

CHANGING CASELOADS: MACRO INFLUENCES AND MICRO COMPOSITION

The unprecedented decline in the caseload of the Aid to Families with Dependent Children (AFDC) program, retitled the Temporary Assistance for Needy Families (TANF) program in 1996, has been, by common agreement, remarkable. The caseload has declined by 50 percent since its peak in 1994 and is now at a level roughly similar to what it was in the late 1970s. It is also generally agreed that welfare reform has played a role in this decline, albeit simultaneously with the effects of the strong economy and of other policy measures. The welfare reform movement that was solidified in the 1996 Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) actually began in the early 1990s, and contributed to the caseload decline prior to 1996. The economy played a stronger role in that period than did welfare reform. However, subsequent to 1996, the economy has played the lesser role, according to estimates from currently available studies (Mayer 2000; Moffitt 1999; Schoeni and Blank 2000; Council of Economic Advisers 1997, 1999). Also playing a role of rather uncertain magnitude have been expansions of the earned income tax credit and Medicaid eligibility; both of these reforms greatly increased the amount of resources made available to families off welfare.

Research studies to date have also examined the effect of welfare reform on employment outcomes and other individual and family outcomes, as well as effects on the caseload. Two types of studies have been conducted. By far, the more numerous have been studies of welfare leavers: women who

have left the AFDC or TANF rolls after welfare reform began. These studies generally have shown leavers to have employment rates in the range of 50 to 70 percent, considerably higher than expected (Brauner and Loprest 1999; U.S. General Accounting Office 1999; Isaacs and Lyon 2000; Acs and Loprest 2001). Unfortunately, these studies do not estimate the effect of welfare reform *per se* because they do not control for the influence of the economy, which has improved considerably over the same period and could have contributed to these favorable outcomes.¹ A second strand of research study examines the effect of welfare reform on employment and other outcomes of all single mothers, or sometimes all less educated women, regardless of their welfare participation status (Moffitt 1999; Schoeni and Blank 2000). These studies control for the state of the economy, and typically have found positive effects on employment and earnings.²

The issue addressed in this paper is how welfare reform has affected the types of women who have remained on the welfare rolls (sometimes called stayers, as opposed to leavers). This group has not been examined by either of the two types of studies just referred to. Yet those women remaining on the rolls are also of policy interest. By and large, it is expected that those women are the most disadvantaged recipients who have not yet been able to find jobs in the growing economy or who have some significant health or other problem that prevents them from being able to leave the rolls or to work. If this is the case, such a disadvantaged group, still in need of a safety net,

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deserves attention and calls for the development of policies to address its needs. However, as was the case in studies of leavers, ascertaining that more disadvantaged women remain on the rolls does not say whether that is a result of the economy or of welfare reform; a low unemployment rate would also tend to draw women with more labor market skills off the welfare rolls. Determining the net effect of welfare reform requires controlling for the business cycle, as some of the other studies cited above have done for other outcomes.

Our analysis is composed of three parts. First, we provide a discussion of what the effects of welfare reform on the composition of the caseload—primarily measured by labor market skill level—should be, in principle. Perhaps surprisingly, we argue that different welfare reform policies have different effects on more skilled versus less skilled recipients, and that the net effect of the policies taken together is mixed and ambiguous. Second, we provide some new evidence from the nation as a whole using Current Population Survey (CPS) data, and from the state of Maryland using administrative caseload and earnings data. Third, we summarize what the few other studies of welfare stayers have shown.

Our analysis indicates that, after controlling for the effects of the economy, there is little evidence in national CPS data that welfare reform has affected the composition of the caseload in its labor market skill distribution, indirectly implying therefore that leavers have been equally distributed across all skill types. The analysis of data from Maryland indicates, in addition, a disproportionate effect of welfare reform on long-term recipients on the welfare rolls, who are the most disadvantaged, although not necessarily resulting in their departure from welfare. Other studies comparing leavers with stayers find as a whole that the former are more job-ready than the latter, but this could be the result of the growing economy and is inconsistent with the CPS, which shows a decline in the skill level of the caseload prior to adjustment for the business cycle. On net, therefore, we find no strong evidence that welfare reform per se has been selective in who has left the rolls and who has stayed in terms of labor market skills.

I. EXPECTED EFFECTS OF WELFARE REFORM ON CASELOAD COMPOSITION

The common theory of the main determinants of why some women are on welfare and others are not is based on a standard economic framework, which views welfare participation as resulting from a trade-off between potential income off welfare and potential income on welfare. Holding constant the latter, usually measured by the level of the welfare benefit, women

with greater income off welfare are less likely to be on the rolls and those with less income off welfare are more likely to be on the rolls. Since labor market earnings are a major source of income off the rolls, this leads to the natural presumption that women with greater labor market skills should be off welfare and those with lesser skills should more likely be on welfare.³ The composition of the rolls over time can be expected to change, according to this framework, if either the benefit level or labor market opportunities off the rolls change. If benefits trend downward, for example, one should expect the caseload to become increasingly disadvantaged in terms of labor market skills, and the same should occur if labor market opportunities improve.

The caseload should change in composition over the business cycle as well according to this framework. As the unemployment rate rises, one should expect women with more labor market skills to come onto the welfare rolls and hence the average skill level of welfare recipients should rise. Such women are ordinarily employed but lose their jobs during economic downturns. Likewise, as the unemployment rate falls, one should expect women with greater labor market skills to leave the rolls as they find jobs, leaving the caseload increasingly composed of more disadvantaged recipients.

When the features of welfare reform in the 1990s are considered, a more detailed examination is required. The overall emphasis of 1990s welfare reform has unquestionably been to increase employment of welfare recipients, and to this extent one might expect the most employable women to leave the welfare rolls first and the least employable recipients to stay on the rolls and to leave later, if ever. However, there are countervailing pressures at work, as can be seen by a more careful consideration of the main elements of reform: work requirements, sanctions, more generous earnings disregards, and time limits.

