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WORK AND THE U.S. WELFARE
SYSTEM: A REVIEW

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Work and the U.S. Welfare System: A Review

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Work and the U.S. Welfare System: A Review

I. INTRODUCTION

The U.S. welfare system has been considered by many observers to be in a state of crisis since the 1960s. Between 1965 and 1985, the caseload in the Aid to Families with Dependent Children (AFDC) program increased by 270 percent; the Food Stamp program grew from a small commodity distribution network to a program with twice as many recipients as AFDC; and the Medicaid program was introduced and grew to a size in 1985 exceeding even that of Food Stamps. The first and foremost concern with this welfare "explosion" has been the high caseloads themselves and the correspondingly high rates of public expenditure they require. But concern has also been generated over the extraordinarily low work and earnings levels of the program recipients, the continuing high poverty rates of many U.S. families even in the presence of the programs, and the high rates of growth of female heads of family, who constitute the major eligibility group for the programs.

In this review I survey the results of research to date on the existence and magnitudes of connections between welfare reciprocity and low levels of work and earnings in the welfare system. The enormous amount of research in this area requires me to be selective. The review therefore deals only with (1) programs for the nonelderly, thereby leaving aside the Social Security retirement system and the Supplemental Security Income program; (2) programs for the nondisabled, thereby leaving aside the panoply of U.S. disability programs; and (3) welfare rather than social insurance programs, thereby leaving aside unemployment

insurance. The review is also restricted to transfer programs currently in existence, thus leaving aside such programs as the negative income tax that have been tested but not implemented. The programs remaining after these restrictions--primarily AFDC, Food Stamps, and Medicaid--constitute the core of the transfer system for the low-income population in the United States.

The review is organized around a set of three questions. First, what have been the actual patterns of growth of these programs and what demographic groups do they serve? Are the programs still growing or are we primarily concerned with the results of past growth? These questions are the subject of Section II.

Second, what are the patterns of work and welfare receipt among the demographic groups served by the programs, and what is the evidence that those patterns are affected by the levels of program benefits and the program structures? The discussion first focuses on the time-series trends in work and welfare receipt. Do those trends correlate with changes in benefits? With other changes in program features? Next, the econometric evidence from studies employing cross-sectional or panel data on individuals is reviewed. Do the studies show that differences in work and welfare receipt are correlated with program characteristics, once other major factors are controlled for? If so, are they sufficiently large in magnitude to explain the time-series trends in work and welfare receipt? If not, what are the causes of low work and earnings levels among recipients? These questions are the subject of Sections III and IV.

Third, what policy measures for improving levels of employment and earnings have been proposed, and what would be their likely effects according to available research? Would lowering the benefit reduction rate, instituting training programs or work requirements, altering the child support system, or reducing the categorical nature of the system increase earnings levels and reduce rates of reciprocity? Are other measures available as well? These questions are the subject of Section V.

The final section of the paper summarizes the answers that have been obtained and makes suggestions for future research.

II. PROGRAM GROWTH AND GROUPS SERVED

As noted in the Introduction, the caseloads of the AFDC, Food Stamp, and Medicaid programs have grown tremendously over the past 20 years. Table 1 illustrates this growth in detail. The AFDC program, most of whose participants are female heads (the term used in this paper to designate female heads of households with children under 18) saw its greatest growth in the decade 1965-1975, during which the number of families on the rolls more than tripled. But the caseload grew by only 6 percent in the five-year period from 1975 to 1980, and it actually declined from 1980 to 1985. The decline is partly attributable to the 1981 Omnibus Budget Reconciliation Act (OBRA), which reduced eligibility for the program and hence lowered the size of the caseload. The number of recipients in the program went through similar cycles but grew more slowly than the number of families. Average family size (recipients per family) in the program has thus significantly declined over time.

Table 1

Average Monthly Caseloads of the Major
Income-Tested Transfer Programs (in millions)

	1960	1965	1970	1975	1980	1985
AFDC: ^a						
Families	.8	1.0	2.2	3.5	3.7	3.7
Recipients	3.0	4.3	8.5	11.3	10.8	10.8
AFDC-UP:						
Families	--	.06	.08	.10	.14	.26
Recipients	--	.36	.42	.45	.61	1.13
No. states with program	--	18	23	27	26	25
Food Stamp recipients	--	.4	4.3	17.1	21.1	21.3
Medicaid recipients:						
Total	--	--	15.5	22.0	21.6	22.2
Adults with dependent children	--	--	3.4	4.5	4.9	5.5
Dependent children	--	--	7.3	9.6	9.3	9.4

^aIncludes AFDC-UP.

Data sources in Appendix.

Clearly the welfare explosion is long since over in the United States and there are no signs of any second surge of caseload growth, at least for the AFDC program. Nor is there any sign of excessive growth in the AFDC-Unemployed Parent (UP) program, for which poor two-parents families in which the principal earner is unemployed are eligible, although there was a small spurt of growth between 1980 and 1985. Since eligibility requirements in the program are stringent, and since no more than 27 states have ever had the program in force at the same time, the program has always been small.¹ The recent spurt does not seem to be a result of increased state adoption, but alternative explanations have not been suggested (though high unemployment rates could be a factor). In any case, the caseload of the program is only 7 percent of that of all AFDC at the present time.

The Food Stamp program, for which marital status and household type are not eligibility criteria, also grew rapidly in the 1965-1975 decade. The program was begun in 1964, and over the late 1960s and early 1970s gradually replaced a voluntary food distribution program. In 1973 legislation, Congress mandated that all counties of all states replace the food distribution program by the Food Stamp program by fiscal year 1975. The caseload subsequently grew by 24 percent between 1975 and 1980, far in excess of that for the AFDC program but still much lower than its prior growth rate. From 1980 to 1985 the caseload has been virtually constant.² Thus again we find that high growth rates in the program appear to be a thing of the past. Currently, the size of the program is about double that of AFDC, though expenditures are only about 50 percent larger.

The Medicaid program has generated increased attention in the last few years because it is widely perceived as a program whose caseloads have exploded. This is not the case, however. The Medicaid caseload grew by 42 percent from 1970 to 1975, but has remained essentially constant since that time. The fraction of the caseload constituted by female heads and their dependents (a few of these families are not AFDC recipients) has held steady at about 65 percent over the entire period. The rest of the caseload is constituted mostly of the aged, blind, and disabled. However, because health care for the aged and the disabled is so expensive, female-headed families only account for 25 percent of program costs. Poor families with adult males who are not receiving AFDC-UP are not eligible for Medicaid.

Current concern with welfare reciprocity is thus not a result of any recent worsening of the situation but is rather a continuing concern with the high levels of the caseload. A number of questions consequently arise. Why are these levels so high in the United States despite its historically strong labor market and high wage levels? To what extent has the offer of assistance itself been responsible for the high caseloads and the presumed low earnings of recipient families? More specifically, for example, what caused the explosion in the AFDC caseload of 1965-1975? If one can determine the cause, can that explosion be reversed--is there any way to decrease reciprocity? What roles do Food Stamps and Medicaid play? The research reviewed in Sections III and IV will suggest answers to some, but not all, of these questions.

Before examining the evidence on these questions, it is necessary to determine whether any demographic groups other than female heads are

likely to have been affected by the transfer system. Table 2 shows the extent of receipt of transfer benefits in 1979 and 1984 by nonelderly single-parent families (primarily female heads) and also by nonelderly two-parent families. More than half of single-parent families receive at least one type of benefit, and most receive some combination of AFDC, Food Stamps, and Medicaid. About 20 to 25 percent receive all three. However, only about 20 percent of two-parent families receive any type of benefit at all, and around half of these receive cash transfers other than AFDC, Medicaid, or Food Stamps (primarily unemployment insurance). As a result, even though both the Food Stamp program and the AFDC-UP program are available to two-parent families, their rates of reciprocity are very low.

These figures provide a prima facie case that welfare reciprocity is primarily a problem only among female heads, and that men and married women can be safely ignored in the review. Since the subject of the review is the connection between reciprocity and work, it may seem obvious that the various transfer programs cannot have an effect on the work levels of groups not receiving significant benefits. However, although such was the conventional wisdom among analysts for many years, it is no longer regarded as self-evident. For example, if AFDC has an effect on marital status, female headship, or single motherhood, it will almost surely have an effect on the work levels of men as well, a hypothesis first offered by Butler and Heckman (1977). Alternatively, if growing up in a household that has received AFDC has an effect on future employment and earnings, there will be an indirect effect of AFDC on the labor market performance of young men. These issues are discussed in Section IV.

Table 2

Benefit Receipt by Family Type, 1979 and 1984
(percentage distribution)

	Nonelderly Single-Parent Families		Nonelderly Two-Parent Families	
	1979	1984	1979	1984
No program	44.6	44.5	79.4	81.8
Food Stamps only	3.7	3.6	1.3	1.9
Medicaid only	0.6	1.1	0.2	0.9
AFDC, Medicaid only	3.9	2.3	0.6	0.6
Food Stamps, Medicaid only	2.5	0.5	0.1	0.3
AFDC, Medicaid, Food Stamps only	14.2	15.4	0.4	1.2
AFDC, Medicaid, Food Stamps, and other benefit	6.8	11.0	1.1	0.5
AFDC, Medicaid, and other benefit (not Food Stamps)	1.7	1.0	0.1	0.3
Cash transfers only ^a	10.4	9.7	11.4	7.6
Housing assistance only	4.3	3.3	0.6	0.9
Other	<u>7.2</u>	<u>7.6</u>	<u>4.5</u>	<u>4.0</u>
Total	100.0	100.0	100.0	100.0

Data sources: Weinberg (1985, Tables 4 and 5; 1986, Tables 3 and 4) and unpublished data provided by D. Weinberg.

^aIncludes unemployment insurance, general assistance, and other cash programs.

III. FEMALE FAMILY HEADS

A. Time-Series Trends in Work and Welfare Receipt

This section discusses the time-series patterns of welfare participation and work levels of single mothers, and the time-series patterns of benefit levels, unemployment rates, and other factors that are commonly thought to affect welfare participation levels and the work effort of welfare recipients. This detailed examination will reveal whether there is any prima facie evidence that the welfare explosion was a result of high benefit levels, as well as whether major historical changes in the AFDC program such as the 1967 Social Security Amendments and the 1981 OBRA legislation have had any visible effect on participation and work effort. In addition, this time-series examination will provide a proper context for the individual-level econometric evidence discussed subsequently, since a major reason for interest in that evidence derives from its potential for explaining time-series trends.

Trends in welfare participation rates and benefit levels in the AFDC, Food Stamp, and Medicaid program from 1967 to 1985 appear in Table 3 and Figure 1. Unfortunately, none of the transfer program variables in the table other than the AFDC benefit is available prior to 1967. In 1967, 36 percent of all female heads were on AFDC. This rate rose to 63 percent by 1973, after which it gradually declined, reaching 53 percent in 1981. It dropped further to 44 percent in 1982, primarily as a result of the 1981 OBRA legislation and the 1981-82 recession. Since then it has remained relatively stable.³ About two-thirds of the AFDC caseload explosion from 1967 to 1974 resulted from the change in the participation

Table 3

Program Participation Rates and Related Variables

	1967	1969	1971	1973	1975	1977	1979	1981	1982	1983	1984	1985
<u>Participation Rates</u>												
<u>of Single Mothers with</u>												
<u>Children under 18 (%):</u>												
AFDC ^a	36	42	62	63	62	57	52	53	44	45	45	43
AFDC and Food Stamps	n.a.	22	n.a.	43	47	42	39	n.a.	n.a.	38	n.a.	n.a.
Medicaid	n.a.	88	n.a.	89	85	85	76	76	72	73	69	69
<u>Real Monthly Benefits (\$):</u>												
AFDC ^c	n.a.	515	513	485	490	485	448	410	394	387	387	396
Food Stamps ^c	n.a.	233	214	218	247	246	233	221	233	244	234	237
Medicaid ^d	n.a.	111	n.a.	140	152	147	148	130	118	114	111	n.a.
Sum ^e	n.a.	705	n.a.	698	742	733	695	638	627	629	616	n.a.
<u>Benefit/Earnings:^f</u>												
AFDC	n.a.	66	60	53	55	52	46	42	41	39	39	40
Sum	n.a.	90	n.a.	78	84	79	72	64	66	63	63	n.a.
<u>Other AFDC Parameters:^g</u>												
Nominal BRR (%)	100	67	67	67	67	67	67	67	100 ^h	100 ^h	100 ^h	100 ^h
Nominal BE (\$)	n.a.	769	766	724	731	724	669	612	394	387	387	396
Effective BRR (%)	41	42	23	22	30	33	32	24	70	n.a.	n.a.	n.a.
Effective BE (\$)	n.a.	1226	2230	2205	1633	1470	1400	1708	563	n.a.	n.a.	n.a.
<u>U.S. Unemployment Rate</u>	3.8	3.5	5.9	4.9	8.5	7.0	5.8	7.6	9.7	9.6	7.5	7.2

^aAFDC-Basic only (not AFDC-UP). Adjusted for subfamily coding errors in the Census Bureau's Current Population Survey.

^bIn 1982 dollars (personal consumption expenditure deflator) for a family of four.

^cMaximum amount paid for a family of four with no other income.

^dAverage of payments per adult on behalf of adult and children. Deflated by 1982 medical care CPI.

^eMedicaid plus AFDC plus Food Stamp benefit minus 30 percent of AFDC.

^fMultiplied by 100. Earnings are real weekly earnings of working females times 4.33.

^gBRR = benefit reduction rate. BE = breakeven level = benefit divided by BRR.

^hWithout 30-and-one-third.

n.a. = not available.

