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**The Impact of Welfare Reform on
the Dynamics of Welfare Receipt and Employment**

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May 2001

Abstract

In the 1990s, welfare reform legislation at both the state and national levels transformed the U.S. cash assistance program for single parents and their children from one of indefinite payments to those meeting federally specified eligibility criteria, to a system with time-limited aid in conjunction with requirements that recipients participate in work or work-related activities. Although there remains substantial uncertainty about the importance of reform in producing the subsequent decline in the welfare case load, even less is known about its impact on the experiences and well-being of former welfare recipients.

The analysis here focuses on the dynamics of welfare participation and employment in the state of Missouri over the period 1990-1999. Our analysis uses administrative data on the demographic characteristics of welfare recipients in Missouri as well as all employment covered by unemployment insurance in Missouri and Kansas. Because these data provide detailed information on past welfare and employment patterns for all recipients, we are able to consider how prior experience influences the dynamics of welfare reciprocity, the stability of employment, and the growth of earnings. Since our data contain extensive information on individual histories we are able to examine welfare recipients over the entire decade of the 1990s and see how the characteristics and behavior of welfare recipients change with changes in the rules governing welfare. We first consider the demographic and family characteristics of recipients moving onto and off of welfare. We also track cycling onto and off of welfare and the extent of employment, and earnings levels and stability. We then consider the experiences of two cohorts of welfare leavers, those leaving welfare in fiscal year 1993 (July 1992-June 1993) prior to welfare reform, and those leaving welfare in fiscal year 1997 (July 1996-June 1997) after welfare reform. Using these data we examine the dynamics of employment and welfare recidivism for welfare leavers. We find that after welfare reform both welfare recipients and leavers are much more likely to be working, have higher total earnings, are receiving a smaller fraction of their total income from welfare, and are less likely to return to welfare. These results, while tentative, suggest that welfare reform has not materially harmed welfare recipients.

I. Introduction

In the 1990s, welfare reform legislation at both the state and national levels transformed the U.S. cash assistance program for single parents and their children. In place of the old system's indefinite payments to those meeting federally specified eligibility criteria, the reformed system specifies time-limited aid in conjunction with requirements that recipients participate in work or work-related activities. Federal rules have been largely replaced by state prerogative, with states permitted to develop their own program designs. Milestone federal reform legislation, passed in 1996, formally changed the name of the program from Aid to Families with Dependent Children (AFDC) to Temporary Assistance to Needy Families (TANF). However, reform began in earnest in the mid 1990s, when a large number of federal waivers permitted states to institute major changes in the program.

Coincident with welfare reform, the national caseload has declined by more than one-half from a peak in the mid 1990s. Although there remains substantial uncertainty about the importance of reform in producing this decline, even less is known about its impact on the experiences and well-being of former welfare recipients. Across the nation, unprecedented numbers of poor families are now primarily dependent on the labor market after years of support from AFDC.

Welfare reform is committed not only to moving individuals off of welfare but to helping them achieve self-sufficiency through employment. The extent to which welfare reform has been successful in this goal is an open question. While employment of welfare recipients and leavers has increased following reform, it is unclear whether former recipients are moving to stable employment. Previous research has shown that those leaving welfare after welfare reform have

relatively low levels of job skills and are working in jobs with low wages, few benefits, and little security (Tweedie, 1999; Brauner and Loprest, 1998; Parrott, 1998). If welfare reform has its impact primarily by forcing the unprepared to exit welfare, it may have the effect of swelling the number of families who rely on jobs offering poor pay and intermittent employment.

On the other hand it may be the case that welfare leavers have always had relatively low levels of job skills and work in low paying jobs and that welfare reforms actually improved the material conditions of those who had been receiving welfare. New requirements that welfare recipients participate in programs designed to facilitate movement into the labor force may have improved their job prospects. If such programs were successful, those moving off of welfare following the reforms may actually be better off than leavers under the prior system. Even if welfare recipients moved into employment under duress, they may still end up in jobs that ultimately provide better material conditions than would welfare.

The analysis here focuses on the dynamics of welfare participation and employment in the state of Missouri over the period 1990-1999. While various administrative reforms occurred in the state throughout the 1990s, the most important reform occurred with passage of state legislation in 1994. Although the structure of reforms differs substantially across states, those in Missouri are as representative as any. Missouri's welfare caseload displays a pattern very similar to that for the U.S. as a whole, reaching a peak in the early to middle 1990s, with a decline to approximately half the peak level by the end of the decade.

Our analysis uses administrative data on the demographic characteristics of welfare recipients in Missouri as well as all employment covered by unemployment insurance in Missouri and Kansas. Because these data provide detailed information on past welfare and

employment patterns for all recipients, we are able to consider how prior experience influences the dynamics of welfare reciprocity, the stability of employment, and the growth of earnings. While some of these issues have been investigated previously, almost all prior studies have been limited to studying welfare recipients and leavers either prior to, during, or after welfare reform. Since our data contain extensive information on individual histories we are able to examine welfare recipients over the entire 1990s and see how the characteristics and behavior of welfare recipients change with changes in the rules governing welfare.

We first consider the demographic and family characteristics of recipients moving onto and off of welfare. We also track cycling onto and off of welfare and the extent of employment, and earnings levels and stability. This information is examined for each of 37 quarters in the period from 1990:3 to 1999:3, spanning the period of active welfare reform.

We then consider the experiences of two cohorts of welfare leavers, those leaving welfare in fiscal year 1993 (July 1992-June 1993), and those leaving welfare in fiscal year 1997 (July 1996-June 1997). The first period identifies welfare leavers prior to welfare reform. At that point, Missouri's welfare caseload was still increasing, and the regulations governing welfare were essentially those of the standard Aid to Families with Dependent Children (AFDC) program, which had changed relatively little since the early 1980s. The second period occurs after substantial policy change. Using these data we examine the dynamics of employment and welfare recidivism for welfare leavers. A comparison of the detailed patterns for these cohorts allows us to directly consider changes occurring over the period of welfare reform.

The rest of the paper is as follows. In the next section we briefly review the literature examining welfare and welfare reform. Following this we review the history of welfare reform

in Missouri. We describe our data in section IV. In section V we describe how the welfare caseload has changed between 1990 and 1999. Section VI contains the results from our analysis of the two cohorts of welfare leavers. Finally, we summarize our results and present some tentative conclusion in section VII.

II. The Dynamics of Welfare and Employment and the Impacts of Reform

Concern with the work activities of welfare recipients goes back to at least the 1960s, when implementation of the federal Work INcentive (WIN) program required states to assure that recipients had access to job search services. Corresponding with this popular concern was a body of research examining the work disincentive effects of AFDC. Nonetheless, studies that examined the determinants of program participation suggested that the labor market was of secondary importance in explaining flows onto and off of welfare. In a review of the literature, Moffitt (1992) cited findings that only one fifth of AFDC exits resulted from earnings gains for the single parent, while a substantially larger share was due to marriage. He noted, “These results suggest that a model of marital search would be a more accurate descriptor of AFDC entry and exit than a wage-search model..” (p. 26)

By the early 1990s, new research appeared to require modification of this interpretation. Whereas the earlier work had used annual data on welfare reciprocity, studies that considered shorter periods found much greater labor market impacts on welfare reciprocity. In addition, it appears that studies using data after 1980 also found a larger impact of employment, very likely reflecting the changes in regulations that made it more difficult to receive welfare and work. Using a monthly measure of welfare receipt, studies found that 40-70 percent of exits from

welfare in the mid-1980s were associated with employment, while only 5-25 percent were associated with marriage (Blank, 1989; Harris, 1993; Blank and Ruggles, 1996). Consistent with the view that both the labor market and the marriage market play a role, analyses that examine the determinants of welfare exits show that measures indicating opportunities in both the labor and marriage markets are associated with welfare exits (Fitzgerald, 1991; Hoynes, 1996; Ribar, 2000).

A substantial portion of those who leave welfare return. Using a one-year window for measuring welfare, Bane and Ellwood (1994) estimated that half of all recipients had multiple spells. When welfare spells are constructed from monthly data, recidivism is higher, and a large share of returns to welfare occur within a year of exit. Short-term recidivism is greater for those whose welfare exits are associated with earnings growth than for those who marry or experience other household changes (Blank and Ruggles, 1994), although ultimately the latter group may be just as likely to return (Harris, 1996). Among leavers with employment, the kind of job held plays an important role in determining whether the individual returns to welfare, with those in higher paying industries less likely to return (Lane and Stevens, 1995, 2001; Bartik, 1997).

Despite obvious disincentives for work in the AFDC program of the 1980s, a large share of welfare recipients combined work with welfare even over relatively short periods. Using data for 1984-1989, Gault, Hartmann and Yi (1999) show that, among those who had received welfare at some point in a two-year period, less than a quarter were out of the labor force during the entire time. The remainder cycled between welfare and work, combined welfare and work, or spent substantial time looking for work. It is also clear that welfare experiences do not preclude later labor market success. When individuals observed receiving AFDC at a given point in time

are followed for several years, labor force participation and earnings increase (O'Neill and O'Neill, 1997) and some studies suggest that wages actually approach those of similar individuals who did not participate in AFDC (Moffitt and Rangarajan, 1989). Insofar as welfare recipients continue to fare less well than others, this appears to be the result of less stable employment (Gladden and Taber, 2000; Loeb and Corcoran, 2000).

Of course, these findings are based on examining AFDC recipients, who could continue to receive benefits indefinitely. Given the observed earnings of recipients and the modest gains that job search and training programs appeared to provide, many observers predicted that attempts to reduce the welfare rolls by moving recipients into jobs would not be successful (Burtless, 1995; O'Neill and O'Neill, 1997; Kalil, et al., 1998).

The welfare reforms of the 1990s corresponded with a dramatic decline in the overall caseload. While there has been much debate about the relative importance of the reforms and the very strong economy in inducing these declines, most research suggests that both had some role, with the importance of reforms increasing with implementation of TANF after 1996.¹ Reforms also appear to have increased rates of employment for single parents in general (Bishop, 1998; Moffitt, 1999; Grogger, 2001).

Much interest has focused on the employment of recipients and its impact on welfare

¹ Recent reviews of the literature on the impacts of welfare reform and the economy on caseloads are provided in Blank (2000) and Bell (2001); a broader survey of the literature of the factors influencing welfare caseloads is provided in Mayer (2000). Perhaps the most influential single study is the Council of Economic Advisors (1999) report, and the best collection of studies is in Danziger (1999). See also Schoeni and Blank (2000) for a broader analysis of the effects of welfare reform. It should be recognized that changes in the federal Earned Income Tax Credit in the early 1990s also influenced employment and welfare use (Meyer and Rosenbaum, 1999; Gogger, 2001).

exits, and on the difficulties that former recipients have obtaining stable employment to provide earnings self-sufficiency. Reforms have been associated with substantial increases in the levels of employment for recipients (Department of Health and Human Services, 2000). We know that those who leave welfare are likely to be working, but that their earnings are often very low and that many of them are suffering substantial hardship (Tweedie, 1999; Brauner and Loprest, 1998; Parrott, 1998). In contrast to expectations, it does not appear that reforms have caused welfare caseloads to become more disadvantaged (Moffitt and Stevens, 2000), although since the implementation of TANF the proportion nonwhite has increased substantially (Zedlewskie and Anderson, 2001).

Following reforms, employment continues to play an important role in welfare exits, but existing studies provide little basis for examining changes in the dynamics of welfare use and employment occurring with reform. In one of the few studies that provides a consistent comparison, Loprest (2000) uses a national sample to examine the experiences of individuals leaving welfare in 1995-1997 with those leaving in 1997-1999, finding that the levels of employment and earnings are, if anything, higher in the more recent period. Unfortunately, this does not provide a very clear picture of the impact of reforms since reform efforts were underway in most states prior to implementation of TANF, which occurred in late 1996 or 1997.

III. Welfare Reform in Missouri

Missouri's welfare system was essentially unchanged from the early 1980s until state welfare reform in 1994. The most important program change prior to 1994 was implementation of the JOBS program, the federal program providing job search services to welfare recipients,

which occurred in the early 1990s in response to passage of federal legislation in 1988.

State welfare reform legislation passed in 1994 and was implemented over the next two years in conjunction with federal waivers that permitted AFDC rules to be modified. Federal welfare reform replaced AFDC with Temporary Assistance for Needy Families (TANF) at the end of 1996, but associated policy changes were relatively small, since state reform had already occurred and no state legislation was passed at that time. By 1997, the welfare caseload in Missouri had declined by about a quarter from its peak in the middle of the 1990s (see Figure 1).

Despite important reforms, the benefit and earnings disregard levels remained the same as those under AFDC through September 1999. Missouri's program is less stringent than some states, in that cases are not generally removed from the rolls because of participation violations, nor are state time limits imposed. The administrative structure has been refocused to emphasize employment, as recipients who fail to meet program training or work requirements face reduced benefits.

