and separation among Blacks was quite stable.

Unmarried parenthood necessarily arises either from unmarried fertility or from marital dissolution. As shown in Figures 6 through 9, the trends in these variables correspond poorly with the trends in AFDC benefit levels. But there is another way that AFDC could influence family structure: it might allow unmarried mothers to reside in independent households of their own instead of residing as dependents of their parents or other kin. Figure 10 shows the percentage of unmarried mothers residing without other kin among Whites and Blacks from 1940 through 1990. Because these figures are based on the consistent system of subfamily coding in the Integrated Public Use Microdata Series (IPUMS), they avoid the problems of comparability that plagued earlier studies of change in the living arrangements of unmarried mothers.[10] Among both Blacks and Whites, there was a significant, although not dramatic, increase in independent residence of unmarried mothers from 1950 to 1980 and a

Figure 7.   Unmarried Fertility Rates: Non-Whites, 1940-1990
Source: U.S. Bureau of the Census, *Vital Statistics of the United States. Natality* (Washington, DC:
GPO, 1971), I-27; U.S. Bureau of the Census, *Vital Statistics of the United States. Natality*
(Washington, DC: GPO, 1991), 199.

decline thereafter. Allowing for a modest lag in the response of living arrangements
to new AFDC conditions, this pattern fits the changes in benefit levels reasonably well.
Thus, it appears more plausible that AFDC affected the living arrangements of
unmarried parents than the absolute number of unmarried parents.

REGRESSION ANALYSES

To assess the impact of AFDC benefit levels on unmarried fertility rates, marital
instability, and the living arrangements of unmarried parents, I carried out a series of
logistic regressions. Many similar studies have been carried out by other investigators
for the 1970s and 1980s.[11] In general, the studies using data from the 1970s found no
significant effect of AFDC on measures of family composition, whereas those based
on data from the 1980s usually found small but statistically significant effects. The
chief innovation of my analyses is that I have broadened the chronological scope of
the analysis by using data from 1940, 1950, 1960, 1970, 1980, and 1990. The analysis
is based on the IPUMS, a consistent series of nationally representative census micro-
data files covering thirteen census years between 1850 and 1990 (Ruggles and Sobek
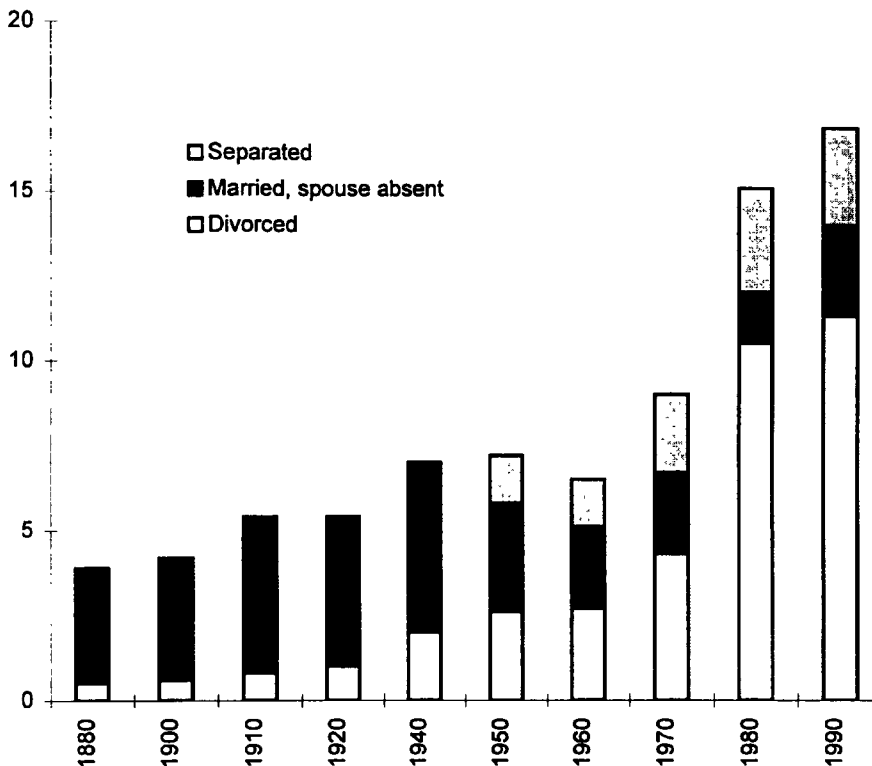1995; see note 10).

