We investigate the extent and implications of cohabitation and marriage among US. welfare recipients. An analysis of four data sets (the Current Population Survey, the National Survey of Families and Households, the Panel Study of Income Dynamics, and the National Longitudinal Survey of Youth) shows significant numbers of cohabitors among recipients of AFDC. An even more surprising finding is the large number of married women on welfare. We also report the results of a telephone survey of state AFDC agencies conducted to determine state rules governing cohabitation and marriage. The survey results indicate that, in a number of respects, AFDC rules encourage cohabitation. Finally, we conduct an analysis of the impact of AFDC rules on cohabitation, marriage, and single motherhood and find weak evidence in support of incentives to cohabit.

Many studies have sought to investigate the presumed antimarriage bias of the U.S. welfare system, with particular attention paid to the Aid to Families with Dependent Children (AFDC) program (e.g., Bishop 1980; Danziger et al. 1982; Ellwood and Bane 1985; Hoffman and Duncan 1988; Moffitt 1990; Schultz 1994). These studies are based on the commonly held view that AFDC benefits are available only, or at least mostly, to divorced, separated, or never-married women with children-that is, only to single mothers. Consequently, the models estimated in these studies presume that women face a stark choice between being married and off welfare, and being unmarried and on AFDC. A general conclusion that can be drawn from this literature is that the AFDC program appears to have some effects on marriage and nonmarital childbearing, but that the effects are not large enough to explain the upward trend in single motherhood in the United States in the 1980s (Moffitt 1992).

Another less well-known strand of the literature has considered the impact on family structure of the AFDC-UP program, the program operated in approximately one half the U.S. states before 1990 and subsequently in all states, which offers benefits to two-parent families. Most of these studies suggest that AFDC-UP has had little or no positive effect, if not a deleterious effect, on marriage rates (see Cain and Wissoker 1990; Hannan and Tuma 1990; Minarik and Goldfarb 1976; Schram and Wiseman 1988; Winkler 1995).

In this study, we reexamine the question of whether the AFDC program discourages marriage and encourages single motherhood, as it is commonly perceived to do. Our major interest is in examining the extent to which women on AFDC cohabit. Cohabitation is a separate state and hence constitutes a third choice in addition to marriage and single motherhood. Cohabitation among AFDC recipients has been ignored in the research literature: Past studies have generally lumped cohabiting women in with single mothers (but see Edin 1991; Gabe 1992; and Winkler 1994, 1995 for exceptions). Our study goes much beyond the analysis in these studies, which is often cursory.

We argue that cohabitation among welfare recipients is more permissible under welfare rules and is empirically more common than generally supposed. For example, it is not widely understood that cohabitation by AFDC mothers has been permitted since 1968,

when the Supreme Court ruled that the presence of a cohabiting male cannot be a basis for denying AFDC eligibility per se; his relationship to the children and the degree of his economic support to the children must be considered. We show in our analysis that there are additional rules in the AFDC program that are relatively conducive to cohabitation. We also find moderately high rates of cohabitation among welfare recipients in the data sets we examine. These findings place a different light on the existing literature on the effect of AFDC on marriage because they imply that past studies have been misspecified by ignoring the option of cohabitation.

Note that recent legislation, passed in August 1996 and having taken place on July 1, 1997, removes most of the federally imposed restrictions on the states regarding definitions of eligible units. Our study is pertinent to the AFDC program that existed before the change in law. As we shall see, however, even before the change, states had great latitude within federal restrictions to set rules governing cohabitors. Hence, our study is still relevant to the new regime.

Our study is composed of three sections. First, we summarize the existing literature on theories and correlates of cohabitation, with a special focus on the low-income population, and we report what is known to date about cohabitation among welfare recipients. Second, we report new estimates of the extent of cohabitation among welfare recipients from four data sets: the Current Population Survey (CPS), the National Survey of Families and Households (NSFH), the Panel Study of Income Dynamics (PSID), and the National Longitudinal Survey of Youth (NLSY). We also report the results of a telephone survey of state welfare departments to learn the rules governing cohabitation in more detail. Finally, we conduct an analysis of how the AFDC program rules affect probabilities of cohabitation, single motherhood, and marriage.

BACKGROUND

There has been a significant amount of research over the past 10 years on the characteristics of, and motivations for, cohabitation. Researchers recognized early on that cohabiting unions have shorter durations and higher exit rates than do marital unions (Bumpass and Sweet 1989; Bumpass, Sweet, and Cherlin 1991; Thornton 1988) and therefore that cohabiting unions are not on an equal plane with marital unions. One theory views cohabitation as a precursor to marital unions and as a type of trial marriage (Cherlin 1992) in which partners gather information on suitability for marriage and the quality of the match. Evidence against this view is extensive. For example, cohabitors have higher rates of marital dissolution than do noncohabitors (Bennett, Blanc, and Bloom 1988; Bumpass and Sweet 1989; Teachman and Polonko 1990). Further, some cohabitors are never-married couples who have already had children together, and others state that they do not intend to marry their partner (McLanahan and Casper 1995). Many cohabitors also state motivations for cohabiting, such as sharing of household expenses, that have no direct relationship to trial marriage (Bumpass and Sweet 1989; Bumpass et al. 1991). Cohabiting relationships appear to be extremely diverse and are not driven by a uniform motivation. Thus, there is no single conceptual framework for the role of cohabitation vis-a-vis marriage.1

Nevertheless, the literature on cohabitation has identified many correlates of cohabitation. Cohabitation rates rise with age but peak rather early (Bumpass and Sweet 1989). Cohabitation rates are also strongly correlated with race, educational attainment, religiosity (particularly Catholicism), and family-background variables, such as the educational levels of the parents and whether the individual comes from a single-parent family (e.g., Landale and Forste 1991; Lillard, Brien, and Waite 1995; Raley 1994, 1995; Thornton, Axinn, and Hill 1992).