IV. Data

Our data on AFDC/TANF recipients come from administrative records maintained by the state of Missouri in the form of monthly files from July 1990 through September 1999. Our analyses focus on female payees in the AFDC-Basic program or its TANF successor, who are at least 18 and less than 56 years of age. "Child only" cases are omitted, since the payee in such cases receives a grant on behalf of children but does not have formal responsibility for them and is therefore exempt from the work or training requirements that parents face. Those listed as welfare recipients who receive only in-kind payments are also excluded.

Since two-parent families receiving payments under the AFDC-UP program are omitted, the unit of our analysis is a single mother with children who receives cash welfare payments, or equivalently, a welfare case headed by such an individual. We have combined the monthly data into quarters, so that recipients are those who receive payments and met our other selection criteria in any month during a quarter. A recipient in a given quarter is defined as a welfare *arrival* or *entry* if she was not a recipient in the prior quarter; and she is defined as a *exit* or *leaver* if she is not a recipient in the subsequent quarter. Since our information on program participation is limited to Missouri, an individual who had received welfare payments in another state would be considered as a new arrival, and welfare in the previous state would not be measured.²

Employment and earnings information derives from “wage record” data maintained by the states of Missouri and Kansas in support of their unemployment insurance systems. For every individual employed in a covered job, the files indicate total quarterly earnings, along with selected employer information. While the vast majority of the employment for Missouri residents is included in these files, self-employment, illegal or informal employment, certain federal employment, and employment outside Missouri and Kansas are not included.³ We match recipient records from the welfare data to the wage record data using Social Security Number. If

² A payee under 18 years of age is not included in our analysis, and so such an individual would be coded as a welfare entry on reaching 18. Since special rules apply to payees under 18, we believe it is most useful to view them as entering a new program at that point.

³ Inclusion of Kansas wage record data is of substantial value, since approximately 15 percent of the jobs held by welfare recipients in Jackson County, Missouri (the central county of Kansas City) were in Kansas. In contrast, including Illinois employment would not influence our results. In St. Louis City, less than 2 percent of the jobs held by welfare recipients were in Illinois.

we do not find a record for an individual in a given quarter in the wage record data, we consider the individual to be not employed.

V. Caseload Dynamics

1. Patterns of Welfare Entry and Exit

Figure 1 tracks the welfare caseload and flows onto and off of welfare for Missouri for each quarter from 1990:3 to 1999:3. Since there is appreciable seasonal variation in arrivals and departures, as well a variation due to small numbers, Figure 1 presents these statistics using a four quarter moving average.⁴ (The paper's appendix includes figures providing original quarterly data corresponding to all figures in the text.) From the beginning of the series, the caseload grows steadily, reaching a peak of just over 74,500 in the third quarter of 1994, after which it begins a steady decline.

The number of individuals entering welfare each quarter averages over 8000 in each year through 1994, after which it declines steadily to around 6000. The average quarterly flow off of welfare increases from about 7000 to a peak of over 9000 in 1997 and then declines to below 8000. This decline is due to a decline in the caseload, representing the population at risk. If we calculate an exit rate, a profile that is almost the mirror image of that for arrivals emerges (compare Figures 1 and 2). Through 1994, the average exit rate remains close to 11 percent, at which point the exit rate increases steadily to nearly 19 percent by the end of our period.

⁴ The quarter indicated in the figures is the fourth quarter of the year to which the average applies.

2. *Changes in the Characteristics of the Caseload and Flows*

Figure 3 provides information on the characteristics of those receiving welfare and on those entering and exiting welfare. Panel A shows that the age of the youngest child among welfare recipients increases slightly, averaging just over 4.8 in the early 1990s, reaching 5.1 in 1996, and declining to around 4.9 in the last year. As might be expected, those entering welfare have younger children, while those exiting have older children. Over this period, the gap narrowed somewhat.

The mean educational level of the welfare caseload increased to the late 1990s, then declined, returning to its initial level, although the increase and decrease is less than 0.1 year (Panel B). Perhaps most significant is that the educational level of both entering and exiting individuals is higher than that of the caseload, reflecting the fact that educated recipients are much more likely to be short term recipients. The educational level for both arrivals and departures follows that of the caseload, increasing and then decreasing.

Racial change is more dramatic in this period (Panel C). While 47 percent of the caseload in 1994 was nonwhite, this had increased to over 56 percent by 1999. Most striking is that both flows have fewer nonwhites than the caseload, reflecting the fact that whites have shorter spells on welfare. During this period, the racial composition of arrivals and exits moved together, with the proportion nonwhite in both increasing. The difference between the racial composition of the caseload and that for these flows remained very stable, in the range of 12 to 14 percent, if we compare one-year averages, despite the dramatic changes in the caseload's racial composition.

Finally, the age of the payees increased by about 0.4 years through 1997 and then

decreased slightly in the following two years (Panel D). Of course, as might be anticipated, those entering welfare are appreciably younger, by approximately two years, than the caseload. Those exiting welfare are only slightly older than the caseload.

Our conclusion is that, with the exception of the racial composition, welfare reforms seem to have little effect on demographic characteristics of recipients. Perhaps of equal interest, the characteristics of those entering and exiting followed very similar patterns to that of the caseload. There is some evidence that the implementation of TANF, occurring in December of 1996, may have had an influence on the dynamics, given that for several graphs inflection points occur around that time, but it is the stability rather than the changes that are most notable.

3. *Prior Welfare Experience and Employment for Welfare Recipients and Flows*

Figure 4 provides information on the prior welfare experience and dynamics of movement onto and off of welfare. Panel A shows that there has been very little change in the extent to which welfare recipients have prior welfare experience. In the two prior years, the average recipient had received payments during approximately six quarters. Those exiting welfare had spent slightly more than four quarters receiving welfare. Through 1997, we observe an increase in leavers' welfare experience, presumably reflecting efforts on the part of welfare reformers to remove long-term recipients from the rolls. Perhaps the only important surprise is a substantial trend in the prior welfare experience of those entering welfare. Whereas in the early 1990s, the average individual beginning welfare had received welfare during approximately one quarter in the prior year, this had increase by about 50 percent by the end of the 1990s.

Despite the fact that entering welfare recipients had more prior welfare experience, this

does not mean that return to welfare has become more common. Panel B shows that the chance that an individual who leaves welfare returns in the following two years has declined from 40 percent to 30 percent. Returning recipients make up an increasing share of entries because, first, with higher rates of departure from welfare, the pool of former recipients is larger, and, second, with smaller flows onto welfare, those returning are more prominent. These two factors overwhelm the fact that individuals are much less likely to return to welfare than in the past. Of course, we cannot be sure that the most recent recipients will have a similar experience, but it seems unlikely there will be a dramatic reversal.

The most dramatic change among welfare recipients is in the proportion employed (Panel C). In the early 1990s, less than one in four recipients were employed, whereas by 1999, the employment rate had increased by 20 percentage points, nearly doubling. Throughout the 1990s, those entering welfare were more likely to be working, whether reflected in current or prior employment. Employment rates for those exiting welfare also increased. The figure identifies two measures of employment for leavers, one in the last quarter receiving welfare and the second in the following quarter. The two figures differ by 2 to 3 percent, suggesting that there are some individuals who obtain employment with a lag after leaving welfare.

Figure 5, Panel A, shows that, over this time, welfare payments are growing less important. Among recipients, the fraction of income paid by welfare declined from close to 70 percent to about 55 percent. There was a more modest decline among those leaving welfare. In contrast, consistent with the observation that entries were more likely to have welfare experience, there was a modest increase in reliance on welfare among new recipients. Perhaps most striking is the increase in the extent of prior earnings for welfare recipients (Panel B). An increase is

observed for those leaving welfare as well as those entering. Echoing a result observed above, we also see that the leavers have become more similar to the caseload during the 1990s.

While it is clear that employment plays a more important role in the welfare dynamic than in the past, Figure 6 presents information on earnings, limiting consideration to those working. If increases in employment were primarily a result of requirements imposed on welfare recipients, we might expect that increased employment rates would be accompanied by declines in average earnings for those with jobs. The trend in the graph does not support this viewpoint. Rather than a decline in earnings, we observe increases. (Earnings have been adjusted for inflation to 1999, quarter 2.) We see that the average quarterly earnings for recipients increased from just under \$1100 in the early 1990s to approximately \$1400 by the end of the 1990s. Measured purely in material terms, it does not appear that welfare reform has pushed ever more marginal individuals into the labor market. Of course, these levels of earnings remain low, and the strong economy may be largely responsible for observed gains.

Interestingly, although we saw earlier that those entering welfare were more likely than current welfare recipients to be working, Figure 6 shows that their earnings are lower, and that the difference is growing. Of course, this may partly reflect the structure of the welfare system. Under AFDC, the structure of which was inherited by Missouri's TANF, earnings disregards allow welfare recipients to temporarily earn at levels that would disqualify them from applying for welfare initially.

Two measure of earnings are presented for welfare leavers, one in the last quarter in which welfare payments were received, and the second in the following quarter. The first measure increases more dramatically over time, reflecting increased incentives for employment

while receiving welfare. However, earnings in the following quarter also increase. This provides further evidence suggesting that welfare reform has not forced the least-prepared individuals into the market.

The level of earnings, while very low, is at the level where, in combination with the Earned Income Tax Credit, it would provide earnings that could exceed the poverty level. In addition, Medicaid eligibility would continue for those leaving welfare for at least a year.

VI. Comparing Two Leaver Cohorts

1. The Impact of Missouri Reforms on Welfare Leavers: Employment and Recidivism

In order to consider how the experiences of welfare leavers have changed over time, we will focus here on two cohorts of leavers, those leaving welfare between July 1992 and June 1993, and those leaving welfare between July 1996 and June 1997. The first period predates major welfare reform in the state, and, with relatively few exceptions, the rules correspond to those of the AFDC system that had been largely unchanged since the early 1980s. Caseloads are also growing at this point. The second period is nearly two years after implementation of the state's major welfare reform, and corresponds to implementation of the federal TANF program in the state. Caseloads are declining at that point and are about 10 percent below their peak level in 1994.

The top panel of Figure 7 shows the proportion of leavers who have returned to welfare during the next eight quarters. The solid line indicates the earlier period and the dotted line the

later period.⁵ A leaver is defined by receipt of welfare in a particular quarter and no welfare in the following quarter, so this measure is zero for the first quarter after the quarter of exit. The lines show that in the second quarter about 10 percent of leavers are again receiving welfare and that this proportion increases for both cohorts up through the fourth quarter.

Differences between the two cohorts are striking. Among leavers in the earlier period, approximately 23 percent were receiving welfare by the eighth quarter after leaving, while the comparable figure is only 15 percent for the later period. We also see that for the later period, there is a pronounced peak in quarter 4, where 17 percent of leavers are again receiving welfare. The decline in welfare receipt over the next four quarters reflects the fact that some of those who return to welfare leave again, outnumbering the flow of those returning.

As noted above, levels of employment among leavers are appreciably higher in the late 1990s, and this is reflected in Panel B. In both periods, employment declines after the first quarter off of welfare. In large part, this identifies the underlying cause for the return to welfare, as leavers lose jobs that facilitated the original move from the welfare rolls.

Figure 8 compares earnings over time for those leaving welfare. While the previous figures focused on the setbacks experienced by leavers, showing a substantial number returning

⁵ The statistics in Figure 7 aggregate the experiences of individuals leaving welfare in any of the specified quarters. For example, those who leave welfare in 1992:3 are followed for 1992:4-1994:3, while those who leave welfare in 1992:4 are followed for 1993:1-1994:4. This means that an individual who left welfare, returned, and then left again within 1992:3-1993:2 would be counted as a leaver twice in this analysis. (The number of such cases is relatively small.) We were concerned about possible differences in that the experiences of individuals leaving welfare in different quarters within each two-year period, and so we calculated statistics in both panels of Figure 7 separately for each quarter. Although small differences exist, these are dwarfed by the differences between the two cohorts. Figure A-7 presents these disaggregated results.

to welfare and a decline in employment, the information here focuses on their successes. The top panel provides average earnings for all leavers, a figure that includes those with no earnings and those who return to welfare. The important observation is that the averages are increasing, showing that increases in earnings for those who remain employed more than compensate for the earnings shortfalls of those who are not employed. The basic patterns are similar in the two periods, although the increase is somewhat larger in the earlier period (11 percent versus 7 percent).

Panel B graphs the increases in average earnings for those with jobs. The increase is larger in the more recent period, in part, no doubt, reflecting that there is a slightly greater decline in employment, so that the lowest earning are removed from the risk set.⁶

Table 1 provides information on the kinds of jobs welfare recipients obtain when they leave welfare. The sample is the same as that described above for welfare leavers. In the set of columns on the left portion of the table, information is provide on employed recipients in the first quarter off of welfare, while in the right columns information is provided for the eighth quarter after leaving welfare. Note, all leavers are included in the latter count, so it includes some individuals who returned to welfare. Information is provides for the cohort leaving welfare in 1992-1993 and the cohort leaving in 1996-1997. All statistics focus on the characteristics of employers of welfare recipients, so individuals who are not employed are omitted.