Figure 8. Percentage Divorced, Separated, or Married-Spouse-Absent: U.S. Ever-Married, Nonwidowed Whites Aged 20-39
Source: Tabulated by the author from the IPUMS.

The basic strategy of analysis is to assess the impact of state-to-state differences in AFDC benefit levels on family composition in each census year. Because states differ in a variety of ways that affect family structure aside from AFDC benefit levels, it is necessary to incorporate control variables into the analysis. Table 2 describes these variables. The individual-level variables—age, race, and education—provide basic controls of demographic characteristics and employability. All the analyses are restricted to women aged 20 or older to minimize the potential effects of age and family structure on education. The district-level variables are basic measures of employment opportunity for men and women said by theorists to influence the odds of getting married and remaining.[12]

The final variable—AFDC benefit level—is the average AFDC benefit per family in the state of residence, adjusted for family size. Most analysts have instead used maximum benefit levels. Maximum benefit is probably the preferable measure, but as I noted earlier, this statistic is not available for the earlier census years. In recent census years, when both measures are available, the state-level correlation between average benefit and maximum benefit is extremely high (.99 in 1990 and .98 in 1980), so in those years the two measures would yield essentially identical results. I did not include food stamps, which were available to welfare recipients in 1980 and 1990, but that
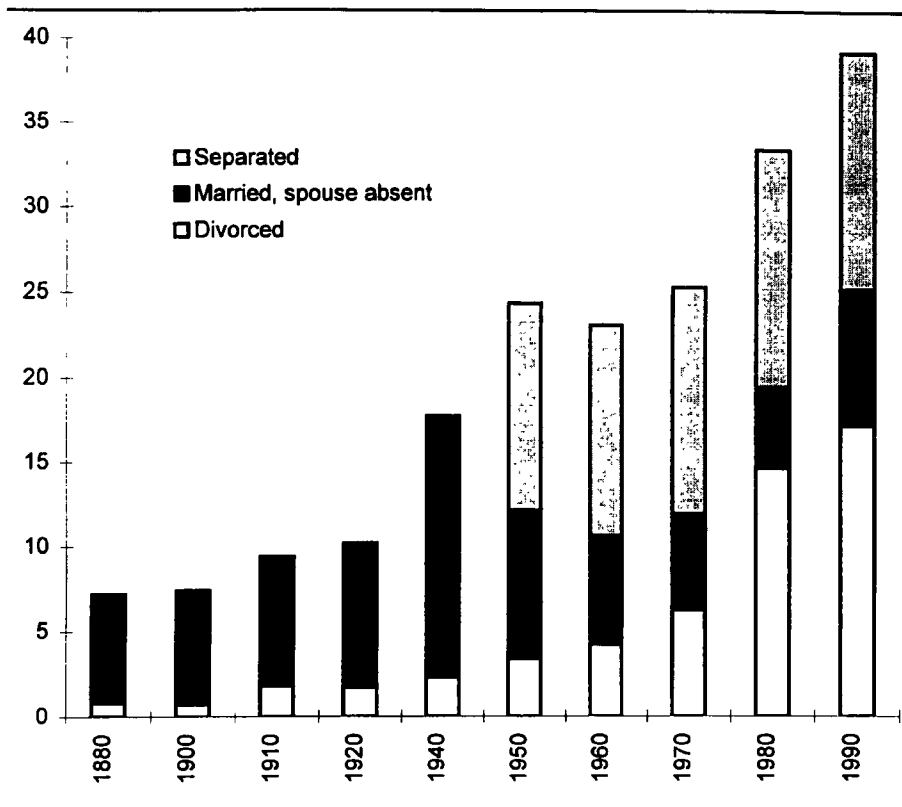
Figure 9. Percentage Divorced, Separated, or Married-Spouse-Absent: U.S. Ever-Married, Nonwidowed Blacks Aged 20-39
Source: Tabulated by the author from the IPUMS.

should have minimal impact on the results because the food stamp program is uniform across states.

The results—given in Tables 3, 4, and 5—are easy to summarize. AFDC had a small effect on unmarried fertility in 1990 but not in any previous year. There were also significant effects of AFDC on marital instability in both 1980 and 1990. All three of these significant effects were small in magnitude, at least compared with the pace of change in the dependent variables: the coefficients suggest that a 100 dollar increase in monthly AFDC benefits would result in a 5 percent to 7 percent increase in unmarried fertility or marital disruption.

