# The Road Not Taken? Changes in Welfare Entry during the 1990s

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Key components of the project include a household survey and studies of policies in 13 states, available at the Urban Institute's web site, http://www.urban.org. This paper is one in a series of discussion papers analyzing information from these and other sources.

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#### Abstract

This paper examines how welfare entry rates changed during the 1990s, a decade marked by substantial state and federal welfare reforms. It also assesses whether changes in entry rates are accompanied by improvements in the circumstances of families that choose not to receive welfare. Using data from the 1990 and 1996 panels of the Survey of Income and Program Participation, we find that welfare entry rates declined during the 1990s with the largest declines coming toward the end of the decade. Neither changes in the characteristics of low-income single mothers nor improvements in the economy directly account for this shift. This leaves policy shifts and changes in attitudes toward work and welfare as the most likely explanations for the drop in welfare entry rates. The analysis also shows that declining entry rates are not accompanied by substantial improvements in the circumstances of low-income single mothers who are not on welfare.

#### Introduction

Welfare caseloads declined dramatically during the 1990s, and research credits changes to welfare polices and the decade's booming economy for this trend. Concern that needy families were being "pushed off" the welfare roles by aggressive sanctions, work requirements, and time limits, spawned a plethora of studies on welfare leavers. By and large, these "leaver" studies show that welfare leavers are somewhat better off after exiting welfare and that about two-thirds of those leaving welfare are working (Acs and Loprest 2001). But it is important to recognize that welfare policies do not just affect those on welfare; changes in welfare policy also affect the decisions low-income families with children make about entering welfare. Only recently have changes in welfare entry drawn the attention of policymakers and policy researchers.

If low-income families are climbing up the socioeconomic ladder, declines in welfare entry rates can be viewed positively. However, if low-income families remain in "a holding pattern," neither entering welfare nor improving their economic circumstances through higher earnings or marriage, falling entry rates may raise concerns. For example, families deterred from entering welfare may also fail to enroll in other public assistance programs like food stamps and Medicaid that could improve their well-being.

This paper examines how welfare entry rates changed during the 1990s, a decade marked by substantial state and federal welfare reforms. It also assesses whether changes in entry rates are accompanied by improvements in the circumstances of families that choose not to receive welfare.

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<sup>&</sup>lt;sup>1</sup> See, for example, Bell (2001); Blank (1997); Council of Economic Advisers (1997); Moffitt (1999); and Wallace and Blank (1999).

This analysis uses data from the 1990 and 1996 panels of the Survey of Income and Program Participation (SIPP) to identify three cohorts of low-income single mothers who are potentially eligible for welfare but are not receiving benefits. The first cohort is a pre-reform cohort starting in late 1989. The second cohort covers the early reform period starting in late 1995. And the third cohort covers the post-federal reform period starting in late 1997. The women in each cohort are tracked for 28 months to see if they enter welfare, remain in precarious economic circumstances, or change their circumstances through higher incomes, marriage, or other living arrangement modifications—that is, changes that effectively end their potential eligibility for welfare. We then use multivariate regression models and decomposition techniques to identify the factors responsible for changes in welfare entry patterns over the 1990s. These same techniques also allow us to examine the factors associated with changes in circumstances that result in single mothers no longer being potentially eligible for welfare.

The results indicate that entry rates declined during the 1990s with the largest declines coming toward the end of the decade. Neither changes in the characteristics of low-income single mothers nor improvements in the economy directly account for this shift. This leaves policy shifts and changes in attitudes toward work and welfare as the most likely explanations for the drop in welfare entry rates. The analysis also shows that declining entry rates are not accompanied by substantial improvements in the circumstances of low-income single mothers who are not on welfare.

#### Background

The 1990s were marked by significant changes in social welfare policy and substantial economic growth. As dissatisfaction with the nation's primary cash assistance program

for low-income families—the Aid to Families with Dependent Children program (AFDC)—increased, many states sought and received waivers to federal rules and began modifying their welfare programs. In 1996, the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) eliminated AFDC and replaced it with the Temporary Assistance for Needy Families (TANF) block grant. Under TANF, welfare is no longer an entitlement and the program imposes a lifetime time limit on the receipt of federal aid.<sup>2</sup> In addition to changes in welfare policy, the federal Earned Income Tax Credit (EITC), which is designed to reward work for low-income families, expanded considerably, and several states introduced state EITCs. Further, as the decade progressed, a sluggish economy gave way to a lengthy and robust economic expansion. These changes in policy and the economy contributed to the decline in welfare caseloads nationwide during the 1990s.

Most of the research on declining welfare caseloads does not distinguish between reductions associated with families leaving welfare and those associated with families entering welfare.<sup>3</sup> Many assume that caseloads have dropped because families are leaving the welfare role faster today than in the past, but changes in the rate at which they enter may be even more important.

Before examining how welfare policy changes in the 1990s affected welfare entry, it is useful to consider prior research on the determinants of entry. Among studies

<sup>&</sup>lt;sup>2</sup> States have significant discretion at setting program rules under TANF. Policies that states have pursued under waivers to AFDC and TANF include changes in the amount of benefits recipients can keep as their earnings rise, strict work requirements, and financial sanctions for noncompliance with program rules. Also, to discourage fertility among welfare recipients, some states have imposed family caps; in these states a family's welfare grant does not increase if it has another child.