One gap in the literature on cohabitation is a relative lack of attention to the low-income population, for whom patterns and motivations may be different than for middleand upper-income populations. To be sure, evidence suggests that cohabitation rates are higher among those who are less educated, those from welfare and single-parent families, and those whose parents have low levels of education (Bumpass and Sweet 1989; Bumpass et al. 1991). Still, an interesting question that has not been examined in depth is whether cohabitation in low-income populations is even less likely to be a trial marriage and more likely to be part of a series of cohabiting relationships, none of which lead to marriage. Given the lower rates of marriage in the low-income population, this seems plausible. For example, one theory emerging from the recent work on nonmarital childbearing has posited that, in populations with an imbalanced sex ratio, equilibria can occur in which men and women with low wages and poor labor market opportunities have permanently low marriage rates and high rates of nonmarital childbearing (Willis and Haaga 1996). This is consistent with a permanent state of transitory cohabiting relationships.

Another gap in the literature on cohabitation concerns the relationship of welfare to cohabitation in the low-income population. Most of the research on welfare and the family has focused on welfare's relationship to marriage. The few studies that have examined cohabitation and marriage among welfare recipients have not given cohabitation systematic attention. In interviews with 50 welfare families in Chicago, Edin (1991) found that both cohabiting and noncohabiting boyfriends were a significant source of income support for welfare mothers trying to make ends meet. In a more formal analysis, Gabe (1992) used the 1987 and 1992 CPS to approximate cohabitation rates among welfare recipients (the CPS gives only an approximate answer because it does not ask explicit questions about cohabitation) and found that about 7% of AFDC mothers were cohabiting compared with about 8% of all mother-only families; thus, he found only a small difference. In a rare attempt to estimate the effects of welfare benefits on behavior, Winkler (1994, 1995) used data from the NSFH to examine the effect of the AFDC and AFDC-UP programs on cohabitation and on the formation of two-parent families. She found the programs to have no statistically significant effect.

Many questions remain regarding welfare and cohabitation. We furnish a new examination of three aspects of the issue. First, we provide systematic information on the extent of cohabitation among welfare recipients from multiple data sets in order to determine whether cohabitation while on welfare is a common phenomenon. This line of inquiry supplements and extends the work of Gabe (1992). Second, we provide new evidence on the rules of the AFDC program governing cohabitation and marriage. Most

studies have not attended to this issue but have made incorrect assumptions about the rules. Third, we estimate a simple cross-sectional model of cohabitation based on the types of equations estimated in previous studies but supplemented with variables for the level of AFDC benefits and with variables measuring welfare incentives to cohabit. Thus, we extend the work of Winkler (1994, 1995) to more data sets and with more extensive specifications.2

WELFARE

Cohabitation Among Welfare Recipients

We examined four data sets to estimate the extent of cohabitation among AFDC recipients: the CPS, the NSFH, the PSID, and the NLSY. Each of these data sets has advantages and disadvantages, and none is superior in all respects to the others. The CPS contains the weakest measures of cohabitation: It permits only the determination of whether two opposite-sex adults live in the same CPS household. Thus, it cannot be used to determine the exact nature of their relationship. The CPS, however, has the largest sample size and yields the most representative picture of the U.S. population. The NSFH contains the most reliable information on cohabitation because it was designed to explore living arrangements of individuals in the United States, but contains the weakest information on welfare receipt. For example, in measuring welfare receipt, the NSFH combines AFDC and food stamps. In addition, we used only the first wave of the NSFH, as the second wave was not available at the time of our analysis. Therefore, the NSFH does not provide panel data. The PSID is a panel study and has asked questions about cohabitation since 1976, but the survey is household based and hence does not contain accurate information on all cohabiting relationships within a household. The PSID, however, contains superior information on welfare receipt. The NLSY is also a panel study, and uses a straightforward question about cohabitation asked of all respondents. It also contains economic information on cohabiting males. The major aim of the NLSY, however, was to measure labor market characteristics and not living arrangements, so it is not clear that its cohabitation measures are as accurate as those in the NSFH. In addition, the NLSY samples only young men and women and hence not a broad age range of adults.

Tables 1 and 2 present the cohabitation and marriage rates3 for women on welfare aged 18-55 (aged 22-29 in the NLSY) in each data set for either 1987 or 1990, depending on the survey. Appendix A provides more detail on each survey's wording of the question regarding cohabitation, definition of AFDC receipt, and treatment of other important issues.