Panel A shows that welfare leavers are very likely to have jobs in retail trade and service firms, and that this proportion grew modestly over the five years between our periods. Looking

⁶ Earnings vary substantially from quarter to quarter, in large part due to seasonal effects. Since the cohorts graphed in Figure 8 combine leavers in four quarters, they smooth these effects. Figure A-8 presents results for leavers in each of the four quarters in each cohort.

at the industry detail, we see that over 13 percent of leavers are working in restaurants and bars, but that this proportion declined slightly between periods. The proportion in manufacturing firms declined nearly a third in the five year period. The most dramatic increase among detailed industries is in help supply services (“temp help”), which increased from 5.3 percent of leavers to 8.2 percent in the first quarter after leaving.

If we compare the immediate quarter with the eighth quarter, we see that the progression is quite similar for the two cohorts. There is little evidence that leavers in the recent period are more likely to remain in unstable or marginal jobs. For example, in both periods, leavers move out of jobs in restaurants and temp help providers, and into jobs in manufacturing, transportation and communications.

Panel B in Table 1 compares the size of firms hiring welfare leavers. Here we see that among leavers in the more recent cohort, appreciably more are working for the largest firms. Whereas in the earlier period, workers tended to move into larger firms, in the recent period, the change is small.

Panel C shows that, initially, both cohorts of welfare leavers work for firms with very similar pay but that progression over the two years after leaving welfare is greater for the more recent group. Perhaps most notable, eight quarters after leaving welfare, nearly 30 percent of leavers in the 1992-1993 cohort worked for firms with wages averaging below \$2000 per quarter, whereas that number had declined to 25 percent for the 1996-1997 cohort. Finally, Panel D shows that welfare leavers are less likely than in the past to be working in a firm with a large share of welfare recipients. We see no evidence that welfare reform has pushed leavers into positions with employers who specialize in hiring welfare recipients.

2. *The Determinants of Recidivism*

As the conditions for departure from welfare shift, we might assume that returns to welfare would have a different structure. Table 2 provides some initial indicators of who returns within two years of leaving.⁷ The analysis is performed separately for our two cohorts. Equation 1 enters standard demographic variables. We see recidivism is greater for nonwhites, those with less education, those who are younger and have more and younger children. While the basic pattern is not altered, there are some changes between cohorts, with race and education playing a slightly more important role in for the second cohort.

Equation 2 considers the welfare and work history of the leaver. Time on welfare indicates the proportion of quarters in the eight quarters prior to leaving that the individual was receiving welfare, which varies from 1/8 to 1. Time working is the proportion of quarters that the individual worked, varying from 0 to 1. Both of these measures are of substantive importance, indicating, as expected, that those with greater welfare experience are more likely to return. The coefficient on time working is less not as clear. In this case, those with more work experience are more rather than less likely to return. Of course, this measure of work experience indicates, for many leavers, that prior work did not preclude welfare receipt. One might expect the employment and welfare experience variables to be negative associated, so that inclusion of welfare experience would influence the coefficient of employment. In fact, omitting welfare experience has little effect on the estimated coefficient of the employment variable.

One hypothesis is that those with more extensive work histories are likely to leave

⁷ We also performed analyses predicting the chance of returning to welfare within one year, but the results were substantively indistinguishable from the two year analysis.

welfare with low paying jobs. Equation 3 enters two measures of employment based on the first quarter after leaving welfare. The first indicates the earnings in that quarter, while the second is a dummy that identifies whether the individual has earnings. Estimated coefficients provide support for the view that those with low paying jobs are particularly unlikely to remain off welfare. The positive coefficient for the dummy indicates that an individual with a job that pays very little is more likely to return to welfare than one with no job, but the negative coefficient on the amount of earnings shows that more earnings reduces the chance of return. Hence, a earnings must exceed a certain level before the job is associated with a decline in recidivism. The breakeven point is about \$2600 in the earlier period and \$2900 in the later period.

While the basic observation that having a low paying job is associated with return to welfare is confirmed, it is of interest that the coefficient of prior work history is reduced only slightly. Even controlling for the kind of job an individual obtains after leaving welfare, those with more extensive prior work histories are particularly likely to return to welfare. An individual who has sought welfare despite consistent employment is less likely to obtain complete self-sufficiency than one with no little work history. While the work of Blank and Ruggles (1996) suggests that those leaving welfare because of employment would be particularly likely to return, nothing in prior work suggests the kind of mechanism we observe here.

When we compare the cohorts, we see that, during this period of dramatic change, the basic pattern of coefficients is unchanged. Welfare and work time have slightly small impacts, but these differences are quite modest. In contrast, education and race grew more important in predicting recidivism.

VI. Summary and Conclusion

We have six unique findings in this paper. First, similar to previous studies, we find that there has been a dramatic drop in the welfare caseload in Missouri after 1994. However, we show that this decline is the result of both a decline in the number of people arriving onto welfare *and* a rise in the number of people leaving welfare. Second, for the most part there has been very little change in the characteristics of welfare recipients or the characteristics of those entering and leaving welfare between 1990 and 1999. The one exception is race, where there has been a significant increase in the percent of nonwhite recipients. Third, again similar to previous work, we find that there has been a dramatic growth in the importance of employment for those in the welfare system. Not only are those leaving welfare more likely to be working than in the past, but so are welfare recipients and those entering welfare. We also show that this growth in employment has in turn lead to a decline among welfare recipients in the fraction of their overall income coming from welfare payments. Fourth, when we examine the earnings of individuals who are working, we do not find any evidence that welfare reform has pushed less skilled workers into the labor market. The earnings of those leaving welfare after welfare reform are higher than the earnings of welfare leavers prior to welfare reform. In addition, the earnings of welfare recipients have risen over this period. Fifth, we find that over the 1990s there has been a significant decline in the probability that a welfare leaver returns to welfare within eight quarters. Finally, we find that the type of firms employing welfare leavers has not changes after welfare reform. It does not appear that welfare reform is forcing welfare workers to work for low paying employers.

While these results are tentative, they do suggest that welfare reform has not lead to

increased hardship for those on welfare or those leaving welfare. Nor is it the case that welfare reform has pushed less skilled individuals into the labor market. While individuals who leave welfare in the late 1990s do earn low wages and tend to work in less stable jobs, this was true of welfare leavers in the early 1990s as well. If anything, welfare leavers after welfare reform appear somewhat better off than welfare leavers prior to welfare reforms; they earn higher wages and are much less likely to return to welfare than previously. Of course, any increased hardship due to welfare reform may have been offset by the strong economy in the late 1990s. However, in the face of this strong economy, the results presented in this paper suggest that welfare reform has not materially harmed welfare recipients.

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Table 1: Characteristics of Employer One and Eight Quarters After Leaving Welfare

	First Quarter		Eighth Quarter	
	After Leaving Welfare		After Leaving Welfare	
	1992-1993	1996-1997	1992-1993	1996-1997
Percent Employed	53.0	64.0	51.4	57.9
Number Employed	16,038	24,879	15,545	22,488
A. Industry of Employment				
SIC Division/Industry Code	Percent	Percent	Percent	Percent
A,B,C Agric., Mining, Construction	1.3	1.3	1.4	1.5
D Manufacturing	13.4	9.5	14.0	10.3
E Trans., Com., etc.	3.1	3.0	3.6	3.9
F Wholesale Trade	2.6	2.7	2.9	2.7
G Retail Trade	27.5	28.3	25.0	25.7
5311 Dept. Stores	2.6	3.2	2.7	3.2
5411 Grocery Stores	3.4	3.5	3.1	3.3
5541 Gasoline Stations	2.4	3.2	2.5	2.9
5810 Eating & Drinking Places	13.8	13.1	11.6	11.1
H Finance, Ins., Real Estate	2.8	3.3	3.2	4.3
I Services	47.3	49.9	47.2	49.1
7011 Hotels, Motels	4.6	3.9	4.1	3.5
7363 Help Supply Services	5.3	8.2	6.2	6.9
8051 Skilled Nursing Care	9.4	8.6	7.7	7.6
8052 Intermediate Care	3.0	2.0	2.1	1.6
8062 Hospitals	3.2	3.1	3.7	1.6
8322 Social Services	1.3	2.2	1.6	2.5
8361 Religious Org.	2.2	1.8	2.3	2.2
J Public Administration	1.5	1.6	2.0	2.4
Industry Not Ascertained	0.7	0.3	0.6	0.1
B. Size of Firm				
	Percent	Percent	Percent	Percent
1-19	11.8	10.2	11.4	10.2
20-99	22.5	20.0	20.8	20.0
100-249	19.9	18.8	18.4	18.0
250-999	21.7	22.4	22.1	23.0
Over 1000	24.3	28.6	27.3	28.8
C. Quarterly Earnings in Firm				
	Percent	Percent	Percent	Percent
Below \$2000	30.6	31.4	29.5	25.2
\$2000-3999	41.7	39.8	37.5	38.1
\$4000-7500	21.4	21.9	24.9	25.9
Over \$7500	6.3	6.9	8.1	10.8
Mean quarterly earnings	3404	3461	3670	3988
D. Welfare Recipients in Firm				
	Percent	Percent	Percent	Percent
Less than 2%	73.8	77.2	75.7	77.3
2-10%	17.4	15.4	16.1	15.5
Over 10%	8.8	7.4	8.2	7.2

All dollars are adjusted for inflation to quarter 2 of 1999.

Table 2: Probit Estimates of Return to Welfare

Dependent Variable: Return to Welfare Within Two Years

	Equation 1			Equation 2			Equation 3		
	Cohort	1992-1993	1996-1997	1992-1993	1996-1997	1992-1993	1996-1997	1992-1993	1996-1997
Intercept	0.9739 (0.0639)	0.9451 (0.0568)	0.7790 (0.0651)	0.7089 (0.0587)	0.6202 (0.0660)	0.4826 (0.0597)			
Nonwhite	0.1887 (0.0159)	0.2503 (0.0141)	0.1105 (0.0165)	0.1744 (0.0149)	0.1325 (0.0166)	0.2093 (0.0150)			
Years of Education	-0.0503 (0.0049)	-0.0741 (0.0044)	-0.0573 (0.0050)	-0.0775 (0.0045)	-0.0523 (0.0050)	-0.0690 (0.0046)			
Age	-0.0297 (0.0015)	-0.0263 (0.0014)	-0.0293 (0.0016)	-0.0247 (0.0014)	-0.0273 (0.0016)	-0.0224 (0.0014)			
Number of Children	0.0428 (0.0076)	0.0379 (0.0068)	0.0361 (0.0078)	0.0312 (0.0069)	0.0382 (0.0078)	0.0307 (0.0069)			
Age of Youngest Child	-0.0095 (0.0024)	-0.0056 (0.0022)	-0.0141 (0.0024)	-0.0102 (0.0022)	-0.0152 (0.0024)	-0.0120 (0.0022)			
Time on Welfare in Last 2 Years			0.3508 (0.0224)	0.2678 (0.0204)	0.3433 (0.0228)	0.26409 (0.0207)			
Time Working in Last 2 Years			0.3409 (0.0230)	0.2738 (0.0208)	0.3148 (0.0248)	0.2608 (0.0223)			
Earnings in Quarter After Leaving					-0.000141 (0.000009)	-0.000142 (0.000006)			
Working in Quarter After Leaving					0.3691 (0.0230)	0.4152 (0.0201)			
N	30,210	38,791	30,210	38,791	30,210	38,791			
Log Likelihood	-23585.53	-23521.56	-9708.56	-11763.25	-9635.60	-11615.78			