<sup>&</sup>lt;sup>3</sup> Oellerich (2001) and Grogger, Haider, and Klerman (2003) are exceptions. Oellerich (2001) uses administrative data and finds that since 1994, welfare entry declined while welfare exits rose. Grogger, Haider, and Klerman (2003) use both national data from the SIPP as well as administrative data from California and find that declining entry rates account for between 39.2 and 66.1 percent of the decline in welfare participation.

that examine the period prior to the welfare reform era of the 1990s, several find that larger AFDC guarantees, the grant available for recipients who did not work, are associated with higher entry rates (Hutchens 1981 and Plotnick 1983) while others do not (Gottschalk and Moffitt 1994; and Klawitter, Plotnick, and Edwards 2000). Higher wage rates and other income reduce the likelihood that a woman will enter AFDC (Hutchens 1981; Plotnick 1983). There is mixed evidence on the impact of the economy on welfare entry. Gottschalk and Moffitt (1994) find it matters; Gottschalk (1996) does not. Finally, most studies find that personal and family characteristics affect entry. For example, Plotnick (1983) finds that younger women and women with a work limiting disability are more likely to begin participating in AFDC.

More recent work has incorporated the potential effects of welfare reform policies on welfare entry. These more recent studies tend to find that benefit levels do affect entry (Acs et al. 2001; Grogger 2003; and Ribar 2001), but they do not consistently find that reform policies have affected entry. For example, focusing on the presence of any state waivers to AFDC, Gittleman (2001) finds that through 1995, women living in states with waivers are more likely to enter welfare. Ribar (2000), however, concludes that waiver policies, in general, have little impact on welfare entry rates. Similarly, Hofferth, Stanhope, and Harris (2000) focus specifically on returns to welfare and find that welfare policies adopted under waivers do not appear to influence recidivism rates.

One reason that studies of welfare reform find such mixed results is that the packages of policies that comprise "reform" vary from state to state, and it can be difficult to measure these policies and disentangle their effects. In addition, states may

<sup>4</sup> These studies differ substantially in the time periods and populations they consider and the other factors they include in the analysis. Some focus on the 1970s, others on the 1980s; some on all potential entrants, others only on initial entry into AFDC. In short, they are difficult to reconcile.

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adopt policies that have contradictory effects. For example, Moffitt (1996) uses a microsimulation model to demonstrate that mandatory employment and training programs could reduce welfare entry rates while voluntary programs might increase them in the long run.

Finally, nonwelfare policies directed at low-income households may also influence welfare entry. Indeed, Grogger (2003) finds that the EITC expansions during the 1990s reduce welfare entry rates.

These studies do not consider the circumstances of those who remain off welfare, an important consideration for fully assessing the implications of welfare reform. Indeed, Zedlewski (2002) finds that about 60 percent of all single mothers who are eligible for TANF but choose not to participate live in poor households.

One earlier study examines both welfare entry and the status of eligible nonparticipants. Blank and Ruggles (1996) use SIPP data from the late 1980s to estimate a model in which a woman who is eligible for AFDC can either start receiving AFDC or become ineligible for benefits. Essentially, they examine the length of eligibility "spells"—that is, how long women remain eligible for welfare without participating. An eligibility spell can end either because a woman enters welfare or because she becomes ineligible for welfare due to a change in circumstance. These include marriage, increases in income, and the departure of children from the household. Most of these changes in circumstance represent economic improvements for women.

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<sup>&</sup>lt;sup>5</sup> Specifically, Blank and Ruggles (1996) estimate a competing risk duration model of AFDC eligibility spells.

spells.

<sup>6</sup> Married-couple families are not automatically disqualified from receiving welfare and the rules governing eligibility for married couples have been changing over the 1990s. Nevertheless, married couples are far less likely to receive welfare than single parent families.

Blank and Ruggles (1996) find that never married, black, and disabled women are more likely to end an eligibility spell by entering AFDC than white, ever married, nondisabled women. Older and more educated women are more likely to improve their circumstances and not enter AFDC. Higher unemployment rates are associated with longer eligibility spells but not higher entry rates. And surprisingly, higher AFDC benefits are associated with lower entry rates and higher rates of improved circumstances.

This study builds on the work of Blank and Ruggles (1996) in several ways. It extends the analysis through the 1990s, focusing on how welfare reform has affected entry rates. Further, it uses decomposition techniques to assess the relative importance of various factors like the economy and the characteristics of low-income single mothers in accounting for changes in welfare entry rates throughout the decade.

#### **Data and Methods**

#### Data

The 1990 and the 1996 panels of the SIPP provide the person-level data for our analyses. The SIPP includes detailed information on family composition, income, work effort, and receipt of public assistance. Each SIPP panel begins with a nationally representative sample of the civilian, noninstitutionalized population 15 years of age and older and follows them, and others who move into their households, over a period lasting from 32 months (1990 panel) to 48 months (1996 panel). The sample is re-interviewed every four months for the duration of the panel; the four-month intervals are called waves.

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<sup>&</sup>lt;sup>7</sup> The Census Bureau redesigned the SIPP survey methodology and questionnaire prior to the 1996 panel. For some key variables, such as education and past welfare use, we had to rely on different variables in each panel. Details about our harmonization procedure for all of the variables that differed between the two panels are available from the authors.

The variables in our data from the SIPP include information about personal characteristics (age, education, race, disability status, marital status, welfare history, and employment history), family characteristics (number of children, age of youngest child, the presence of other working adults, the presence of income from sources other than welfare and the single mother's earnings), and a geographic identifier. Using the state identifier, we append information on state-level AFDC/TANF benefits, unemployment rates, and median household income.

### **Definition of the Sample**

The first step in examining welfare entry is defining a sample of families that are potentially eligible for welfare. Although married couples and pregnant women may receive welfare benefits in some circumstances, the overwhelming majority of adult welfare recipients are single mothers. Consequently, we restrict our analysis to single mothers.