Work requirements should, at one level, make welfare less attractive in general and should lead some women to leave the welfare rolls. Naturally, the women who can leave most easily are those with greater labor market skills. An important question, however, is whether such requirements lead to work while on the rolls instead of work off the rolls. States that count earnings against the welfare grant, as most do, may make some women who earn sufficient amounts of money from employment ineligible for benefits and hence lead to their departure from welfare. However, those women who do not earn enough to render themselves ineligible will stay on the rolls and will combine welfare and work. The question regarding work requirements is how they will affect those women who have barriers to employment, such as health problems, low levels of education and work experience, or difficulties finding child care. To the extent that these more

disadvantaged women are exempted from work requirements, they will be unaffected; but to the extent that they are not exempted (and the tendency in many states is to minimize the number of exempt categories), they will find work requirements more onerous to fulfill. This could lead to an inability to meet those requirements and lead to a departure from the rolls, possibly working in the opposite direction to the main effects of work requirements.⁴

Sanctions that are imposed for noncompliance with work requirements should, similarly, work toward the departure from the rolls of more disadvantaged rather than less disadvantaged women. Women who are more job-ready and have fewer barriers to work are most likely to be able to comply with work requirements and hence avoid sanctions, while women who have more barriers related to health, child-care problems, or difficulties at home or in their personal life are likely to have a more difficult time complying and hence are more likely to be sanctioned. Indeed, the evidence to date is that women who have left the rolls after being sanctioned have lower employment rates and higher poverty rates than other leavers and are, in general, a more disadvantaged group (Brauner and Loprest 1999; Moffitt and Roff 2000; U.S. General Accounting Office 2000). Thus, sanctions work against the usual presumption that the most advantaged are more likely to leave the rolls.

More generous earnings disregards also work against this presumption, at least in relative terms.⁵ Such disregards have an employment-inducing effect by encouraging women to combine welfare and work and hence to hold jobs while still on welfare. They therefore tend to increase the welfare rolls by discouraging women from leaving welfare for work and encouraging women who might otherwise not have come onto welfare to do so, knowing that they can work while on the rolls. The women most capable of taking advantage of more generous earnings disregards are the more job-ready women who have sufficient education and work experience to find and retain employment. The women least able to take advantage of disregards are those with the poorest work skills and those with the most difficult problems in their personal and family life.⁶

Finally, the effects of time limits on caseload composition are complex and not easy to predict. In the short run, to the extent that the existence of time limits causes some women to leave the rolls before the time limit is reached, possibly in order to “bank” their benefits, it should be expected that more job-ready recipients would be more easily able to find jobs and leave the rolls early. However, in the longer run, as time limits are reached, women who are more disadvantaged will remain on the rolls and will actually be observed to hit the limit and be terminated. At that point, the more disadvantaged women are more likely to leave welfare. States may grant extensions from the time limits to some of these types of recipients as well as use

their 20 percent time-limit exemption for such women, thereby ameliorating their impact. But even these short-run and long-run effects depend on the extent to which state policy encourages women to work on the rolls before they hit the limit, and the extent to which such encouragement extends to disadvantaged as well as advantaged women (Moffitt and Pavetti 2000). The more women stay on the rolls to work prior to the limit, the more likely they will still be on the rolls when the time limit is reached.

In summary, while the general tendency of welfare reform is to encourage more job-ready recipients and those with more education and work experience to leave the rolls—leaving behind the more disadvantaged women—there are tendencies in the opposite direction as well. Sanction policies and more generous earnings disregards, as well as elements of other policies, will tend to retain more job-ready women on the rolls and/or lead to the departure from the rolls of the more disadvantaged recipients.

II. NEW EVIDENCE

Analysis of the Current Population Survey

The ideal data set for a study of national trends in the composition of the AFDC and TANF caseloads would be a national data set with information on the characteristics of recipients over several years, including different periods of the business cycle. Many characteristics of families are of interest, including the education, work experience, health, and other characteristics of the single mother herself, as well as the number and ages of her children and their health status; also, information on others in the household and the type of income they can provide. Information on the mother’s history of welfare participation would be useful to determine whether she is a long-term recipient.

Unfortunately, such a data set does not exist. Administrative data on recipient characteristics in all states have been collected in a series of changing formats since 1969, providing some information on recipients, but most data are drawn from the AFDC or TANF records themselves, leading to a variable list far shorter than the list noted above. National survey data sets generally are weak as well, often having very small sample sizes of recipients (as in the national longitudinal data sets) or a limited number of years available (the Survey of Program Dynamics). Probably the best national survey for this purpose is the Survey of Income and Program Participation, which has

been available since 1984, but it has been very slow to release data, and very little information subsequent to 1996 has yet been provided to the public. A next-best national data set is the March Current Population Survey, which is used here.

The CPS has strong advantages for this type of study. It is available back to 1968 on an annual basis and through 1999, and it contains reasonably large sample sizes of single mothers. It is nationally representative and most questions have been consistently asked across the years. It contains information on nonwelfare recipients as well as welfare recipients, which is needed in order to disentangle trends in characteristics that have occurred for all single mothers from those that have been experienced by single mothers on welfare per se.⁷

However, the CPS has major disadvantages as well. The survey takes place in March of each year and obtains information on earnings, weeks of work, and welfare receipt during the prior calendar year, but respondents are not asked week-by-week questions, which would allow a determination of whether welfare receipt and work occurred at the same time. Most individual and family characteristics are measured as of the March interview, which does not coincide with the time at which welfare participation is measured. The characteristics of the single mother obtained are very sparse, and consist only of the usual crude socioeconomic markers—age, education, and so on. There is essentially no information on the indicators of serious disadvantage that are present in the worst-off portions of the welfare caseload—poor health of mother or children, substance abuse, a history of welfare dependency, very little work history, and so on. Also, the data are not longitudinal in nature, and hence a woman’s movements on and off welfare over time cannot be tracked. Nevertheless, the CPS is used here because it is the only nationally representative data set that has a long enough history to estimate business cycle effects.⁸

The main characteristics of the single mother that we use to indicate labor market skill are her level of education and the level of hourly wage rates of jobs she has held over the past calendar year.⁹ Hourly wage rates are the best single indicator of where in the hierarchy of skill in the labor market an individual is located. We also look at other characteristics in the CPS pertaining to family structure and marital status (family size, whether the single mother has ever been married), some other personal characteristics (age, race), and some labor market attachment variables (earnings, weeks of work, employment status). Note that these last three variables do not measure skill per se but rather outcomes that themselves are changed by the business cycle and, possibly, by welfare reform; they are not markers of whether the caseload is becoming more or less disadvantaged in terms of labor market skills.