The percentages presented in Table 1 suggest that the AFDC caseload is more diverse than is usually perceived and contains significant percentages of both cohabitors and married couples. Among all women aged 18-55, cohabitation rates are fairly uniform across the CPS, NSFH, and PSID, ranging from 8.3% to 9.2%. Cohabitation rates are higher among those who are under age 30 than among all those in the sample, but there is no consistent difference between those with less than a high school education and the

sample as a whole. Rates are also somewhat higher in the NLSY, which includes women only in the 22-29 age range, who may have higher cohabitation rates than those at other ages. For women under age 30, with less than a high school education, and with children under age 18,4 however, cohabitation rates (range = 13.7%-23.8%) are higher than for all women in all data sets except the CPS, the least reliable of the four surveys for measuring cohabitation.

The lower panel of Table 1 shows that 19.6%-30% of women receiving AFDC are married, with the spouse present. (Note that marriage and cohabitation are mutually exclusive categories by our definitions.) However, the 30% figure from the NSFH is an overestimate because the definition of welfare income in the NSFH includes food stamps, a program for which married couples are eligible. Indeed, when marriage rates in the PSID and NLSY are recalculated including food stamps along with AFDC, marriage rates rise almost to equal those in the NSFH. Nevertheless, the marriage rates in the other data sets are surprisingly high-up to one quarter of less-educated women in the NLSY.

These high marriage rates also imply that the cohabitation rates in the upper panel of Table 1 are even higher if recomputed as a percentage of unmarried women. Among unmarried women, cohabitation rates are one fifth to one third higher than those shown in Table 1, and are as high as 32% for the less-educated group of NLSY women.

The definition of AFDC in these tabulations is problematic because welfare receipt is defined as receipt of benefits at any time during the prior calendar year, whereas cohabitation and marriage are defined as of the interview date (a common difference in many surveys). We can investigate this issue only with the PSID and NLSY, which are panel studies that include retrospective questions at each interview concerning the exact months of AFDC receipt in the prior year. The CPS and NSFH do not permit such an adjustment. Table 2 reports cohabitation and marriage rates in the PSID and NLSY when AFDC receipt is measured as of the quarter of the 1987 interview using the retrospective welfare questions in the 1988 interview. The lower panel of the table shows that marriage rates are considerably lower than those in Table 1 when this change is made, but are still as high as 18% for some groups. The upper panel of Table 2 shows that the cohabitation rates from the PSID are considerably lower than those in Table 1, but rates of cohabitation from the NLSY are similar across the two tables. It is unclear why the two data sets differ in this respect. Nevertheless, cohabitation rates are still as high as 12% in the PSID and up to 26% in the NLSY, and are up to one fifth higher among unmarried women than among all women.

Table 3 shows cohabitation and marriage rates in the population of mothers in the two data sets, (only 7% to 9% of these women are on AFDC). It is not surprising that marriage rates are much higher in the general population than among those on AFDC. Cohabitation rates are considerably lower in the general population, consistent with prior literature finding higher cohabitation rates in the lower-income population.

Thus, cohabitation rates and marriage rates among AFDC recipients are not as high as would be found in a crude analysis (Table I) but are large enough to warrant further

study of cohabitation among welfare recipients. We investigated a variety of data-related and minor program-related explanations for these relatively high rates. These issues included examining the effects on our cohabitation and marriage rates of (1) extending the age limit for AFDC eligibility through age 18 (children who are 18 can be included in the AFDC unit if they are full-time students); (2) excluding "other welfare" from the AFDC receipt definition, where possible (see Appendix A for a discussion); (3) defining AFDC receipt for the household rather than for the husband or cohabitor (if present) in addition to the woman; (4) counting all children in the household rather than the mother's own children (sometimes women can receive AFDC by being a caretaker adult for children other than their own); and (5) checking for women with disabled husbands, who are eligible for AFDC. We found that these factors generally changed the cohabitation or marriage rates by about 1% or less. What is called for, therefore, is a reexamination of the rules of the AFDC program regarding cohabitation and marriage.

TABLE 1.

Cohabitation and Marriage Rules in the AFDC Program

Until recent (1996) federal legislation, eligibility and benefit rules in the AFDC program have been a mixed federal-state responsibility. The federal government typically imposes certain restrictions that the states must follow, but the states are free, within those strictures, to set whatever rules they wish. This principle also holds for rules governing cohabitation and marriage.

For example, regarding marriage, in 1961 the federal government began allowing states the option to offer the AFDC-UP program-which provides benefits to two-parent households-in addition to the "AFDC-Basic" program-which provides benefits to single-parent familiesbut did not require the states to do so. The existence of the AFDC-UP program only partly explains the presence of married women on AFDC: Only about one half the U.S. states had an AFDC-UP program in 1987 (though concentrated in large states). More important, federal statistics indicate that the percentage of AFDC households who are on AFDC-UP (versus AFDC-Basic) has never been more than about 10% (U.S. House of Representatives 1988:430). Almost all of the percentages married in Table 2 are significantly above 10%.5

Regarding cohabitation, the most important AFDC program rule to note is that cohabitation among single mothers has not been prohibited since the late 1960s and early 1970s. Before 1968, many states did not allow women on AFDCBasic to have an adult male-whether a stepfather to the children, a relative (e.g., natural father) of the children, or a cohabitor-living in the household; the presence of a male was deemed sufficient grounds for ineligibility for AFDCBasic. In 1968 the Supreme Court eliminated the so-called "man-in-the-house" ineligibility rule and ruled that, for determining a child's

eligibility on the basis of an absent parent, a cohabitor (or even a nonadoptive stepfather) could not be considered a substitute parent. Many states, however, continued to count cohabitor (and stepfather) income in determining eligibility and grant amounts. In 1970 the Supreme Court struck down these provisions as well, ruling that evidence of actual contributions by the male was required before a grant could be reduced.