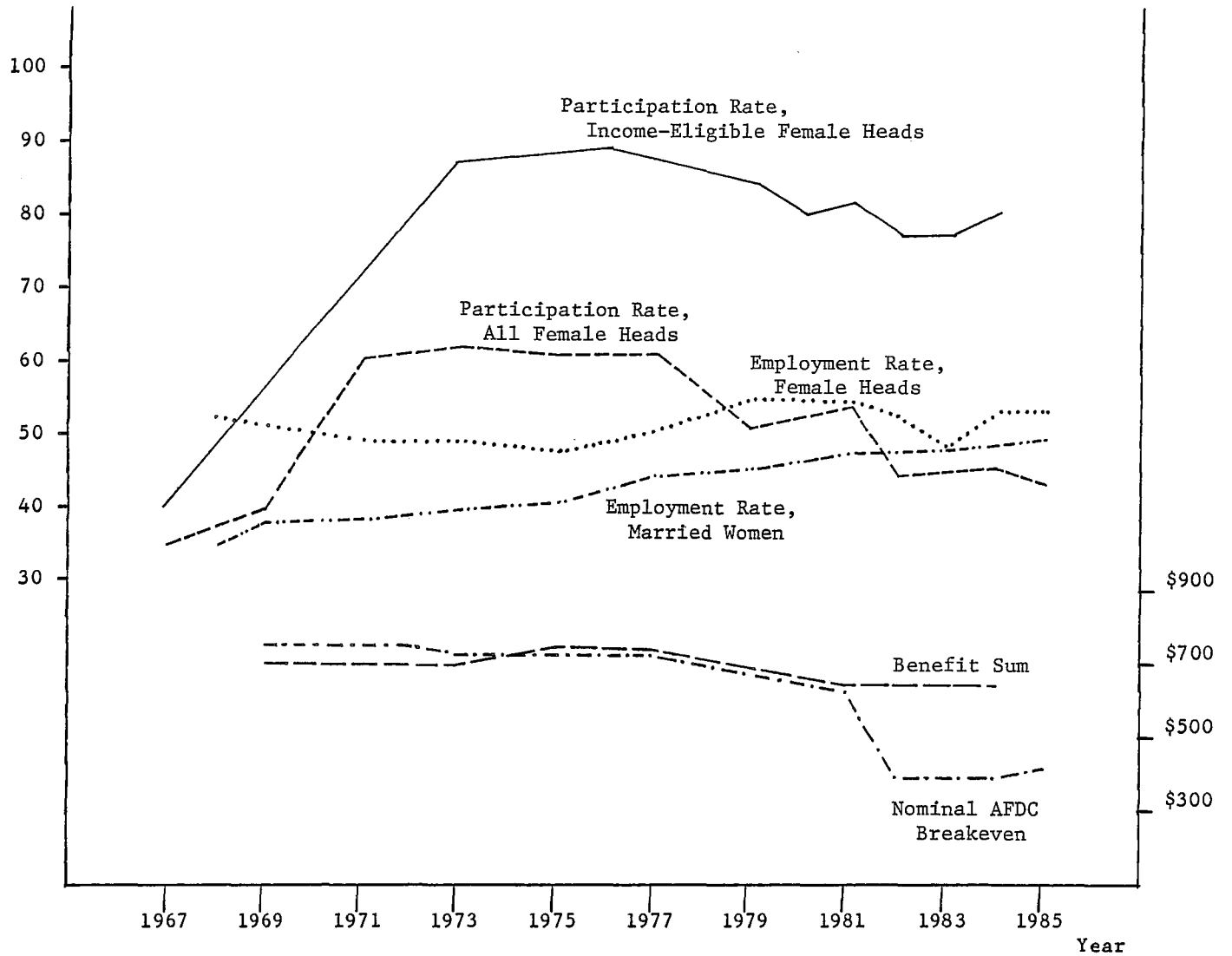
Data sources in Appendix.

Figure 1

Trends in AFDC Participation, Benefits, and Work Effort

Participation,
Employment Rate (%)

Benefit Sum,
Breakeven Level



rate rather than from an increase in the number of female heads. However, by 1985 the participation rate declined to its 1969 level, even though the caseload was approximately double its 1969 size. Consequently, today's large AFDC caseload is now entirely a result of the historic increase in the number of female heads. This has important implications for any explanation of the high current caseload, as will be discussed below.

The percentage of female heads receiving both AFDC and Food Stamps has followed the same pattern. In 1969, before the Food Stamp program had been firmly established nationally, only 22 percent of female heads (about half of those receiving AFDC) received both forms of benefit. The percentage rose and peaked in 1975, falling by 1983 to 38 percent, or 84 percent of the AFDC caseload.⁴ Medicaid participation rates are considerably higher because many female heads are eligible for Medicaid even though they are not receiving AFDC benefits. Over 80 percent of female heads received Medicaid benefits in the early 1970s. The participation rate has declined to about 70 percent currently.⁵

Table 3 also shows trends in the real benefits in the programs. Real AFDC benefits have fallen almost continuously since 1971, although they leveled off in the last three years shown on the table. Food Stamp benefits fluctuated somewhat over the period, but have remained more or less constant in real terms. This is no doubt a result of the indexation of Food Stamps to inflation. Real average Medicaid benefits rose over the late 1960s and early 1970s, the early period of the program, but have declined since 1975. The total benefit to families participating in all three programs--about 20 to 25 percent of female heads according to Table 2--rose slightly in the early 1970s but has also declined since 1975.

Although not shown in Table 3, the real monthly AFDC guarantee in 1960--the earliest year for which it is available--was \$460 for a family of four. Comparing this to the benefit sums in Table 3, it appears that the welfare option rose by 53 percent by 1969 (to \$705) and by 61 percent by 1975 (to \$742). The subsequent decline in the real benefit sum left it 34 percent above the 1960 AFDC benefit in 1984. It should be noted that most of the 34 percent is a result of Medicaid, for the sum of AFDC and Food Stamps alone in 1984 was only 9 percent greater than AFDC alone in 1960.⁶ In addition, the 34 percent is an upper bound on the increase in the cash equivalent value of the transfer package, for Medicaid benefits have a lower value than cash.

Thus it appears that the real benefit sum and participation rates follow the same pattern, rising in the later 1960s and early 1970s and falling in the late 1970s and early 1980s. That decline can also be seen in Figure 1. This makes a simple case for the participation rate being motivated by benefit levels. However, one difficulty with this explanation is shown in Table 3 by the benefit-to-earnings ratios for both the AFDC benefit and the benefit sum. These ratios are frequently used to measure the attractiveness of transfers relative to the labor market. Because earnings growth was very strong in the late 1960s and early 1970s, the ratios fell over that period as well as over the later period; in fact, they have fallen almost continuously.

Participation rates can also be driven by the benefit reduction rate and the income breakeven level in the program, whose trends over the period are shown in Table 3. The nominal benefit reduction rate dropped from 100 percent to 67 percent in 1969 and rose back to 100 percent

in 1982. As a result, the breakeven rose and fell, respectively, at those two times. This movement in the breakeven level would appear to be partly responsible for the changes in participation rates over the period, a point discussed further below. Effective benefit reduction rates and breakeven levels (i.e., those including the effects of deductions) followed the same pattern.^{7,8}

While Table 3 thus provides a prima facie case that participation rates were influenced by potential benefit levels and by the benefit reduction rate, it provides no direct information on work effort. Table 4, showing trends in the work levels of female heads since 1968, offers this information. Among female heads on AFDC, an extraordinarily low percentage work--never more than 18 percent over the entire period and only 5 percent in 1983. Thus the AFDC program has consisted almost entirely of nonworkers, a result with important implications for reform (see Section V). However, of those who work, more than half have worked full time, at least until 1982. But monthly earnings of workers are very low and indicate that the hourly wage rates are at or below the minimum wage.

All three measures of work for AFDC recipients (first three rows of table) rose slightly in the mid-1970s, gradually declined in the late 1970s, and dropped precipitously in 1982. This pattern can be largely explained by the movement in the income breakeven level in the program. The increase in the breakeven level in 1969 allowed more relatively high-income families onto the rolls, thereby raising the average level of work observed in the caseload. The 1981 OBRA legislation had the opposite

Table 4

Labor Force Indicators for Female Heads with Children under 18
and Other Women in the United States, 1968-1985

	1968	1969	1971	1973	1975	1977	1979	1981	1982	1983	1984	1985
<u>AFDC Female Heads:</u>												
Percentage working	16 ^a	15	17	18	18	15	16	14	7	5	n.a.	n.a.
Percentage working full time ^b	50 ^a	67	59	61	67	60	56	57	29	31	n.a.	n.a.
Real monthly earnings ^c (\$)	358 ^a	495	487	497	485	480	428	429	240	n.a.	n.a.	n.a.
<u>All Female Heads with Children under 18:</u>												
Percentage working	52	51	49	49	48	50	56	55	53	49	53	53
Percentage working full time ^b	71	73	71	71	69	71	75	74	72	74	73	72
Hours of work per week ^d	19	19	18	18	17	18	21	20	19	18	19	19
<u>Employment Rates of Other Women, 16+ (%):</u>												
All	40	41	40	42	42	44	47	48	48	48	n.a.	n.a.
Single	48	48	48	51	50	52	57	55	54	54	56	n.a.
Married, spouse present	37	38	38	40	41	43	47	48	48	48	50	n.a.
Divorced or separated	n.a.	n.a.	55	58	58	60	63	64	63	61	63	n.a.
<u>U.S. Unemployment Rate</u>	3.6	3.5	5.9	4.9	8.5	7.0	5.8	7.6	9.7	9.6	7.5	7.2

^aOctober-December 1967.

^bOf those working.

^cIn 1982 dollars; workers only.

^dIncludes nonworkers.

n.a. = not available.

Data sources in Appendix.

effect, increasing the benefit reduction rate and directly reducing maximum allowable income in the program, thereby eliminating many earners from the rolls and lowering the average earnings and work levels observed in the caseload.⁹ Consequently, the trends in work among AFDC recipients are for the most part statistical artifacts that cannot be interpreted as resulting from any genuine change in work effort; the work behavior of all female heads must be examined instead.

Of all single mothers with at least one child under 18, about 50 percent are on AFDC and about 50 percent work. Since AFDC female heads have employment rates of approximately 15 percent, this implies that female heads not on AFDC have employment rates of about 85 percent. It thus appears that the AFDC program decreases the employment rate by 70 percentage points. This is not necessarily correct, however; the difference may merely reflect a difference in the earnings capabilities and skill levels of the two groups, plus the fact that recipients must have low earnings to be on the program in the first place. The econometric studies surveyed in the next section are explicitly designed to estimate how much of this difference in work effort is a true disincentive effect of the program.

Do the patterns of work effort over the 1960s, 1970s, and 1980s appear to be generated by program benefit levels? No consistent connection is apparent. As shown in Figure 1 as well as the tables, over the late 1960s and early 1970s the real benefit sum was rising and employment rates and hours of work of female heads were falling, consistent with the explanation of work disincentives of AFDC receipt. Of course, as mentioned previously, earnings in the labor market were rising even faster

than the benefit sum over this period. But over the late 1970s and early 1980s the benefit sum fell while the work effort of female heads followed a quadratic pattern of increase and decrease, inconsistent with any simple explanation.

Do the work effort patterns appear to be explained by changes in the benefit reduction rate in 1969 or 1981? Again, the answer from Figure 1 and the tables appears to be in the negative. Work effort of female heads actually fell after the 1969 decrease in the benefit reduction rate (the 1967 Social Security Amendments were implemented in 1969) and, while work effort fell after the 1981 OBRA increase in the benefit reduction rate, the decline clearly began prior to 1982. Thus the time-series trends offer no obvious and strong evidence that the work effort levels of female heads have responded to changes in the features of the transfer programs.

This lack of apparent response may of course be a result of the presence of other forces at work over the period that are not accounted for; the econometric evidence discussed below will bear on this possibility. But what is clear from the tables is that the employment and hours levels of AFDC recipients and female heads in general have been extraordinarily stable in the face of major changes in benefit levels, benefit reduction rates, benefit-earnings ratios, and unemployment rates. Between 1968 and 1981, the employment rates of AFDC recipients varied only from 14 percent to 18 percent, and those of all female heads varied only from 48 percent to 56 percent. This extreme inelasticity does not augur well for the prospect of increasing work effort by any change in benefits or in benefit reduction rates.

If the low levels of work effort of female heads are not a result of transfers, to what can they be attributed? Does female headship per se lead to such low work levels? Some perspective on this question is lent by the employment rates of other women, shown at the bottom on Table 4. Interestingly, female heads have employment rates greater than those of women as a whole, though this is partly because the latter category includes a large number of widows with very low employment rates. But female heads work about the same amount as single women, a fairly extraordinary fact given their greater child care responsibilities; slightly less than divorced and separated women; and more than married women. Thus we find that female heads with children--a very low-income group, of whom 40 percent are below the poverty line, half are on AFDC, and more than half receive Medicaid--work about the same, on average, as all other women and sometimes more than many of those women who also have children. In fact, the relatively high levels of work effort of female heads are probably the result of their extreme poverty, for their low incomes are no doubt a strong stimulus to work significant amounts in order to maintain minimum consumption standards for themselves and their children.¹⁰ The implication of these comparisons is that the higher poverty rate of female heads compared with other women is not a result of lower employment levels: the major difference is that female heads have no earnings of a spouse and no alternative sources of income. Indeed, earnings of others in the family and nontransfer sources of income together constitute only 20 percent of the family income of female heads. AFDC and other transfers account for another 20 percent, and the earnings of the female head account for the largest part, 60 percent.

The earnings levels of female heads are also not noticeably different from those of other women, as shown in Figure 2. Earnings of female heads are, in fact, greater than those of women as a whole.

Nevertheless, the mean earnings of female heads who worked in 1985 (\$9988) were only slightly greater than the poverty-line income for a family of four (\$9847). For all female heads, including the 50 percent who do not work, mean earnings were of course much smaller (\$6472). This should not be surprising, given the low wage rates of these women, for even full-time, year-round work at the minimum wage is not sufficient to lift a family of four above the poverty line.

Nevertheless, the comparison of female heads to other women does show some time-series differences that could be related to transfer programs. For example, as Figure 1 shows, employment rates of married women grew slowly but steadily over the late 1960s and early 1970s, while those of female heads failed to increase and even fell a bit. In addition, while the employment rates of both female heads and all women experienced significant growth in the late 1970s, those for female heads stopped growing in the early 1980s; in fact, the employment rate of single mothers in 1984 was lower than in 1979. Also, the earnings of female heads seem to have suddenly stagnated after 1980, while those of all women have continued to grow (see Figure 2). The possible connections between these differences and trends in the generosity of transfers will be discussed in the next section.