Charts 1 and 2 plot an education measure and the real hourly wage rate for AFDC recipients, respectively, together with the unemployment rate. The education measure is the percentage of recipients who have at least twelve years of education.¹⁰ It shows a strong upward trend over the past thirty years, indicating growth in the educational levels of welfare recipients. There is a slight countercyclical pattern in Chart 1, showing a positive correlation between the unemployment rate and the educational level of welfare recipients. The hourly wage rate measure in Chart 2 shows a steady decline from the 1970s to the 1980s, but with a slight recovery starting in the late 1980s and early 1990s. The relationship to the unemployment rate again appears to be roughly countercyclical, with the exception of the early 1980s. There appears to be a slight upward movement in wages after 1996.

These charts are misleading, however, for they do not show trends in the single-mother population as a whole. Educational levels, for example, have been increasing for the entire

CHART 1
Percentage of Welfare Recipients with Twelve or More Years of Education, 1968-99

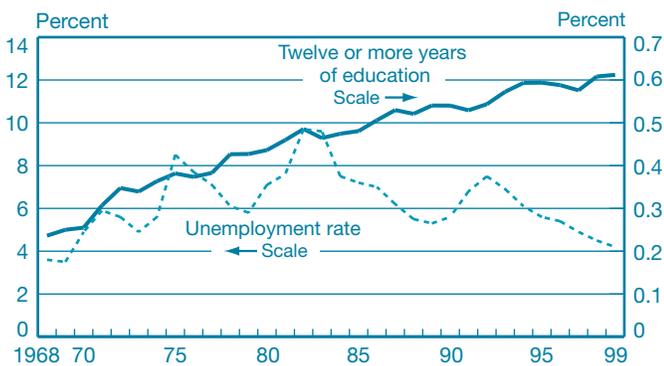
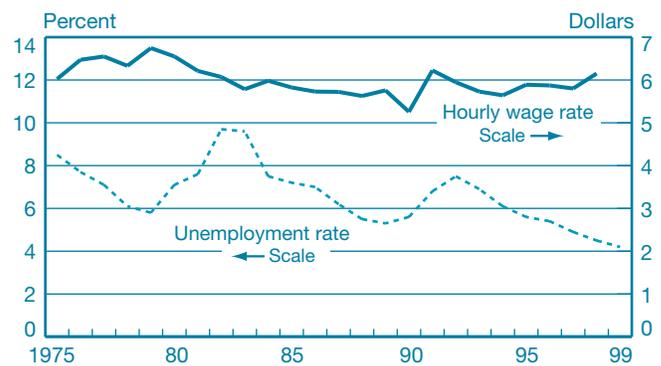


CHART 2
Hourly Wage Rate of Welfare Recipients, 1975-98



population, both men and women, over the past three decades. Likewise, the hourly wage rates of women in general, and single mothers in particular, have been undergoing long-term trends that have affected all women, not just mothers on welfare. It would be incorrect to attribute long-term trends or any post-1996 trend to welfare or any other factor if those trends were occurring for all single mothers.

Charts 3 and 4 show the trends in the education measure and hourly wage measure, respectively, for welfare recipients relative to those same measures for nonwelfare recipients.¹¹ Interestingly, the upward trend in the education of welfare recipients appears even here, reflecting a gain relative to nonwelfare recipients. As for the period following 1996, it appears that educational levels of the welfare recipient population are again rising, but it is not clear that they are rising any faster than would be expected from the long-term trend. The hourly wage rate shows a long-term, secular decline relative to nonwelfare recipients and without the gradual recovery that was visible in Chart 2. This decline in relative wages is probably the result of a deterioration in the demand for low-skilled labor that has affected other low-skilled workers in the U.S. economy over this same period. The wage rate appears to be countercyclical, as should be expected: as the unemployment rate rises, higher wage workers come onto the welfare rolls. The period in the early 1980s does not demonstrate this relationship, however, possibly because the 1981 OBRA reduced the number of higher wage welfare recipients at the same time that the unemployment rate was rising. After 1996, there appears to be a decline in the wage rates of welfare recipients, but again it is not clear whether it is any different from what would be expected from a trend.

Table 1 reports the results of regressions in which these two welfare-nonwelfare ratios, as well as similar ratios for other variables, are regressed on a time trend, the unemployment rate, a dummy for OBRA 1981, and a dummy for 1996 and after. The trend coefficients in the first two rows confirm the graphical evidence that there have been significant long-term trends in both the education and hourly wage rates of welfare recipients relative to nonwelfare recipients. The unemployment coefficients are both positive, although statistically significant in only one case, indicating that higher unemployment rates draw onto the rolls more skilled women in terms of education and wage rates. This implies that both educational levels and wage rates in the post-1996 period should have been falling because of the business cycle alone. The coefficients on the 1981+ dummy for OBRA are both negative, indicating that more skilled recipients left the rolls because of that legislation. Finally, the coefficients in the last column show whether there has been a deviation from trend and cycle after 1996; the answer is that there has been no significant change. Although educational levels have been rising and hourly wage rates of recipients falling after 1996, these are not significantly different from what would be expected on the basis of trend and cycle. Therefore, the CPS provides no evidence that PRWORA has been strongly selective in ending welfare participation for either more or less disadvantaged women; the best conclusion is that both types of women have left the rolls in equal proportions.