The effects of AFDC are far easier to discern when we turn to the living arrangements of unmarried mothers, shown in Table 5. The AFDC effect is both significant and substantial in every census year. These powerful relationships suggest that at least in the period 1950 through 1970, the sharp rise of AFDC benefit levels may have been the main source of increase in the independent residence of unmarried mothers.
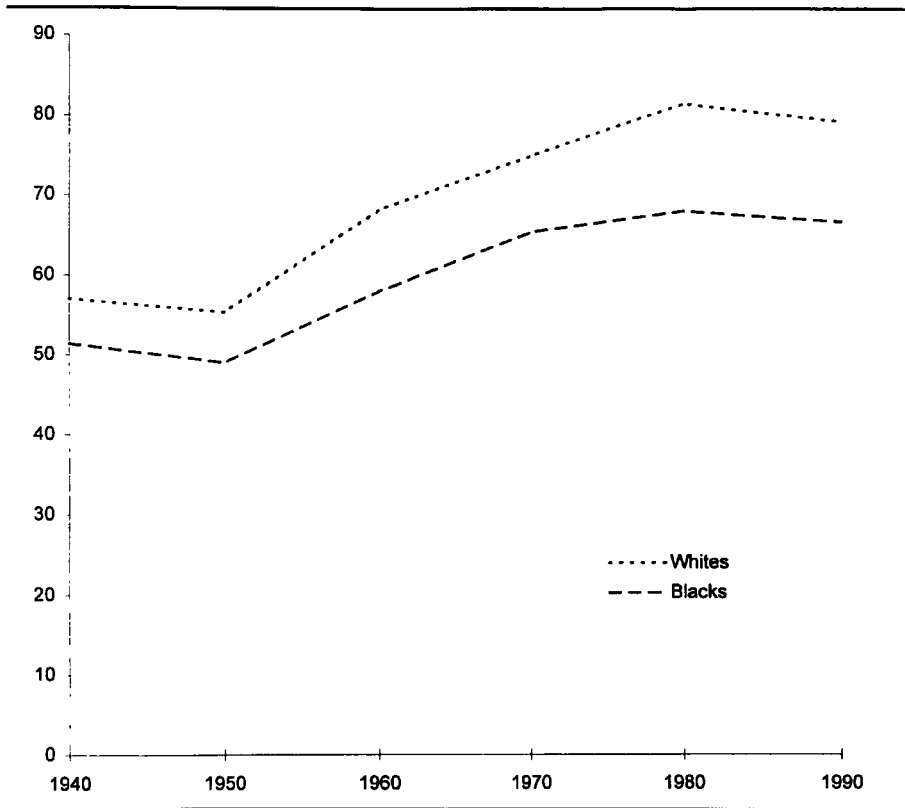
Figure 10.   Percentage of Single Mothers of Children Younger Than 18 Residing without Other Kin: Whites and Blacks, 1940-1990
Source: Tabulated by the author from the IPUMS.

DISCUSSION

The regressions suggest that the strongest effects of AFDC were on the living arrangements of unmarried mothers. AFDC had a more modest effect on divorce and separation, and the least effect on unmarried fertility. These findings are identical to those in Ellwood and Bane's classic study of the impact of AFDC on family structure in 1976. Ellwood and Bane felt their findings made a good deal of sense:

> The more significant the family structure change, the less influence AFDC seems to have. Living arrangements of young mothers are most sensitive to AFDC benefits since the only question facing the young mother is whether or not she can afford to live independently. Divorce or separation involves more than a decision to live independently; it involves a complicated severing of emotional and most probably financial ties that husband and wife have to each other. Thus AFDC quite expectedly has less impact. . . . Childbirth is the most extreme event. It involves a vastly greater change in the options and opportunities a woman faces and a high level of emotional