There are two general approaches to determining whether a single mother is eligible for welfare: (1) One can use a strict eligibility standard and follow complex state rules, as a welfare caseworker would, to determine whether a single mother would qualify for benefits (the approach taken by Blank and Ruggles 1996), or (2) one can use a potential eligibility standard, assuming that all single mothers with certain characteristics (e.g., high school dropouts, those with incomes below a fixed income standard) are potentially at risk for entering welfare (the approach used by Grogger 2003). This paper uses a potential eligibility standard based on income, arguing that single mothers with sufficiently low incomes could reduce their earnings and receive welfare. This method is appropriate here because we want to distinguish between single mothers who stay off

welfare but remain in precarious economic circumstances from those whose situations improve. Under a strict eligibility measure, a single mother may become ineligible for welfare because rules are tightened and not because of improvements in her economic circumstances.

A single mother is deemed low-income and, thus, potentially eligible for welfare, if (1) her family's annualized income is below 150 percent of the federal poverty level or (2) her family's annualized income is between 150 and 250 percent of the federal poverty level and the mother's own earnings are less than 100 percent of the federal poverty level.

# **Estimation Strategy**

The analysis focuses on three cohorts of low-income single mothers. Low-income single mothers not on welfare at the start of the 1990 panel comprise the pre-reform data set; those not on welfare at the start of the 1996 panel comprise the mid-reform data set, and those not on welfare at the start of the fifth wave of the 1996 panel (late 1997 to early 1998) comprise the post-reform data set. <sup>8</sup> Each cohort is followed for 28 months to determine whether cohort members enter welfare, become ineligible for welfare, or remain at risk for entering. Transitions are assessed at the beginning of each wave (i.e., at four-month intervals). <sup>9</sup> A low-income single mother enters welfare if she has at least two continuous months on welfare; the entry wave is the wave during which the single mother

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<sup>&</sup>lt;sup>8</sup> A single mother is defined as a woman age 18 to 64 who is unmarried at the start of the sample period and who is the designated parent of a child under the age of 18.

<sup>&</sup>lt;sup>9</sup>Although the SIPP reports data on a monthly basis, it is not uncommon for important transitions (like entering or leaving welfare) to be reported at the start or end of a wave. This problem is known as "seambias." To convert the core data from a person-month format into a person-wave format, we condense four person-month observations into one person-wave observation per person. For the majority of the data, we define the wavely values as the average value for the wave. For continuous variables, such as age, the average is the simple mean of the four-month values. For indicator variables, the average is set to 1 if the indicator variable equals 1 in two of the four months. The wavely measure of the maximum AFDC/TANF benefit is the value during the first month of the wave. The state economic condition variables are annual measures. We assign the value to each person-wave observation that was in place at the beginning of a wave. If a person-wave began in December 1989, then we would append the 1989 median household income and 1989 unemployment rate for the person's state of residence to that observation.

has her first month, of at least two consecutive months, of welfare participation. <sup>10</sup> She ceases to be at risk for entering welfare if her income or family status disqualifies her; the transition occurs in the wave in which she no longer qualifies as potentially eligible for welfare.

Initially, we describe how welfare entry patterns differ across the pre-, mid-, and post-reform cohorts. We then use multivariate regressions to examine the factors affecting the probability that a low-income single mother enters welfare as well as the probability that her circumstances change and she becomes ineligible. For the most part, becoming ineligible can be viewed as a positive outcome as it is usually associated with a rise in income. Finally, we decompose changes in welfare entry and "ineligibility" rates to identify the factors that explain changes in these rates over time.

#### Model

Competing risk models are used to simultaneously examine both transitions onto welfare and out of the risk pool for each of the three cohorts of low-income single mothers. 11 Rather than a person, the unit of analysis here is a person-wave. A low-income single mother who is not on welfare is "at risk" of either entering welfare or having her circumstances change so that she is no longer potentially eligible to receive benefits. 12 Women who do not make a transition in a given wave remain "at risk" for making a transition in the subsequent wave. Women continue providing person-waves of data to the model until they make a transition or stop providing information to the SIPP.

<sup>&</sup>lt;sup>10</sup> Because participation in AFDC and TANF is underreported in the SIPP, we include receipt of General Assistance along with AFDC/TANF in our definition of welfare.

<sup>&</sup>lt;sup>11</sup> For a description of competing risk models, see Allison (1984).

<sup>&</sup>lt;sup>12</sup> Note that since this is a cohort analysis, women who are not "at risk" of entry in the first wave—because they are already on welfare, they are not yet single mothers, or their incomes are too high—never become part of the entry analysis.

These models can be estimated using a multinomial logit procedure where there are three outcomes: a woman enters welfare, she becomes ineligible, or she makes no transition during the wave. The probability that a low-income single mother makes a transition in a given wave (t) conditional on having not yet made a transition the prior wave (wave t-1) can be written:

$$Pr(P_t = j | P_{t-1} = 0) = f_j(X_t, M_t, b_t, t)$$

Here, X includes a woman's own characteristics (education, age, race, marital status [never married], disability status, and past welfare and food stamp use)<sup>13</sup>, her family's characteristics (number of children, age of youngest child, the presence of other adults, and the receipt of income not from own earnings or welfare), and her region of residence. M represents the state economic conditions (unemployment rate and median household income), and b measures the maximum welfare benefit available to a single woman with two children in her state of residence. T measures time "at risk" of a transition and the subscript t indicates that explanatory variables can vary over time. Factors that may vary over time (like number of children) as well as those that remain fixed (like race) can be included in this model. t

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<sup>&</sup>lt;sup>13</sup> Women in the pre- and mid-reform cohorts are all asked questions about their past welfare use in a topical module to the SIPP in wave 1. Women in the post-reform cohort were not necessarily asked the welfare history questions because they are drawn from women in wave 5 of the SIPP. For women in the post-reform cohort we base welfare history on their receipt of welfare in the past 16 months.