Table 1 also shows the results of similar regressions for other characteristics in the Current Population Survey. The caseload has been becoming younger, more white, and more composed of never-married mothers over the period, and these

CHART 3
Ratio of the Percentage of Welfare Recipients with Twelve or More Years of Education to the Percentage of Nonwelfare Recipients, 1968-99

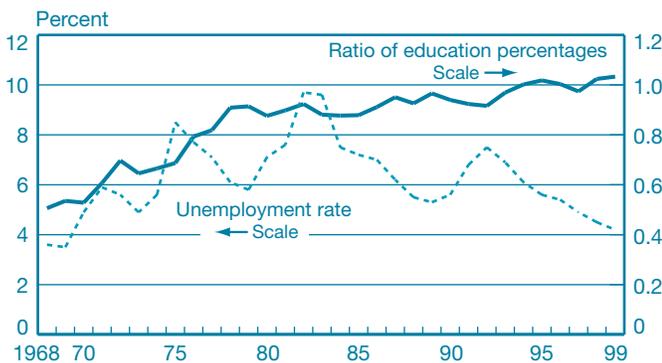
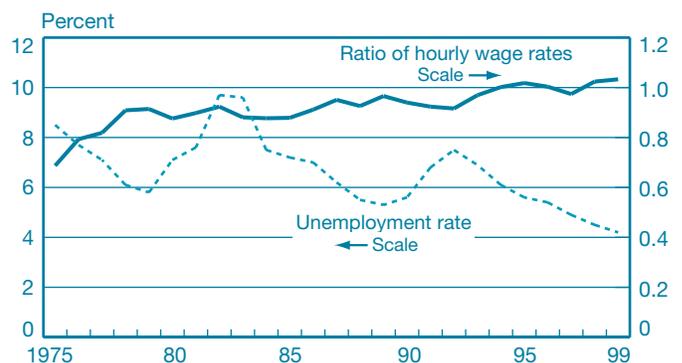


CHART 4
Ratio of Hourly Wage Rate of Welfare Recipients to Hourly Wage Rate of Nonwelfare Recipients, 1975-98



characteristics have been changing over the business cycle in expected ways: as the unemployment rate rises, women with smaller family sizes—who are younger and more likely to be white—come onto the rolls. However, there have been no post-1996 changes in these recipient-nonrecipient ratios after netting out the effects of trend and cycle except for the proportion that has never been married, which has declined. Never-married recipients tend to be more disadvantaged than other recipients.

The last four rows of the table show coefficients for regressions with labor market attachment as dependent variables—employment, weeks of work, hours of work, and

TABLE 1
Regression Results for March Current Population Survey Welfare Recipient Characteristics

Dependent Variable	Trend	Unemployment Rate	OBRA81 Dummy	PRWORA Dummy
Twelve years of education or more	.019* (.003)	.023* (.008)	-.065 (.044)	-.053 (.044)
Hourly wage rate	-.006* (.002)	.008 (.007)	-.075* (.026)	.032 (.023)
Number in family	.001 (.001)	-.022* (.004)	.021 (.023)	.010 (.024)
Less than twenty-five years old	.009* (.001)	.021* (.004)	-.002 (.023)	-.022 (.023)
White	.006* (.001)	.005* (.003)	.006 (.014)	-.003 (.014)
Never married	.022* (.001)	-.006 (.004)	.065* (.022)	-.066* (.022)
Employed over the year	.006* (.003)	-.009 (.010)	-.150* (.038)	.128* (.034)
Annual weeks worked	.003 (.003)	-.008 (.009)	-.164* (.035)	.122* (.031)
Hours worked per week	.003 (.004)	-.011 (.011)	-.177* (.043)	.150* (.038)
Annual earnings	-.002 (.002)	-.006 (.008)	-.159* (.030)	.085* (.027)

Notes: Standard errors are in parentheses. The dependent variable is calculated as the ratio of the mean for welfare recipients to the mean for single mothers not on welfare in the year in question. Intercept not shown.

*Statistically significant at the 10 percent level.

annual earnings. All four have risen significantly after 1996, even after accounting for trend and cycle. This suggests that welfare reform has, indeed, resulted in more work and earnings among welfare recipients than was the case prior to 1996.¹²

Evidence from Maryland

Another source of data for examining trends in welfare recipient characteristics, albeit not national in scope, are administrative records from individual states and local areas. Many states have assembled records from welfare agency files of the characteristics of recipients over a fairly long period of time, and these typically have been matched to other administrative records, most commonly the earnings data from unemployment insurance (UI) files. Such data have the advantage of large sample sizes, relatively good administrative information on welfare receipt and simultaneous earnings, and a moderately long time period (1985 to 2000 in the case of Maryland).¹³ A disadvantage is that the data contain even less information on personal and family characteristics than the CPS does, and therefore cannot provide a comprehensive picture of well-being or an index of advantage and disadvantage. The major variable indexing skill comes from the match to UI files, where quarterly earnings are available.¹⁴

However, a better measure of disadvantage that can be constructed from this type of data comes from the availability of histories of welfare participation, for in this case we can classify recipients by their past level of welfare dependency. Long-term recipients are the most obvious subgroup on the rolls who are known from other research to be more disadvantaged in terms of labor market experience, education, health, and other problems; indeed, long-term reciprocity is, in a sense, an overall measure that is a proxy for a large number of problems of disadvantage. We use a slightly more detailed classification based on the one initially proposed by Bane and Ellwood (1994), which divides the caseload into long-termers, short-termers, and cyclers. Long-termers are those with relatively long spells of welfare receipt and generally a relatively small number of individual spells; short-termers are those with short spells when on welfare and also a small number of spells; and cyclers are those with relatively short spell durations but a larger number of spells. Long-termers include the most disadvantaged women on welfare, while short-termers are presumed to be the least disadvantaged and cyclers are in between long-termers and short-termers in this dimension.¹⁵ We use this classification as our primary measure of disadvantage and examine whether the relative numbers of these types of recipients have trended

over time, have varied with the business cycle, and have changed after PRWORA.

The Maryland welfare and earnings data are available for all TANF recipients beginning in April 1985 and running through March 2000. These files are maintained by The Jacob France Center at the University of Baltimore through data-sharing agreements with Maryland's Department of Human Resources (DHR) and Department of Labor, Licensing, and Regulation (DLLR). Data are available for all Maryland welfare recipients, but the diversity of Maryland's economy led us to limit the analysis reported here to Baltimore City welfare recipients alone.

We use the longitudinal dimension of the data to classify women by their welfare dependency status; we use a five-year window to do so, using welfare participation within that window to classify women into the three dependency groups. To examine trends over time, we select different birth cohorts of women, each cohort consisting of all women in that cohort who were on welfare at least once during the five-year period. In the results reported here, we select women who were nineteen in the initial year. Thus, for example, our earliest cohort consists of women whose nineteenth birthday fell between April 1, 1985, and March 31, 1986, whom we follow from 1985:2 to 1990:1. Our second cohort consists of women whose nineteenth birthday fell between April 1, 1986, and March 31, 1987, whom we follow from 1986:2 to 1991:1, and so on. The final cohort was age nineteen between the same dates in 1995 and 1996, and is followed from 1995:2 to 2000:1.