Enlarge 200%
Enlarge 400%
TABLE 2.
TABLE 3.

Nevertheless, states may consider the income, resources, and contributions of male cohabitors, within the scope of the law, in determining eligibility and benefit levels, just as states might for any adult in the household within which the AFDC unit resides. States are allowed considerable latitude in determining the rules governing such treatment; thus cohabitation could still be de facto made difficult. Unfortunately, state rules in this regard are not adequately documented in official publications. To remedy this lack of knowledge, we conducted a telephone survey of the AFDC agencies in the 51 U.S. states and jurisdictions in the summer and fall of 1993 to obtain information on state rules governing cohabitation both in the AFDC-Basic and AFDC-UP programs. Our survey asked questions regarding the eligibility rules governing cohabiting women, the treatment of cash and in-kind contributions by male cohabitors, and the relation of the AFDC-Basic and AFDC-UP programs in these respects (a more detailed description can be found in Moffitt, Reville, and Winkler 1995).

Our survey uncovered four aspects of AFDC rules that bear importantly on marriage and cohabitation. First, we confirmed Winkler's (1995) key finding that the distinction between AFDC and AFDC-UP is not based on marriage per se but on whether the natural father of the children is present in the household, regardless of whether he is married to the mother. When a male cohabitor is present who is the natural father of the children, the mother and the children are ineligible for AFDC-Basic (unless he is disabled), but the family unit (including the father) is eligible for AFDC-UP and must apply for benefits to that program. AFDC-UP has considerably more stringent income and employment eligibility conditions than does AFDC-Basic: Unlike in AFDC-Basic, in AFDC-UP the unemployed parent must have a history of employment, and the income of both parents is automatically counted in full. Further, AFDC-UP has not always been available in all states. Thus, cohabitation is not quite as favorably treated as one might think. On the other hand, in married families in which the husband is a stepparent rather than the natural father of the children, the mother and her children are eligible for AFDC-Basic in all but seven states (in those seven, stepparent families must apply for AFDC-UP). This makes eligibility for married couples somewhat more favorably treated than expected and could explain the presence of many married families on AFDC. Table 4 summarizes the basic eligibility categories in the AFDC-Basic and AFDCUP programs.

Second, we found that although mothers and children in family units in which either a stepfather or a male cohabitor unrelated to the children (henceforth referred to as unrelated cohabitors) is present are eligible for AFDC-Basic, the income and contributions of the cohabiting males are treated more leniently than are those of the stepfather. As required by federal regulations based upon the Supreme Court decisions mentioned previously, no state automatically includes the income of male cohabitors against the AFDC grant amount. In 1981, however, Congress overrode the 1970 decision and mandated that a portion of stepfather income must be counted against the grant. But for unrelated male cohabitors, there must be evidence of an explicit contribution before grant reductions can be made. Thus, a cohabiting couple claiming that the male has made no contributions to the woman and her children would not experience grant reductions or loss of eligibility. This differential treatment of stepparents and cohabitors is particularly relevant in light of the changing character of stepfamilies as described by Bumpass, Raley, and Sweet (1995).

Third, we found that contributions made by unrelated male cohabitors to the woman and her children, even if reported, are almost always ignored if they are for in-kind purposes-usually for payment of rent-and that even cash contributions are often ignored. Appendix Tables BI and B2 detail each state's policies regarding contributions for shelter and cash contributions, respectively. For example, if the male cohabitor directly pays the rent (or other shelter expenses) for the woman and her children, almost all states (35) make no adjustment in the grant amount. Most other states reduce the AFDC benefit if the woman makes partial contribution toward rent, even if it is only a small portion of the total.6 The treatment of cash contributions by cohabiting males is less lenient: Cash contributions made by the cohabiting male "to meet the needs of the woman and her children" (i.e., she can spend the money any way she chooses) are counted against the grant. Even here, most states (27) do not count such contributions against the grant if they are intended to pay for shared household expenses (i.e., rent, household supplies, food, and other provisions), however. Because distinguishing these uses of cash contributions from purely discretionary uses is difficult, if not impossible, in practice, contributions in those states are likely to be ignored.7

TABLE 4.

Fourth, we found that five states have some type of specific cohabitor policy apart from grant adjustments on the basis of actual contributions, even though this seemingly violates federal law. In three states an unrelated cohabitor is required to make contributions either toward shared living expenses or toward the needs of the woman and her children if he is not making them already. In two other states, the grant amount is reduced on the assumption that the cohabitor would make payment of his share of the rent. Thus, cohabitor policies are somewhat less lenient in these states, but they are the exceptions rather than the rule.

These findings may explain the high percentages of cohabitors on the AFDC rolls shown in Tables I and 2. Further, if these rules are not well enforced, the treatment of cohabitors is even more lenient than we have found. Although there is no systematic information on this question, the difficulty of making many of the distinctions in the law and the seeming ease with which the rules can be evaded suggest that enforcement may not be effective in any case.

