

**Did Welfare Leavers' Employment Levels and Job Characteristics
Change During TANF Implementation: An analysis using SIPP 1996-2000**

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Abstract

This study investigated whether employment levels and characteristics of the jobs that women obtain upon leaving TANF have changed over 12 quarters from Q4 1996 through Q3 1999 as welfare reform has gone into effect. The central hypothesis was that employment levels and quality of the initial jobs obtained by welfare leavers declined over time despite the strong economy. Employment rates of welfare leavers differed significantly by quarter of exit net of changes in leaver composition and the economy. The trend was curvilinear, with employment falling initially and then rising slightly by the end of 1999. The employment trend, though, was moderated by state time limits. States with short lifetime limits had increasingly higher employment rates among leavers while the dip in employment occurred in states that adopted the 60-month Federal time limit. However, despite increasing employment rates in short time limit states, several indicators suggest that there was decreasing job quality among leavers in these states over time. There may have been unobserved differences in the leaver cohorts or changes over time in the aggressiveness or effectiveness of welfare reform implementation that pressured more women to leave welfare for work but to take jobs of lower quality.

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Introduction

This study investigated whether the employment levels and characteristics of the jobs that women hold upon leaving cash assistance have changed as welfare reform has gone into effect. This question has policy relevance because welfare reform, as put forward in the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) of 1996, emphasizes rapid employment entry, penalties for non-compliance with work requirements, and time limits on benefits. As growing numbers of recipients experience these requirements and as the reality of time limits approaches, the pressure on single mothers to leave welfare and attempt to support their family through work is mounting. Under these circumstances, women leaving welfare may be increasingly likely to enter less desirable jobs in terms of wage levels, hours worked, employee benefits, or unable to find a job at all. Using quarterly welfare exit cohorts identified in the 1996-2000 panel of the Survey of Income and Program Participation (SIPP), this study examined whether indicators of employment and job quality have changed and the degree to which these changes are associated with characteristics of the leavers, the business cycle and policy differences across the states.

The mid-1996 to 2000 time interval represents an important phase of policy implementation. Congress passed welfare reform legislation, followed by the promulgation of rules for the Temporary Assistance for Needy Families (TANF) program. States then crafted their own TANF plans and these new welfare policies were gradually put into practice by state and local agencies. During this period of welfare reform implementation there were possibly offsetting influences on the employment outcomes for single mothers leaving welfare. On the

positive side, the tightness of labor markets, as reflected in falling unemployment rates, fostered high levels of employment among welfare leavers and low-skill women in general (Blank, 2001). Other things being equal, sustained labor demand should have led to an increase in the employment rates and indicators of job quality among welfare leavers. Moreover, welfare agencies during this time period gained experience with their welfare-to-work programs and should have become more adept at moving recipients into job opportunities. However, other forces may have had a more negative influence on employment levels and job quality. Over the first four years of welfare reform, unprecedented numbers of low-skill single mothers were added to the labor force, especially in some regions (Lerman and Ratcliffe, 2001). As these additions to the labor force cumulated, many of the more attractive job openings may have been filled in the short run (Bartik, 1998, 2000; Enchautegui, 2001). Also, the policy inducements to leave welfare may have intensified over time as state mandates became more strictly enforced. Time limits, in particular, may have had a more powerful influence as the end date drew closer, creating an urgency for women to leave welfare without assurance of a job or to take a position that they would have forgone in earlier years. Finally, if the most job-ready women left welfare early in the period, the later cohorts may have experienced poorer employment outcomes because they had fewer employment qualifications or more personal barriers to employment.

Welfare leavers studies

Since welfare reform, there has been considerable policy interest in the employment success of individuals who left welfare. The earliest evidence, which was quite optimistic, came from state-based welfare leavers' studies. They reported employment rates of exiters in 1997-98 to be in the 65-75 percent range, rates thought to be higher than before welfare reform (Brauner & Loprest, 1999). Still only about half the leavers earned enough to get their families out of

poverty and most did not work a full 40-hour week. Moreover, between 18 and 35 percent of leavers, depending on the state, were back on welfare within a year (Acs & Loprest, 2001). Using a nationally representative sample of single mothers from SIPP, Bavier (2001) found employment rates that were similar to the state leavers studies. Among persons who left welfare in 1996 and 1997 and remained in the sample for at least 12 months after exit, approximately half worked in the month of exit. Roughly two-thirds worked at some point in the 12 months following exit.

Most relevant to the research reported here are several studies that have compared employment outcomes for individuals who left welfare at various points in time. Loprest (2001) identified individuals in the 1997 and 1999 panels of the National Survey of American Families (NSAF) who had left welfare and stayed off in the two years prior to their interviews. She found few significant differences between the two cohorts in barriers to work and no differences in employment rates or average earnings at the time of the interview. However, she speculated that increased labor demand should have lead to increasing rather than stagnant earnings over this time period, all else being equal, leading her to conclude that employment outcomes may have actually been worsening.