Note: Standard errors are in parentheses

Fig. 1: Caseload, Leavers, Arrivals: 4-Quarter Moving Averages

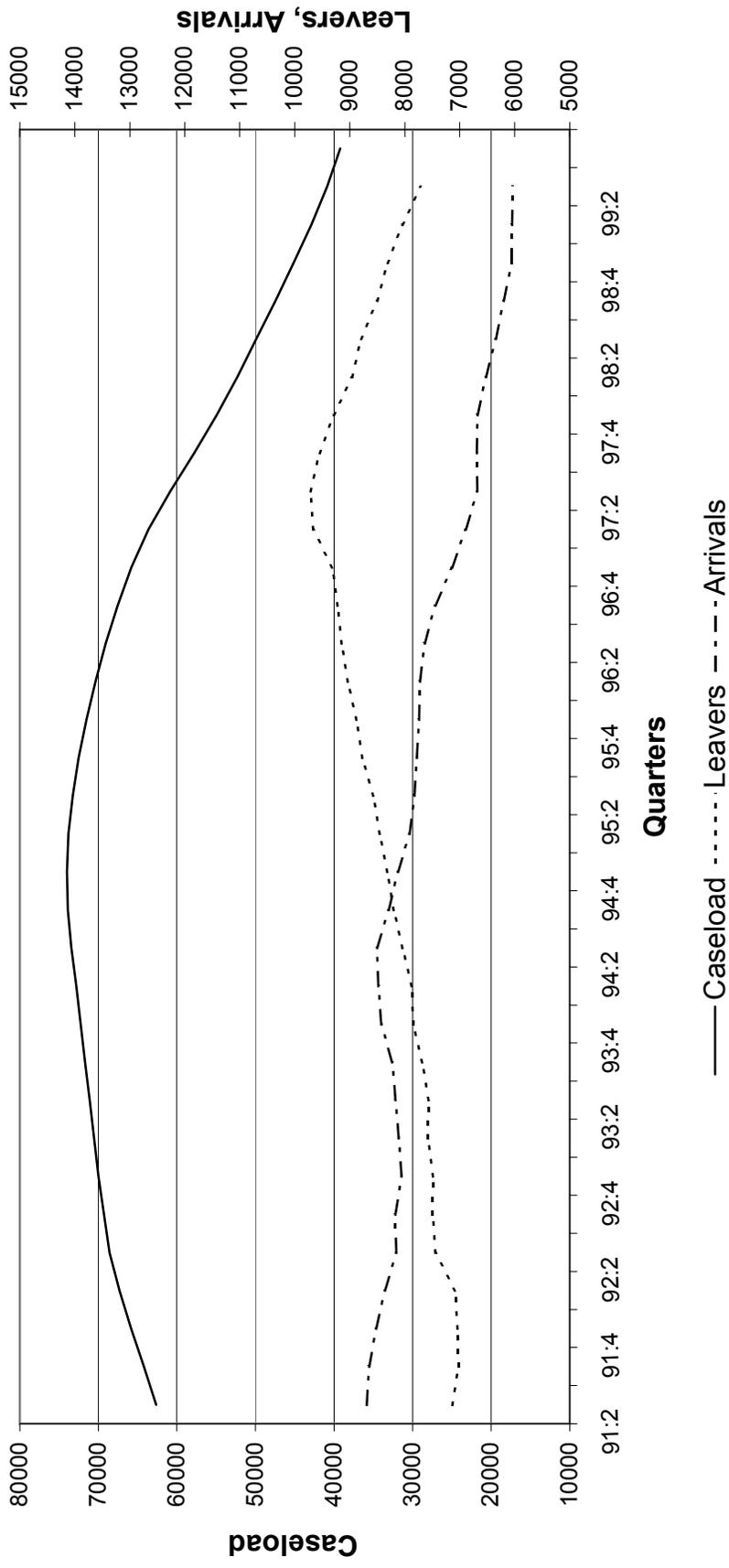


Fig. 2: Exit Rate

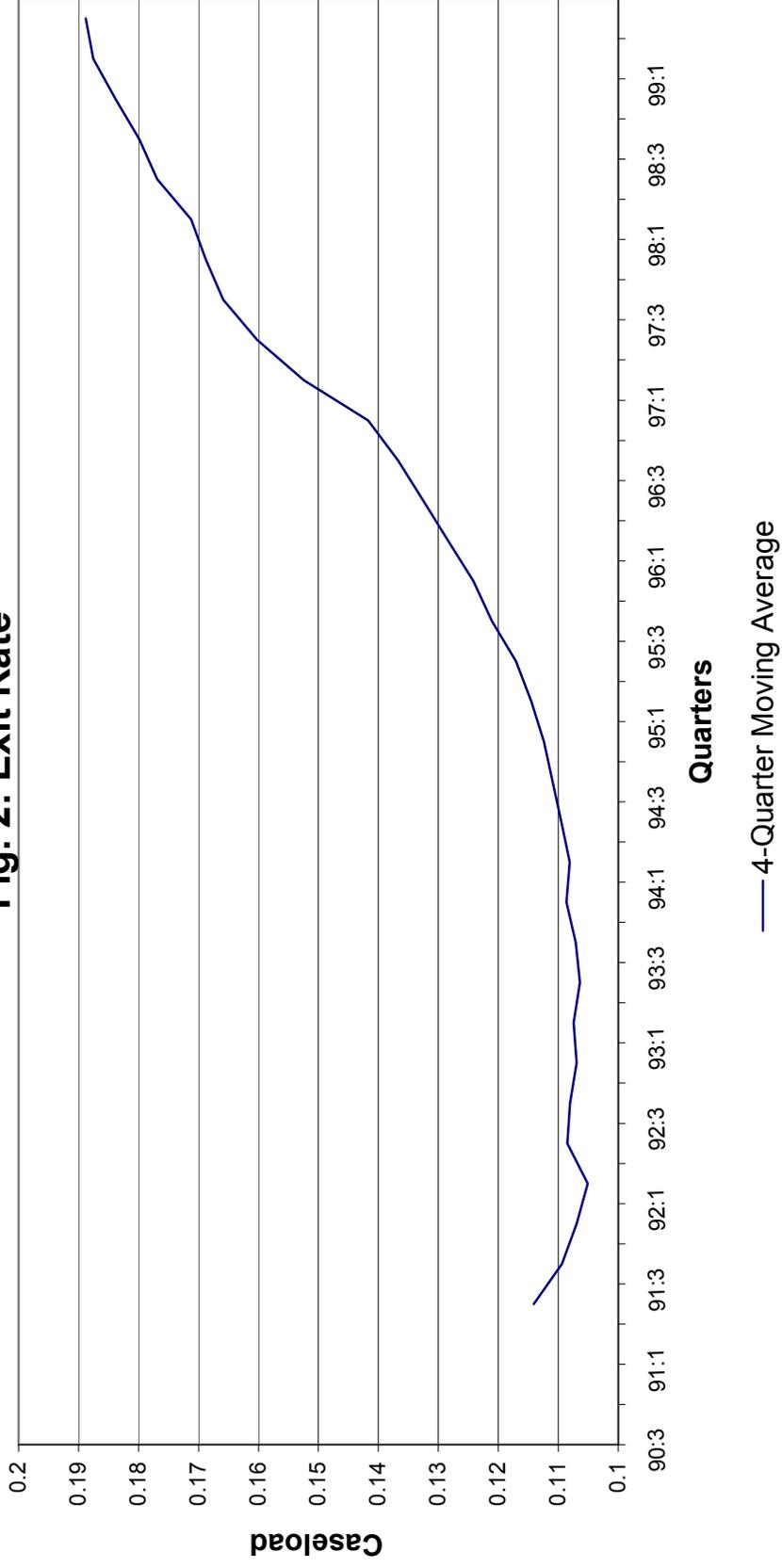
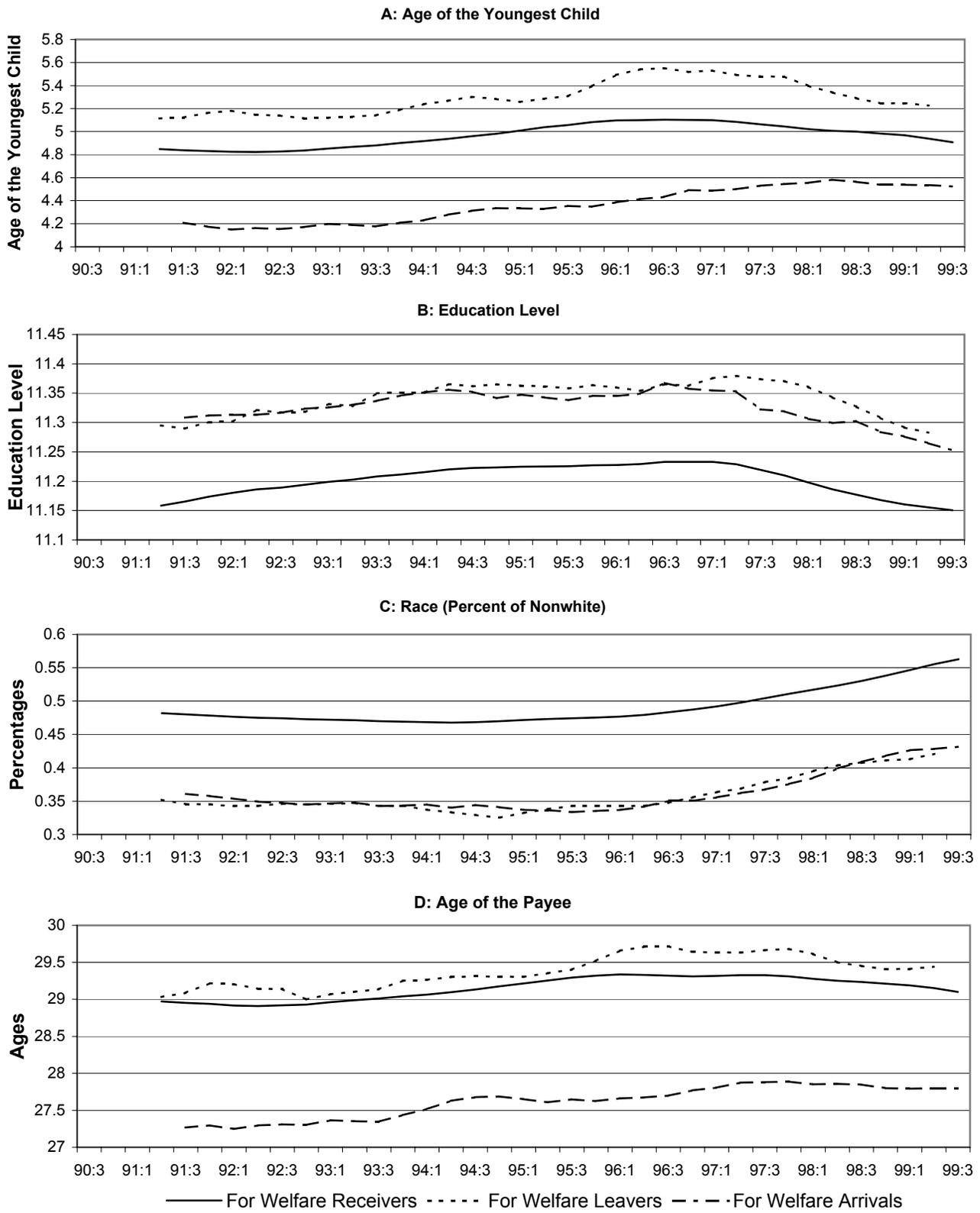


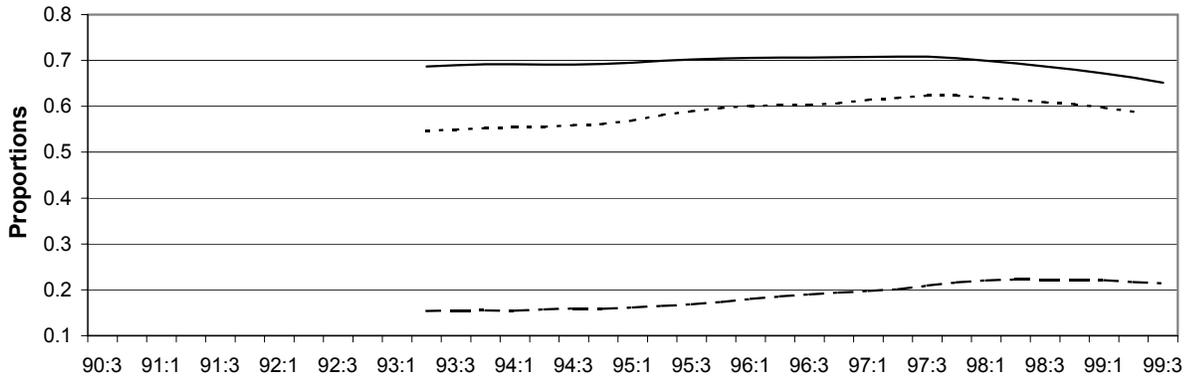
Fig. 3: Characteristics of Recipients, Arrivals and Leavers



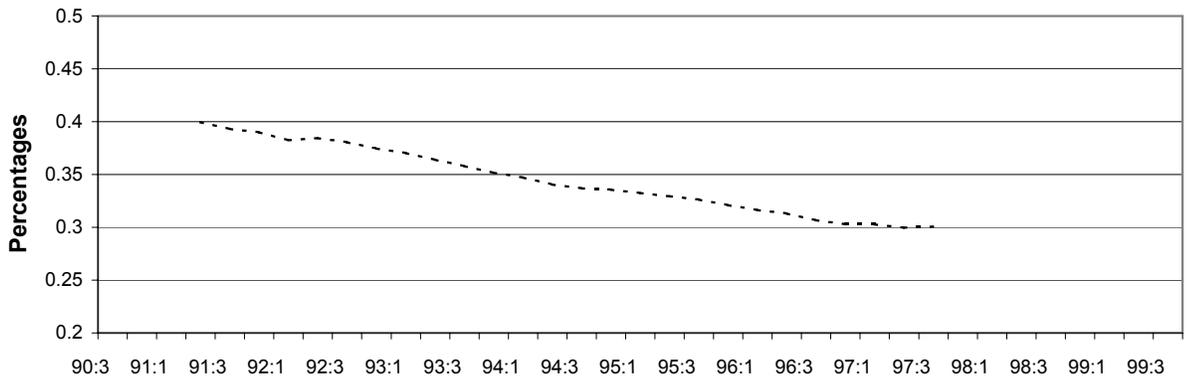
All measures calculated as 4-quarter moving averages