In sum, our survey provides evidence that, in most states, cohabitation is treated quite leniently by the AFDC program, provided that the cohabiting male is not the natural father of the children. That is, most states impose almost no grant penalty if he pays the entire rent, and more than one half of the states impose no penalty if he contributes cash toward household expenses. In only a few states is an additional financial obligation imposed on the cohabiting male in the absence of contributions. In light of these rules, the high cohabitation rates among AFDC recipients are not surprising.9

Consistency of the PSID and NLSY Data With AFDC Rules

Our survey findings imply that certain patterns of living arrangements and welfare receipt should be found in the data. For instance, a cohabiting couple comprising a woman and a nondisabled man who is the natural parent of all of the children should receive AFDC only if they are in the AFDC-UP program and hence only if they are in a state providing AFDC-UP. Our survey findings also explain why a married woman may be found on AFDC, even if she does not live in a state providing AFDC-UP: This can occur if the husband is a stepfather. Finally, the rules now make clear that the income of the male is treated differently depending upon whether he is an unrelated cohabitor, a stepparent, or a natural parent (married or cohabitor). An examination of the income of the men in AFDC households should show patterns consistent with these rules if our interpretations are correct.?

We examined only the PSID and the NLSY for consistency with the rules because only those two data sets can be used to determine whether a woman is in a household receiving AFDC in the quarter of the interview. Table 5 shows our findings on the relationship of the husbands and cohabiting males to the children. Among cohabiting women on AFDC, we found that about one half were living with men who are the natural fathers of at least one of the children. Thus, consistent with the AFDC-UP rules, we found that unmarried women living with the fathers of their children are indeed eligible for AFDC. In addition, the table shows that about one fifth of men in married families receiving AFDC are stepparents, consistent with our findings that AFDC rules permit such families to be on AFDC. The distributions in the NLSY and PSID are quite similar. Tabulations from the NSFH, albeit defining welfare receipt as of the prior year, show a similar mix of natural and nonnatural fathers among cohabiting and married AFDC women. "

An important question is whether the women living with nondisabled cohabiting males who are natural fathers to the children are on AFDC-UP, as required by the rules, and whether the women married to stepfathers who are not natural parents are on AFDC-

Basic rather than AFDC-UP (exeat with the AFDC unit be included in the official food stamp household, implying that his income and assets will be considered in the calculation of eligibility and benefits. Stepfathers and natural fathers are treated even less leniently because they are automatically included in the food stamp household, whether or not they eat with the AFDC unit.

10. Our data are were collected in 1987, whereas our rules survey was conducted in 1993. This could be problematic if the rules changed over the period (we chose 1987 for all surveys because the initial NSFH wave was conducted in that year). However, the 1993 rules are quite similar to those documented by Hutchens et al. (1989) for the early 1980s, and a comparison we conducted of the 1993 rules with those in the 1990-1991 U.S. Department of Health and Human Services publication, "Characteristics of State Plans for AFDC," indicated little change for the rules it documented. In addition, although the rule for disregarded cash contributions for shared household expenses was made official in 1989, many of our respondents told us that the rule had been followed earlier in their states.

I I . The quality of the reports of whether a male is a biological father of a child is open to question, and it may be that the percentage of men who are natural fathers is greater than suggested by our tabulations. cept in seven states). Unfortunately, we cannot accurately answer this question with our data because AFDC-UP in 1987 covered approximately 90% of the AFDC caseload. Consequently, almost all the AFDC families in our data live in states providing AFDC-UP. In addition, sample sizes in the data sets are too small to yield reliable estimates for the number of observations that are inconsistent with the rules.

Another issue regarding the rules concerns the income levels of husbands compared with those of unrelated cohabiting males. In the PSID, unrelated cohabiting men in AFDC households have mean annual earnings of $10,612, and husbands have annual earnings of $4,737. The smaller value for husbands may result from the requirement that husbands' income be counted against the AFDC grant regardless of whether he is a natural father or stepfather, whereas this is not the case for unrelated cohabiting men. Consequently, when husbands and unrelated male cohabitors have the same earnings, married couples are less likely to be eligible for AFDC than are those who cohabit. The PSID also indicates that 52% of cohabiting males in households receiving AFDC are employed in the week of interview, again indicating considerable evidence of labor force and income-generating activity among cohabiting men. The NLSY shows similar figures. Unfortunately, the NLSY did not ask the same earnings and income questions of husbands and cohabitors in 1987, so they cannot be compared with each other. Both, however, are over $6,000 annually. Among cohabiting males in the NLSY living with women on AFDC, 66% were working at the time of interview.

EXAMINATION OF INCENTIVE EFFECTS

Theoretical Incentive Effects

Our study of the state AFDC rules revealed that cohabitation, at least with men unrelated to the children, is generally treated leniently. The income of such cohabitors is not counted against the grant, rent payments the man makes are rarely counted against the grant, and in more than half the states even cash contributions are often not counted against the grant. Therefore, there seems to be a significant monetary encouragement to cohabitation while on AFDC that has not been recognized in the research literature on the program.