For each cohort, we extract all monthly welfare events represented in the DHR records and quarterly DLLR wage records over the relevant five years and select all women with at least one welfare record. We have eleven cohorts; comparing these cohorts over time tells us whether the caseload is changing in terms of composition, controlling, clearly, for age—each cohort is at the same point in its life cycle.¹⁶ We define a woman as a cyler if she had three or more spells during the five years, a long-terminer if she had only one or two spells and an average spell duration of twenty-one months or more, and a short-terminer if she had only one or two spells and an average spell duration of twenty months or less.¹⁷

Some components of welfare reform in Maryland began with a federal waiver in October 1995, so we have many months of observations after the official beginning of the reforms. However, state and local observers encourage the use of October 1996 as an appropriate date to expect welfare leaving and employment profiles to show a reform effect, for that is the approximate date of post-PRWORA TANF implementation. The Maryland TANF program has two-year work requirements stipulating a minimum of twenty hours per week (in accordance with federal law), full family sanctions, a

35 percent earnings disregard, and a five-year time limit. The cyclical pattern of the unemployment rate in Maryland over the 1985-2000 period is roughly similar to that in the United States as a whole, although lower in level. It fell from 4.6 percent in 1985 to a trough of 3.7 percent in 1989, then rose to a peak of 6.7 percent in 1992, and has since fallen steadily to 3.5 percent in 1999.

Table 2 shows the trend in cohort size as well as the relative fractions of women in short-term, cyler, and long-term welfare dependency categories over time. The cohort size column indicates that the number of young women ever receiving welfare in Baltimore City in the five-year period rose for the first few cohorts, most of whose observation periods fell in the period of rising unemployment from 1989 to 1992. It peaked for the 1989-94 cohort and then fell markedly, reaching its level for the first cohort by the 1991-96 period. Subsequently, it has declined only slightly thereafter through the last cohort (in fact, it rose for the last two cohorts). The lack of decline in cohort size in the last, post-PRWORA periods reflects the fact that entry rates in Baltimore did not decline very strongly, at least through 1997 or 1998 (Mueser et al. 2000, Figure 2). The caseload did decline, however, because exit rates rose.

TABLE 2
Percentage Distribution of Maryland AFDC-TANF Caseload by Welfare Dependency Status and Cohort, Ages Nineteen to Twenty-Three

Cohort ^a	Cohort Size	Welfare Dependency Status (Percentage Distribution) ^b		
		Long-Termer	Short-Termer	Cyler
1985:2-1990:1	1,865	35	65	0
1986:2-1991:1	2,234	33	64	3
1987:2-1992:1	2,354	40	56	4
1988:2-1993:1	2,307	41	52	7
1989:2-1994:1	2,388	47	44	9
1990:2-1995:1	2,090	45	47	8
1991:2-1996:1	1,874	46	44	10
1992:2-1997:1	1,604	45	47	8
1993:2-1998:1	1,518	43	48	9
1994:2-1999:1	1,751	19	62	19
1995:2-2000:1	1,754	15	67	18

^aFive-year observation period for women who were age nineteen in the year beginning with the first quarter indicated.

^bLong-terminers have one or two spells in the five-year observation period and an average spell of twenty-one months or more; short-terminers have one or two spells in the five-year observation period and an average spell of twenty months or less; cyclers have three or more spells in the five-year observation period.

The other columns in Table 2 separate the cohorts into short-terminer, cycler, and long-terminer components. Most of the young Baltimore City welfare recipients—between 44 and 67 percent across all cohorts—are designated as short-terminers. There are very few cyclers in general, although the number has been gradually rising over time. Long-terminers are in between in terms of size. The trends in composition up through the 1993-98 cohort are partly explainable in terms of the business cycle. In the late 1980s and early 1990s, as the local unemployment rate and welfare caseload rose, the percentage of long-term recipients drifted upward to a high of 47 percent for the 1990-95 cohort and fell modestly over the next four cohorts as the unemployment rate declined, though not falling perhaps as much as would be expected. Mirroring this trend, the percentage of the cohort composed of short-terminers fell initially and then rose slightly through the 1993-98 cohort. Interestingly, the percentage composed of cyclers rose during the rise in the unemployment rate as well, but then roughly stabilized.

The last two cohorts show a marked change in composition, with a sharp drop in the percentage of long-terminers and a sharp rise in the percentage of short-terminers and cyclers. The unemployment rate was continuing to decline over this period, but at a steady rate that could not explain the suddenness of the caseload composition change, which is therefore almost surely the result of welfare reform. The abruptness of the change also suggests that welfare reform in Baltimore affected primarily those young recipients who had recently entered the rolls, for the last two cohorts are observed for almost their entire five-year period after welfare reform. The earlier cohorts began their observation period prior to reform.

These findings go against the conventional wisdom for how welfare reform should affect the composition of the caseload, for the usual presumption is that the percentage of the caseload composed of long-terminers should markedly rise after reform, as short-terminers and cyclers leave the rolls for the labor market. The opposite has occurred in Maryland, where long-terminers have declined as a fraction of the ever-on five-year caseload. It is quite likely that women who would have been long-terminers in the absence of reform are now short-terminers and cyclers, and that welfare reform has caused a reduction in the number of long spells while on welfare. Note that this does not imply that those who would have been long-terminers have left the rolls; indeed, the cohort size rose slightly over the last two cohorts.¹⁸ However, it does imply that it is among the long-terminers where welfare policy has had its greatest impact in Baltimore.