Fig. 4: Prior Welfare, Recidivism and Employment

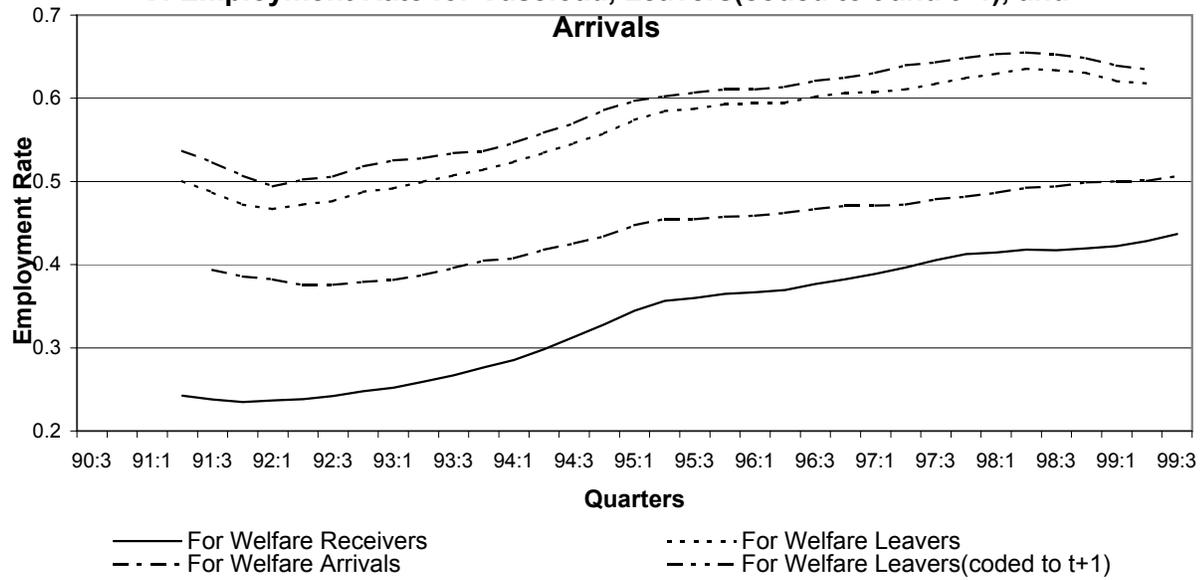
A: Proportion of Prior 8 Quarters on Welfare



B: Percentage of Welfare Leavers Back on Welfare within Two Years



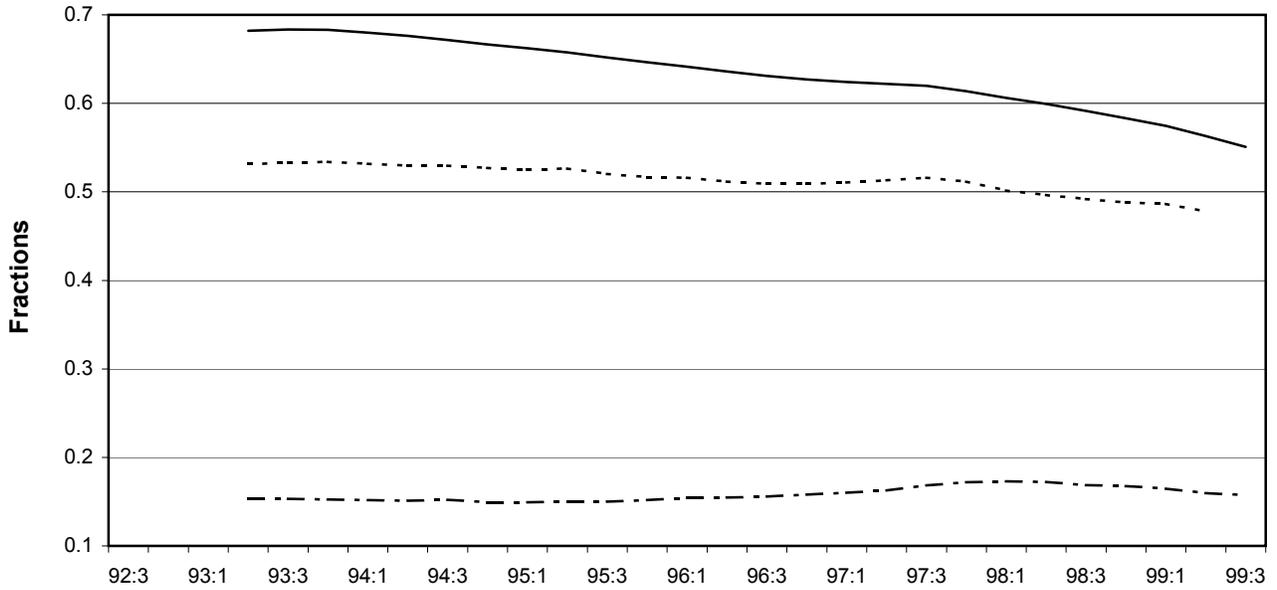
C: Employment Rate for Caseload, Leavers(coded to t and t+1), and Arrivals



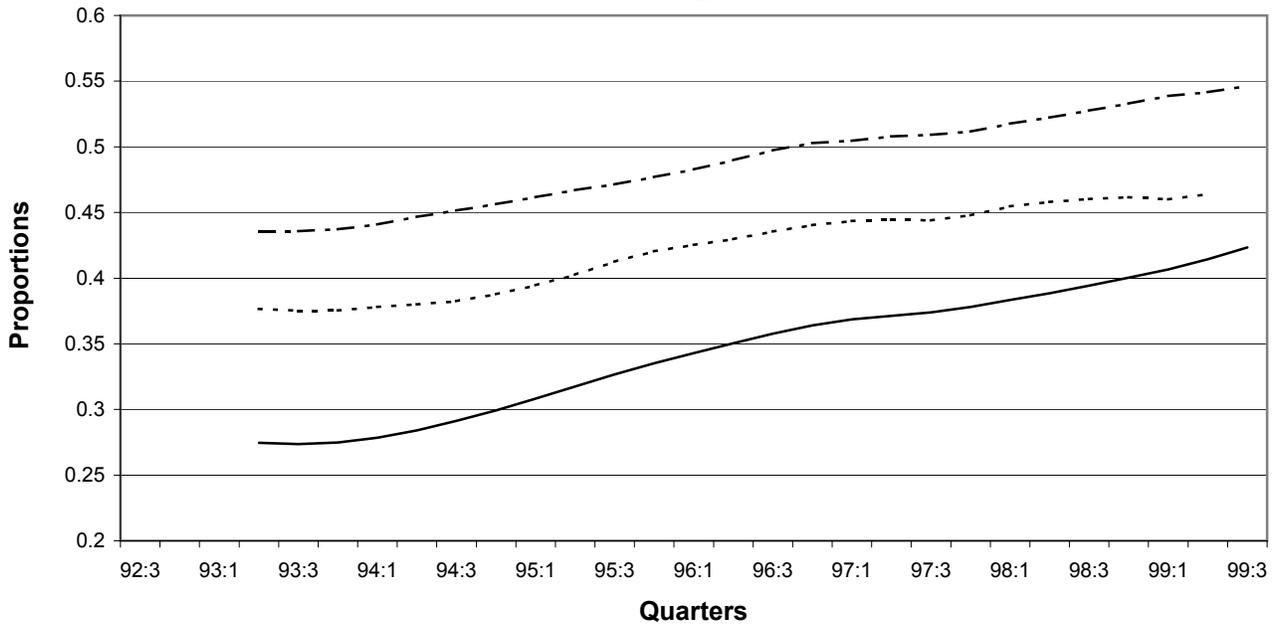
All measures calculated as 4-quarter moving averages

Fig. 5: Welfare and Employment History

A: Fraction of Income in Prior 8 Quarters Due to Welfare



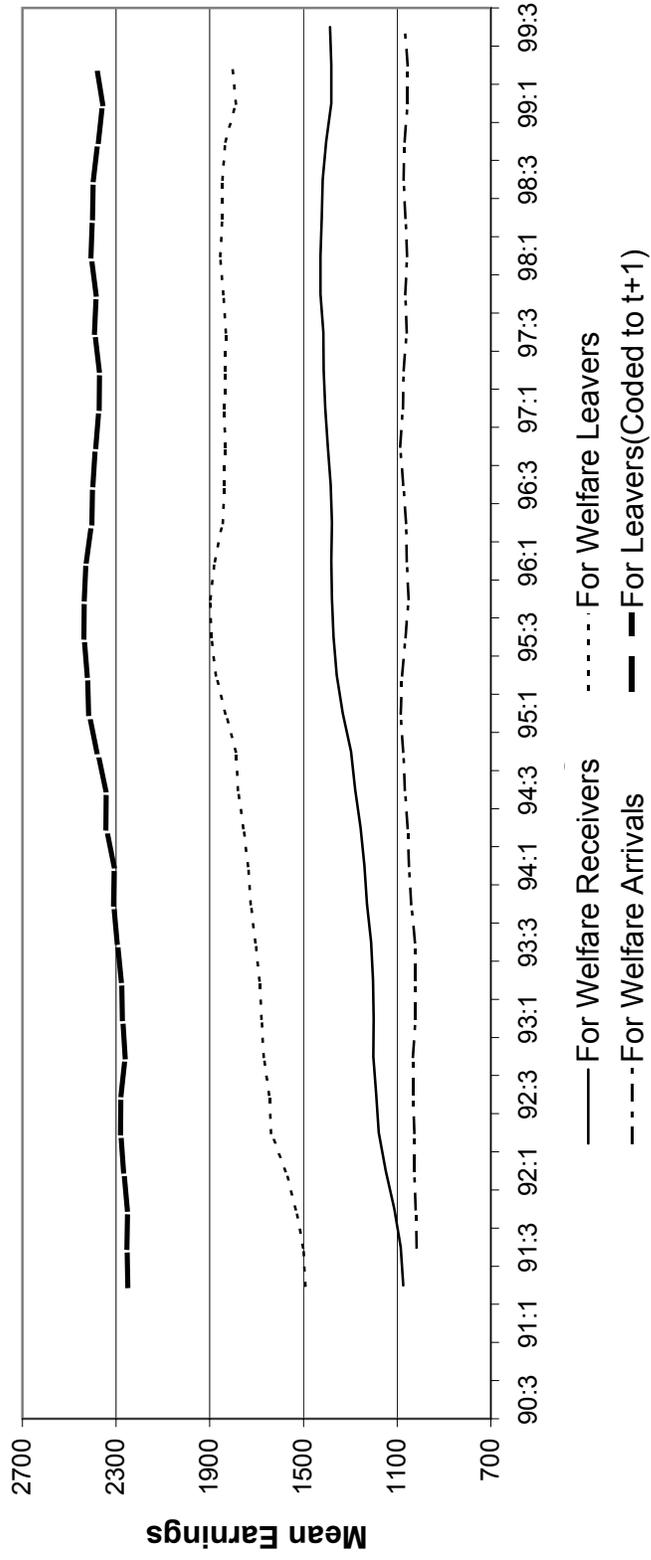
B: Proportion of Prior 8 Quarters With Positive Earnings