<sup>14</sup> We do not control for the problem of left-censoring—that is, we do not know how long a low-income

<sup>&</sup>lt;sup>14</sup> We do not control for the problem of left-censoring—that is, we do not know how long a low-income single mother not receiving welfare in wave 1 has been at risk of entering. Our starting sample, no doubt, is composed of women who have been low-income single mothers not receiving welfare for years as well as new mothers. Consequently, we cannot properly assess how time at risk affects entry. Nevertheless, we do control for time observed at risk.

# **Decompositions**

To assess which factors account for changes over time we use a decomposition analysis. In addition to decomposing the trend between the pre- and post-reform cohorts, we also examine changes between the pre- and mid-reform and the mid- and post-reform cohorts. For ease of exposition, we describe the method for decomposing changes in entry rates for the pre/post period. Decompositions for changes in ineligibility rates and for other period pairs are analogous.

To decompose trends in welfare entry, we generate a series of simulated entry rates combining the coefficients estimated from the post-reform model and the population characteristics from the pre-reform cohort. Through a series of comparisons between actual entry rates in the two cohorts and our simulated rates, we can assess the importance of various factors in accounting for changes in welfare entry.

Our simulations rely on the fact that the average entry rate can be computed by calculating the probability of entry during the average wave for each woman in the sample and taking the mean:

$$\hat{P}_i = \frac{e^{\mathbf{b}X_i + \mathbf{x}M_i + \mathbf{g}b_i}}{1 + e^{\mathbf{b}X_i + \mathbf{x}M_i + \mathbf{g}b_i}}$$

$$\hat{P} = \sum_{i=1}^{N} \hat{P}_i / N$$

where N is the number of person-wave observations. For notational convenience, we describe our simulations referring only to the variables to be used in the predictions (e.g., X, M, and b). The simulations all use coefficients from the post-reform model.

We compute our first simulated entry rate using data on women from the prereform cohort; however, we set economic variables and benefit levels to their post-reform values:

$$\tilde{P} = f(X^{pre}, M^{post}, b^{post})$$

This simulated rate is what entry would have been in the post-reform era if the women at risk of entering welfare had the characteristics of the pre-reform cohort.

Next, we simulate the entry rate using data on women from the pre-cohort and setting state economic conditions to their pre-reform levels. Benefit levels remain at their post-reform levels.

$$P^* = f(X^{pre}, M^{pre}, b^{post})$$

Finally, we simulate the entry rate using data on women from the pre-reform cohort and setting the economic variables and benefits to their pre-reform levels.

$$P^{\#} = f(X^{pre}, M^{pre}, b^{pre})$$

Thus, the total change in the entry rate,  $P^{post}-P^{pre}$ , can then be expressed as:

$$(P^{post} - P) + (P - P^*) + (P^* - P^*) + (P^* - P^{pre})$$

The first term captures the change in entry attributable to changes in the characteristics of low-income single mothers, the second term captures changes directly attributable to the economy, the third term captures changes due to welfare benefit levels, and the fourth term measures the unexplained residual portion of the change. This residual includes the effects of shifting welfare policies, changes in programs like the EITC, and changes in attitudes toward welfare. Note that we are implicitly assuming that changes in attitudes toward work and welfare are responses to changes in transfer and tax policies.

#### Results

# **Entry and Ineligibility Rates across the Cohorts**

Table 1 shows the share of low-income single mothers in each cohort that enter welfare, change circumstances and become ineligible for welfare, or remain potentially eligible for welfare over a 28-month period. Only women who were present in the SIPP for 28 months are included in these tabulations. The share of low-income single mothers who enter welfare is substantially lower in the post-reform cohort than in both the pre-reform and mid-reform cohorts (11.6 versus 16.1 and 17.1 percent, respectively). Women in the post-reform cohort are also more likely to experience changes in circumstances that make them ineligible for welfare than women in the two earlier cohorts. Within 28 months, 60.0 percent of women in the post-reform cohort are no longer low-income single mothers. Slightly more than one in four women in all three cohorts neither enter welfare nor change their circumstances and remain at risk of entering welfare.

One concern with these straightforward comparisons is that they are based on women who were consistently re-interviewed in the SIPP. Women who were not re-interviewed for eight consecutive waves are not included. If attrition from the sample is nonrandom (for example if those who left the sample are disproportionately likely to have changed circumstances and lose eligibility) then the findings may be misleading. Further compounding the problem is the fact that attrition varies considerably across the cohorts, with attrition rates of 10.0, 20.9, and 17.5 percent for the pre-, mid-, and post-reform cohorts, respectively.

To address this problem, we compute wave-to-wave hazard rates for both welfare entry and changes in circumstance. That is, for every wave, we compute the share of low-income single mothers who make a transition out of those who remain in the sample and have not already made a transition in an earlier wave.

Panel A of figure 1 clearly shows that entry rates are consistently lower for the post-reform cohort than for both the pre- and mid-reform cohorts; the entry rates for the mid-reform cohort are, in turn, lower than those for the pre-reform cohort. For all three cohorts, entry rates fall steadily between wave 2 and wave 7 indicating that the longer a low-income single mother remains off welfare, the less likely she is to ever enter. Panel B of figure 1 shows that there are no clear differences across the three cohorts in the probability that a low-income single mother experiences a change in circumstance that makes her ineligible for welfare.