Table 2
Definitions of Variables in the Regressions

Variable Name	Definition
Dependent variables	
Unmarried fertility	Coded 1 if own child younger than one year of age is present in household; else coded 0 (unmarried Black and White women aged 20-49)
Divorce and separation	Coded 1 if divorced, separated, or married spouse-absent; else coded 0 (married, separated, and divorced White and Black women aged 20-49)
Independent residence	Coded 1 if resident with no kin except own children; else coded 0 (unmarried Black and White women aged 20-49 with coresident children younger than 18)
Individual-level variables	
Age	Dummied in five year groups, 20-24 to 40-44; reference category 45-49
Black	Coded 1 if race is Black; else coded 0
Education	Dummied into no high school, some high school, high school complete; reference category some college
District-level variables	
Female participation	Age standardized percentage in district employed in market labor, among married-spouse present women aged 20-459 not attending school
Male participation	Age standardized percentage in district employed in market labor, among married-spouse present men aged 20-59 not attending school
High female opportunity	Age-standardized percentage in district with annual earnings of more than $8,770 in 1982-84 dollars, among women aged 20-49 employed in market labor
High male opportunity	Age-standardized percentage in district with annual earnings of more than $8,770 in 1982-84, among men aged 20-49 employed in market labor
Nonfarm employment	Percentage of all employed persons in district with nonfarm occupations
State-level variable	
AFDC[a] benefit level	Mean monthly AFDC benefit per family, adjusted for state variations in family size, in hundreds of 1982-84 dollars

a. AFDC = Aid to Families with Dependent Children.

commitment. It seems quite plausible that such decisions might not be greatly influenced greatly by AFDC benefits.[13]

Another reason why AFDC had only modest effects on divorce, separation, and unmarried fertility is that the scale of the AFDC program has always been relatively small by comparison with changes in family structure. At the peak of the program in the mid-1970s, only a little more than 5 percent of Americans received AFDC. By the 1990s, however, more than half of marriages ended in divorce or separation and almost one-third of births were to unmarried women. Obviously, the great majority of divorces, separations, and births to unmarried women had nothing to do with AFDC. But, as shown in Figure 3, as a percentage of unmarried women residing with children younger than age 18, AFDC participation has been quite high throughout the past five decades. Thus it makes sense that for the small subgroup of the population who are

Table 3
Logistic Regression of Selected Characteristics on the Probability of
Unmarried Fertility: Unmarried Black and White Women Aged 20-49

	1940	1950	1960	1970	1980	1990
Age						
20-24	0.996*	3.800***	3.066***	3.150***	3.236***	4.218***
25-29	1.643**	3.855***	3.269***	3.090***	3.129***	4.057***
30-34	1.646**	3.740***	2.940***	2.497***	2.717***	3.656***
35-39	1.563**	3.353***	2.245***	1.874***	1.970***	2.943***
40-44	−0.030	2.544*	1.214***	0.949***	1.088***	1.866***
Black	0.351	0.450	1.072***	0.728***	1.278***	0.834***
Education						
No high school	2.748***	1.603***	1.843***	1.994***	1.749***	1.107***
Some high school	2.457***	1.746***	1.901***	2.121***	1.736***	1.368***
High school complete	1.899*	0.791*	1.025***	1.416***	1.099***	0.868***
Female employment	−0.004	0.005	−0.008	0.004	−0.017**	0.008
Male employment	−0.011	−0.076	−0.013	−0.054*	0.014	−0.029*
High female opportunity	−0.017	−0.016	−0.014*	−0.006	−0.007	−0.011**
High male opportunity	−0.021	−0.007	0.014*	0.016*	−0.003	−0.006
Nonfarm employment	−0.004	−0.004	−0.010	−0.030***	−0.000	−0.020
AFDC[a] benefit level	−0.138	0.053	−0.003	−0.005	0.016	0.068**
Constant	−7.566	−1.736	−6.140*	−1.175	−7.806***	−3.551
−2 log likelihood	1,553.5	1,950.4	10,741.3	17,378.3	27,438.7	32,873.9
Model χ^2	139.0***	227.3***	1,569.4***	2,339.6***	3,222.7***	3,930.3***
N	65,364	21,640	64,497	89,386	151,210	186,056

Source: Calculated from IPUMS. State-level average benefit levels and family sizes taken from U.S. Social Security Administration, *Social Security Bulletin*. May (Washington, DC: GPO, 1941), 46; U.S. Social Security Administration, *Social Security Bulletin*. July (Washington, DC: GPO, 1950), 28; U.S. Social Security Administration, *Social Security Bulletin*. July (Washington, DC: GPO, 1960), 39; U.S. Social Security Administration, *Social Security Bulletin*. August (Washington, DC: GPO, 1970), 52; U.S. Social Security Administration, *Social Security Bulletin*. November (Washington, DC: GPO, 1980), 61; U.S. Social Security Administration, *Social Security Bulletin*. *Annual Statistical Supplement* (Washington, DC: GPO, 1992), 320.
Note: Sample densities are 1/100 in all years except 1950, which is 1/330. Reference categories are age 45-49, White, and 1 or more years of college.
a. AFDC = Aid to Families with Dependent Children.
*p < .05; **p < .01; ***p < .001.

already single mothers, AFDC benefit levels may have consistently influenced family structure by encouraging independent residence.