Bavier (2002) examined employment levels of female welfare leavers from the 1993 and 1996 panels of SIPP. His statistical models controlled for personal characteristics, economic conditions, and the year in which the individual exited. When TANF was specified as a dummy variable that distinguished individuals who left before and after July 1996, its coefficient was negative and significant suggesting that employment outcomes may have worsened under

welfare reform net of other factors.¹ There was also a positive (but insignificant) coefficient for a linear time trend from 1993 to 1998, suggesting the possibility that unmeasured policy or economic influences may have been pushing employment upward, after taking into account the downward shift in July 1996.

A comparison of 1995 and 1997 Wisconsin welfare leavers showed that the latter group had higher employment rates, with differences being especially notable among the more disadvantaged, big city leavers (Cancian, Haveman, Meyer & Wolfe, 2002). However, post-welfare reform leavers were more likely to have their employment in lower earning industries such as restaurants, hotels and retail trade. In a pooled model of employment levels, controlling for human capital, demographic characteristics and the economy, the coefficient for the 1997 leaver group was positive and significant, suggesting that employment outcomes improved to a modest degree.

Taken together the above studies present a mixed picture of whether the employment outcomes for welfare leavers are changing and towards what direction. Although the employment rates of post-TANF welfare leavers are remarkably high, they may be lower than would have been expected given the strong economy and may be trending downward. There also may be differences across states due to variation in their welfare policy. The study presented in this paper differs from those above in that it compares leaver cohorts over 12 quarters, all in the post TANF period. Thus, it does not attempt to determine whether leavers' employment success improved or worsened due to TANF but to describe the trends as TANF moved from a federal law to a reality in all of the states. By focusing on quarters rather than years, it allows a more

¹ Other specifications of the onset of welfare reform showed similarly negative effects but the July 1996 point most clearly demarcated the change. Since this was before the time when most welfare recipients were directly affected by TANF, there may have been anticipatory influences.

precise measurement of the economy and state policy at the time of exit and of the leavers' employment status at approximately the same point.

Job quality

High employment rates among welfare leavers belie a number of concerns about their job quality (Edin & Lein, 1997). Therefore, the study described in this paper looks for trends in the quality of welfare leavers' first jobs in addition to their employment levels. However, there are a number of ways to define job quality (Gittleman & Howell, 1995; Jencks, Perman & Rainwater, 1988) as well as alternative theoretical perspectives on the structure of the low-wage labor market (Bernstein & Hartmann, 2000). Since most empirical work on job quality has focused on the workers rather than the jobs, an important problem has been in separating worker preferences and unobserved characteristics from features of the jobs themselves (Burtless, 1990). Even so, for women leaving welfare, it is important whether the jobs they obtain are stable and have the pay and benefits to support the basic needs of their families.

There have been few studies of changing job quality among women who leave welfare, largely because most states adopted a rapid labor force attachment model. From this perspective, any job is considered a success. An exception is Johnson and Corcoran's (2003) longitudinal study of a sample of Michigan women who were on welfare in 1997. Approximately one year later, 13.5 percent of those who were employed worked in good jobs, defined as those that were full time, paid a living wage and offered health benefits. They also found that having skilled experiences on the previous job, making voluntary job changes and being in a union predicted transition from a bad job to a good job.

Factors in employment trends

The study reported in this paper examines trends in employment outcomes for welfare leavers since welfare reform. There are several potential explanations for any trends that are observed: a.) The employment-related characteristics of persons leaving welfare as a group may have improved or worsened (i.e. composition); b.) The conditions of the labor markets in which they are seeking work may have changed (i.e. economic context); or c.) The welfare policies or programs that are in place at the time may differ (i.e. policy implementation). These effects are not independent in that policies and the economy may influence the kinds of people who leave welfare and economic conditions and population characteristics may affect the policies that are chosen and the way in which they are implemented in practice. Nevertheless, this study seeks to control for these influences in the assessment of trends but not to establish causality.

Composition of leaver population

Welfare-reliant women face a number of barriers to finding and keeping good jobs. They are single mothers, often of young children, who disproportionately are members of disadvantaged minority groups. By virtue of education and experience, they largely fall into the category of low-skill workers and often have personal barriers to employment, such as mental and physical health problems, and domestic violence (Danziger, Corcoran, Danziger & Helfin, 2000). Given their family obligations, their labor market participation may also be influenced by their family support and other sources of income or benefits. Consequently, even before TANF went into effect, many former welfare recipients had earnings below the poverty line over extended periods (Cancian, Haveman, Kaplan, Meyer & Wolfe, 1999; Corcoran, Danzinger, Kahil & Seefeldt, 2000; Harris, 1996). Thus, it is anticipated that labor market success of this

group as a whole depends on its composition at a point in time and the severity of their employment barriers.