# Differences in the Characteristics of At-Risk Single Mothers across the Cohorts

Differences across the cohorts in the characteristics of low-income single mothers may account for some differences in their welfare entry and ineligibility rates. Table 2 shows

the average characteristics for all three cohorts of low-income single mothers at the start of their respective sample periods. First, consider the demographic characteristics of the women themselves. Compared with the pre-reform cohort, women in the post-reform cohort are more likely to have completed high school and received some postsecondary training. The age distribution of at risk women is spreading out with women in the post-reform cohort being both more likely to be under age 25 and over age 35 than women in the pre-reform cohort. Finally, compared with women in the pre-reform cohort, a greater proportion of women in the post-reform cohort are black or Hispanic.

The family status of at-risk low-income single mothers has also changed over time. Compared with the pre-reform cohort, women in the post-reform cohort are more likely to never have married and to have more children. They are also more likely to live with other working adults. Interestingly, a greater proportion of low-income single mothers in the post-reform cohort have received welfare in the past than women in the pre-reform cohort. This suggests that a number of women in the post-reform cohort are recent welfare leavers.

The economic conditions confronting low-income single mothers improved for each subsequent cohort. Average state unemployment rates fell while average family incomes rose. The real value of welfare benefits (in 1999 dollars), however, dropped. The average AFDC benefit for a family three facing the pre-reform cohort was \$449 per month compared with an average TANF benefit of \$366 for the post-reform cohort.

#### **Competing Risk Models**

To assess the importance of these characteristics and conditions on the probability that a low-income single mother either enters welfare or becomes ineligible for welfare, we

estimate competing risk models on each cohort. Columns 1 through 3 of table 3 show the estimated coefficients for welfare entry; columns 4 through 6 show the estimated coefficients for ending a potential eligibility spell without entry. For ease of exposition, we focus on the findings for the post-reform cohort and note where they differ appreciably from those in earlier cohorts.

First consider the factors that affect welfare entry. Low-income single mothers without high school degrees, those with disabilities, and those with an infant are more likely to enter welfare than women who are more educated, able-bodied, and have older children. In addition, black women are more likely to enter welfare than white, non-Hispanic women. Not surprisingly, women living with adults who are working and women with other sources of income are less likely to enter welfare than other low-income single mothers. And women who received welfare in the past are more likely to enter welfare than women who never received welfare. These findings are relatively stable across the three cohorts although the relationships are not always statistically significant in the earlier cohorts.

Interestingly, neither the state unemployment rates nor state median family incomes have statistically significant impacts on welfare entry for any of the three cohorts. And somewhat surprisingly, the estimated coefficient on the state unemployment rate for the post-reform cohort implies that lower unemployment rates are associated with higher welfare entry rates. Finally, higher potential benefits are associated with higher entry rates, but the relationship is not statistically significant.

Next consider the factors associated with ending an eligibility spell without entering welfare. One would expect the women who are the least likely to enter welfare

would be the most likely to become ineligible for welfare because their incomes rise or they marry. In many instances, this is the case. Higher levels of educational attainment, being able-bodied, being white, having less than three children, having a youngest child who is a teenager, and never having received welfare are all associated with an increased probability of becoming ineligible for welfare. Low-income single mothers with other sources of income are also more likely to become ineligible than other low-income single mothers. Interestingly, although living with another adult reduces the probability of entering welfare, it does not significantly raise the probability of ending a potential eligibility spell.

Stronger economic conditions are associated with increases in ineligibility.

Finally, benefit levels are not significantly related to ineligibility rates in the post-reform cohort, and they are not stable across the three cohorts.

# **Decomposition Results**

To assess what factors account for falling welfare entry rates across the pre-, mid-, and post-reform cohorts, we use the coefficients to decompose changes in entry rates into the portion attribut able to changes in the characteristics of low-income single mothers, changes in the economy, changes in benefit levels, and other changes which could reflect the response to policy. This analytic technique also allows us to perform a similar decomposition for changes in the rate at which women become ineligible for welfare. We present results that show the effect of these factors on the probabilities that a single mother enters welfare or becomes ineligible for benefits within a two-year period. <sup>15</sup>

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<sup>&</sup>lt;sup>15</sup> The simulations used for the decompositions compute the probability of an entry in an average wave. To compute the probability of an entry occurring within two years (six waves), we use the following formula:  $Pr(\text{entry by wave 6}) = P_1 + P_2 + ... + P_6$ 

Where  $P_t$  is the unconditional probability of exit in wave t and can be computed as:

Table 4 shows the results of the decomposition of trends in welfare entry. Between the pre-reform and post-reform cohorts, the probability of entering welfare within two years falls by 6.4 percentage points, from 19.6 to 13.2 percent. The bulk of this decline occurs between the mid- and post-reform periods. Interestingly, none of the measurable factors included in this analysis plays a particularly large roll in the decline of entry rates over time. For example, changes in the characteristics of low-income single mothers, the women at risk of entering welfare, actually would have led to a 0.8 percentage point increase in entry between the pre- and post-reform cohorts. Changes in state unemployment rates and state median household incomes have virtually no effect on entry rates. Falling real welfare benefit levels account for a very small portion of the decline in entry rates between the pre- and post-reform periods; they account for a slightly larger portion of the decline between the pre- and mid-reform periods.

Consequently, the bulk of the decline in welfare entry through the welfare reform period cannot be explained by the characteristics of single mothers, changes in the economy, and falling real welfare benefit levels. This is consistent with the idea that changes in welfare policies, expansions of the EITC, and changes in attitudes toward welfare, which may have been induced by changes in policy, likely account for the drop in welfare entry rates. <sup>16</sup>

Table 5 presents findings from the decomposition of trends in the rate at which the circumstances of low-income single mothers not on welfare change so that they are

$$P_{t} = h_{t} \prod_{s=1}^{t-1} (1 - h_{s})$$

Where  $h_t$  is the hazard rate in wave t.