If we consider these results together with the analyses of a score of previous investigations, we can make several generalizations about the long-run impact of AFDC on family structure with considerable confidence. Most important, the growth of AFDC benefit levels and participation between 1936 and 1972 did not significantly contribute to increases in marital instability or unmarried fertility. The chronological fit between changes in AFDC and changes in family structure is poor. Past research using data from the late 1960s and 1970s has failed to find any systematic association between divorce, separation, or unmarried fertility and AFDC benefit levels.[14] The present investigation has extended the analysis backward and found no effect of AFDC benefits on these measures of family structure in 1940, 1950, 1960, or 1970. For the entire period during which AFDC grew, therefore, it had no discernible impact on illegitimacy or divorce or separation.

Table 4
Logistic Regression of Selected Characteristics on the Probability
of Divorce or Separation: Married, separated, and divorced
Black and White Women aged 20-49

	1940	1950	1960	1970	1980	1990
Age						
20-24	−0.021	0.070	0.095*	0.278***	0.131***	−0.174***
25-29	−0.136**	−0.080	−0.145***	0.012	0.231***	−0.262***
30-34	−0.125**	−0.177***	−0.126**	0.030	0.234***	−0.165***
35-39	−0.091*	−0.096*	−0.098*	0.055	0.192***	−0.103***
40-44	−0.100*	0.022	−0.058	0.044	0.125***	0.003
Black	1.097***	1.387***	1.240***	1.071***	0.705***	0.796***
Education						
No high school	−0.084	0.206***	0.345***	0.398***	0.289***	0.369***
Some high school	0.070	0.148***	0.279***	0.383***	0.351***	0.499***
High school complete	−0.109*	−0.067	−0.057	0.014	0.035	0.102***
Female employment	0.013***	0.011***	0.013***	0.004	0.007*	−0.001
Male employment	−0.113***	−0.041***	−0.044**	−0.060***	−0.008	0.004
High female opportunity	0.009	0.008***	0.008***	0.013***	0.023***	0.009***
High male opportunity	0.002	0.002	−0.010***	−0.019***	−0.032***	−0.032***
Nonfarm employment	0.009***	0.008***	0.024***	0.029***	0.038***	0.073***
ADFC[a] benefit level	−0.018	0.007	−0.003	0.004	0.060***	0.072***
Constant	7.218***	0.066	−0.800	1.001	−4.180***	−7.346***
−2 log likelihood	52,210.1	51,246.4	56,072.1	72,665.2	79,130.5	95,460.6
Model χ^2	1,455.1***	2,414.8***	2,965.8***	3,255.5***	3,107.4***	3,161.9***
N	92,749	84,715	98,850	105,412	88,537	96,665

Source: Calculated from IPUMS. State-level average benefit levels and family sizes taken from U.S. Social Security Administration, *Social Security Bulletin*. May (Washington, DC: GPO, 1941), 46; U.S. Social Security Administration, *Social Security Bulletin*. July (Washington, DC: GPO, 1950), 28; U.S. Social Security Administration, *Social Security Bulletin*. July (Washington, DC: GPO, 1960), 39; U.S. Social Security Administration, *Social Security Bulletin*. August (Washington, DC: GPO, 1970), 52; U.S. Social Security Administration, *Social Security Bulletin*. November (Washington, DC: GPO, 1980), 61; U.S. Social Security Administration, *Social Security Bulletin*. *Annual Statistical Supplement* (Washington, DC: GPO, 1992), 320.
*$p < .05$; **$p < .01$; ***$p < .001$.
Note: Sample densities are 1/200 in 1940; 1/330 in 1950, 1960, and 1970; and 1/400 in 1980 and 1990. Reference categories are age 45-49, White, and 1 or more years of college.
a. AFDC = Aid to Families with Dependent Children.