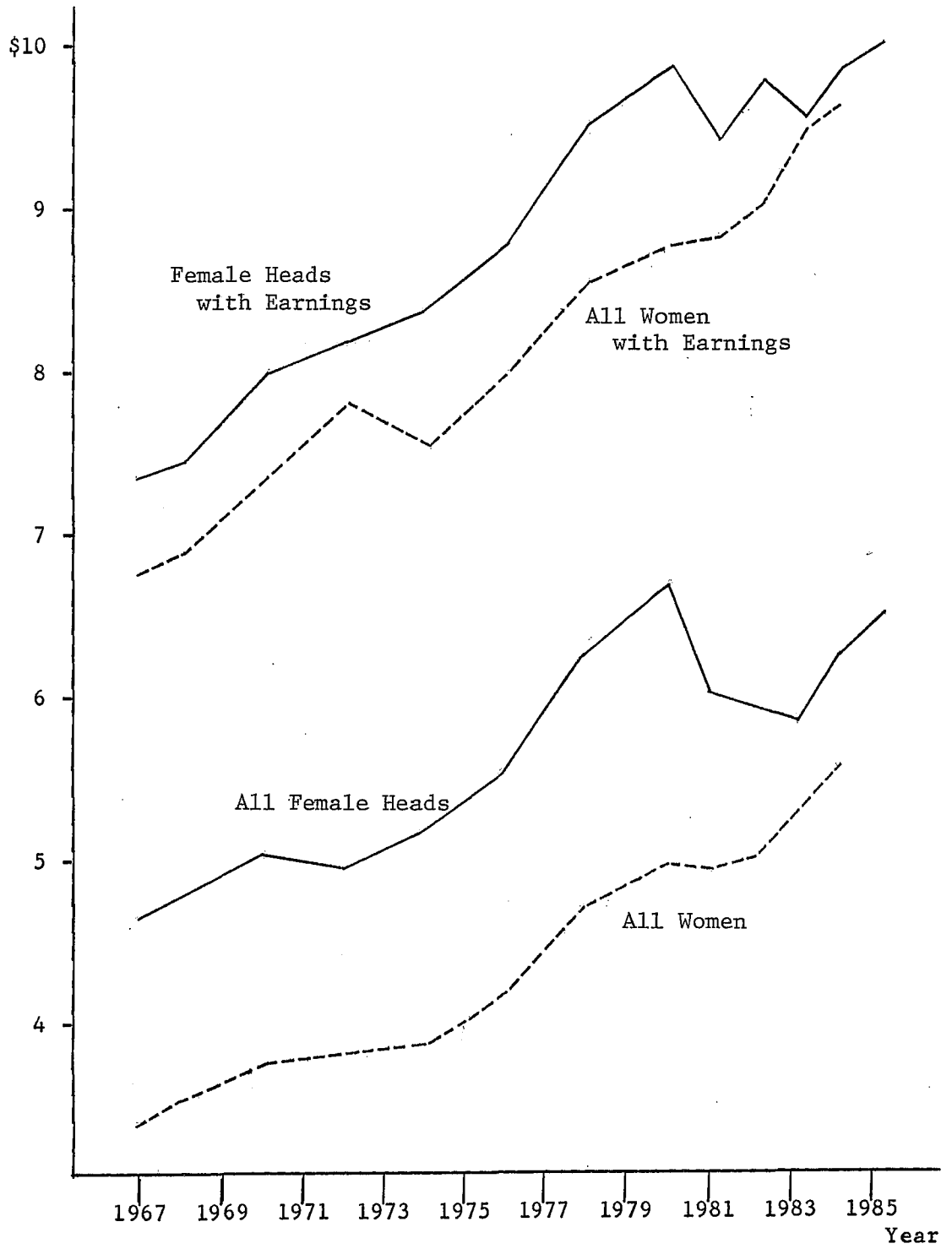
B. Research Evidence

AFDC. Most of the research on female heads focuses on the AFDC program. The issue receiving the most attention has been whether any

Figure 2

Mean Earnings of Women

Earnings
(000's of
1982 dollars)



work disincentives are exerted by the program, and, if so, what their magnitudes are likely to be. Although the economic model of labor supply predicts that such a disincentive will exist, it does not predict its magnitude. In the economic model, the offer of a payment to nonworkers decreases the need to work to generate consumption (the "income effect") while also reducing the reward from work (the "substitution effect"). That such disincentives are probably at least partly present is strongly suggested by the fact that the 1986 monthly AFDC maximum benefit levels for a family of four are in excess of monthly earnings from full-time work at the minimum wage (\$580) in eight states. In another four states payment levels are only slightly less (between \$500 and \$580). Maximum payments in many more states are larger than earnings from part-time work at the minimum wage as well.

Econometric estimates of disincentive effects of the AFDC program generally come from cross-sectional correlations between measures of work effort and AFDC benefits, controlling for other variables of interest. There are many statistical dangers in this approach. Simply comparing the work levels of AFDC recipients in different states is not appropriate, for income breakeven levels vary across states and hence generate definitional differences in work levels. Simply comparing the work levels of recipients to nonrecipients is also inappropriate, as recipients are a self-selected group with lower-than-average skills whose work levels would be less than those of nonrecipients even in the absence of AFDC. Several econometric studies have attempted to circumvent the biases in these comparisons.

The research prior to 1981 is well summarized in a review by Danziger et al. (1981). Since there has been little additional work completed since that time, I will not review the literature here.¹¹ As the Danziger et al. study indicates, the available research unequivocally shows that the program generates nontrivial work disincentives. However, since the estimates of income and substitution effects vary considerably across studies, there is great uncertainty regarding the magnitude of the effect. Danziger et al. estimate that the reduction in work effort ranges from 1 hour to 9.8 hours of work per week, corresponding to percentage reductions of 10 to 50 percent.¹² Since AFDC recipients work approximately 9 hours per week on average, this implies that they would work between 10 and 19 hours per week in the absence of AFDC, not a high level in any case. A midpoint estimate of 5.4 hours per week would imply a 30 percent reduction; at the current minimum wage (\$3.35 per hour), this in turn would imply a reduction in annual earnings of about a thousand dollars.

These estimates are averages in many senses and consequently mask many smaller and larger responses. For example, they represent effects for a woman facing the average benefit level in the United States. Since the research surveyed by Danziger et al. showed that the level of benefits adversely affects work effort, disincentive effects would be smaller in low-benefit states and larger in high-benefit states. The estimates also represent averages of a population including female heads who would remain nonworkers even in the absence of AFDC--who must have zero work disincentives--and female heads who would work full time in the absence of AFDC, who thus experience significant disincentives.

These estimates can be related to the point made by Okun (1975) that the "bucket" that carries transfers to welfare recipients can be a leaky one. The bucket in the AFDC program is moderately leaky according to the above estimates of work disincentives. For every dollar transferred to female heads, about 37 percent leaks out in the form of reduced earnings. Put differently, about \$1.60 must be spent on female heads to raise their income by \$1.00.¹³ The source of this leakage is the extra time female heads spend out of the labor market in child care.¹⁴ Of course, one of the original purposes of the program was to allow women to care for their own children.

The work disincentives of welfare are significant but are not responsible for the high poverty rates of female heads. An additional \$1000 of earnings on top of the mean earnings shown in the last section would still leave the mean family of four below the poverty line. The low incomes of female-headed families relative to family size are instead a joint consequence of their lack of skills and lack of the earnings of a husband.

An additional important finding in this literature is that very little of the work effort reductions are the result of initially ineligible female heads lowering their work levels to become eligible. This implies that work disincentives have little effect on caseload size in the program. The evidence indicates that such disincentives increase the caseload by approximately 5 percent at most, or about 3 to 4 percentage points in the participation rate. Put differently, 95 percent of those in the caseload would still receive benefits even if they were to earn the same amount that they would earn if off the program. Consequently,

welfare dependency itself cannot be ascribed to the work disincentives of the program.

There have been no studies of the work disincentives of AFDC following OBRA. Although, a few crude estimates are available (Moffitt, 1986a, b). The magnitude of the disincentives may have changed because the nominal benefit reduction rate is now 100 percent after four months of earnings. However, the estimated substitution and income elasticities obtained in prior studies can be used to predict the effect of a 100 percent benefit reduction rate. Those estimates show that average work disincentives after OBRA probably lie in the range of 4 to 8 hours of work per week, only slightly above the pre-OBRA estimates.¹⁵ This apparent lack of responsiveness of work effort to a change in the benefit-reduction rate will be discussed further below.

A number of studies directly examine the determinants of AFDC receipt (for example, Barr and Hall, 1981; Moffitt, 1986b; Willis, 1980). The studies are fairly uniform in their findings. First, participation in AFDC appears positively affected by the benefit levels and negatively affected by the level of the benefit reduction rate. These results hold for both the participation of these eligibles for AFDC and of all female heads. Second, potential earnings in the labor market have a strong negative effect on participation probabilities. Similarly, the amount of unearned income from nontransfer sources also exerts a negative influence on participation. These results support the intuitive economic model of participation in which individuals are assumed to compare net income on and off the program in making their participation decisions.

The studies show that there are many other significant determinants of AFDC participation as well. Older women are less likely to be

recipients--even if they have children under 18 in the household--presumably because their potential earned and unearned incomes are higher. Women with higher levels of education are less likely to be recipients, in part a reflection of higher levels of human capital but also, probably, of attitudinal differences among women of different educational levels. Blacks appear to have higher reciprocity rates in virtually all studies, even when other observed characteristics are controlled. Women with greater numbers of children have higher reciprocity rates, even after control for the benefit. Poor health and disability also contribute to a higher likelihood of receiving an AFDC payment. The unemployment rate exerts a positive effect on the probability of receiving benefits, as should be expected. Participation rates also appear to be lower in the South than elsewhere in the country, probably reflecting more restrictive eligibility requirements in those states. The level of administrative restrictiveness is difficult to measure, but when this has been attempted, it appears that higher levels of restrictiveness reduce the probability of receiving a benefit, as should be expected (Willis, 1980).

One finding from this literature is that some female heads who are eligible for benefits choose not to receive them. The percentage of eligibles receiving benefits rose in the 1970s but is still significantly below 100 percent (the exact value depends upon the definition of eligibility employed). One explanation is that the stigma of welfare receipt deters many women from applying for benefits (Horan and Austin, 1974; Moffitt, 1983; Rainwater, 1982). Alternative explanations are that the "hassle" of applying for benefits is too great; that eligible nonparticipants are unaware of their eligibility, though this seems

implausible; that such women have been rejected incorrectly by welfare administrators; and that such women have sufficiently high assets as to be ineligible for benefits (assets are rarely completely measured in the data).

Explanations of Trends in AFDC. Most studies of the AFDC program have not directly dealt with the explanation of time-series trends in the AFDC caseload, participation rates, and levels of work effort. Michel (1980) and I (Moffitt, 1986c) analyzed the increase in caseloads and participation rates in the late 1960s and early 1970s. Perhaps unexpectedly, we both concluded that those increases were not the result of changes in the size of the real benefit package, but instead were a result of changes in attitudes toward welfare--such as reductions in the stigma of AFDC receipt--and of several legislative rulings over the period--such as those eliminating man-in-the-house rules and residency requirements. The rejection of the real-benefits hypothesis is based upon several types of evidence, including (1) the decline in the attractiveness of the welfare option relative to earnings over the period, (2) the decline in the real AFDC benefit, (3) the availability of Food Stamps as an independent option not requiring AFDC participation, and (4) the taxation of AFDC income by the Food Stamp program. In my work I found that the decrease in the benefit-reduction rate in 1969 and the consequent increase in the breakeven level did act to increase the participation rate of all female heads, but that it could explain only 20 percent of the rate increase.

In my study I also examined the decline in participation rates in the later 1970s and ascribed it to falling real benefit levels and to increases in the effective benefit reduction rate over that period. Both

acted to reduce the income breakeven level as well as to make the program less attractive to those remaining below breakeven. The decline in participation after 1981 was, of course, a result of the OBRA legislation.¹⁶

One of the implications of these findings is that some female heads are in fact worse off than they would have been in 1968. Although the overall participation rate in the program is the same in 1985 as it was in 1968, this is a result of a higher participation rate of eligibles and a lower percentage of female heads actually eligible (the real breakeven level is lower in 1985 than in 1968). Consequently, many female heads with moderate levels of earnings who would have been eligible for benefits in 1968 do not currently qualify.

These studies have all examined the participation rate in AFDC, not the size of the caseload. To explain caseload trends, at least for the period since 1975, requires an explanation for the growth rate of the population of female heads. As shown in Section IV below, there are some difficulties with ascribing that growth to the transfer system, because its rate increased after 1975 at the same time that the real benefit package was falling in value.

Some research has also been conducted on the determinants of trends in work effort among female heads and AFDC recipients over the period from 1968 to the present. Most of these studies have been concerned with the effect of the 1967 Social Security Amendments and the 1981 OBRA and thus with the effects of the benefit reduction rate. The 1967 amendments lowered the nominal benefit reduction rate from 100 percent to 67 percent in order to provide work incentives to recipients. However, as Table 4 indicated, work effort among female heads actually fell after 1967,

especially relative to that of all women. One explanation for this puzzle, provided by Levy (1979), is that the higher breakeven level drew new female heads into the program whose work effort presumably fell, in line with the findings of work disincentives of AFDC, mentioned above. I have also studied this issue (Moffitt, 1986b) and have concluded instead that the reduction in work levels after 1967 was a result of the exogenous increases in the participation rate, which followed from the attitudinal and legislative changes over that period; the reduction in the benefit reduction rate kept work effort from falling even more than it would have otherwise. However, both Levy's study and mine found that changes in the benefit reduction rate in general do not have large effects on the work effort of female heads in either direction, a finding to which I will return below.