Tables 3-5 offer additional details on how the characteristics of the young Baltimore caseload has changed over time. Table 3 shows trends in the total percentage of time on welfare over the

five-year period—sometimes called the “total time on”—which is one of the best overall measures of welfare dependency. The first column shows a marked rise in welfare dependency, from 31 percent of the five years on welfare to a high of 51 percent for the 1991-96 cohort. The percentage of time on subsequently declined at about the same time as the unemployment rate, and then dropped more precipitously as the 1990s ended, returning to the beginning level of approximately one-third of the five years spent in welfare dependency. Again, this abrupt decline is almost surely the result of welfare reform. The other columns show that this welfare reform change was the result of two, complementary changes: a drop in the total time on among those who remained as long-terminers and a slight drop among those who were short-terminers and cyclers. Even if these welfare dependency levels within groups had not changed, the shift from long-terminers to short-terminers and cyclers apparent in Table 2 would have generated a reduction in overall total time on. The reductions in total time on within each group, particularly among long-terminers, reinforce this.¹⁹

Table 4 shows trends in the mean quarterly earnings of the women during the quarters in which they were not receiving welfare benefits. Real earnings rose steadily through the mid-

TABLE 3
Percentage of Five-Year Period on AFDC-TANF,
by Cohort and Welfare Dependency

Cohort ^a	Welfare Dependency Status ^b			
	All	Long-Termer	Short-Termer	Cycler
1985:2-1990:1	31	57	18	22
1986:2-1991:1	34	56	23	39
1987:2-1992:1	39	59	25	44
1988:2-1993:1	43	64	25	51
1989:2-1994:1	49	71	24	59
1990:2-1995:1	49	73	24	59
1991:2-1996:1	51	74	25	58
1992:2-1997:1	49	73	25	59
1993:2-1998:1	48	72	25	60
1994:2-1999:1	37	67	20	61
1995:2-2000:1	32	54	20	57

Note: Percentage of time on welfare is defined as the fraction of the sixty months in the five-year observation period in which the woman received an AFDC or TANF payment.

^aFive-year observation period for women who were age nineteen in the year beginning with the first quarter indicated.

^bLong-terminers have one or two spells in the five-year observation period and an average spell of twenty-one months or more; short-terminers have one or two spells in the five-year observation period and an average spell of twenty months or less; cyclers have three or more spells in the five-year observation period.

TABLE 4
Mean Quarterly Earnings While off Welfare, by Cohort and Welfare Dependency, in Real 1999 Dollars

Cohort ^a	Welfare Dependency Status ^b			
	All	Long-Termer	Short-Termer	Cycler
1985:2-1990:1	1,313	1,201	1,361	1,762
1986:2-1991:1	1,498	1,232	1,618	1,468
1987:2-1992:1	1,572	1,232	1,794	1,286
1988:2-1993:1	1,502	1,131	1,763	1,344
1989:2-1994:1	1,626	1,302	1,879	1,588
1990:2-1995:1	1,773	1,546	1,896	1,862
1991:2-1996:1	1,855	1,737	1,957	1,655
1992:2-1997:1	1,752	1,661	1,785	1,888
1993:2-1998:1	1,965	1,961	1,983	1,873
1994:2-1999:1	1,845	2,398	1,724	1,794
1995:2-2000:1	1,889	1,716	1,981	1,625

^aFive-year observation period for women who were age nineteen in the year beginning with the first quarter indicated.

^bLong-termers have one or two spells in the five-year observation period and an average spell of twenty-one months or more; short-termers have one or two spells in the five-year observation period and an average spell of twenty months or less; cyclers have three or more spells in the five-year observation period.

TABLE 5
Earnings Relative to Human Capital Potential, by Cohort

Cohort	Five-Year Earnings as a Percentage of Human Capital Potential	Human Capital Potential as a Percentage of Full-Time, Full-Year Minimum Wage
1985:2-1990:1	44	51
1986:2-1991:1	46	58
1987:2-1992:1	48	61
1988:2-1993:1	48	58
1989:2-1994:1	45	63
1990:2-1995:1	43	69
1991:2-1996:1	42	72
1992:2-1997:1	42	68
1993:2-1998:1	44	76
1994:2-1999:1	46	72
1995:2-2000:1	52	73

Notes: Human capital potential is defined for each individual as her mean quarterly earnings, taken over those quarters in which she had earnings, multiplied by twenty quarters. The full-time, full-year minimum wage is the earnings amount for 2,000 hours per year for five years at the minimum wage, \$5.15 per hour.

1990s, both overall and for the individual dependency groups. If earnings are taken as a measure of wage rates, which they proxy only slightly, this is consistent with the more skilled women being on the rolls than was the case for cohorts in which the unemployment rate was lower. However, earnings have more or less leveled off over the past few cohorts, even though the unemployment rate has declined (there is considerable fluctuation, but no consistent upward or downward trend). These results are fairly surprising, for the marked decline in the unemployment rate should have led to a decline in wage rates as the caseload became less skilled (again, quarterly earnings is at best a proxy for wage rates); however, real earnings did, at least, level off, and no longer continue to rise.²⁰

These figures do not capture labor market skill levels in the same way the hourly wage does because they do not control for the employment rate and for hours of work. The former can at least partly be adjusted for by calculating what earnings over the entire five-year period would be if each individual had worked in all twenty quarters and had earned in each quarter the off-welfare amounts shown in Table 4; we term this their “human capital potential.”²¹ The first column of Table 5 shows how the five-year earnings of each cohort have changed relative to this human capital potential, showing that they have risen gradually and then increased sharply recently. This calculation implies a more definitive increase in employment and work effort than was implied in Table 4. The second column shows the ratio of this human capital potential to a measure of full-year, full-time work at the minimum wage over the full five years. This measure has also increased over the eleven cohorts, but with some unevenness. There has been some increase in the average earnings capacity of the caseload, but the effects in the last three cohorts, which are the main post-reform periods, are not as strong relative to previous periods as might be expected.

III. OTHER EVIDENCE

There is a scattering of additional evidence from other sources relevant to the issues discussed thus far, even though none is definitive and none controls for the business cycle. One source is administrative data from AFDC and TANF records on the characteristics of recipients over time. Such data have been collected sporadically since 1969, but not always on a comparable basis. For present purposes, the main variable of interest is educational attainment, which has been collected on and off over the years. The figures in Table 6 show how it has changed over time. There was a dramatic improvement in the educational level of AFDC adults from 1969 to 1994 in terms of

the percentage of recipients who have at least twelve years of education, and some improvement from 1986 to 1995 in the fraction with some college education. Unfortunately, for 1996 and after, only the percentage with twelve or more years of education has been published. There appears to be some negative selection on education in 1995 and after, for while the fraction with twelve or more years grew from 1986 to 1994, it then dropped in 1995 and afterward. This is consistent with the CPS, which also showed negative selection in this period, but there it was ascribed to the business cycle.²²