Economic context

Employment outcomes for welfare leavers may vary over time due to the overall strengths of the economy, and the fact that rapidly falling caseloads may signal increases in low skill labor supply and mismatches in some locales (Holzer & Danziger, 2001). Labor market conditions, which vary over time and place, may affect employment outcomes for welfare recipients perhaps more strongly than other job seekers (Hoynes, 2000). Rates of families leaving welfare for work have historically been very sensitive to local economic conditions and the business cycle suggesting the tenuousness of their labor market attachment and their vulnerability to economic downturns (Fitzgerald, 1995). Moreover, given their relatively low levels of education and experience, employment opportunities for women leaving welfare are driven largely by the number of low-skill job openings and the strength of the business sectors in which such jobs are concentrated (Holzer, 1999).

At the outset of welfare reform, it was suggested that large inflows of welfare leavers might diminish their job prospects, and those of other low skill workers in the short run (Bartik, 2000). Economists expected such dislocations to resolve over time though, as local labor markets adjusted to the increased availability of low-skill workers. Nevertheless, there were questions about how quickly these adjustments would occur and whether there would be lags in some places, particularly big cities with large caseloads (Allen & Kirby, 2000). For example, as labor force participation of low-skill women rose from 1992 to 1997, there was an increase in their unemployment rate in the short run (Smith & Woodbury, 2000). However, a study of single mothers in large urban areas found that they significantly increased their labor supply between

1995 and 1999. At the same time their unemployment rate fell dramatically, suggesting that the strong economy responded quickly to increase the employment of these individuals in these cities (Lerman & Radcliffe, 2001). Since the period studied in the research reported in this paper was generally one of economic growth, employment rates of welfare leavers would be expected to rise, other things being equal.

Policy implementation

States phased in their welfare reform plans during the period of this study. There were important differences among the states in their welfare time-limits and when they went into effect that could influence employment trends among leavers. One prospect is that the closeness of impending time limits may have pushed women to leave welfare more quickly than they would have earlier, even if they have been unable to find desirable jobs. It is also possible that agency staff became more aggressive in requiring participation in work activities or sanctioning non-compliance as time limits drew near. Moreover, awareness of time limits may have increased over time and welfare recipients may have gotten a clear message sooner in states with short time limits (Quint, Edin, Buck, Fink, Padilla, Hewitt & Valmont, 1999). If the influence of time limits on women's employment depends in part on their understanding of them, behavioral effects may become more apparent later on. Once the point has come when some recipients in a state actually begin reaching time limits, these examples may serve as additional pressure to leave welfare and seek work.

After time limits actually hit, the composition of the leaver cohort, may have begun to include individuals who have been dropped from TANF due to using up their months of eligibility. At such a point, a further decline in job quality might be observed in the leaver population due to individuals being put off the welfare rolls against their will. For example, in

Ohio, time limited leavers were more likely than other leavers to report employment that was outside the system as signified by the absence of a state Unemployment Insurance wage record, to have lower wages and to work fewer hours. They also had more barriers to work (Bania, Coulton, Lalich, Martin, Newborn & Pasqualone, 2001). It is also plausible that time limits may have stronger behavioral effects on women who see themselves as possibly needing to rely on welfare benefits in the future. Along these lines, research suggests that women with younger children may show a greater tendency to leave welfare in response to time limits so as to protect their future eligibility (Grogger, 2002; Grogger & Michalopoulos, 2003).

Even though past state waiver demonstrations that included time limits showed little impact on employment compared to the old AFDC program (Bloom, Melton, Michalopoulos, Scriverner, Walter, 2000; Bloom, Farrell, Kemple & Verma, 2000), these findings do not necessarily apply going forward (Moffit & Pavetti, 2000). TANF implementation has been universal and some 17 states adopted shorter time limits than the Federal 60-month life time limit. States also vary in when they began counting TANF benefits against the time limit and whether they adopted the Federal limit, a shorter limit, or decided to substitute state funds to avoid a time limit hitting all together (Bloom, D., Farrell, M. & Fink, B., 2002). Therefore, the time limit policy in effect varies by state and over time for the welfare leavers in the study reported here. We exploit that variation to examine whether the implementation of time limits is associated with trends in employment outcomes. However, it is important to note that states with strict time limits policies often adopted other provisions to promote work such as harsh sanctions or earned income disregards that might have also had effects on work. Moreover, there may have been unobserved differences among states that were correlated with the length of time limits.

Thus, this study cannot isolate the impact of time limits but only describe whether employment trends differed among states with longer or shorter time limits.