The effects of OBRA, in particular its increase in the benefit reduction rate, on work effort have also generated considerable attention. A number of studies conducted shortly after the implementation of OBRA analyzed the extent to which recipients who were terminated or whose benefits were lowered reduced their work effort in order to become reeligible for AFDC (for reviews see Hutchens, 1986, and Moffitt, 1985a). Virtually all of those studies found no detectable work disincentives of the OBRA legislation. In my view there is some evidence that those studies were conducted too early and that reductions in work effort did eventually occur (Moffitt, 1986a). The sudden stagnation of employment and earnings of female heads in the early 1980s, discussed in the last section, is a piece of that evidence. Again, however, I estimated the magnitude of the reduction to be about .70 to .90 hours per week, a small amount.

AFDC Turnover. There have been a number of studies of the determinants of AFDC turnover (Bane and Ellwood, 1983; Blank, 1986; Hutchens, 1981; O'Neill et al., 1987; Plotnick, 1983). The findings across studies are similar in most major respects. They indicate that exit rates from AFDC are generally greater for those with higher wage rates and nontransfer income and are generally smaller for those with higher benefits, though the latter relationship is often found to be weak. The studies also generally find higher exit rates for older women and for those with more education, but lower exit rates for those who have more children, who have never been married, and who are black. These findings are virtually identical to those obtained in the studies of participation rates in AFDC discussed previously. This should be expected, for the participation rate at a given point in time is just a function of past exit and entry rates.¹⁷

Bane and Ellwood (1983) and Ellwood (1985) have shown as well that the caseload is heterogeneous, composed at any point in time of a large number of long-term recipients, even though there is a high rate of turnover in the program. Most of those who are on AFDC at least once over a given period of time are short-term recipients. For example, Ellwood (1985) finds that only 25 percent of spells are more than nine years in length but that 60 percent of all spells in progress at a given point in time are long-term spells of ten years or more. Over time, spell lengths have followed the same pattern as participation rates, rising in the early 1970s and falling thereafter (U.S. House of Representatives, 1986, p. 392).

Unfortunately, little research has examined the relationship between work levels and turnover in general or the work levels of short-term and

long-term recipients. Bane and Ellwood (1983) found that those who exit owing to an increase of earnings are more likely to be short-term than long-term recipients. In addition, they found that entry rates into the program are less likely to result from a decrease in earnings than from a change in family composition, though exit rates are about equally the result of earnings and family composition changes.

Nevertheless, the extent to which work disincentives are greater or smaller among short-term and long-term recipients remains to be studied. On a priori grounds, the relationship could take either direction. While the general supposition should be that long-term recipients exhibit greater disincentives, this need not be the case. For example, short-term recipients are better off than long-term recipients in general and, in particular, have higher potential wages. This difference explains much of the high turnover of short-termers, for their wage rates frequently allow them sufficient earnings to be independent of the transfer system. Short-term recipients are likely to rely on AFDC mainly during temporary periods of nonemployment. A significant work disincentive may exist for such women because many would, of course, choose to work temporarily at a low-wage job in the absence of AFDC. Such a work disincentive is almost identical to those studied extensively in the unemployment insurance system--to which AFDC is very similar for short-term recipients--and could easily be large in magnitude. On the other hand, long-term recipients probably work at low levels--or not at all--regardless of the presence or absence of AFDC, and hence the program may have only small effects on their levels of work. In sum, the work effort of short-termers could easily be more responsive to AFDC than that of

long-termers. Whether this speculation is in fact the case can only be resolved through research on the magnitude of work disincentives in a dynamic context.¹⁸

A related but distinct area in which there has been virtually no research is that on the analysis of life-cycle patterns of welfare reciprocity, earnings, work effort, and marital status and female headship. In most of the population, employment rates and earnings are low at young ages but grow over time, though they eventually decline at sufficiently high ages. One would expect that women in general and female heads in particular should show the same patterns, with the consequence that welfare reciprocity should decline with age. Cross-sectional studies of participation do in fact show such a relationship, but several important issues remain. One is whether women pass into and out of female headship in a way that is related to their earnings growth--for example, are female heads selected from the lower part of the (potential) earnings distribution of young women? This issue would become important if one were to attempt to study life-cycle patterns of earnings, for one would quickly discover that female headship is usually not a lifetime state. Another issue is whether female heads, and AFDC recipients in particular, have lower returns to human capital and work experience than other women, and whether this is a cause or an effect of their female headship or AFDC reciprocity. A related policy issue is whether a "welfare trap" exists, which would occur if the AFDC system reduces work levels, thereby lowering human capital formation and future potential earnings and hence leading to further welfare reciprocity. These issues have scarcely been touched, yet they are critical to our understanding of the sources of the

poverty of female heads, the need for and effects of manpower training programs, and the ability of other policy measures to increase earnings and lower welfare reciprocity.

Food Stamps, Medicaid, and Other Programs. Compared with the research on the AFDC program, that on Food Stamps is minuscule. Moreover, no research has been conducted on the determinants of Medicaid participation or the effect of that program on work effort. The one completed study of the effect of Food Stamps on the work effort of female heads (Fraker and Moffitt, forthcoming) found modest effects of the program. Hours of work per week of recipients were estimated to fall by about one hour, approximately a 10 percent reduction, as a result of the program. The levels of work effort of those both on and off the Food Stamp program are extremely low, equal to 10 hours per week in the absence of the program and 9 hours per week in its presence. The low level of work in the absence of Food Stamps arises in part because approximately 75 percent of female heads receiving Food Stamps also receive AFDC, which would still be available without Food Stamps. Another result of some interest is that reductions in AFDC benefits generate additional work effort reductions from the Food Stamps program, for Food Stamp benefits rise when AFDC benefits fall.

There have been a number of studies of the determinants of participation in the Food Stamp program (Butler, 1984; Butler and Schoenman, 1986; Coe, 1985; Czaka, 1981; Fraker and Moffitt, forthcoming). The findings from these studies are quite similar to those for the AFDC program. Participation rates are higher for those with greater potential benefits and for those with lower nontransfer income and lower potential

labor market earnings. Blacks, individuals who are younger and have less education, and families with children are all more likely to receive Food Stamps. The literature also indicates that the receipt of other welfare income, most frequently AFDC, increases the probability of receiving Food Stamp benefits. This result holds even when it is the potential AFDC benefit, not the actual benefit received, that is tested as a determining factor. Apparently the increased participation in AFDC that arises from increases in AFDC benefits encourages a family to receive Food Stamp benefits as well.

Participation rates among eligibles in the Food Stamp program are much lower than in AFDC, about 28 to 31 percent (Czaka, 1981).¹⁹ The stigma of receiving benefits, which may be connected to the necessity of publicly displaying the stamps, is one of the stronger explanations for the low rate of participation (Butler and Schoenman, 1986). Also, lack of knowledge of eligibility may be more serious than in the AFDC program. Alternatively, the potential benefit levels may simply be insufficiently large for many families to bother to collect.

There have been two studies of turnover in the Food Stamp program (Carr et al., 1984; Lubitz and Carr, 1985). As in AFDC, high turnover rates are apparent--the number of families receiving benefits sometime over the course of a year is 70 percent higher than the number receiving benefits in a given month. Exit rates from the program are lower for blacks and for those with greater benefits, while those with more education have higher exit rates.

As noted previously, there are no studies of the effect of Medicaid on work effort, either alone or in combination with other programs.²⁰

This is a significant gap in the literature, for Medicaid plays an important role in the structure of benefits to female heads. Its quantitative importance has grown through the 1970s as real AFDC benefits have fallen. Indeed, in the absence of Medicaid the real benefit package of AFDC and Food Stamps would be about the same in 1985 as it was in 1967. Further, because Medicaid is generally received in combination with AFDC and because Medicaid eligibility is lost when AFDC benefits fall to zero, a notch (absolute reduction in income) in the budget constraint is generated which has potential work disincentive effects. This would seem to be an important topic for future research.

Another major omission in the literature is the study of the effect of housing assistance programs on work effort. Over 12 percent of all female heads and about 30 percent of AFDC and Medicaid recipients live in public or subsidized housing. Because housing is a relatively expensive commodity, expenditures in 1985 on Section 8 housing and public housing were, together, in excess of federal spending on AFDC. Since public and subsidized housing is income-conditioned and hence eligibility is lost if income rises above certain breakeven levels, obvious work disincentives may be present. Unfortunately, there have been no empirical studies of the existence and magnitude of such effects.²¹

More generally, the research on both participation and work levels has been almost entirely concerned with individual programs and not with the effects of multiple program participation. Yet, as shown clearly at the beginning of this paper, multiple program participation is very common, if not the norm, for female heads. The analysis of multiple participation is more difficult than the analysis of single programs because

the benefit formulas and eligibility conditions of the different programs frequently interact, as the examples of the Medicaid notch and the Food Stamp taxation of AFDC benefits illustrate. Yet the cumulative tax rate could be much higher than the AFDC tax rate alone and could have bigger effects on work incentives.

IV. MEN

A. Time-Series Trends

As noted in Section II, few two-parent families receive significant transfer benefits from Food Stamps, AFDC-UP, or other welfare programs. Nevertheless, transfer programs could affect the work levels of men in at least two ways. First, if the present structure of transfer programs in the United States leads to an increase in female headship, male work effort could be adversely affected. Both single men as well as men who are divorced, separated, or widowed have lower employment rates than married men--when married, men generally work more, and women less, than when not married (Becker, 1981). Thus if AFDC increases female headship--either by increasing the rate of divorce and separation, delaying the rate of remarriage, or increasing the rate of illegitimacy--average employment rates among men should fall.

A second mechanism by which welfare may affect work concerns youth in welfare families (Lerman, 1986a). The earnings of children under 21 are generally not considered in the calculation of the welfare benefit, so there should be little direct effect of welfare on youth labor incentives. But growing up in a welfare family may exert other deleterious

effects: (1) the extra income in the household may reduce the need for youth to work; (2) the presence of a nonworking parent may lessen the probability that the child works through some sort of attitudinal transmission; and (3) familiarity with the welfare system may exert some attitudinal effects on the later work effort of youth.

Is the crude time-series evidence consistent with these hypotheses? Some evidence relevant to the first hypothesis is shown in Figures 3 and 4, which portray illegitimacy rates, female headship rates, and the divorce rate from 1960 to the present. All measures show marked growth, particularly after 1968 or so. However, while the trends frequently show patterns that align themselves with the patterns of growth of AFDC participation and the real benefit package discussed earlier, they do not always do so. The divorce rate does appear to have experienced its greatest growth beginning around 1968, and indeed began to taper off in the mid-1970s, just as AFDC participation growth was slowing and the real benefit was falling. Illegitimacy rates and female headship rates for blacks and nonwhites show strong upward trends for the entire period since 1960, and their rates of growth increased in the late 1960s. However, whereas the nonwhite illegitimacy rate did grow faster in the early 1970s than in the later 1970s and 1980s, nonwhite female headship continued to grow significantly in the latter period. In addition, white illegitimacy rates and female headship rates have been growing faster in the last 10 years than in the late 1960s and early 1970s.

Given this evidence of the possible effects of welfare on marriage and illegitimacy, Figure 5, shows trends in labor force participation rates of young and prime-aged (35-44) men from 1960 to 1984. The

Figure 3

Divorce Rate and Female Headship Rates

Percent

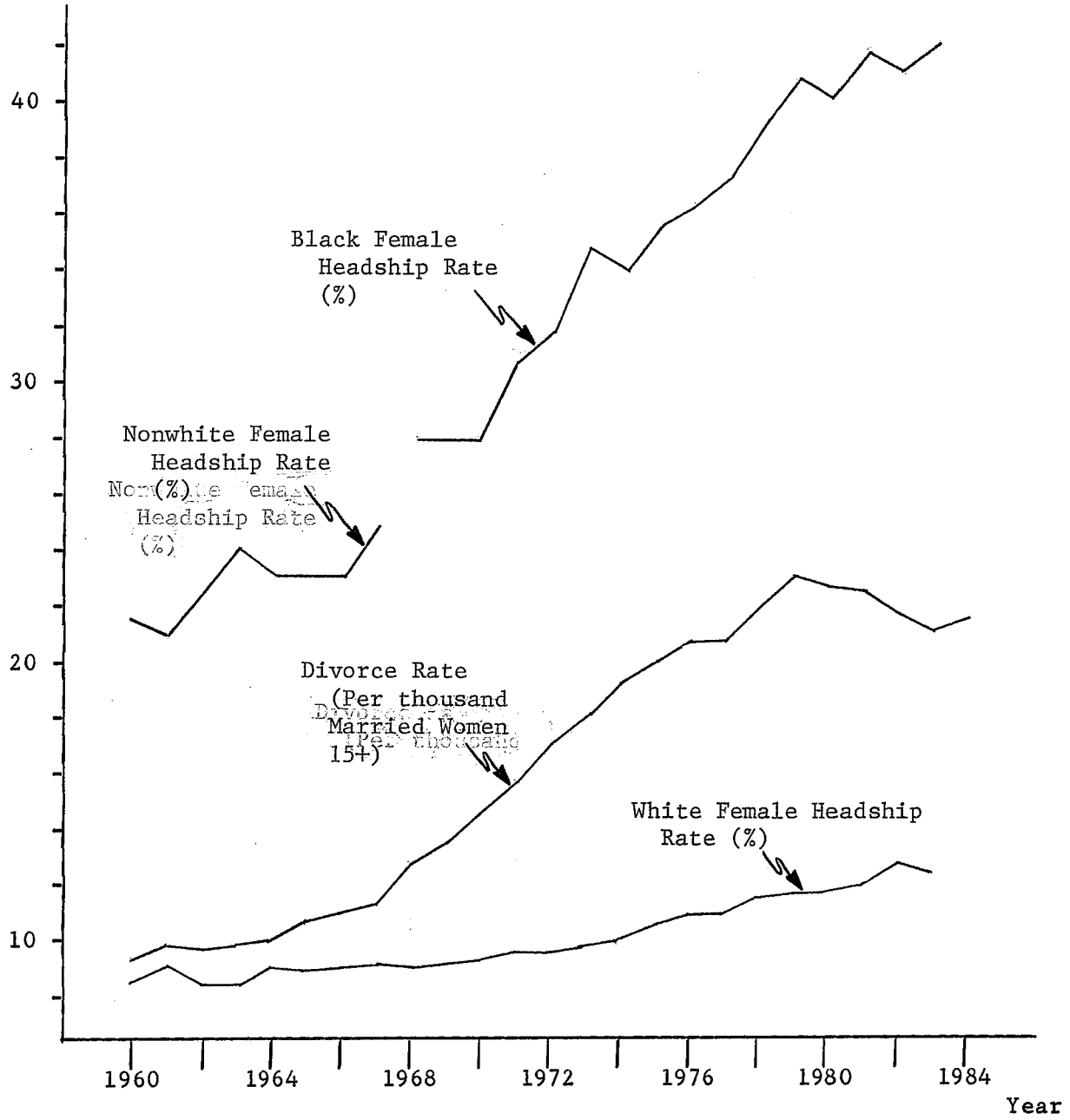


Figure 4

Illegitimacy Rates (No. Illegitimate Births per
Thousand Live Births), Ages 15-19