A second source of additional evidence comes from some of the studies of welfare leavers conducted in the past several years that have compared leavers with stayers (most leaver studies do not conduct such comparisons). All of these studies focus on post-1996 data, so no control for the business cycle can be made. For example, Loprest and Zedlewski (1999) find that stayers have lower levels of education and more obstacles and barriers to work and, among those with obstacles, stayers are less likely to work. However, stayers and leavers did not differ on some other dimensions (such as health). Cancian et al. (2000) estimate probit equations for the probability of leaving TANF in Wisconsin and find that probability to be positively related to education, age, age of the youngest child, the number of other adults in the household, and work experience, and to be negatively correlated with the number of children and years on welfare. These all accord with selection on job readiness. A further investigation of the likelihood of

leaving welfare in Wisconsin, using dependency categories similar to those used here for the Maryland data, finds that short-termers and cyclers are more likely to leave welfare than long-termers (Ver Ploeg 2001). A study comparing leavers with stayers in Illinois likewise finds stayers to be worse off in terms of education, experience, and marital history (Institute for Public Affairs and School of Social Work 2000). A similar study in the state of Washington finds leavers to be better educated, younger, in better health, and to have fewer children than stayers (Fogarty and Kralej 2000).²³ In an examination of welfare leavers in Michigan, Danziger (2000) finds them to have higher levels of education, better adult and child health, more work experience and job skills, and fewer transportation problems than stayers. While this evidence is a bit mixed, the general tendency is nevertheless consistent with negative selection on skill and with the implication that better-off recipients have more likely left the rolls. Again, this is consistent with the CPS, although with that data set it was attributable to the favorable state of the economy.

A leaver examination issued by the Three-City Study is also indirectly relevant. Moffitt and Roff (2000) found that leavers in three cities (Boston, Chicago, and San Antonio) contained a wide diversity of different types of women—ranging from more educated women who were in better health and had relatively high employment and earnings to less educated women who were often in poor health and had much lower employment and earnings. The implication of these findings is

TABLE 6
Educational Percentage Distribution of AFDC and TANF Adults, 1969-99

Years of Education				Fiscal Year						Fiscal Year		
	May 1969	May 1975	March 1979	1986	1988	1990	1992	1994	1995	1997	1998	1999
8 or less	37.5	21.8	18.3	11.9	13.2	12.2	9.2	7.4	10.0	—	—	—
9-11	39.2	41.3	40.0	35.5	35.3	34.6	35.2	32.5	28.9	—	—	—
12	20.4	30.9	36.2	42.9	42.0	40.5	41.9	44.6	45.4	—	—	—
13-15	2.6	5.1	5.2	8.4	9.4	11.9	12.7	14.3	14.6	—	—	—
16+	0.3	0.9	0.8	1.2	1.4	0.8	0.9	0.9	1.1	—	—	—
1-6	—	—	—	—	—	—	—	—	—	5.2	5.0	5.2
7-9	—	—	—	—	—	—	—	—	—	14.1	13.2	12.3
10-11	—	—	—	—	—	—	—	—	—	28.0	29.9	31.5
12+	23.3	31.9	42.2	52.5	52.8	53.2	55.5	59.8	51.1	52.6	51.9	51.1

Sources: For 1969-95, U.S. Congress (1998, Table 19); for 1997-99, U.S. Department of Health and Human Services (1997, Table 16; 1998, Table 17; 1999, Table 17).

Notes: Figures shown represent the originals inflated by the fraction nonmissing. Figures for 12+ for 1969-95 are derived by summing the figures for 12, 13-15, and 16+.

that leavers are composed not only of the better-off recipients in the caseload, but many of the more disadvantaged recipients as well. This is the flip side of the coin indicating that stayers are likewise composed of more advantaged as well as disadvantaged recipients. Both stayers and leavers are composed of a diverse, heterogeneous set of women who have a wide range of labor market skills and other characteristics. This again belies the conventional view of leavers as composed solely of better-off (former) recipients and stayers as composed solely of worse-off recipients.²⁴

Another set of relevant studies are the few leaver studies that have compared multiple cohorts of post-1996 leavers. The conventional wisdom suggests that successive waves of leavers should be progressively worse off, presuming that the better-off and more job-ready recipients left first. The available studies provide much less support for this supposition than would be expected. While a study in Illinois found early leavers to be slightly better off than later leavers in terms of work experience, education, and marriage history (Institute for Public Affairs and School of Social Work, University of Illinois 2000), a succession of leaver cohorts examined in South Carolina found no difference in employment rates, hardship, or other measures (South Carolina Department of Social Services 2000). A study of Wisconsin leaver cohorts in 1995 and 1997 found lower earnings in the later cohort but no significant differences in employment or income (Cancian et al. 2000), and a review of three states with multiple cohort leavers—Arizona, Washington, and Wisconsin—found very mixed evidence of any trend in employment (Isaacs and Lyon 2000). The finding of little evidence of selectivity is not consistent with many of the previous findings, but since most of these multiple cohort studies have examined only post-1996 leavers—when the unemployment rate decline has slowed and welfare reform effects have been more important—they may be more consistent with the CPS findings reported above, which indicate no statistically significant selectivity after 1996.

IV. CONCLUSIONS

The discussion in this paper concerns the effect of welfare reform on the composition of the caseload, and on whether reform has led to more or less disadvantaged recipients leaving the rolls. A consideration of the theoretical effects of welfare reform on the composition of the caseload suggests that while most policies should lead to a departure from the rolls of those who are more job-ready, who have more labor market skills, and who are in general less disadvantaged, several welfare reforms—most notably, sanctions and more generous earnings disregards—work in the opposite direction.

Our analysis of national Current Population Survey data indicates that the skill level of the welfare caseload has tended to decline, but this has been primarily the result of the improvement in the economy; welfare reform per se, after one nets out the effects of the economy, has had little effect on the composition of the caseload in its labor market skill distribution. An analysis of data from Maryland indicates that welfare reform has had its major impact on long-term recipients, who are the most disadvantaged. A survey of other studies comparing leavers with stayers, multiple cohorts of leavers, and diversity among leavers and stayers, offers several findings. One finding is that while stayers may have been worse off in general than leavers—although our analysis implies that this is the result of the business cycle and not welfare reform—more recent cohorts of leavers are not much different than earlier cohorts of leavers. In addition, studies examining the diversity of leavers have found many worse-off former recipients who have left welfare, suggesting that leavers have not been composed solely of better-off former recipients.