That cohabitation is a viable and perhaps attractive alternative implies that models of the incentive effects of the AFDC program on living arrangements should consider not a twofold choice between single motherhood and marriage, but a threefold choice between single motherhood, marriage, and cohabitation. This framework leads empirically to a three-way multinomial choice model. The relatively lenient cohabitor rules imply that the incentive to cohabit is increased relative to its two alternatives. Cohabitation with an unrelated male is encouraged relative to marriage because marriage would ensure that the male's income be counted against the grant according to the stepparent rules in AFDC-Basic (or, in seven states, the couple would be forced to comply with the even more restrictive rules of the AFDC-UP program). Cohabitation is encouraged relative to single motherhood because cohabiting couples benefit from economies of scale in household expenses and from the income of two persons instead of one, yet the grant is not necessarily reduced to compensate.

None of these incentive effects apply to the choice between cohabitation, marriage, and female headship when a natural father is involved. In that case, the choice is between being on AFDC-Basic as a single mother and being on the AFDC-UP program, whether married or cohabiting; and that choice is not affected by the cohabitation rules governing unrelated men that we have discussed. However, if incentive effects operate at the more fundamental level of whether to cohabit with or marry a natural father versus to cohabit with or marry an unrelated male, there is a five fold choice confronting a woman with children: to cohabit with an unrelated male, to marry an unrelated male, to cohabit with a natural father, to marry a natural father, or to live as a single mother. In this situation, the relatively lenient rules that apply to cohabitation with an unrelated male provide an economic incentive to choose this living arrangement over cohabitation with the natural father of one of the children.

Empirical Tests

Using the PSID and the NLSY, which permit identification of AFDC receipt in the quarter of the interview, we can examine empirically whether cohabitation and marriage rates respond to AFDC benefits levels and the rules regarding cohabitation. Using a three-way classification, we first estimated multinomial logit models for the determinants of partner status: cohabiting, married, or neither. Because our focus is on welfare, we also estimated multinomial logits for the joint decision of partner status and welfare status. We then considered estimation of models that separate observations according to whether cohabitation and marriage are with natural fathers. Note that, because both welfare

participation and partner status are choice variables and are jointly chosen, neither should appear as a regressor in an equation for the other.

Enlarge 200%
Enlarge 400%
TABLE 5.

For control variables we drew on the large literature on marriage (e.g., Lichter, LeClere, and McLaughlin 1991; Lichter et al. 1992; Mare and Winship 1991) and cohabitation (e.g., Bumpass et al. 1991; Lillard et al. 1995). Among the variables that have been identified as basic demographic correlates of marriage are age, education, race, the presence of children, employment opportunities in the state of residence, the ratio of males to females, the ratio of employed men to women, and urban residence. The literature on cohabitation has shown that race, age, and education are important determinants of cohabitation. Religiosity and familybackground variables are determinants of cohabitation and marriage. We included of all these variables in our model (see Appendix Table C I for the list of variables and means).

Our sample includes all women aged 18-55 in the PSID and all women aged 22-29 in the NLSY with children under age 18. The sample sizes in the PSID and NLSY are 1,258 and 1,430, respectively. (We include observations only if they have nonmissing values for all variables.) Small sample sizes of cohabitors hamper the analysis: There are only 43 cohabiting women in our PSID sample and 82 in our NLSY sample. This leads to large numbers of insignificant coeffcients and generally weak results if many variables are entered into the equations.

Table 6 shows multinomial logit estimates for the threecategory partner-status variable for the PSID, and Table 7 shows the corresponding estimates for the NLSY. We show the results of two specifications: (1) a "small" model, which includes only variables for age, education, race, and children, and the AFDC benefit, and (2) an "extended" model, which includes variables for the local marriage market, religiosity, urban residence, and family background. The majority of the coefficients in the small model which are significant fall in magnitude and significance in the extended model. We show the small models because the small sample sizes of cohabitors make it difficult to obtain significant results in extended models (e.g., few variables in the cohabitation equations in those models are significant at conventional levels).

Results from the small models indicate that marriage probabilities relative to single motherhood are positively related to age, education, and the presence of young children and are lower for blacks than for nonblack women in the sample. We also find that marriage probabilities in the small models are negatively related to the level of the state welfare benefit, consistent with recent research showing some effect of welfare on marriage in cross-sectional regressions. The magnitude of the effect is modest, however:

A $100 increase in the monthly benefit reduces marriage probabilities by no more than 5 percentage points (NLSY) and by as little as 2.5 percentage points (PSID).

The small model results show that cohabitation rates relative to rates of single motherhood are negatively related to education and are lower for black women than for nonblack women; cohabitation rates relative to single-motherhood rates are not significantly related to the level of state welfare benefit. Relative to marriage, however, the level of state welfare benefit is positively related to cohabitation, and this effect is statistically significant in the NLSY (results not shown; significance of difference in coefficients are shown in the cohabiting and married columns in Tables 6 and 7). This finding is consistent with the incentive effects we discussed earlier.

The results for the extended models are generally weaker, although the benefit effects in the NLSY remain significant. Few of the additional control variables are significant at conventional levels. We tested a variety of different specifications without any change in the tenor of the results. Additional variables tested included the state unemployment rate, the number of times church was attended (PSID only), and family income of parental family (PSID only). None were significant. We also tested variables for high school and college graduation for parents in both data sets and found that college variables were slightly more significant in the NLSY than in the PSID and high school variables were slightly more significant in the PSID than in the NLSY; neither set of variables affected the benefit coefcients, however.