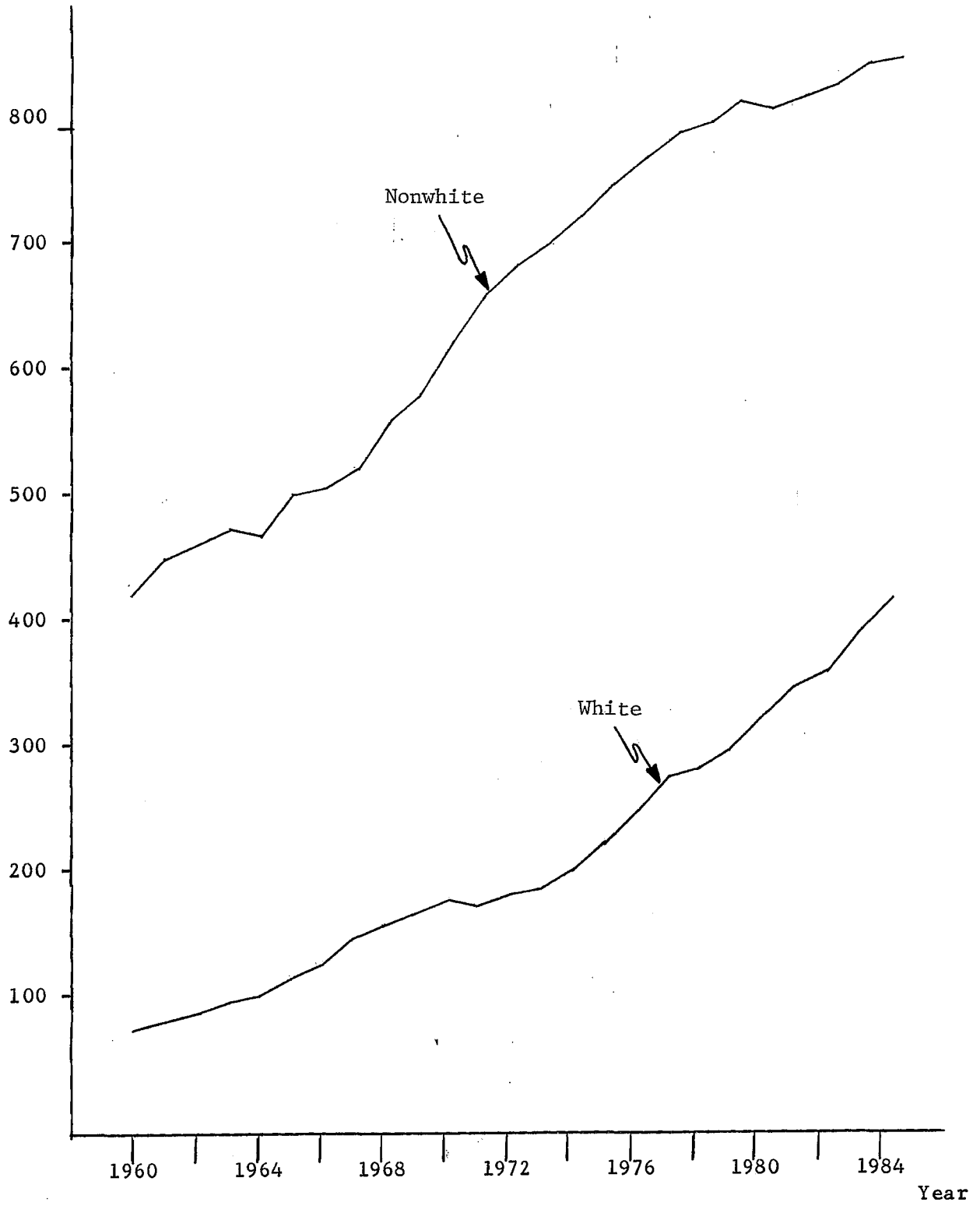
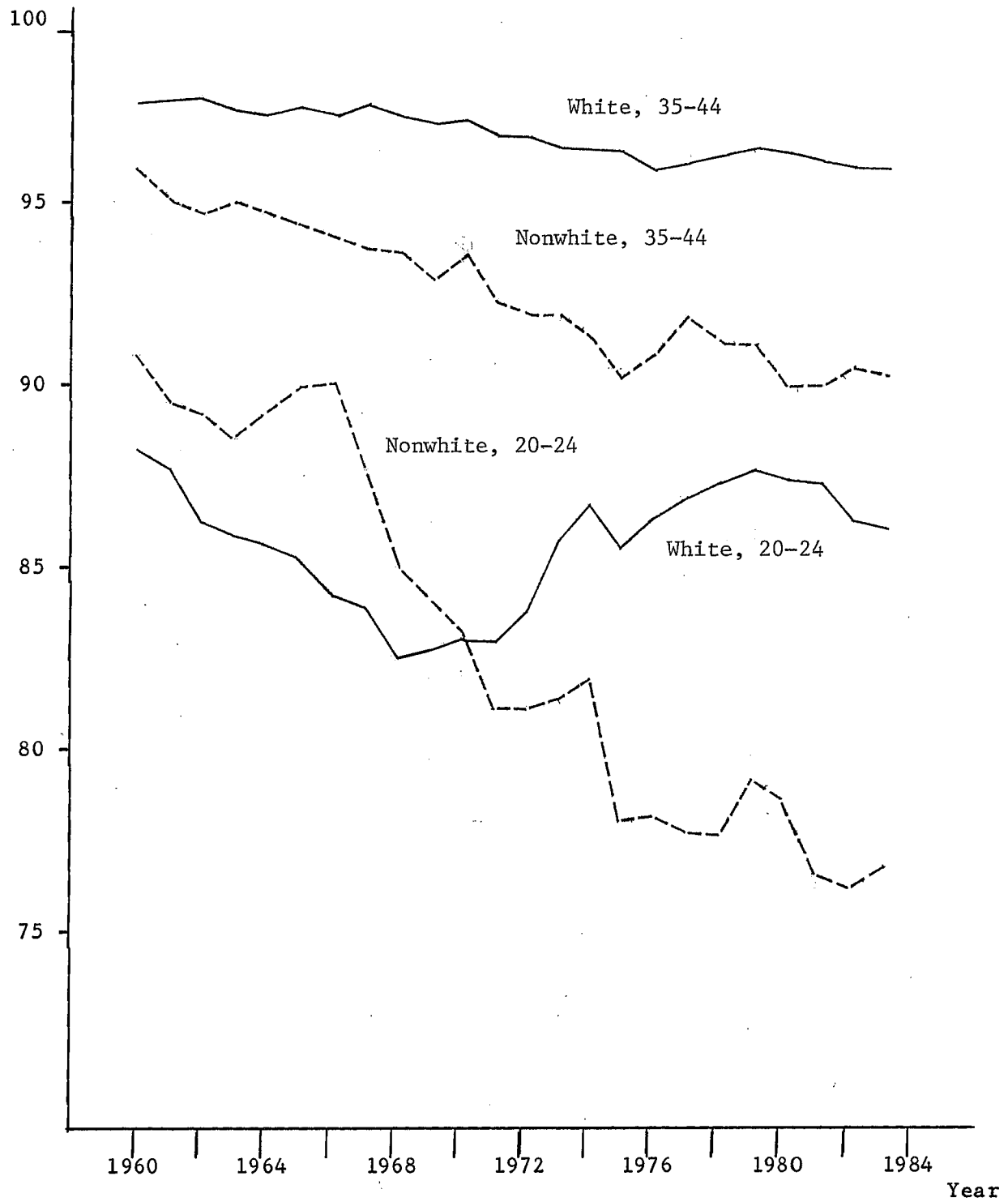


Figure 5

Male Labor Force Participation Rates



participation rates of white prime-aged men declined slowly but steadily over the entire period, showing no particular acceleration in the 1960s and early 1970s. The nonwhite prime-aged rate fell somewhat more, but again does not show a significantly faster decline after the mid-1960s. However, the trend for nonwhite youth is considerably different: their participation rates fell rapidly after 1966. But here again the figure does not show that nonwhite participation rates fell any faster in the early 1970s than in the later 1970s and 1980s, though there is indication that the decline has slowed in recent years. Moreover, while the white youth participation rate fell in the early 1970s and then actually rose in the later 1970s, thus following the pattern of AFDC participation and real benefits, this does not accord with the patterns of growth of white illegitimacy and female headship. Thus the simple time-series trends provide mixed evidence on the hypothesis that AFDC affects male work effort.

Even with the supporting evidence that is provided, it should be noted that any negative correlation between the growth rates of female headship and illegitimacy, on the one hand, and male labor market performance, on the other, can reflect causal effects in either direction. For example Wilson and Neckerman (1986) have suggested that a negative relationship may be a result of initial declines in male employment and earnings followed by a decline in their attractiveness as marriage partners. Only a careful statistical analysis can sort out the direction of effect.

Interpreting youth participation rates in light of the second hypothesis--that growing up in a welfare family reduces current and future employment--is more consistent with the time-series trends, at

least for black youth. The continued decline of black youth labor force participation in the later 1970s could, in this interpretation, have been a result of the higher probability that they had grown up in a welfare household.²² However, the very different patterns of white and black youth participation trends are puzzling, for welfare participation among white families grew in the earlier periods as well.

B. Research Evidence

Much less research has been conducted on the effects of transfer programs on male work levels than on those of female heads. Only a few studies have examined the issue, so this section will be necessarily brief. This area is one in which much additional work is needed.

The major mechanism by which AFDC and other categorical transfer programs could have an effect on male work effort is through the effect of female headship. The evidence on such effects has been surveyed elsewhere and is outside the scope of this review. In a recent survey, Hoffman (1986) finds that "the nonexperimental research has failed to identify a strong and consistent. . . effect of AFDC on most of the family structure decisions." But Hoffman notes that some studies have detected significant effects on divorce and separation and on remarriage.

Apparently there have been no direct studies of the effect of AFDC on the work levels of men. The only study that has even indirectly examined the issue focused on the effect of the potential AFDC benefit on the probability that a young man (early twenties) would become an absent father (Lerman, 1986b). In his initial analysis, Lerman found that AFDC benefits have a positive but insignificant effect on that probability for

young men as a whole, but a very strong and significant positive effect on black men from welfare households. The effect weakens considerably when different time periods are examined, leaving the finding a tentative one. Interestingly, Lerman also found that neither the current employment status of the young man nor the current unemployment rate has a significant effect on the probability of becoming an absent father. Both of these findings deserve further examination, but they provide suggestive evidence that male work effort may be affected by the transfer system through female headship.

A neglected area of study that deserves particular attention is the effect of the AFDC-UP program on female headship and on male work effort. In states where that program is available, there should be at least some evidence on the effect of making intact couples eligible for assistance and thus reducing the incentive for family breakup. In light of the extensive analysis of the effect of AFDC on marital status, it is surprising that no work has been performed examining the one program in existence that might provide some direct information.

The other mechanism by which male work effort may be affected by the transfer system is through effects arising from having grown up in a welfare household. This possibility was studied by Lerman (1986a) using information from two panel data sets, one on black youth in inner-city ghettos and one on black youth in the nation as a whole. Lerman concluded from his analysis of both data sets that the employment outcomes of black youth are significantly and negatively correlated with having come from a welfare family. He also found that the probability of being in school is lower for youth from welfare families, leading

presumably to lower human capital formation as well. While more research is necessary in this area, the study provides suggestive evidence of a deleterious effect of AFDC on male labor market performance.

V. POLICY MEASURES TO INCREASE EARNINGS AND WORK EFFORT

The survey of results in the last two sections indicates that, while nontrivial and significant work disincentives are associated with the transfer system in the United States, the levels of earnings and work among female heads would remain low and their poverty rates high even in the absence of those programs. In this section I shall discuss several policy measures that have been proposed to increase earnings and work effort and to reduce dependency on the transfer system. Five policy measures will be reviewed: manipulating the benefit reduction rate; instituting manpower training or workfare programs; reforming the child support system; reducing the categorical nature of the system; and long-run strategies such as increasing the human capital of the poor through education or raising incomes through economic growth and better macroeconomic performance.

A. Lowering the Benefit Reduction Rate

Lowering the benefit reduction rate is the most popular policy prescription among academic economists for increasing the earnings and work effort of welfare recipients. The nominal benefit reduction rate in AFDC is currently 100 percent after four months of earnings, and has never been lower than 67 percent. When the benefit reduction rates of Food Stamps, Medicaid, and housing are added on, the marginal cumulative

rate for those receiving multiple transfers is often in excess of 100 percent and often was so even prior to OBRA. By lowering the benefit reduction rate, recipients are allowed to "keep" a higher percentage of their earnings--that is, their benefit is not reduced by as great an amount if they earn more. Thus a direct financial inducement to work is provided.