<sup>&</sup>lt;sup>16</sup> This is consistent with the findings of prior research that includes explicit measures of state welfare policies (Acs et al. 2001). Although they find that changes in welfare policy, in general, play an important role in declining welfare entry rates, isolating the effects of individual policies is a challenge. The individual policy variables are generally not statistically significant, and some have surprising signs.

no longer potentially eligible for welfare. Between the pre- and post-reform cohorts, the probability that a low-income single mother not on welfare becomes ineligible for welfare over a two-year period actually falls by 3.3 percentage points, from 54.8 to 51.5 percent. The bulk of this decline occurs between the pre- and mid-reform periods. Between the mid- and post-reform periods, the two-year ineligibility rate is virtually unchanged.

Interestingly, the decomposition results suggest that there are important differences between the mid- and post-reform periods. For example, changes in the economy between the pre- and mid-reform periods reduce the likelihood that a low-income single mother becomes ineligible for welfare; between the mid- and post-reform periods, however, the economy increases the likelihood of becoming ineligible. This is consistent with the idea that the sluggish economy of the early and mid-1990s left low-income single mothers mired in precarious economic circumstances while the strong economy during late 1990s helped them find and keep jobs that lifted them above 150 percent of the poverty level, the eligibility standard used in this analysis. Similarly, the unexplained portion of the trend, the portion that we attribute mainly to policy, reduces the ineligibility rate during the early period but increases it during the later period.

Overall, the decline in welfare entry rates between the pre- and post-reform cohorts is larger than the decline in ineligibility rates. In addition, between the mid- and post-reform cohorts, the period of TANF implementation, entry rates fell while ineligibility rates remained stable. This indicates that during this period, low-income single mothers became less likely to enter welfare and were no more likely to enjoy improved economic circumstances. Further, changes in welfare policy, expansions of the

EITC, and attendant shifts in attitudes toward work and welfare likely play an important role in these trends.

#### Discussion

This paper finds that welfare entry rates dropped during the 1990s, with the bulk of the decline coming after the implementation of TANF policies nationwide. Changes in the characteristics of women who are potentially eligible for welfare, changes in the economy, and changes in welfare benefit levels account for virtually none of this decline in entry rates. In fact, population changes would have led to an increase in entry rates. This suggests that welfare policies, expansions of the federal and state EITCs, and changes in attitudes toward work and welfare play an important role in explaining this trend.

If low-income single mothers stay off welfare but remain in precarious economic circumstances, then falling welfare entry rates could raise concerns. Indeed, these eligible nonparticipants may fail to enroll in other public assistance programs like food stamps and Medicaid that could benefit them and their children. We find that women who stayed off welfare in the post-reform era are slightly more likely to remain in precarious economic circumstances than women earlier in the pre-reform era. However, this change occurred during the first half of the decade. Indeed, there is little difference in ineligibility rates between the mid- and post-reform periods. In addition, between the mid- and post-reform periods, the data suggest that policy changes, the EITC, shifts in attitudes, and the economy all helped low-income single mothers leave the welfare risk pool.

There are several important caveats to keep in mind when assessing these findings. First, sample attrition rates are much lower for the pre-reform cohort than for the mid- and post-reform cohorts. If the women who leave the samples are more likely to experience improvements in economic circumstances than those who consistently provided information to the SIPP, then we would find artificially low ineligibility rates in the mid- and post-reform cohorts. This is not likely to be a problem for comparisons between the mid- and post-reform cohorts. Second, although most transitions out of the risk pool for welfare receipt occur because of a rise in family income, not all these changes represent positive outcomes. For example, a woman who places her children in the care of others would leave the welfare risk pool.

Finally, it would be inappropriate to draw strong conclusions about the role of policy in accounting for these changes. The decomposition technique used here can identify the roles played by factors that are directly measured—population characteristics, economic conditions, and benefit levels. But these factors can only explain part of the trend. We attribute the unexplained portion of these trends to factors that are not directly measured, such as changes in welfare policies (e.g., time limits, diversion policies, sanctions, family caps, earnings disregards), changes in federal and state EITCs, and changes in attitudes toward work and welfare. Although this is a compelling explanation, it is not a definitive test of the impact of welfare policies and the EITC.

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**Table 1: Welfare Entry among Low-Income Single Mothers** 

		Cohort	
	Pre-Reform (%)	Mid-Reform(%)	Post-Reform(%)
Enter Welfare	16.1	17.1	11.6
Change in Status	55.4	58.0	60.0
Remain Potentially Eligible	28.4	25.7	28.3

Source: Authors' tabulations from the 1990 and 1996 Surveys of Income and Program Participation. See text for definitions.

Table 2: Characteristics of Low-Income Single Mothers At Risk of Entering Welfare

		Cohort		Significant
	Pre-Reform	Mid-Reform	Post-Reform	Differences
< High School	0.295	0.251	0.267	a,c
High School graduate	0.425	0.422	0.394	
Some college	0.280	0.327	0.340	
Age 18-24	0.178	0.208	0.191	a,c
Age 25-34	0.424	0.372	0.362	
Age 35-44	0.267	0.302	0.323	
Age 45+	0.131	0.118	0.124	
Black, non-Hispanic	0.338	0.308	0.357	a,b,c
Hispanic	0.135	0.165	0.170	
White and other non-Hispanic	0.526	0.527	0.473	
Never married	0.313	0.421	0.457	a,b,c
Disabled	0.106	0.137	0.120	a
One child	0.544	0.511	0.471	c
Two or more children	0.456	0.489	0.525	
Youngest child < 1	0.102	0.116	0.077	b
Youngest child 1-3	0.243	0.252	0.266	
Youngest child 4-17	0.655	0.631	0.657	
Other working adults (0/1)	0.270	0.330	0.311	a,c
Other income in household (0/1)	0.752	0.657	0.664	a,c
Northeast	0.124	0.152	0.161	a,c
Midwest	0.233	0.202	0.191	
West	0.164	0.204	0.181	
South	0.479	0.442	0.466	
Ever participated in AFDC/FS	0.458	0.434	0.530	b,c
Ln(state unemployment)	1.717	1.685	1.596	a,b,c
State median household inc (\$1,000s	3.694	3.707	3.795	a,b,c
Maximum AFDC benefit (\$100s)	4.490	3.853	3.659	a,b,c
Unweighted Sample Size	729	1,519	1,341	