— For Welfare Receivers ····· For Welfare Leavers - - - For Welfare Arrivals

All measures calculated as 4-quarter moving averages

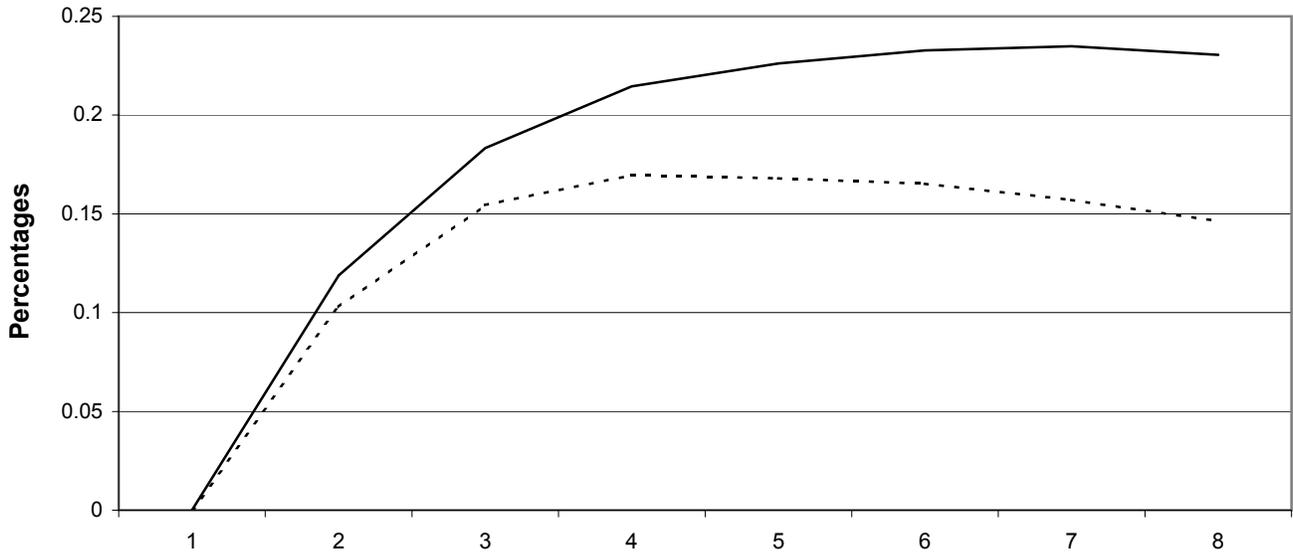
Fig. 6: Mean Earnings Caseload, Leavers, and Arrivals: Employed Individuals



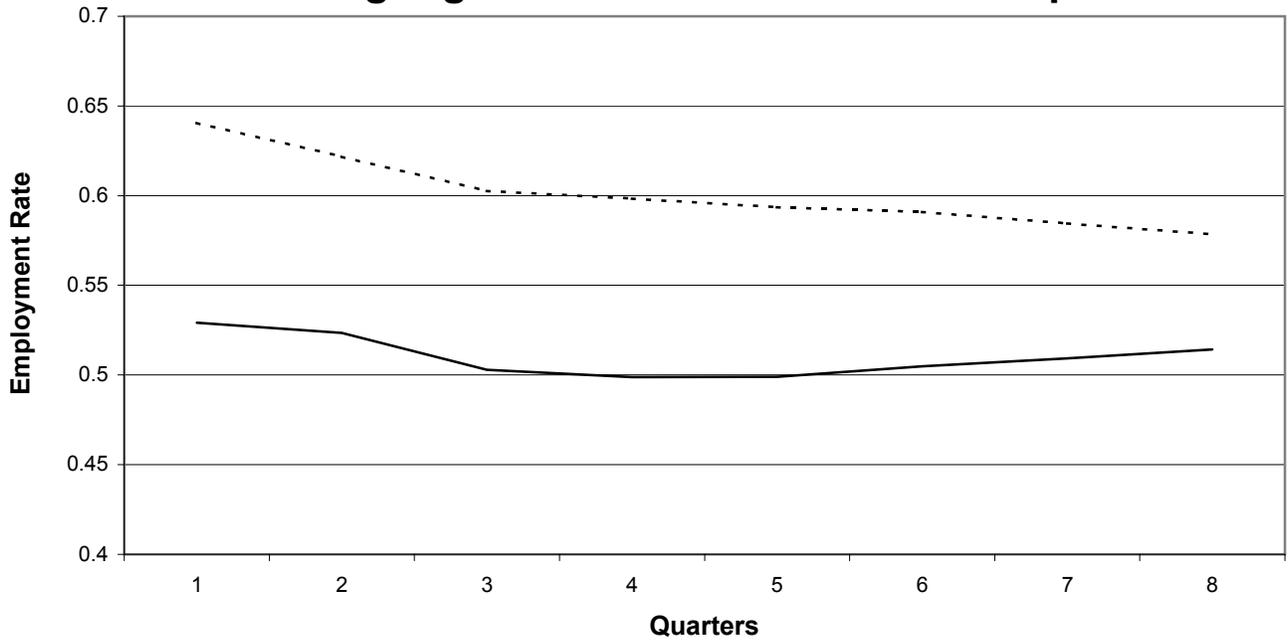
All earnings in real 1999:2 dollars.
 All measures calculated as 4-quarter moving averages

Fig. 7

A: Percentage of Leavers Back on Welfare in Each of the Following Eight Quarters For the two Groups



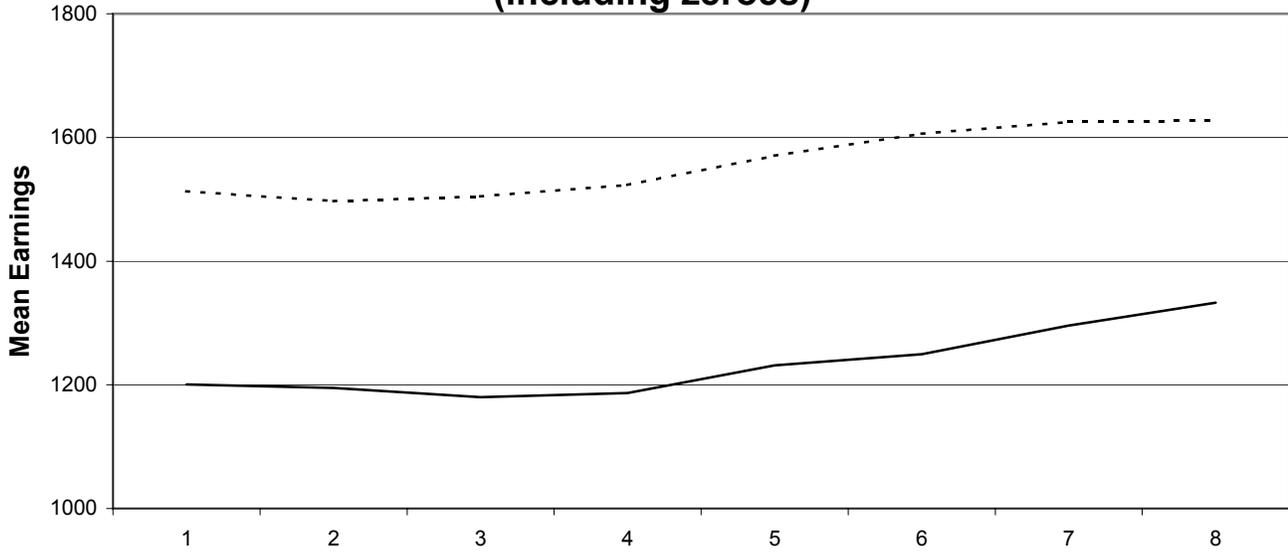
B: Employment Rate of the Leavers in the Following Eight Quarters for the Two Groups



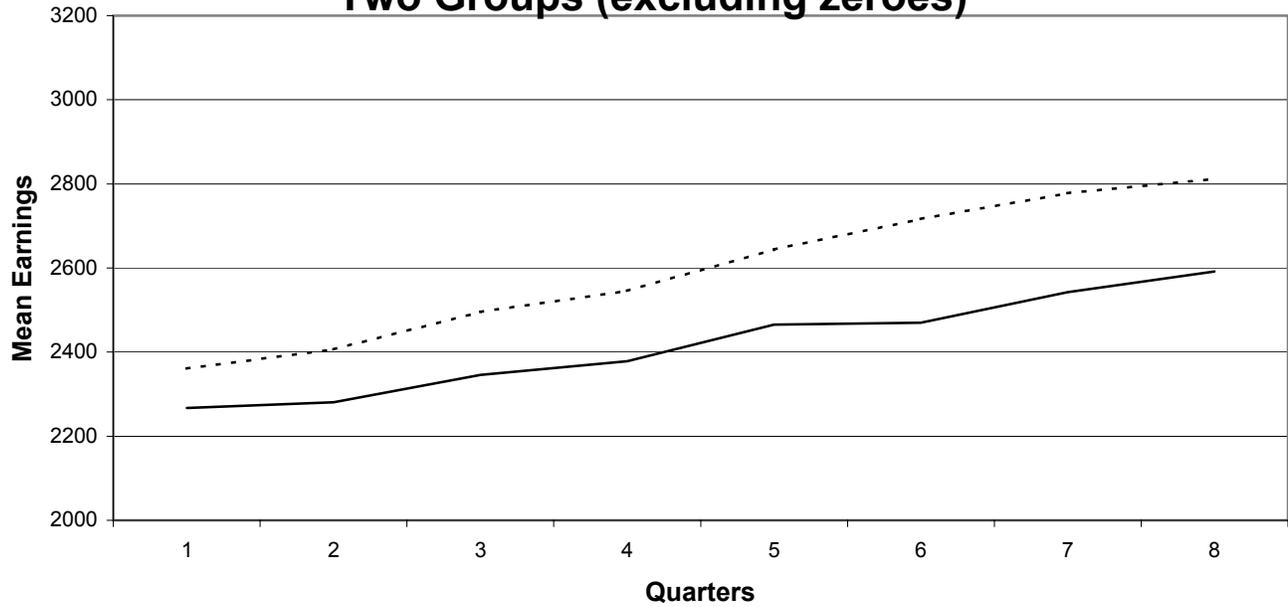
— 1992:3-1993:2 ····· 1996:3-1997:2

Fig. 8

A: Mean Earnings(adjusted to 99:2) of the Leavers in Each of the Following Eight Quarters For the Two Groups (including zeroes)



B: Mean Earnings(adjusted to 99:2) of the Leavers in Each of the Following Eight Quarters For the Two Groups (excluding zeroes)