At the outset, it should be noted that this method of increasing earnings among program recipients is not also a method of reducing the caseload; in fact, it is a method of increasing the caseload. Financial incentives are provided precisely by paying positive benefits to families in situations in which they would otherwise have been ineligible--that is, if they have sufficiently high earnings. Lowering the benefit reduction rate is designed to increase work incentives by keeping families on the rolls even if they work.²³

Nevertheless, as Levy (1979) has argued, and as I also have subsequently stressed (Moffitt, 1985b, 1986a, 1986b), lowering the benefit reduction rate does not necessarily increase work effort among the low-income population as a whole. While recipients already on the rolls may work more, the lower benefit reduction rate raises the breakeven level of income and hence draws new recipients into the program. The new recipients will generally respond by reducing their hours of work. On net, whether work effort among female heads rises or falls with a lowering of the benefit reduction rate is uncertain. For example, it could be the case that 100 percent rates generate the most work effort.

From his empirical work, Levy concluded that, in fact, female heads would actually work less if the rate were lowered--that is, a

sufficiently large number of new recipients would be brought in to outweigh any work incentives provided to initial recipients. In my work I have concluded the opposite--that female heads would, on net, work more. However, both Levy and I find that the change in work effort is small in magnitude regardless of its direction. In my prototype simulations (Moffitt, 1985b), I find that lowering the benefit reduction rate by 25 percentage points would increase work effort by no more than one-half hour per week, a trivial amount.

This conclusion is fully consistent with the inelasticity of work effort evidenced in time-series evidence and referred to earlier. As noted before, the employment rate and weekly hours of work of female-heads varied little between 1968 and 1986 despite drastic changes in the benefit reduction rate. In addition, the hours of work and employment rates of recipients remained very low even after the 1967 amendments--the program still consisted almost entirely of nonworkers. As mentioned previously, I have elsewhere estimated that OBRA reduced hours of work by 10 to 30 percent per week (Moffitt, 1986a), which, if correct, implies that the 1967 legislation raised hours of work by approximately the same amount. These effects are trivial in magnitude. Instead, both pieces of legislation had their primary impacts on the caseload rather than on work levels.

Fraker and I found a similar result for the Food Stamp program (Fraker and Moffitt, forthcoming). The estimates in our study indicated that an increase in the benefit reduction rate in the program from .30 to .50 would have no statistically detectable effect on work effort whatsoever.

These econometric results, together with the time-series evidence, effectively bury the idea of using the benefit reduction rate to achieve significant gains in work effort in the low-income population. Also in need of a tombstone is the idea that there is a trade-off between work incentives and program costs--that lowering the benefit reduction rate is desirable to increase work incentives but would raise caseloads and hence costs. In fact, no trade-off of any serious quantity exists.

Of course, it should be stressed that the benefit reduction rate may be lowered for reasons other than work incentives--for example, to provide benefits to the working poor. A benefit reduction rate of 100 percent implies that a female head working full time for the entire year at the minimum wage would receive no AFDC benefits but would nevertheless fall below the poverty line. The benefit reduction rate should be set so as to allocate a given program expenditure for different income groups in whatever proportion is socially desired.

B. Manpower Training and Related Programs

Manpower training and related programs involving work requirements are more direct methods of increasing earnings and work levels. Interest in training programs began in earnest in the 1960s, increased gradually throughout the 1970s, and has mushroomed in the 1980s. Much of the activity in the 1980s is a direct result of 1981 legislation encouraging states to explore such programs, and currently several bills are before Congress which propose further federal involvement. This increase in interest in training and work-related programs is in part a result of the change in the political and policy climate over the last decade and a

half, but it is also partially a result of a gradual recognition of the ineffectiveness of the financial incentives, discussed in the last section.

The increased emphasis on training and work-related programs has been accompanied by an interest in strengthening the degree to which such programs are mandatory for recipients and the degree to which provision is made for sanctions (e.g., grant reductions) for noncompliance. There has also been some interest in workfare programs which require work for no remuneration other than the AFDC benefit itself, reflecting a popular view that recipients should be required to "work off" their welfare grants.²⁴ These changes in emphasis reflect a significant change from prior voluntary programs (provided under the Manpower Demonstration and Training Act of 1962, the Comprehensive Employment and Training Act of 1973, and the Job Training Partnership Act of 1982) and even from the traditional Work Incentive (WIN) program for AFDC recipients. The WIN program is mandatory for certain types of recipients and makes provision for sanctions, but in fact few sanctions have been imposed and the long waiting lists for the program reduce the impact of its mandatory nature considerably. Nevertheless, despite this change in emphasis, relatively few states have imposed workfare programs for a large portion of the caseload, and sanctions are still the exception rather than the rule. Instead, most states have opted for strengthening the job search and training components of traditional WIN programs and for imposing registration requirements more seriously and on a wider set of AFDC recipients.

The literature on the evaluation of training and workfare programs is extremely large and diverse. Consequently, only the highlights of the

results can be touched upon here. In addition, evaluations of the most recent spate of workfare programs are still under way at this writing and a final summary of their results consequently cannot be provided.

Many of the training programs that have been evaluated are not specifically aimed at welfare recipients, such as the MDTA, the Job Corps, CETA, and JTPA. The MDTA began in 1962 as a program for the "structurally" unemployed but eventually became a program for the disadvantaged, and provided primarily classroom training and on-the-job training. The Job Corps, a War on Poverty program that is today included as part of JTPA, provides education and vocational training in a residential environment for youth from disadvantaged backgrounds. The CETA program (1973-1982) provided a variety of service, including classroom training, on-the-job training, work experience, and public service employment to eligible disadvantaged individuals. Although disadvantaged status was generally based upon low income and/or a history of low employment, AFDC recipients were also included and constituted approximately 18 percent of CETA participants. The JTPA program, the replacement for CETA, offers all the same services as CETA except for public service employment but puts much heavier emphasis on job-search assistance. AFDC recipients constitute approximately 20 percent of the JTPA caseload.

Although the JTPA program has not yet been evaluated, the other three have been, to varying degrees. Three evaluations of the MDTA program conducted in the 1970s found significant and positive effects of the program on the earnings of women, but welfare recipients were not examined separately (Bassi and Ashenfelter, 1986, p. 140). Evaluations of

the Job Corps (e.g., Mathematica Policy Research, 1980) have found positive earnings impact and benefit-cost ratios considerably greater than one, but welfare recipients are once again too small a part of the participant population to be examined separately. The program that has received the greatest number of evaluations is the CETA program. A major review of CETA research recently completed (Barnow, 1987) indicates that CETA increased earnings of its participants by approximately \$200 to \$600 per year (late 1970s dollars). The impacts were much greater for women than for men, and the on-the-job training and public service employment options had bigger effects than either classroom training or work experience. However, most of the evaluations of CETA did not examine AFDC recipients separately. The one study (by Bassi) that did do so found earnings gains amounting to from \$600 to \$900 per year, higher than that of the average, and small reductions in welfare payments.

Barnow emphasizes that these findings of positive and significant earnings payoffs must be treated with some caution. Most of the studies did not follow trainees for more than two years past the time of training and thus the payoffs could have later decayed. In addition, Barnow finds that the estimates appear to be quite sensitive to the comparison groups methodology and econometric technique employed, a common difficulty in nonexperimental evaluations.

It should also be emphasized that these estimates of earnings gains are only those for voluntary participants, who are likely to be a self-selected (i.e., "creamed") portion of the eligible population who were better skilled to begin with. If so, making such programs mandatory for the population--as some current programs intend--would result in programs

with lower average earnings payoffs. Unfortunately, the research literature on CETA evaluations has examined this problem very little and hence we have no estimates of its quantitative importance.²⁵

Two training programs of relevance to the AFDC population that have been tested and evaluated are the Supported Work and Employment Opportunity Pilot Project (EOPP) programs. The Supported Work program provided long-term AFDC recipients who had little or no work history with temporary employment in a sheltered environment, one with substantial peer support and in which performance standards were gradually increased over time. The analysis, based on a randomized design, indicated that the annual earnings of participants were significantly increased by approximately \$600 to \$800 per year, with no evidence of decay after two years (Grossman et al., 1985, Table IV.1). However, while welfare payments dropped significantly in the period immediately following training, they rose gradually over time.

The Supported Work evaluation was also notable for its careful analysis of benefits and costs from several points of view. The analysis indicated that benefit-cost ratios were considerably greater than one from both the point of view of the taxpayer (i.e., weighing the benefits in welfare savings and program output versus the administrative costs of the program) and from that of society (i.e., weighing the earnings and output gains against the direct and indirect costs of the program). However, the benefit-cost ratios from the point of view of the recipient were less than or equal to one because the earnings gains were insufficient to outweigh the welfare savings, even when projected into the future (Kemper et al., 1984, p. 259). This result has some important implications, as discussed below.

The EOPP program provided intensive job search assistance followed by a period of subsidized employment or training and was made available to, among others, AFDC women with CETA qualifications. The results of the analysis of its effects (Grossman et al., 1985) indicate that the job-search component had no positive effects on earnings but that the more costly employment and training component had large initial earnings impacts, though they dropped off quickly. The impacts on welfare payments were negligible for the job-search component and small for the employment and training component, leading to little prospect that the program would pay for itself.

The work and training program most directly related to the AFDC program is the WIN program. Legislated in 1967, WIN has historically provided to AFDC recipients a mix of skills assessment, classroom training, on-the-job training, and public service employment, as well as supportive services such as counseling and child care. Over time, public service employment and training have been deemphasized relative to the other services and relative to intensive job-search assistance. Beginning in 1971 WIN was made mandatory for recipients, subject to certain exemptions (such as having a child under 6), and sanctions for non-compliance and refusal to accept a job were put into place.

The major evaluation of WIN was conducted from interviews with recipients in 1974 and 1975 (Ketron, 1980). A sample of women enrolled in WIN but who had not received services (i.e., on a waiting list) was used as a comparison group, though one with clear possible selection bias. The Ketron analysis found positive and significant effects on future earnings and employment of about \$300 per year, a small amount. However,

those receiving subsidized training and employment experienced considerably larger impacts, of up to \$1500 per year. The analysis also found no effects (if not positive ones) on welfare payments. A reanalysis of the Ketron data (Grossman et al., 1985), focusing on more long-term AFDC recipients and concentrating on the employment and training service components, confirmed a finding of positive earnings impacts of about \$1200 per year but with no welfare savings. Thus, once again, it appears that intensive employment services can produce significantly positive impacts, but not significant savings in welfare costs.²⁶

Grossman et al. (1985) also reanalyzed the data from the evaluations of two WIN labs that provided only intensive job-search assistance rather than subsidized training or employment. While the programs had positive impacts on earnings, they were quite small (\$200-\$300 per year) and welfare savings were negligible. Thus, while job-search assistance alone has positive impacts, they appear to be considerably smaller than those resulting from the more intensive employment and training programs. Grossman et al. also found little direct evidence that specific targeting strategies could improve the earnings and welfare impacts (p. 12).

The most recent evaluations of work programs for AFDC recipients stem from 1981 and 1984 legislation allowing states to operate strengthened work-related programs. States are now allowed to require increased job search of recipients (WIN "demos"), to operate community work-experience programs requiring recipients to work at community jobs ("workfare"), and to operate grant diversion programs that use the AFDC benefit to subsidize private-sector or public-sector employment. By January 1987, 42 states were operating one of these various types of programs, reflecting

what has been a strong response to the legislation (Congressional Budget Office, 1987). The types of programs that have been implemented by the states are quite diverse and difficult to summarize, and to date there is little solid information on the distribution of different types of services across the states as a whole. It does appear that most recipients in the new programs receive one or another form of job-search assistance, and only a few in specific locations are enrolled in workfare programs (Congressional Budget Office, 1987, p. 25). The two most heavily publicized programs are the Employment and Training Choices program in Massachusetts, an extensive voluntary program of education and training with child care support and few sanctions, and California's Greater Avenues for Independence program, which includes extensive job search assistance as well as education and training, with sanctions possible in principle. Neither of these programs has been evaluated.

Although neither the Massachusetts or the California program has been studied, major evaluation of others have been conducted by the Manpower Demonstration Research Corporation (MDRC).²⁷ The evaluations conducted by MDRC use a randomized design, thereby eliminating the selection biases that may have arisen in other evaluation studies. Evaluations of programs in five states have been completed at this writing, programs that vary greatly in treatments offered. In three sites (Arkansas, San Diego, and Virginia), the programs essentially offer a period of job search followed by a short-term period of either work experience or workfare. However, San Diego also offered a program of only job search and Virginia also offered a program with education and training in place of workfare in the second stage. In a fourth site (West Virginia), only

work at a public or nonprofit job for an unlimited length of time was required, placing it closest to a traditional workfare program. In the fifth site (Baltimore), the most extensive array of services was offered: job search, education, training, and work experience.

The results of the evaluation show positive effects on earnings and employment in all sites except West Virginia, after an average of a year although the effects are not always statistically significant. The largest effects were found in San Diego, where annual earnings in the experimental group were about \$550 over those in the control group, and the smallest were in Virginia, where the comparable effect was about \$120. These earnings impacts fall squarely into the range obtained in the prior WIN studies and in some of the other evaluations, although somewhat smaller than the payoffs for CETA, Supported Work, and the employment and training components of WIN. However, the MDRC estimates include some individuals in the experimental group who did not receive services and, in addition, the control group generally received some package of services themselves; hence the MDRC estimates should be inflated to some degree to make them comparable with other estimates.

A significant finding of the MDRC studies is the lack of effects of the West Virginia program (Friedlander et al., 1986), for not only were there no employment and earnings effects, but also no welfare savings were detected. Such absence of effects is consistent with the relatively strong emphasis of a workfare program on work requirements per se, and may simply reflect the differing goals of workfare and training and job search programs. However, this interpretation is clouded by specific features of the West Virginia test, for the unemployment rate was

extremely high in the state and the program was focused more on AFDC-UP than AFDC recipients. Whether the results will apply to other workfare programs remains to be seen.

A natural question is whether the positive impacts of the programs in the other four sites, all of which included both job search and work experience or workfare components, owed their results more to the former or the latter components. The MDRC evaluation allowed such a comparison in San Diego (Goldman et al., 1986), where treatments with and without workfare were tested. The results were mixed, but suggested that the workfare components contributed to the earnings impact. While this conflicts somewhat with the West Virginia findings, the workfare components in San Diego may have been different from those in the other sites. However, this finding is completely consistent with the reanalysis of Grossman et al. (1985), who found much greater earnings impacts from subsidized employment and training programs such as Supported Work and WIN components than from job-search-only programs.