Like previous researchers, I found small but statistically significant effects of AFDC benefit levels on marital dissolution and unmarried fertility in the most recent census years. But we must bear in mind that welfare benefits declined after 1972, even if we include food stamps. Despite the measurable effects of state differences in AFDC benefit levels in recent years, therefore, we still cannot explain any of the increase in illegitimacy or divorce and separation as a consequence of the expansion of welfare. In theory, we might conclude that if AFDC benefits had not gone down during the 1970s, levels of marital instability and illegitimacy could be as much as 10 percent higher than they are today. That effect is almost certainly an overestimate, however: welfare benefit levels and participation have been essentially stable since the end of the 1970s, so we cannot plausibly attribute any changes in family structure to changes in AFDC benefit levels since 1980.

Table 5
Logistic Regression of Selected Characteristics on the Probability of
Independent Residence: Unmarried Black and White Women Aged 20-49
with Coresident Children Younger Than the Age of 18

	1940	1950	1960	1970	1980	1990
Age						
20-24	−2.480***	−2.033***	−1.471***	−1.308***	−1.156***	−1.247***
25-29	−1.425***	−1.323***	−0.709***	−0.322***	−0.286**	−0.588***
30-34	−0.880***	−0.684***	−0.350***	0.018	0.040	−0.110
35-39	−0.413***	−0.374**	−0.191*	0.080	0.167	0.114
40-44	−0.115	−0.307*	−0.107	0.117	0.122	0.099
Black	0.060	0.029	−0.056	−0.433***	−0.524***	−0.714***
Education						
No high school	0.211	0.264*	−0.116	−0.171*	−0.527***	−0.590***
Some high school	0.186	0.181	−0.118	−0.044	−0.317***	−0.062
High school complete	−0.253	−0.041	−0.234*	−0.197**	−0.273***	−0.163***
Female employment	−0.007	0.007	0.012	0.009	0.016*	0.028***
Male employment	−0.158**	−0.060*	0.025	−0.054*	−0.070**	−0.055***
High female opportunity	0.017	0.003	−0.020***	−0.004	−0.008	−0.025***
High male opportunity	−0.006	0.011	0.036***	0.035***	0.039***	0.025***
Nonfarm employment	0.000	−0.012	−0.026**	−0.005	−0.049***	0.002
AFDC[a] benefit level	0.143**	0.108**	0.110**	0.105***	0.185***	0.092***
Constant	15.602**	6.303*	−1.134	3.795	9.281***	4.067
−2 log likelihood	6,541.5	5,713.4	7,945.4	11,484.8	12,430.8	16,241.4
Model χ^2	675.6***	457.8***	435.3***	867.5***	902.7***	1,061.6***
N	5,434	4,471	6,490	10,322	12,482	15,169

Source: Calculated from IPUMS. State-level average benefit levels and family sizes taken from
U.S. Social Security Administration, *Social Security Bulletin*. May (Washington, DC: GPO, 1941),
46; U.S. Social Security Administration, *Social Security Bulletin*. July (Washington, DC: GPO,
1950), 28; U.S. Social Security Administration, *Social Security Bulletin*. July (Washington, DC:
GPO, 1960), 39; U.S. Social Security Administration, *Social Security Bulletin*. August (Washington,
DC: GPO, 1970), 52; U.S. Social Security Administration, *Social Security Bulletin*. November
(Washington, DC: GPO, 1980), 61; U.S. Social Security Administration, *Social Security Bulletin*.
Annual Statistical Supplement (Washington, DC: GPO, 1992), 320.
*$p < .05$; **$p < .01$; ***$p < .001$.
Note: Sample densities are 1/200 in 1940; 1/330 in 1950, 1960, and 1970; and 1/400 in 1980 and
1990. Reference categories are age 45-49, White, and 1 or more years of college.
a. AFDC = Aid to Families with Dependent Children.

In sum, then, we must conclude that the dramatic increases in divorce, separation,
and illegitimacy since the Great Depression cannot be attributed to the growth of
welfare. To explain these changes, we should instead investigate the massive structural
changes in society, including the decline of farming and the rise of wage labor,
urbanization, the growth of female labor-force participation and wage rates, and the
rise of individualistic values. During the past two decades, the declining opportunities
of low-skilled men also probably played a part in reducing the attractiveness of
marriage for women.[15]

The story is different when we turn to the living arrangements of unmarried mothers
of children younger than 18. Between 1950 and 1980, the proportion of such women
residing independently rose steadily, from 49 percent to 68 percent among Blacks and
from 55 percent to 81 percent among Whites. It is quite possible that the increases in

independent residence of unmarried mothers might not have occurred if there had been no increase in welfare benefit levels.