— 1992:3-1993:2 - - - - - 1996:3-1997:2

Fig. A-1: Caseload, Leavers, Arrivals

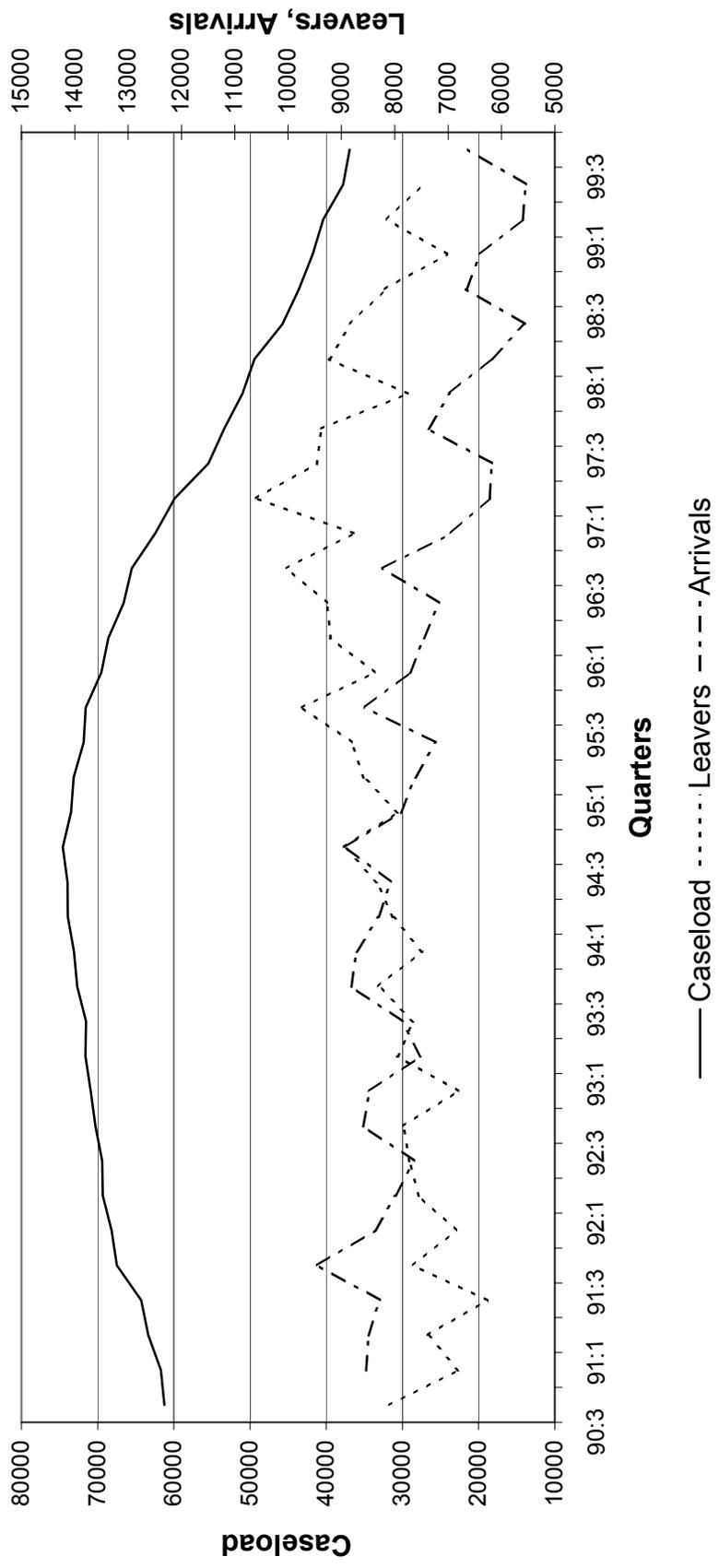


Fig. A-2: Exit Rate

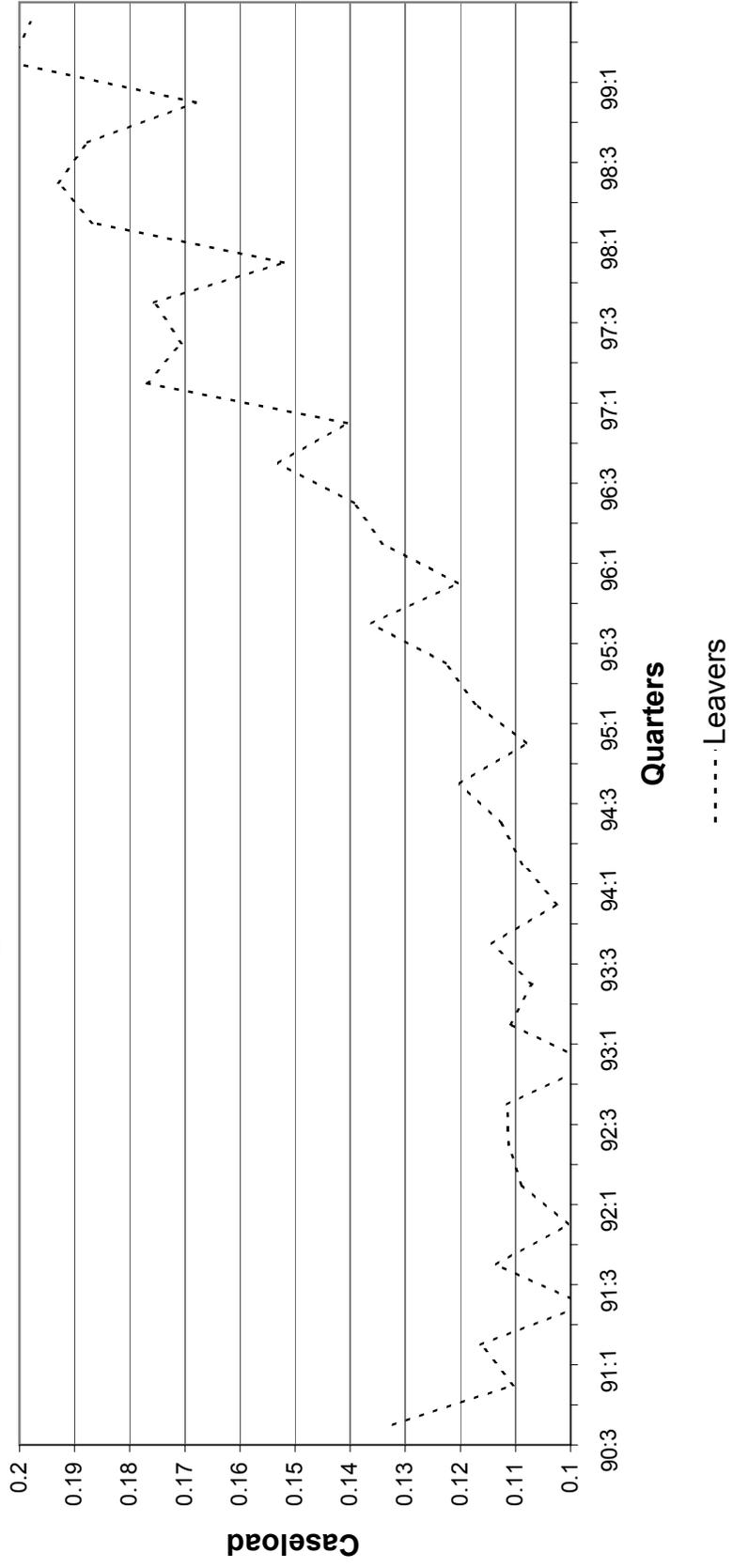
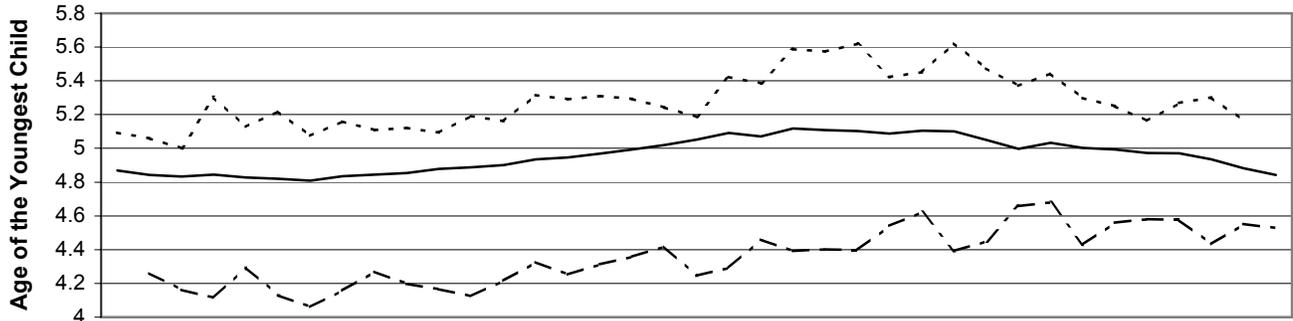
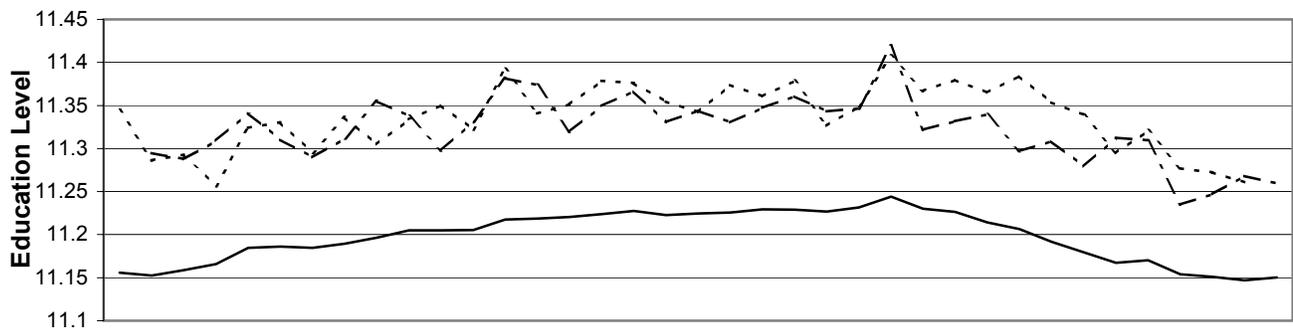


Fig. A-3

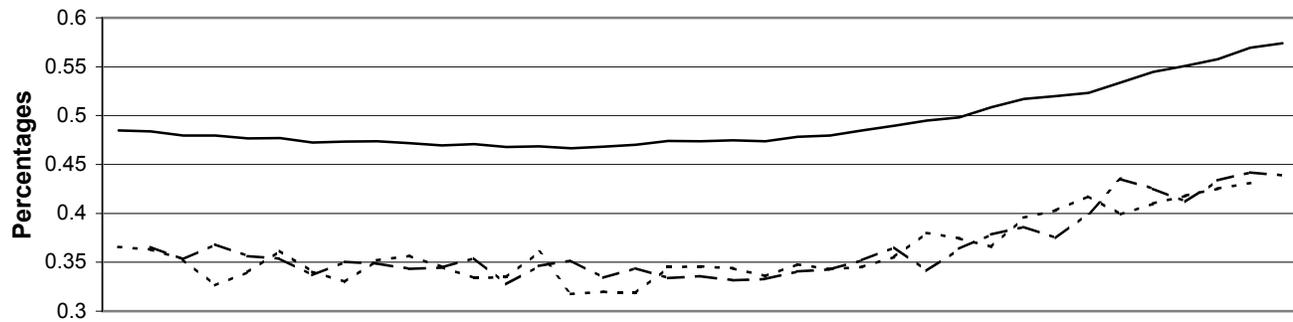
A: Age of the Youngest Child



B: Education Level



C: Race (Percent of Nonwhite)