The policy implication of these findings is that policy should recognize that there are at least two types of low-income single mothers: those who have more job skills and are better off and those who have much lower skill levels and a much greater set of problems. More important, both types of women are found both on and off the welfare rolls. Therefore, any additional assistance to either or both groups—say, greater labor market supports to the more job-ready women and more basic assistance to the more disadvantaged women—should be directed not just at women still on TANF, but also at women off TANF. Policies must be designed to assist women in need of assistance who are in these multiple situations.

ENDNOTES

1. For an exception, see Mueser et al. (2000), who find that welfare reform had no effect on employment rates of leavers in five urban areas through 1997, after controlling for the economy.
2. Because these studies examine a more comprehensive group, they can capture the effects of welfare reform on discouraged entry onto welfare as well as increased exit.
3. It is somewhat less obvious what the influence of other sources of nonwelfare income should be. For example, whether women who have more income available off welfare from unearned sources—say, help from other family members—have more labor market skills or less skills is not as clear-cut. In addition, it is also less clear how labor market skill is correlated with the likelihood of moving on and off welfare as the result of changes in marital status.
4. Similar effects should occur in terms of welfare entry. Women with more job market skills are the least likely to come on the rolls for the most part, but they are also more likely to be able to fulfill the work and job-search requirements—often imposed by formal diversion programs—than are women in more disadvantaged situations. See Moffitt (1996) for a general discussion of entry effects in welfare programs.
5. As of October 1997, one state (Illinois) disregarded 67 percent of earnings and a number of states (such as California) disregarded 50 percent of earnings, usually beyond a threshold. Other states had smaller disregards and a few remained with the AFDC disregard of zero. See Gallagher et al. (1998).
6. The 1967 and 1981 federal changes in earnings disregards in the AFDC program had these effects. The 1967 change increased earnings disregards, which led to an increase in the employment rate and earnings of welfare recipients and hence an increase in the skill level of those on welfare. The 1981 Omnibus Budget Reconciliation Act's (OBRA) elimination of earnings disregards removed many workers from the welfare rolls and led to a reduction in the employment rate of welfare recipients. In addition, since 1996, states that have had more generous earnings disregards have had higher employment rates of recipients on TANF (U.S. Congress 2000, Chart 7-5).
7. Another advantage of the CPS is that trends in recipient characteristics will capture the effects of economic and policy changes working through entry rates as well as exit rates.
8. Another disadvantage of the CPS is that it appears to be increasingly undercounting the number of AFDC and TANF recipients compared with counts in administrative data. This is a serious but currently unresolved problem. It will not affect the results given here if the undercount is not related to the measures of disadvantage we use (education and hourly wage rate).
9. Unfortunately, hours of work per week in the past calendar year have been collected only since 1976. Therefore, hourly wage rates are measurable only from 1976 to 1998, unlike the other variables, which go back to 1968.
10. The sample is composed of all single mothers age sixteen to sixty-four who reported public assistance income in the prior calendar year. Education is measured at the time of the March interview and the hourly wage is the average wage rate over the prior calendar year, in real 1997 dollars.
11. For the wage rate measure, only those with hourly wage rates of less than \$30 per hour are included, for those constitute a better comparison group than all single mothers.
12. As emphasized previously, the inability to know from these data whether the work periods were in the same weeks as the welfare participation periods over the year leaves somewhat ambiguous the issue of whether this increased work occurred while on or off the rolls. This illustrates one of the weaknesses of the CPS for this type of question. However, evidence from many other sources (such as U.S. Department of Health and Human Services [2000]) clearly indicates that there has been a large increase in employment and earnings among TANF adults subsequent to PRWORA.
13. A minor timing problem arises because UI earnings are available quarterly but welfare data are available monthly, so it is not possible to know precisely in some cases whether work and welfare periods overlap within a quarter. However, this is a minor problem relative to the major timing issues in the CPS.
14. Another disadvantage is that there is no information on hours of work over the quarter, so hourly wage rates—the preferable measure—cannot be calculated.
15. See Moffitt (2001) for an analysis of the background characteristics of these three types of recipients. Somewhat surprisingly, the analysis indicates that cyclers are, in some dimensions, worse off than long-termers. How these groups are defined affects the answer to this question.

ENDNOTES (CONTINUED)

16. Other age groups could, of course, be examined. We reserve that for future work.

17. A “spell” in our definition is a consecutive run of months of welfare receipt that is not interrupted by two or more months of consecutive nonreceipt (one-month gaps are allowed). Left-censored and right-censored spells are included as spells. The twenty-month criterion for separating long-termers from short-termers is used because twenty months is the mean “spell” length among those two groups combined.

18. Another way to say this is to suppose that the impact of welfare reform in Baltimore had taken place by shortening the spells of short-termers and cyclers only, who, although having come onto welfare in the first place, left earlier than they would have otherwise; this is the usual hypothesis. In that case, the relative proportions of the three groups in Table 2 would not have changed at all.

19. It is interesting to note that the total time-on figures for cyclers have risen over time to equal those of long-termers. However, this is a long-standing trend and not a result of welfare reform.

20. Real earnings levels tend to be highest for short-term recipients over most of the period, with cyclers between short-term and long-term recipients, who have the lowest levels. Note that this is not a statistical artifact of their assignment to long-term status because only

nonoverlapping quarters with some earnings are used to calculate the subpopulation average amount. However, these differences have gradually declined and have led, in particular, to a closer match between long-term recipients and cyclers.

21. On average, the young Baltimore caseload worked seven to nine quarters over the five-year period. There was a slight increase from eight to nine quarters for the last three cohorts.

22. These data are of sometimes dubious quality, for often upwards of 40 percent of the sample is missing education information in some of the years.

23. A study of Medicaid leavers and stayers finds as well that leavers are in better health than stayers (Garrett and Holahan 2000).

24. The Danziger study (2000, Table 3) also broke out leavers and stayers each into those who are working and not working. Interestingly, Danziger found that working stayers and working leavers were much more similar in characteristics (such as education and work experience) than stayers and leavers as a whole, and that nonworking stayers and nonworking leavers were also more similar than stayers and leavers as a whole. This has the same implication: there is a mix of better-off and worse-off types of women in both stayer and leaver groups.

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