MDRC also conducted benefit-cost analyses, finding higher ratios than have prior studies. Benefit-cost ratios from the point of view of society were in excess of one for all five sites, although in West Virginia this arose primarily from the value of the output produced in the workfare jobs. However, not all the programs paid for themselves--in the five-year period of the demonstrations, only Arkansas and San Diego did so. Moreover, in one of these two sites (Arkansas), recipients were no better off when their earnings gains were compared to their welfare losses.

As a methodological matter, it should be noted that the use of random assignment as in the MDRC evaluations (and prior experimental designs)

does not completely eliminate the problem of self-selection. Because randomization can take place at only one place in the program, the experimental estimates are valid only for the types of individuals that have reached that point. Unfortunately, the types of individuals reaching that point may change if a workfare program is permanently in place, thereby possibly changing the average earnings impact. To take an extreme case, if no AFDC recipients were exempt and all were registered immediately upon acceptance in to the AFDC program, the types of women applying for AFDC would no doubt change. Depending upon whether those with relatively better employment prospects or worse employment prospects would fail to apply, the earnings impacts of the program would fall or rise, respectively. This point will be elaborated on below.

Another recent demonstration evaluated the effect of training AFDC recipients to be health aides for the elderly in the home (Bell et al., 1986). The program provided four to six weeks of training followed by a year of subsidized employment as a home health aide, a fairly intensive treatment. The preliminary results indicate that annual earnings increases approximately two years after exit from the program ranged from \$130 to \$1932 across the seven sites involved, with an unweighted average of about \$1100. Thus the program appears to have somewhat greater effects than most of those already discussed. Welfare benefits were often significantly reduced, but no benefit-cost analysis has been released at this writing.

A final set of evaluations worth noting are two of work programs within the Food Stamp program. In the first (Center for Human Resources, 1986), a variety of different arrangements for administering existing

Food Stamp work requirements as well as a number of new attempts to strengthen the job-search effectiveness of the treatments in the Food Stamp program were tested experimentally in 11 sites. The analysts found that annual earnings increased with most of the new treatment, the effects ranging from \$130 to \$800 for all those with a positive impact. Food stamp benefits and participation rates fell as well, although the ~~benefit-cost ratios generally remained above one for participants, tax-~~ payers, and society. Second, an evaluation of a Food Stamp workfare demonstration using comparison-group methods found significant reductions in welfare receipt and positive, though insignificant, effects on earnings and employment (U.S. Food and Nutrition Service, 1987). Earnings gains, though insignificant, were large enough to make the benefit-cost ratios for the program greater than one from the point of view of society as well of the recipient. However, the standard errors on the ratios were large enough to raise considerable doubt as to their accuracy.

Taken together, these evaluations show that earnings gains are possible from training and workfare programs. There are suggestions that the earnings gains are positively related to the strength of the training elements and negatively related to the strength of the pure workfare elements in each package of services, although few pure cases of either type have been evaluated. Nevertheless, even for the programs with relatively strong training components, the magnitude of the gains in earnings and the reductions in welfare receipt are sufficiently small to make it unlikely that serious reductions in either the poverty rate or the welfare caseload will result from training and workfare programs. Earnings gains of \$500 to \$800 per year, for example, are nontrivial but

insufficient to raise the mean income of single mothers above the poverty line. Moreover, most estimates of welfare reductions appear to be small relative to the caseload. Consequently, the evidence thus far does not support the use of training and work requirements as a sole means by which to reduce the problem of poverty and welfare dependency among female heads.

In addition, despite the large amount of research conducted on evaluations of training and workfare programs, little attention has been paid to the implications of such programs for the long-run caseload. In the long run, programs which improve the earnings capacity of recipients --or, to be more precise, which have a benefit-cost ratio greater than one for the recipient--will encourage entry onto the rolls, and programs which reduce that capacity will discourage it. In addition, a program with a benefit-cost ratio of less than one will obviously be undesirable to the recipient and will lead to a disincentive for such recipients to participate in the training programs and hence to a disincentive to work. Of course, the stronger the mandatory elements in the program the more difficult it is for recipients to avoid the activity; but voluntary programs would certainly be avoided.

The possibility of benefit-cost ratios being less than one from the recipient's point of view has the additional unfortunate implication that the worst-off in the caseload would probably be penalized the most. An AFDC program with a positive benefit plus a mandatory work program with a benefit-cost ratio less than one would encourage some individuals not to apply for AFDC. But those most likely not to apply would be those with the strongest employment and earnings prospects when off AFDC; those continuing to apply would be those with the worst opportunities elsewhere.

The goal of most work-related programs is instead to raise the recipient benefit-cost ratio above one. Nevertheless, in this case one would expect the welfare alternative to become more attractive than it is presently and therefore to increase the long-run caseload.²⁸ This would fail to occur only if the earnings payoff were sufficiently high and longlasting as to make a large number of recipients permanently independent of AFDC. In addition, given the difficulty of developing programs with high earnings payoffs, considerable resources would have to be devoted to the training component, making it unlikely that the program would pay for itself. Alternatively, heavy subsidization of child care and other work-related expenses could generate high benefit-cost ratios for participants though not, obviously, for the taxpayer. Put differently, it is usually not possible to get something for nothing-- increasing recipient well-being in the long run will probably cost money.

A research implication of these considerations is that more attention should be directed to the estimation and calibration of AFDC participation and caseload equations as a function of the net present value of AFDC, including that of the training or workfare program. With existing evaluation data, equations for the probability of dropping off the program and returning to the program at future dates could be estimated, with a variable for the net present value as a regressor. However, since in the long run the net present value of participating in AFDC would become more widely known, it would also be necessary to predict the effect of the program on the applicant rate, which would rise or fall according to whether the program increases or decreases the net present value of participating in AFDC. Such an analysis may be possible

only through simulation. Also required as part of the analysis would be an examination of the sorts of individuals who do not participate in AFDC as a result of the work program. This would require examining the extent of heterogeneity in the AFDC-eligible population and the types of self-selection that occur in the participation decision. This analysis would, in turn, relate closely to the creaming issue and other self-selection issues that arise in the examination of participation in the training or workfare program. Indeed, in the extreme case in which all AFDC participants were required to enroll in the work program, the two participation decisions would be equivalent, as noted previously.

C. Child Support Reform

Another means by which work effort of female heads might be increased is through reform of the child support system. Child support is awarded to only 58 percent of all women with children who are potentially eligible for support, and to only 40 percent of poor women (U.S. House of Representatives, 1986, p. 416). Of those with awards, many women do not receive the full amount due--about 50 percent receive less than the amount due and 24 percent receive nothing at all. Only 50 percent receive the full amount of the award. In response to these low payments of support, Congress amended the Social Security Act in 1975 and 1984 to strengthen enforcement of child support awards.

There are many difficult issues involved in reform of the child support system but, for present purposes, the question is only how child support affects work effort.²⁹ In principle, child support may increase work effort among female heads and simultaneously reduce the AFDC

caseload. Child support is a form of income that is not affected by the work effort of the custodial parent and hence increases the amount of income available to a woman off AFDC.³⁰ Moreover, since the AFDC program taxes child support at a 100 percent rate, the net increase in disposable income is greater at high work-effort levels (i.e., above breakeven) than at low work-effort levels. At low levels, AFDC benefits will generally dominate child support, although increased child support may encourage some women to accept a somewhat lower income in return for being off welfare.

Nevertheless, there are potentially offsetting work-effort effects to child support. The provision of child support to women above the breakeven level--which is the primary means by which women initially on the rolls are encouraged to leave--simultaneously reduces work effort among those women not on AFDC. The net effect of an increase in child support is therefore indeterminate in direction. This indeterminacy is closely related to that resulting from a change in the benefit reduction rate, though the two do not have precisely the same type of effect on incentives and need not have the same effects on work effort. However, regardless of the direction of the change in work effort, the AFDC caseload is unambiguously reduced by child support because the AFDC income breakeven level is lowered. Consequently, child support reform is one mechanism by which work effort might be increased by reducing, rather than increasing, AFDC participation.

There have been only two studies of the effect of child support on work effort or participation. Robins (1986) studied the effect of increasing enforcement of child support on AFDC participation rates.

Surprisingly, his results indicate that the participation rate would be little affected by increased enforcement of child support, even complete enforcement and full payment of existing awards. Apparently the increase in child support has its greatest potential effect on women around the breakeven level, women for whom the availability of child support may make income off AFDC more attractive than that on AFDC. Unfortunately, there are very few recipients who have sufficient earnings to put them around the breakeven level. As stressed previously in this review, the vast majority of AFDC recipients (over 80 percent) do not work. For such women child support awards would almost never dominate AFDC payments, and changes in income alternatives around the breakeven level would have little effect. This lack of an effect is consistent with the small effects found for changes in benefit reduction rates.

The second study is connected to a reform of the child support system currently being tested in Wisconsin (Garfinkel et al., 1987). In the Wisconsin demonstration a minimum level of child support is guaranteed to the mother, and the state makes up the difference between the guarantee amount and the child support actually collected. This encourages women to go off AFDC. However, to prevent high-income families from receiving this subsidy, those receiving it must pay an income tax that effectively converts the subsidy into an income-conditioned transfer benefit--the subsidy amount is at its maximum for those with no income and gradually falls to zero as income rises. Moreover, in the Wisconsin demonstration a fairly generous wage-rate subsidy (up to 50 percent) is added on top of the child support structure. Thus the program has significant differences with the existing child support program studied by Robins. The

effects of the Wisconsin program on earnings and work level are indeterminate in direction, for, while AFDC recipients still have an incentive to leave the rolls, women not on AFDC who must face the new tax may work less. However, the AFDC caseload should fall in any case.

Garfinkel et al. (1987) have used estimated income and substitution elasticities from the econometric literature to simulate the effects of the program on costs, caseloads, and work effort. They find that the AFDC participation rate in Wisconsin would fall from its present level of 46 percent to 40 percent if the child support guarantee were \$2000 per year, the lowest amount being tested. At this guarantee level the work effort of existing AFDC recipients would rise by 25 percent but that of nonrecipients would fall by 8 percent, leaving average work effort among female heads virtually unchanged (up by only 0.8 percent). However, for the highest guarantee tested, \$3500 per year, the AFDC participation rate would fall to 36 percent and work effort among recipients would increase dramatically--by over 300 percent--resulting in a 13 percent increase in overall work effort. However, the greater work incentives at this guarantee level come at a cost, for aggregate costs (AFDC plus child support) could rise by 13 percent.

The results of the Robins and Garfinkel et al. studies are quite different and require some reconciliation. For example, the latter simulates a reduction in the AFDC participation rate of 6 percentage points at the lower child support guarantee, about the same level of child support as that simulated by Robins, who found essentially no change in participation. The difference in results is probably a result of differences in the programs simulated. The Wisconsin program makes new

awards to many who do not presently have one, whereas Robins only simulated the effect of enforcing all existing awards. In addition, the Wisconsin program contains a generous wage-rate subsidy, and it does not tax nonwage income as heavily as does AFDC. Also, the larger labor supply effects at the higher Wisconsin guarantee are probably a result of the wage-rate subsidy and the great reduction in the breakeven level generated by the program. The fraction of the AFDC caseload simulated to be in or near the wage-rate-subsidy range rises from 21 percent to 45 percent from the low to high guarantee (Garfinkel et al., 1987, Table 1). Finally, there could, of course, be differences in the U.S. and Wisconsin caseloads, although it is doubtful that they would generate such major differences alone. In any case, Garfinkel et al. unfortunately did not determine the contributions of the different features of the Wisconsin program to the end results, yet it is important, for obvious policy reasons, to make that determination. This should be another area for additional work.

D. Reducing the Categorical Nature of the System

The major categorical feature of the present transfer system is its restriction of significant cash transfers to families lacking an able-bodied adult male. If this feature is responsible for an increase in female headship, weakening the categorical restriction and increasing transfers to low-income husband-wife families could be a means for reducing poverty rates and increasing work effort in the population, particularly among men. First, to the extent that the poverty of female heads is a result of their marital status and lack of the earnings of a

husband, a direct reduction in poverty could result. Second, to the extent that AFDC has reduced the work effort of men, particularly young black men, as discussed previously, their work effort could be expected to increase if incentives for female headship were reduced. Of course, this means of increasing earnings of men and reducing poverty rates could be achieved only by increasing the caseload.

As noted in Section IV, there is considerable evidence on the effect of AFDC on female headship but little direct evidence on the effect of female headship on poverty rates and male work effort. Consequently very little can be concluded about the effect of reducing categorization. Bane (1986) has argued that household composition per se has relatively small effects on poverty rates, for poor female heads typically marry men with incomes so low that their combined incomes would still usually leave the unit below the poverty line. However, as noted in Section IV, research by Lerman has suggested that AFDC may affect the probability of absent fatherhood, thus possibly affecting the work effort of men. It should be noted that reducing female headship would cause the work levels of women to fall--as discussed in Section III, wives invariably work less than female heads.

Extending benefits to husband-wife families would, in addition, generate work reductions of the usual kind that result from transfer programs. Since there is no evidence from the AFDC-UP program on the effect of transfers on the work levels of husbands and wives, research from the income maintenance experiments must be examined instead. That research indicates that extending the current AFDC system to husband-wife families would lower their joint work levels (if recipients) by about 7

percent. Husbands would reduce their hours of work per week from an average of 37 to an average of 35, and wives from an average of 9 to an average of 8. However, the bucket would also leak for husband-wife couples, in their case by about 44 percent, implying that \$1.82 would be necessary to raise their incomes by \$1.00. This is slightly larger than that for female heads.³¹

E. Long-Run Strategies

Two broad long-run strategies for increasing earnings and reducing the rate of welfare participation are worth mentioning briefly. One is the improvement of economic growth and the other is improvement in the educational achievement of low-income children.