Source: Authors' tabulations using weighted data from the 1990 and 1996 Surveys of Income and Program Participation. See text for definitions.

Notes: These characteristics are measured at the start of each sample period.

Significance tests are based on chi-squared tests corrected for sampling weights.

Significant differences indicated at the 90 percent confidence level.

a indicates significant differences between the pre- and mid-reform cohorts.

b indicates significant differences between the mid- and post-reform cohorts.

c indicates significant differences between the pre- and post-reform cohorts.

Table 3: Regression Results from Competing Risk Models on Welfare Eligibility Spells for Low-Income Single Mothers

	Welfare Entry				Ineligibility	
	Pre-Reform	Mid-Reform	Post-Reform	Pre-Reform	Mid-Reform	Post-Reform
< High School	0.226	0.681***	0.468*	-0.451***	-0.595***	-0.599***
	[0.295]	[0.208]	[0.275]	[0.170]	[0.124]	[0.125]
High School graduate	-0.684**	0.318	0.218	-0.232	-0.077	-0.457***
	[0.306]	[0.198]	[0.263]	[0.145]	[0.095]	[0.103]
Age 18-24	1.464***	1.224***	0.62	-0.075	-0.207	-0.057
	[0.559]	[0.379]	[0.473]	[0.286]	[0.201]	[0.214]
Age 25-34	1.301***	0.728**	0.532	0.104	-0.069	-0.056
	[0.492]	[0.329]	[0.403]	[0.208]	[0.148]	[0.165]
Age 35-44	0.481	0.392	0.511	0.029	-0.260**	0.059
	[0.519]	[0.319]	[0.365]	[0.197]	[0.131]	[0.143]
Black, non-Hispanic	0.087	0.503***	0.672***	-0.168	-0.268**	-0.327***
	[0.282]	[0.182]	[0.247]	[0.154]	[0.108]	[0.114]
Hispanic	0.241	-0.078	0.022	-0.059	-0.375***	-0.299**
	[0.334]	[0.234]	[0.333]	[0.185]	[0.135]	[0.142]
Never married	0.384	-0.065	0.006	-0.212	-0.228**	-0.047
	[0.255]	[0.184]	[0.248]	[0.162]	[0.109]	[0.114]
Disabled	0.206	0.555***	0.898***	-0.433**	-0.462***	-0.394***
	[0.340]	[0.205]	[0.259]	[0.194]	[0.135]	[0.146]
One child	0.122	-0.198	0.619**	0.810***	0.667***	0.435***
	[0.293]	[0.208]	[0.283]	[0.190]	[0.137]	[0.145]
Two children	-0.085	-0.103	-0.02	0.437**	0.292**	0.261*
	[0.291]	[0.196]	[0.289]	[0.196]	[0.139]	[0.143]

Table 3: Regression Results from Competing Risk Models on Welfare Eligibility Spells for Low-Income Single Mothers (Continued)

		Welfare Entry	<b>y</b>		Ineligibility	
	Pre-Reform	Mid-Reform	Post-Reform	Pre-Reform	Mid-Reform	Post-Reform
Youngest child < 1	1.326**	0.796**	1.411**	-0.651**	-0.740***	-0.532*
	[0.533]	[0.389]	[0.554]	[0.314]	[0.229]	[0.277]
Youngest child 1-3	0.424	0.488	0.593	-0.372*	-0.680***	-0.599***
	[0.486]	[0.346]	[0.392]	[0.225]	[0.161]	[0.174]
Youngest child 4-5	0.213	0.172	0.293	-0.208	-0.525***	-0.378**
	[0.545]	[0.382]	[0.399]	[0.229]	[0.167]	[0.168]
Youngest child 6-12	0.653	0.553*	0.214	-0.529***	-0.418***	-0.560***
	[0.436]	[0.300]	[0.325]	[0.171]	[0.120]	[0.129]
Other working adults	-0.187	-0.424**	-1.089***	0.074	0.163*	0.062
	[0.252]	[0.176]	[0.280]	[0.139]	[0.092]	[0.099]
Other income	-0.329	-0.022	-0.898***	0.383**	0.297***	0.178*
	[0.224]	[0.158]	[0.211]	[0.154]	[0.095]	[0.103]
Northeast	-0.083	0.338	1.308***	0.148	0.01	-0.11
	[0.496]	[0.308]	[0.433]	[0.265]	[0.186]	[0.199]
Midwest	-0.177	0.074	0.768**	0.138	0.197	0.072
	[0.382]	[0.255]	[0.351]	[0.199]	[0.145]	[0.155]
West	-0.677	0.169	0.829*	0.171	0.251	-0.033
	[0.605]	[0.343]	[0.492]	[0.288]	[0.188]	[0.210]
Ever participated in AFDC/FS	5 1.144***	0.06	1.317***	-0.159	-0.154*	-0.221**
	[0.245]	[0.153]	[0.256]	[0.126]	[0.086]	[0.093]
Ln(state unemployment)	0.519	-0.276	-0.316	-0.101	0.157	0.042
	[0.687]	[0.493]	[0.660]	[0.355]	[0.280]	[0.292]
State median hh inc	0.026	0.245	-0.133	0.062	0.292**	0.261*
	[0.340]	[0.197]	[0.311]	[0.184]	[0.118]	[0.136]
Maximum AFDC benefit	0.076	0.056	0.01	0.039	-0.095*	-0.003
	[0.110]	[0.089]	[0.126]	[0.057]	[0.053]	[0.058]