Tables 8 and 9 show estimates for the joint choice of partner status and welfare participation, estimated as a sixcategory multinomial logit (on or off welfare, and cohabiting, married, or single mother) for selected coefficients (see Appendix Tables C2 and C3 for logits for welfare participation estimated alone). This is our preferred specification because our model implies that incentive effects work through welfare participation. Thus, we expanded our specification to include additional welfare-related variables: (1) variables for whether a state adopted in-kind Policy A or Policy B for contributions by unrelated cohabitors, where Policy A is the most lenient and Policy B is the second most lenient policy (see Appendix Table Bl); (2) a variable for whether the state disregarded unrelated cohabitor cash contributions made for shared household expenses (see Appendix Table B2); and (3) a variable for whether the state has a specific policy toward cohabitors (five states-California, Kansas, South Dakota, Oregon, and Virginia-have such policies). The first two variables should increase incentives for cohabitation while on welfare, and the third variable should discourage cohabitation. In addition, we included a policy variable to identify whether an individual lives in a state with an AFDC-UP program.

Our estimates with these variables entered both singly and in combination indicate no significant effects of either the variable for cash contributions or the variable for cohabitor policy. In part, the lack of effect of cash contributions may follow from the fact that the federal government officially agreed to that policy only in 1989, after our data were collected. However, states were presumably treating cash contributions partly in that fashion before 1989 (see Moffitt et al. 1995). The lack of any effect of cohabitor

policy may arise from its presence in only five states, states that may differ from the rest of the country in many other ways as well. In addition, for neither of these variables do we have information on how common they are in the caseload, or on how effectively they were enforced.

Enlarge 200%
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TABLE 6.

Enlarge 200%
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TABLE 7.

Enlarge 200%
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TABLE 8

The variables representing in-kind contribution rules, however, have a more systematic pattern of effects across the many different model specifications we estimated. As indicated by the coefficients from the small model on the in-kind variables in Tables 8 and 9, states with either the very lenient Policy A or the moderately lenient Policy B tended to be associated with higher rates of combining welfare with cohabitation; the coefficients maintain their signs, but lose significance in the extended models. There is no strong difference, however, in the coefficients between states with Policy A and those with Policy B, perhaps because the policies are effectively the same. Specifically, women in states with Policy B may make sufficient contributions of their own to avoid grant reductions. An anomalous effect appears in the PSID, where the in-kind variables are associated with higher cohabitation rates for those not on welfare than for those on welfare; this may be a spurious correlation from some omitted state-level characteristic.

Table 8 also shows that the presence of a state AFDCUP program is associated with a higher likelihood of being on welfare and married in the PSID (at least in the small model). This finding, unlike much prior research on this issue, suggests that AFDC-UP encourages marriage. There is some indication that this finding is a result of our having broken down marital status by welfare status: When we estimated simple married/not married logits-that is, the type of specification estimated in previous research-the coefficient on the AFDC-UP variable in the PSID lost significance. However, the results from the NLSY, both in Table 9 and from married/not married logits, are quite different and are inconsistent with the PSID in this respect. In addition, there are several anomalous AFDC-UP coefficients in the tables. Consequently, our findings on AFDC-UP are only suggestive, and deserve further investigation.12

Finally, in results not reported here, we attempted to conduct a more detailed analysis of the determinants of cohabitation and marriage by estimating multinomial logits that stratify the six outcomes in Tables 8 and 9 by whether, for cohabiting and married women, the male in question was the natural father of at least one of the children. Unfortunately, this leads to a model with ten outcome categories, and our sample sizes proved too small to provide reliable estimates. In the PSID, for example, we have only six unrelated cohabitors, three stepfathers, and eight related cohabitors on welfare. These correspond to sample frequencies of .015, .008, and .021, respectively, which are far too small to provide reliable equation estimates. We therefore leave this topic for future research with a larger data set.

SUMMARY AND DISCUSSION

TABLE 9.

Our investigation of cohabitation and the U.S. AFDC program yielded several findings. Four data sets reveal si nifcant cohabitation rates among women on AFDC, as high as 12% to 26% for some age groups. We were surprised to have found fairly high marriage rates among women on AFDC as well. In addition, the results of a telephone survey of the states reveal that AFDC policies are often quite lenient with regard to the presence of unrelated male cohabitors in the household of women on AFDC, and that most states impose few, if any, grant reductions in the presence of such cohabitors if they make contributions to rent payments or for shared household expenses. The 1987 PSID data suggest that men cohabiting with women receiving AFDC (and not related to her children) had in excess of $10,000 in annual earnings compared with less than $5,000 for husbands. A brief examination of the relationship between cohabitation rates of women receiving AFDC, and the leniency of a state's rules toward unrelated cohabitors revealed only weak evidence in support of incentive effects.

Our analysis has only scratched the surface of what is a complex social phenomenon. Perhaps the major gap in the analysis is the inability to delineate more fully the nature of the relationships between the cohabiting women and men in our sample. There is an enormous range of relationships, from long-term, stable partnerships with integrated economic relationships, to temporary cohabitations with only casual economic exchanges. Thus, for example, the permanence or transitory nature of the relationships cannot be established with our data. Nor do our data have any direct information on intrahousehold economic relations, sharing of income and other resources, or sharing of expenses. Yet, the effect of welfare rules on living arrangements, as well as the socially optimal design of welfare rules, should depend heavily on the answers to these questions.