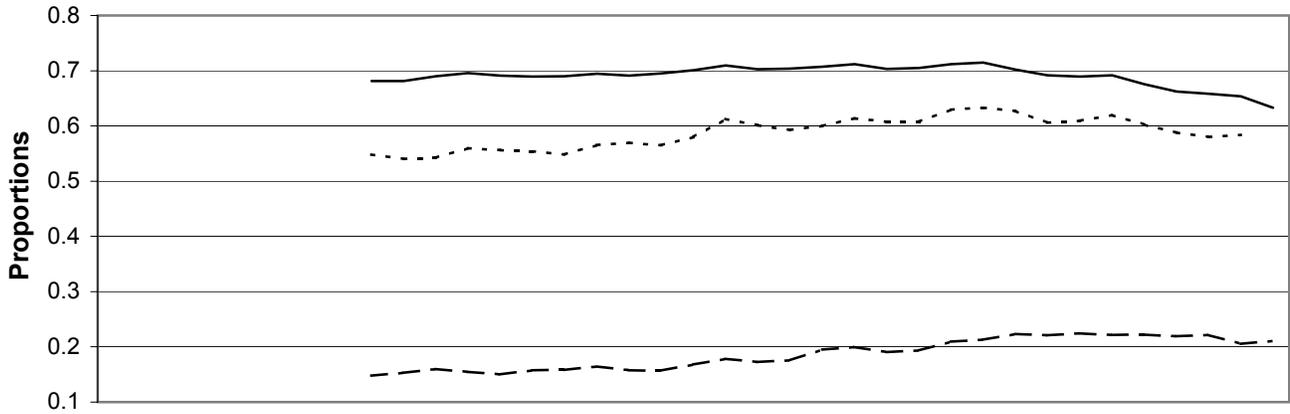


D: Age of the Payee

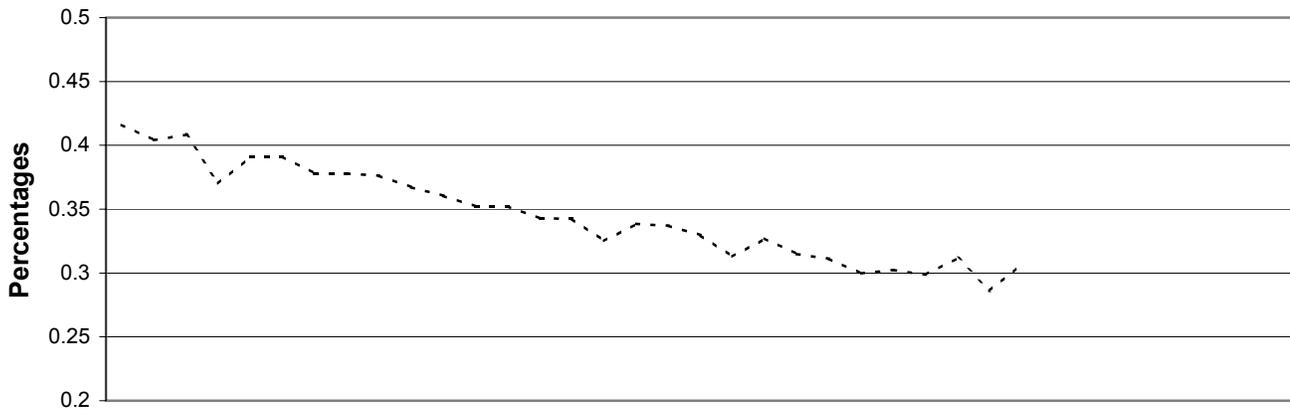


Fig. A-4

A: Proportion of Prior 8 Quarters on Welfare



B: Percentage of Welfare Leavers Back on Welfare within Two Years



C: Employment Rate for Caseload, Leavers(coded to t and t+1), and Arrivals

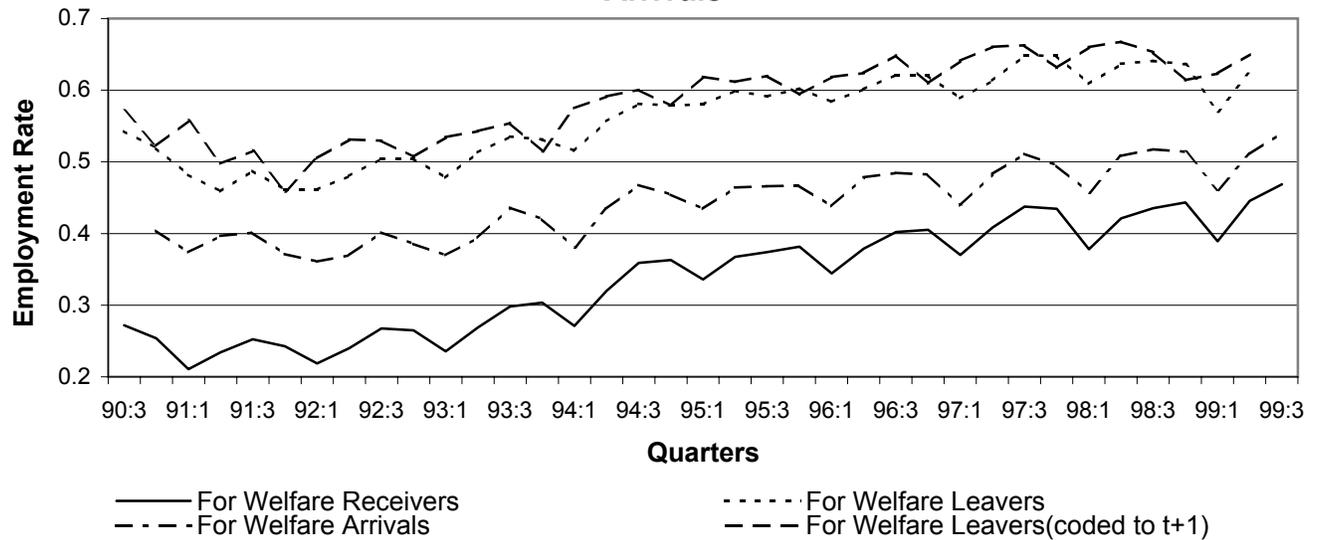
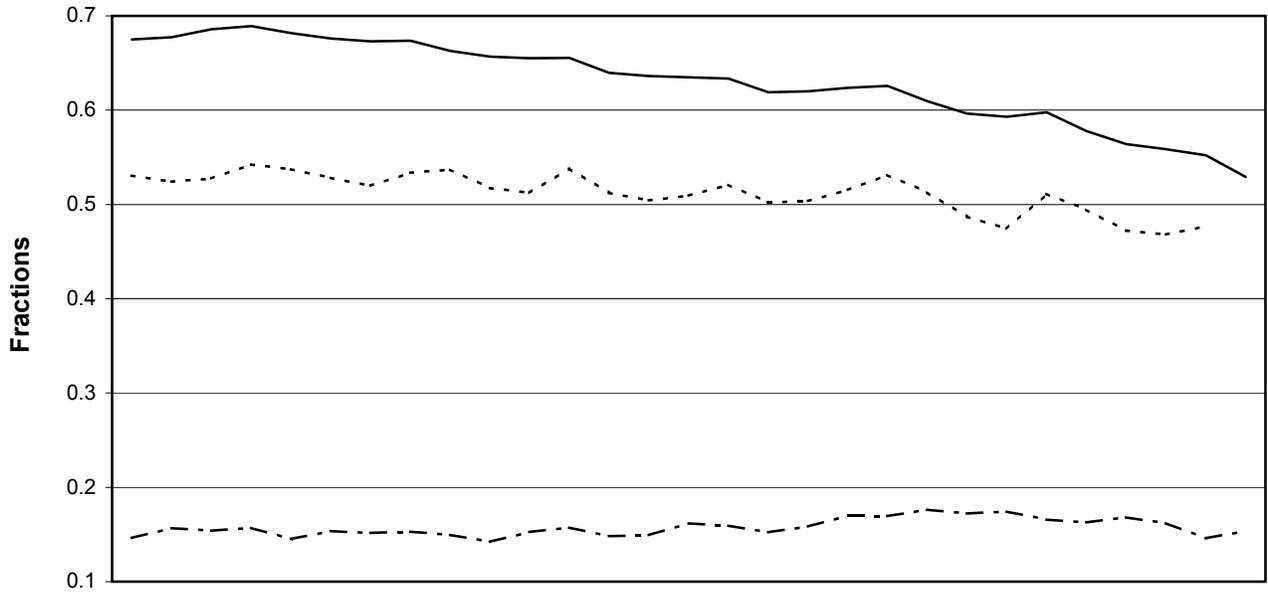


Fig. A-5

A: Fraction of Income in Prior 8 Quarters Due to Welfare



B: Proportion of Prior 8 Quarters With Positive Earnings

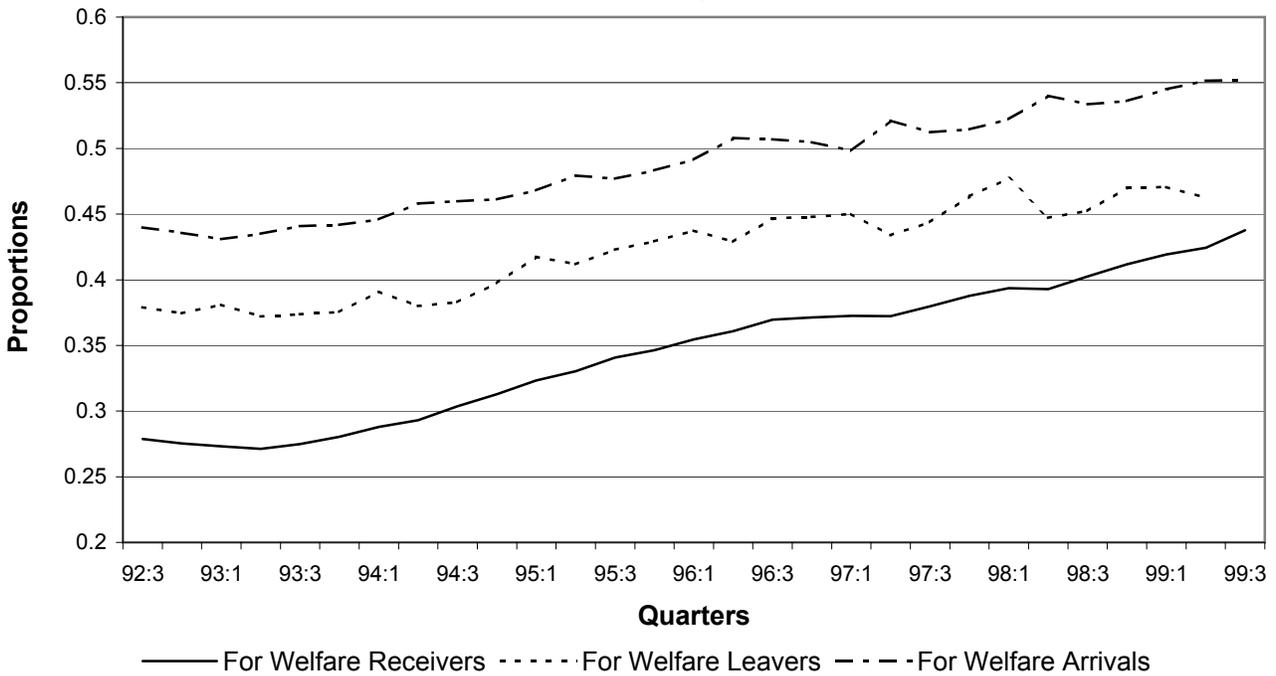


Fig. A-6: Mean Earnings(adjusted to 99:2 and averaged among those with positive earnings in each category) for Caseload, Leavers(coded to t and t+1), and Arrivals

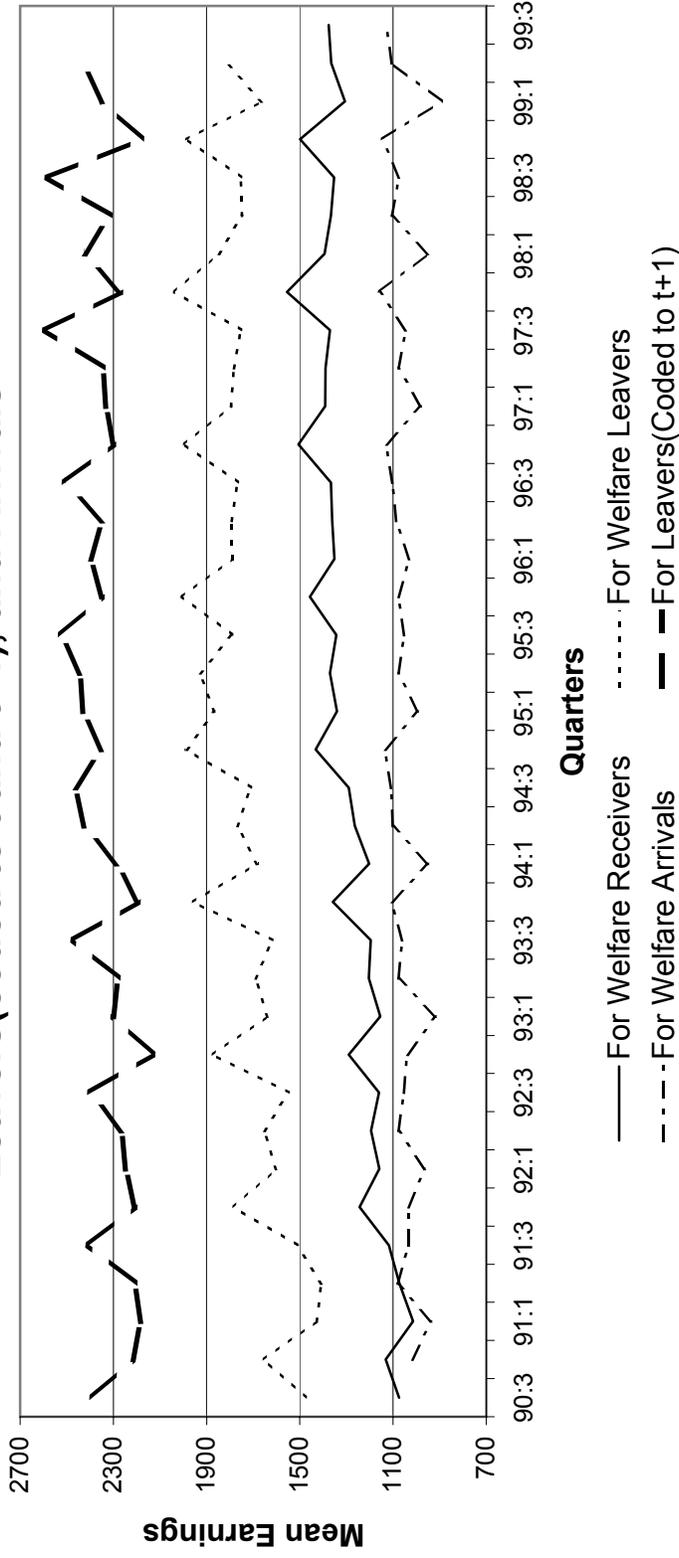
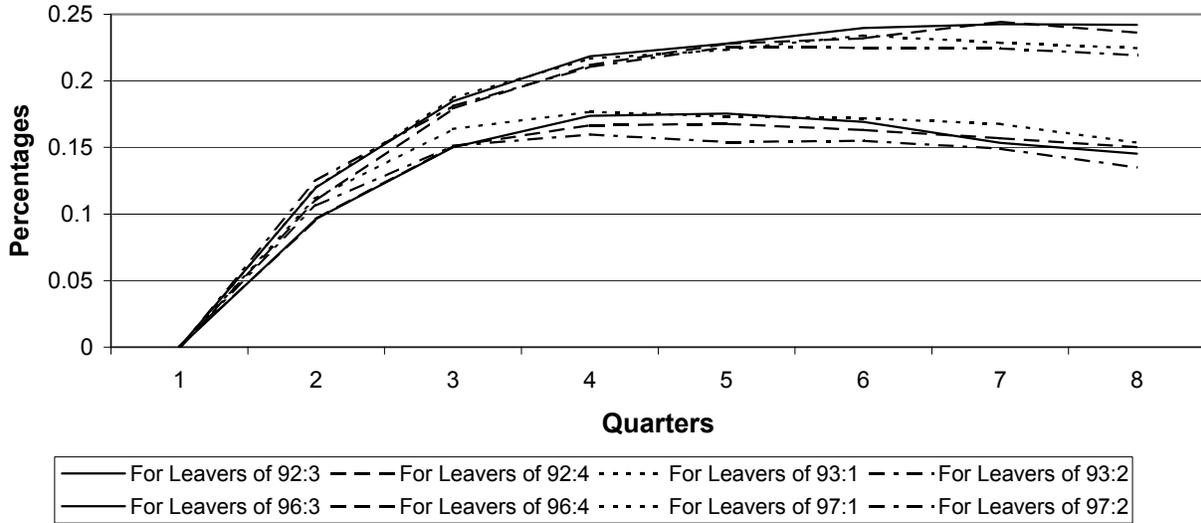


Fig. A-7

A. Percentage of Leavers Back on Welfare in Each of the Following Eight Quarters



B. Employment Rate of the Leavers in the Following Eight Quarters