**Table 3: Regression Results from Competing Risk Models on Welfare Eligibility Spells for Low-Income Single Mothers (Continued)** 

		Welfare Entry	/		Ineligibility	
	Pre-Reform	Mid-Reform	Post-Reform	Pre-Reform	Mid-Reform	Post-Reform
Duration term wave 1	0.315	0.76	-0.828	2.185***	1.093***	0.900***
	[0.711]	[0.512]	[0.667]	[0.349]	[0.189]	[0.198]
Duration term wave 2	2.254***	2.445***	2.286***	1.990***	0.634***	0.713***
	[0.630]	[0.475]	[0.457]	[0.354]	[0.199]	[0.207]
Duration term wave 3	2.041***	2.036***	1.510***	1.137***	0.738***	0.561***
	[0.646]	[0.486]	[0.483]	[0.385]	[0.205]	[0.214]
Duration term wave 4	1.843***	1.547***	1.459***	1.171***	0.691***	0.494**
	[0.652]	[0.501]	[0.503]	[0.388]	[0.208]	[0.225]
Duration term wave 5	1.428**	0.827	0.858	1.352***	0.686***	0.32
	[0.690]	[0.565]	[0.574]	[0.385]	[0.217]	[0.241]
Duration term wave 6	1.489**	0.924	0.38	1.562***	0.666***	0.758***
	[0.702]	[0.578]	[0.614]	[0.386]	[0.228]	[0.227]
Constant	-8.045***	-7.159***	-6.507***	-3.947***	-3.460***	-3.022***
	[2.255]	[1.227]	[1.802]	[1.118]	[0.680]	[0.789]
Observations	2866	6125	5182	2866	6125	5182
Log-likelihood	-1325.893	-2787.679	-2199.77	-1325.893	-2787.679	-2199.77

Source: Authors' tabulations using weighted data from the 1990 and 1996 Surveys of Income and Program Participation. See text for definitions.

Standard errors in brackets.

<sup>\*</sup> significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

**Table 4: Decomposition of Trends in Welfare Entry Rates over Two Years for Low-Income Single Mothers** 

	Percentage Point Difference between					
	Pre- and Mid-Reform	Pre- and Post-Reform				
	Cohorts	Cohorts	Cohorts			
Total Change	-1.2	-5.2	-6.4			
Change Due to:						
Characteristics	0.9	0.6	0.8			
<b>Economic Conditions</b>	0.6	0.0	0.1			
Benefit Levels	-0.4	-0.1	-0.2			
Residual (policy, EITC	-2.2	-5.8	-7.1			
and attitudes)						

Source: Authors' tabulations using weighted data from the 1990 and 1996 Surveys of Income and Program Participation. See text for definitions.

Note: Figures represent the percentage point change in the probability that a low-income single mother enters welfare in a two-year period.

**Table 5: Decomposition of Trends in Welfare Ineligibility Rates over Two Years for Low-Income Single Mothers** 

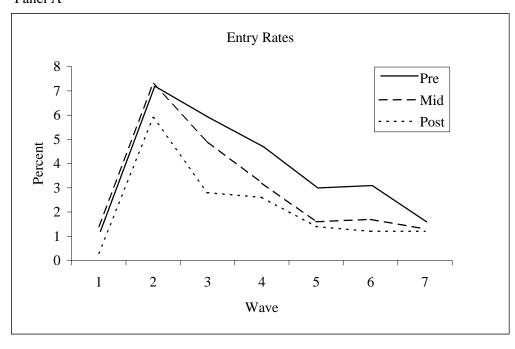
	Percentage Point Difference between					
	Pre- and Mid-Reform Mid- and Post-Reform Pre- and Post-					
	Cohorts	Cohorts	Cohorts			
Total Change	-3.5	0.2	-3.3			
Change Due to:						
Characteristics	-1.2	-1.8	-1.0			
<b>Economic Conditions</b>	-0.3	0.9	1.2			
Benefit Levels	1.4	0.0	-0.1			
Residual (policy, EITC	-3.3	1.1	-3.4			
and attitudes)						

Source: Authors' tabulations using weighted data from the 1990 and 1996 Surveys of Income and Program Participation. See text for definitions.

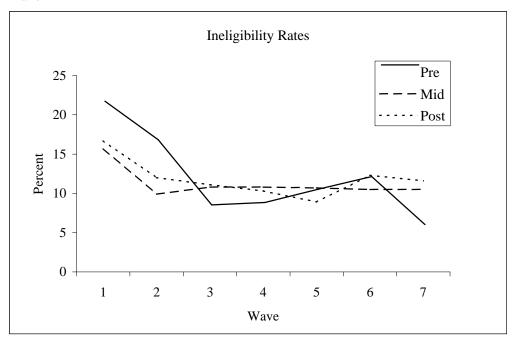
Note: Figures represent the percentage point change in the probability that a low-income single mother becomes ineligible for welfare in a two-year period.

Figure 1 : Welfare Entry and Ineligibility Rates for Three Cohorts of Low-Income Single Mothers

Panel A



Panel B



Source: Authors' tabulations on weighted data from the 1990 and 1996 Survey of Income and Program Participation. See text for definitions.