Long-run economic growth has raised the real earnings levels of the U.S. population tremendously over the last century and has simultaneously increased real earnings in the lower portion of the distribution. Ellwood and Summers (1986) have shown that, in fact, median family income and the poverty rate have tracked each other closely over the past 20 years. Unfortunately, median family income has failed to grow at its earlier rates over this period, with consequent effects on the poverty rate and the AFDC caseload. Although the measurement of median family income suffers from some difficulties, its relatively low growth rate seems clearly to reflect the decline in the growth of productivity in the U.S. economy. Thus the earnings and work levels of female heads would be aided and AFDC caseload levels would be restrained if productivity growth could be resumed at earlier levels. Unfortunately, there is no consensus on how to achieve that goal.

Increases in the educational achievement of low-income children through compensatory education programs or through more general improvements in the schools has long been a favored policy strategy, because such programs promise greater human capital formation and hence permanently higher earnings. Unfortunately, while the positive relationship between earnings and level of education is one of the strongest and most consistent empirical relationships in economics, no specific educational policy measures or programs have yet been found that have significant long-run effects on achievement and earnings. It appears that recent evaluations of Title I of the Elementary and Secondary Education Act of 1965, evaluations better designed and executed methodologically than earlier studies, show positive achievement gains for children in the early grades (Glazer, 1986). However, these gains fade in secondary school. Moreover, the economic literature on educational production functions continues to indicate that neither student-teacher ratios, teacher education, teacher experience, teacher salaries, nor expenditures per pupil has any strong or systematic effect on achievement (Hanushek, 1986, p. 1162).

VI. SUMMARY AND CONCLUSIONS

The evidence adduced and the literature reviewed in this survey show that the problem of low levels of work and earnings among welfare recipients in the United States is an exceedingly recalcitrant one. The time-series evidence indicates that the low levels of work of female heads have been extraordinarily stable over the past 20 years despite

drastic changes in benefit levels, benefit reduction rate, unemployment rates, and other economic variables. The cross-sectional econometric evidence indicates that AFDC and Food Stamps do reduce work effort among female heads, but not so much as to have a large effect on either poverty rates or on the welfare caseload. Among policy measures that might increase the work effort of female heads, training programs appear to have the best prospects at the moment, though child support programs of very generous levels and coupled with wage subsidies may also increase work effort. However, the earnings payoffs from training and work programs rarely exceed \$1000 per year, the amount of earnings lost through work disincentives in the first place. Therefore, for the same reasons that work disincentives are not the cause of poverty or welfare dependence, training and work programs will not seriously reduce them.

Perhaps the most puzzling questions are why the work levels of female heads have failed to grow in the last 20 years as those of other women have--assuming that the transfer system is not the major explanation--and why basic human capital formation such as education and normal on-the-job training in the private sector has not seemed to "work" for female heads as it has for every other group in the population. To be sure, it has not been firmly established that human capital formation does not benefit female heads, but the evidence on training and education programs provides some indication of this.

The review also touched upon the possible influence of AFDC on the work effort of men. While the time-series evidence is suggestive, the effects are indirect and difficult to study in cross section. Unfortunately, the issue has been too little researched to draw any conclusions here.

The review has also uncovered a number of areas and topics that require further research. The most important are the following:

- (1) Lacunae. There have been no studies of the effect of Medicaid on work effort, especially the Medicaid notch (loss of Medicaid coverage when income rises above the AFDC maximum). Only one study of Food Stamps has been completed. No studies of the effect of Food Stamps or AFDC-UP on the work effort of intact couples has been completed. No studies of housing programs have been completed. In general, the amount of research on the determinants of multiple program participation and of the effects of high cumulative tax rates on work incentives is minuscule, despite the fact that the trends in transfer program participation and work since 1970 cannot be fully understood without such studies.
- (2) Life-Cycle Analysis. There has been virtually no work on the analysis of welfare receipt as a life-cycle decision or on life-cycle profiles of welfare participation, work, and marital status. Equally important, there has been no work on the connection between human capital accumulation and welfare reciprocity, even though low earnings are one source of the welfare problem.
- (3) Training Effects. There have been no studies of the effect of manpower training and workfare programs on the entry rate into AFDC and hence on the long-run caseload, even though the rationale for such programs is to reduce it. The decision to apply for AFDC must be modeled as a function of the expected present value of the net benefits to be had from it, including any positive or negative benefits from manpower training and workfare programs.
- (4) Effects on Men. There has been no research on the effect of the categorical nature of the system on the work effort of men via female headship effects. Existing research shows that AFDC does affect female headship and, at the same time, some male labor force indicators (particularly for young blacks) have deteriorated. Since men still contribute a much larger fraction of total work effort to the labor market than do women, a potential for sizable effects is present. Also, the lack of research on AFDC-UP makes it difficult to estimate the effect on male work effort of mandating that program or of making intact couples eligible in other ways.

**Appendix to
"Work and the U.S. Welfare System: A Review"
Data Sources for Tables and Figures**

Table 1:

AFDC: U.S. Social Security Administration (1985, p. 254), 1960-1980;
U.S. House of Representatives (1986, p. 391), 1985.

AFDC-UP: U.S. National Center for Social Statistics (1965, Table 8),
1965; U.S. House of Representatives (1986, p. 391), 1970-1985. No.
states from National Center for Social Statistics (1965, 1970a,
1975), 1965-1975; U.S. Social Security Administration (1980), 1980;
unpublished data from the Office of Family Assistance, U.S.
Department of Health and Human Services, 1985.

Food Stamps: U.S. Social Security Administration (1985, p. 256),
1965-1980; U.S. House of Representatives (1986, p. 456), 1985.

Medicaid: U.S. National Center for Social Statistics (1970b, Table 1),
1970; U.S. House of Representatives (1986, p. 254), 1975-1985.

Table 3:

AFDC Participation Rate: No. AFDC families from U.S. Social Security
Administration (1985, p. 254), 1968-1983; U.S. House of
Representatives (1986, p. 391), 1984-1985. No. AFDC-UP families from
Michel (1980, p. 58), 1967-1969; U.S. House of Representatives (1986,
p. 391), 1971-1985. No. female headed families with children under
18 computed by author from Current Population Survey. Participation
rate calculated by dividing difference between total AFDC and AFDC-UP
by no. female heads, and scaling results down by CPS subfamily
adjustments shown in Ruggles and Michel (1987).

Food Stamp Participation Rate: U.S. House of Representatives (1986, pp.
392-393).

Medicaid Participation Rate: No. adults on Medicaid from U.S. National
Center for Social Statistics (1972, Table 2), 1969; U.S. House of
Representatives (1986, p. 254), 1973-1985. No. female heads with
children under 18 computed by author from Current Population Survey.

AFDC Benefits: Kasten and Todd (1983, unpublished appendix), 1969;
unpublished data, Office of Family Assistance, 1971-1985.

Food Stamp Benefits: Personal communication from Dr. Thomas Fraker,
1969-1971; U.S. House of Representatives (1986, p. 456), 1973-1985.

Medicaid Benefits: Medicaid payments for adults and children from U.S.
National Center for Social Statistics (1972, Table 3), 1969; U.S.
Social Security Administration (1985, p. 220), 1973-1984. No. adults
on Medicaid: see above source of Medicaid participation rate.

Effective BRR and BE: Fraker et al. (1985).

Figure 1:

All from Table 3 sources except participation rate of eligibles, drawn from Michel (1980) and Ruggles and Michel (1987).

Table 4:

AFDC and All Female Heads: Moffitt (1985, Table IV.3); Moffitt (forthcoming, Tables 3, B-1); U.S. House of Representatives (1986, p. 392).

Other Women: U.S. Department of Labor (1985, Tables 1, 50, 51).

Figure 2:

Female Heads: Computed by author from Current Population Survey.

All Women: U.S. Bureau of the Census, Current Population Reports, Series P-60, various issues.

Figure 3:

Divorce Rate: U.S. National Center for Health Statistics (1986, Table 1).

Female Headship: U.S. Bureau of the Census, Current Population Reports, Series P-20, various issues, 1960-1969; Wilson and Neckerman (1986, Table 10.1), 1970-1983.

Figure 4:

Murray (1984, p. 262), 1960-1980; U.S. National Center for Health Statistics, Advance Report of Final Natality Statistics, 1981-1984.

Figure 5:

U.S. Department of Labor (1983, Table A-5), 1960-1981; U.S. Department of Labor (1985, Table 5), 1982-1983.

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Notes

¹However, the states in the AFDC-UP program have larger-than-average caseloads, so more than 50 percent of the population is covered.

²The purchase requirement in the Food Stamp program was eliminated in 1979, probably contributing to the caseload increase from 1975 to 1980.

³These participation rates are considerably higher than those in Table 2, probably because they are based upon administrative counts of AFDC recipients and those in Table 2 are based upon survey responses. The latter are likely to be subject to underreporting bias. Note too that these participation rates pertain to all female heads with at least one child under the age of 18. Participation rates among female heads who are income-eligible are naturally higher but, as shown in Figure 1, they have followed the same pattern as those in Table 3. For example, Ruggles and Michel (1987, p. 31) calculated eligible participation rates of 42 percent, 88 percent, 83 percent, and 78 percent in 1967, 1976, 1981, and 1983, respectively.

⁴Food Stamps are also available to female heads not receiving AFDC. About 18 percent of female heads currently receiving Food Stamps are not on AFDC.

⁵There is a slight noncomparability between the AFDC and Medicaid participation rates that exaggerates their difference. For AFDC the participant count is measured as the average monthly caseload, while for Medicaid the count is measured as the number who received Medicaid payments anytime during the year.

⁶This takes into account the taxation of AFDC and Food Stamps, for the net sum was only \$505 in 1984. The 1960 AFDC benefit level is taken

from U.S. House of Representatives (1986, p. 578). The calculation there showed a 5 percent increase in AFDC and Food Stamps from 1960 to 1984, similar to my calculation.

⁷However, participation rates of eligibles followed a quadratic pattern as well (see note 1 and Figure 1). Thus changes in participation were not solely a result of changes in the breakeven level.

⁸The cumulative BRR was higher than 67 percent when other programs are included, and hence the BRR may have drifted up in the 1970s. The Food Stamp BRR adds 10 percent to the 67 percent rate (less than 30 percent as a result of the taxation of AFDC by Food Stamps) but Medicaid, housing, and other programs could raise it by more.

⁹The disproportionate effect of OBRA on earnings is documented by Moffitt and Wolf (1987).

¹⁰In other words, simple income effects may be at work. Of course, no control for age, race, education, or other characteristics is made here.

¹¹That review did not cover the negative income tax (NIT) experiments, nor will this one. The NIT experiments provided no direct estimates of the effect of AFDC, but only estimates of the incremental effect of replacing AFDC with an NIT offering more generous benefits.

¹²These estimates are drawn from note 38 of the Danziger et al. article and assume a 50 percent employment rate. The lower-bound estimate cited by Danziger et al. was later revised (Moffitt, 1983) and indicated instead a six-hour reduction. But simulations of the effect of AFDC I have performed since that time (Moffitt, 1985), using a range of income and substitution elasticities drawn from the literature, generate

effects of from one hour to six hours per week. Thus the upper-bound estimate cited by Danziger et al. appears to be an outlier.

¹³The leaky-bucket fraction is the ratio of the loss in earnings to the AFDC benefit, or one minus the Lerman ratio (the ratio of increased income to the benefit). Taking the estimate of 5.4 hours given in the text together with the hourly wage of \$3.27 in Moffitt (1983), and with an average AFDC benefit in 1975 of \$208 per month, the loss fraction is .37.

¹⁴Of course, the true efficiency loss does not include the increased value of leisure and child care, but only the deadweight loss induced by the benefit reduction rate.

¹⁵See Moffitt (1985a), which shows work disincentives among all female heads. Those for AFDC recipients only are available from the author upon request.

¹⁶In a recent paper Robins (1987) provides evidence suggesting that demographic factors (e.g., the decline in family size) played a major role in the fall in the participation rate from 1978 to 1981.

¹⁷One study (Blau and Robins, 1986) also examined labor turnover among welfare and nonwelfare recipients, finding that welfare recipients have lower entry rates into employment and higher exit rates.

¹⁸The work-disincentive effects obtained from the cross-sectional studies mentioned previously can be thought of as estimates of the average response. The question is how that effect is divided between short-term and long-term recipients.

¹⁹These estimates are subject to underreporting bias and may therefore be biased downward. For example, using administrative data,

Zedlewski (1985) found participation rates to range from 49 percent to 56 percent.

²⁰However, a recent paper by Blank (1987) represents a first look at the effect of Medicaid on AFDC participation. Blank finds it to have no effect.

²¹Murray (1980) performed a crude simulation using aggregate time-series data on public housing tenants without any data on work effort but, as he stressed, his estimates were only suggestive at best.

²²Of course, there is an extensive literature on youth unemployment which considers many other explanations.

²³It is sometimes argued that inducements to work while still on the rolls will increase the recipient's human capital and hence lower the future caseload. Whether the human capital returns to work are large enough for this to be a major effect is unclear; at least no such effect appeared after the 1967 Social Security Amendments.

²⁴See Mead (1986) for a statement of this view.

²⁵Björklund and Moffitt (1987) found such effects to be extremely important in a Swedish manpower training program.

²⁶It is rather puzzling that such strong earnings effects are unaccompanied by any change in welfare benefits. The authors supply no explanation.

²⁷See Friedlander et al. (1985a, 1985b, 1986), Goldman et al. (1986), and Riccio et al. (1986).

²⁸The JTPA program provides some training to non-AFDC recipients, but its payoff is sufficiently uncertain that the introduction of an AFDC work program with genuinely strong and positive payoffs would be very attractive to many recipients.

²⁹See also the more detailed review by Lerman (1987), which covers this same material. Lerman comes to similar conclusions as those reached here.

³⁰As Philip Robins has pointed out to me, this assumes that her work effort does not affect the payment level of the absent father or the level of award of the court.

³¹The 7 percent figure is obtained from SRI International (1983, p. 181) and the 44 percent figure from p. 185 of the same publication, both for a guarantee of 75 percent of the poverty line and a benefit reduction rate of 50 percent. See also Moffitt and Kehrner (1981) for a summary of the work effort results of the income maintenance experiments and Burtless (1986) for a discussion of the "leaky-bucket" issue.

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