A second major gap in our analysis is the lack of information on how the AFDC program treats AFDC households in practice, regardless of the official rules. Many of the

respondents to our AFDC agency telephone survey pointed out the unenforceability of many of the rules governing the treatment of income and resources. In addition, although anecdotal evidence suggests that most AFDC households have unreported income and thus violate the rules of the program (e.g., Edin 1991), our investigation of the rules revealed that in many states it is relatively easy for cohabiting males with substantial income to live in AFDC households and to make significant contributions to the woman and her children without having the AFDC grant reduced and, more important, without violating the letter of the AFDC regulations. The distinction may be difficult to make in practice, but it is important to make in principle because it affects our view of whether AFDC households abide by the rules or commit fraud. These issues provide many opportunities for future research.

A third issue concerns what AFDC policy should be, a normative question that we have not addressed. The preferred treatment of cohabitation and marriage by the welfare system is affected by a tradeoff between equity considerations and neutrality (or "efficiency," in economic parlance) considerations. Neutrality considerations imply that the government should attempt to stay neutral with respect to individual decisions concerning living arrangements and should permit individuals to cohabit without encouragement or discouragement from government policy. But equity considerations imply that if children in cohabiting families are better off than children in single-parent families, either because additional income is available or because household expenses (per person) are lower, those children should receive lower benefits. If benefits are lower for children in cohabiting families than in noncohabiting families, however, the neutrality principle is violated because cohabitation is discouraged relative to what it would be in the absence of any welfare program. An analogous tradeoff exists for the treatment of married and unmarried families. How the government should balance these considerations has not been systematically thought out because the incentives for cohabitation among welfare recipients have not been subject to sufficient public attention.

A fourth topic for future research concerns the effects of the 1996 Personal Responsibility and Work Opportunity Reconciliation Act. Although the legislation contains no specific provisions relating to marriage or cohabitation, states are even more free than they had been previously to set their own rules. For example, states may now choose to treat cohabitors less leniently because they are not bound by federal law restricting their treatment and because a less generous treatment may reduce the welfare rolls, a goal of many states. Future analysis examining the effects of the policies the states choose would be desirable.

APPENDIX A:

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[Footnote]
1. One way to conceptualize the alternative views is to posit cohabitation as either a substitute for marriage or a complement to marriage. In the former case, variables that increase marriage rates decrease cohabitation rates, whereas, in the latter case, variables that increase marriage rates also increase cohabitation rates (relative to being neither married nor cohabiting). Addressing this issue would require comparing the signs on common variables in the two equations, which has not been systematically conducted in the literature (see Raley 1994 for an exception).

[Footnote]
2. In research conducted after our work was completed, London (1996) and Hilton and Shelton (1996) used the Survey of Income and Program Participation and the PSID, respectively, to examine the effect of welfare on cohabitation. These authors, however, restricted their study to single mothers and hence did not consider the marriage alternative. Our study is more comprehensive, as we examine cohabitation as a decision relative to marriage and relative to noncohabiting single motherhood.
3. Although some women live with their parents, we did not separately examine this living arrangement. Hilton and Shelton (1996), and London (1996) found that the percentage of single mothers living with their parents ranges between 16% and 26%. In an earlier study, Hutchens, Jakubson, and Schwartz (1989) found that 33% of single mothers live as a subfamily, although not always with their parents.

[Footnote]
4. Table I implies that some women on AFDC do not have a child under age 18, a prerequisite for eligibility. The discrepancy arises, in large part, because some 18-year-old children, generally full-time students, are eligible for AFDC and because our definition of "own children under 18" excludes cases in which children are being cared for by a nonparent/caretaker adult. In any case, with the exception of the CPS, cohabitation rates for all women and women with children under age 18 are quite close.

[Footnote]
5. None of the surveys asked respondents to indicate whether they were receiving AFDC-Basic or AFDC-UP, presumably because recipients may not have known the difference. In addition, many of the married men may be disabled, for married couples with such men are eligible for AFDC-Basic. Only 3.7% of AFDC children, however, lived in such households in 1988 (U.S. House of Representatives 1994:401).

[Footnote]
6. With minor exceptions, these policies are identical for shelter contributions made by the parents of a woman if she lives with them and they pay the rent. The policies are intended to apply to contributions made by anyone else in the household, not just a male cohabitor. See Hutchens et al. (1989) for the results of a telephone survey that focused on the treatment of parental shelter contributions.
7. In a 1989 administrative ruling, the Department of Health and Human Services officially permitted states to disregard cash payments for shared household expenses, but many of our survey respondents told us that their states had been disregarding such payments before that time.
8. Edin (1991) suggested that underreporting of income and contributions is extensive, but her sample was small and not designed specifically to determine legality (i.e., it is not possible to determine from her data whether contributions made by the male cohabitors of the women in her sample were actually fraudulent or whether they were allowed under the permissive rules we have found to exist).
9. Working somewhat against this leniency of treatment are the provisions of the food stamp program, which require that cohabiting males who

[Footnote]
12. Table 9 also shows the odd result for the NLSY of a significant AFDC-UP coefficient, even on nonwelfare marriage rates. On the other hand, when the simple married/not married logits are estimated on the NLSY data, the AFDC-UP coefficient remains significant and positive, a result directly in contradiction to past work.

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