ACKNOWLEDGMENTS

NOTES

1. Charles Murray, *Losing Ground: American Social Policy, 1950-1980* (New York: Basic Books, 1984).

2. For overviews of this literature, see Robert Moffitt, "Incentive Effects of the U.S. Welfare System: A Review," *Journal of Economic Literature* 30 (1992), 1-61; and Lyle Groenveld, Michael Hannan, and Nancy Tuma, "Income and Marital Events: Review of Previous Research," in *Final Report of the Seattle-Denver Income Maintenance Experiment*, vol. 1 (Menlo Park, CA: SRI International, 1983).

3. Moffitt, "Incentive Effects," 31.

4. U.S. Social Security Administration, Office of Family Assistance, *Characteristics of State Plans for AFDC* (Washington, DC: GPO, 1980); U.S. Department of Health and Human Services, Administration for Children and Families, Office of Family Assistance, *Characteristics of State Plans for AFDC* (Washington, DC: GPO, 1990). Compare Federal Security Agency, Social Security Board, *Social Security Yearbook 1940* (Washington, DC: GPO, 1940), 303-5.

5. Mary Jo Bane and David T. Ellwood, *Welfare Realities: From Rhetoric to Reform* (Cambridge, MA: Harvard University Press, 1994).

6. U.S. House of Representatives, Committee on Ways and Means, *Background Material and Data on Programs within the Jurisdiction of the Committee on Ways and Means* (Washington, DC: GPO, 1987), 660-70.

7. Bane and Ellwood, *Welfare Realities*, 1-27.

8. See Moffitt, "Incentive Effects," for an overview of the AFDC participation literature. The statistics for 1967 through 1987 in Figure 3 are taken from Moffitt, "Incentive Effects," 9, who labels them "AFDC participation rates of female heads with children." Because Moffitt actually adjusts for unmarried mothers residing in subfamilies, his figures are equivalent to AFDC participation of all unmarried mothers. For the years where the percentage of all unmarried mothers of children can also be tabulated from the Integrated Public Use Microdata Series (IPUMS; 1970 and 1980), the results are virtually identical to Moffit's figures.

9. Herbert L. Smith, S. Philip Morgan, and Tanya Koropeckyj-Cox, "A Decomposition of Trends in the Nonmarital Fertility Ratios of Blacks and Whites on the United States, 1960-1992." *Demography* 33 (1996), 141-51.

10. The IPUMS is described in Steven Ruggles and Matthew Sobek, *The Integrated Public Use Microdata Series: User's Guide* (Minneapolis, MN: Social History Research Laboratory, 1995). For discussion of the subfamily problem, see David T. Ellwood and Mary Jo Bane, "The Impact of AFDC on Family Structure and Living Arrangements," *Research in Labor Economics* 7 (1985), 137-207.

11. See, for example, Heather L. Ross and Isabel Sawhill, *Time of Transition: The Growth of Families Headed by Women* (Washington, DC: Urban Institute, 1975); Ellwood and Bane, "The Impact of AFDC"; Robert Moffitt, "The Effect of the U.S. Welfare System on Marital Status," *Journal of Public Economics* 41 (1990), 104-24.

12. William Julius Wilson and Katheryn Neckerman, "Poverty and Family Structure: The Widening Gap between Evidence and Public Policy Issues," in *The Truly Disadvantaged* (Chicago: Chicago University Press, 1987); Valerie Kincaide Oppenheimer, "Women's Rising Employment and the Future of the Family in Industrial Societies," *Population and Development Review* 20 (1994): 293-342; Gary S. Becker, "A Theory of Marriage," in *Economics of the Family: Marriage, Children and Human Capital*, ed. Theodore W. Schultz (Chicago: University of Chicago Press, 1974), 299-344. In the runs shown, the "districts" are not strictly speaking geographic areas but are a combination of race and metropolitan residence within each state. Thus, each state is divided into four "districts": White metropolitan, White nonmetropolitan, Black metropolitan, and Black nonmetropolitan. In some of the census years, it is possible to construct finer districts based strictly on geography, but the results do not change appreciably.

13. Ellwood and Bane, "The Impact of AFDC," 142.

14. Groenveld, Hannan, and Tuma, "Income and Marital Events."

15. Wilson and Neckerman, "Poverty and Family Structure"; Oppenheimer, "Women's Rising Employment."