Data and Methods

The central hypothesis guiding this study is that as welfare reform has moved into full implementation, single female heads of TANF households are increasingly resorting to leaving welfare without having a job or with only marginal employment prospects. In order to assess the full picture of this trend towards marginal employment, this central hypothesis is broken into several components including no work, part time work, low hourly wages, no employer provided health insurance, instability of employment and poverty level earnings. All hypotheses are tested with a set of human capital, demographic, welfare history and other individual characteristics taken into account and controls for the economy. Leavers in states with shorter time limits are expected to have more pronounced deterioration in labor market outcomes than leavers whose states adopted the Federal 60-month life time limit or had no lifetime limit.

Data and sample

The data used for this study come from the 1996 longitudinal file and Topical Module 1 of the Survey of Income and Program Participation (SIPP). SIPP has a number of features that make it ideal for addressing the study questions, but it also has several limitations. SIPP enrolls a nationally representative sample of households and gathers information about all household members over approximately 4 years following enrollment. Welfare and employment status are reported monthly, so it is possible to pinpoint the timing of welfare exits and examine characteristics of subsequent employment. A limitation of SIPP is that individuals may be missing in particular waves, either because they joined a household after it enrolled in SIPP, left the SIPP household or were in a household that was not interviewed in a particular wave. The

number of individuals with missing data increases as the panel goes on.² By the end of the 1996 panel, approximately one-third of the sample had been lost (Bavier, 2002).

The focus of this research is on women who left welfare during the initial period of welfare reform implementation, and who are assumed to have been subject to its time limits and work requirements. Therefore, the sample selected for this study was single, adult women who headed TANF cases³ for at least one month and left welfare for at least 2 months⁴ between October 1996 and September 1999 and whose employment status could be ascertained following exit.⁵ Women whose state of residence at the time of exit that could not be determined or who were 65 years of age or older were excluded from the analysis. Exit quarter was determined based on the first time the individual stopped receiving welfare after September 1996.⁶ Sample identification began with a total of 1,718 women who received TANF for at least one month during the SIPP panel, and at some point during which they received TANF they were also unmarried adult case heads. Of these 121 women were on welfare for the entire panel, 407 had

² Some individual non-response is handled by SIPP through imputation (although most occurs when an entire household is not interviewed and no imputation is performed). Item non-response is also handled through imputation. Of concern to this study is the fact that approximately one-quarter of the sample had imputed welfare income in their last month on cash assistance.

³ It was important to exclude child-only cases since they are not subject to time limits and work requirements. Whether a case was “child only” could only be determined in SIPP for women who exited in wave 9 or later because a question was added about this in wave 9. For women exiting in earlier waves, SSI income for herself was used as a marker for having a child only case as suggested by Bavier (2001).

⁴ This 2-month off definition of a leaver is consistent with the one used in the HHS leavers studies and by Bavier (2001, 2002).

⁵ This study was interested in the first jobs women held after leaving welfare on the assumption that they would be most influenced by welfare reform implementation. However, some leavers’ households were not interviewed in the wave following exit. For them, the second wave after leaving was the source of employment information.

⁶ Some women were observed in SIPP to be on welfare and then later observed to be off welfare but they had one or more missing waves of data in between the two observations. Because pinpointing the timing of exit was important, women with more than one missing wave of welfare income data were excluded from the sample. For women with one missing wave between an on-welfare and off-welfare observation, their quarter of exit was assumed to be during the missing wave.

two or more missing waves so that their leaver status or quarter of exit could not be determined, and 292 left welfare but did not meet the study criteria of being an unmarried adult case head at the time of exit or did not exit within the study window. There were 898 women who met the initial criteria for the study sample. Of these, 837 had valid data in the next two waves on their employment status, were under age 65, and their state of residence at time of exit could be determined.

Dependent variables

The dependent variables are crafted from employment information provided by respondents in the two waves following their exit from TANF. The first wave after exit was defined as the wave that included the first month off of cash assistance.⁷ The employment variables are described in the first panel of Table 1. *Employment* is defined as being employed (including job, business, or contingent work) at any point during the two waves following exit. Women, who did not report any job during the two waves after exit or whose jobs had zero hours or earnings, were defined as not employed. *Total earnings* from employment are the combined total of earnings (in 1999 dollars) on all jobs during the first six months after exit. *Hours worked per month* is the average hours worked monthly on all jobs during the first six months after exit. When these two variables are also calculated for all leavers, rather than only those who were employed, they reflect the combination of becoming employed and the amount of work.

Another set of employment measures pertain to the quality of individuals' primary jobs after leaving welfare. A focus on the primary job is justified because the failure of a main job to provide family supporting wages, steady work and benefits is a problem identified in the

⁷ For most exiters (76%), the first month off of cash coincided with the first month of a wave (probably due to a wave effect). For this group of exiters, the two waves after exit occurred entirely after the last month on cash. For the remaining 24% of exiters, the first wave after exit included one, two, or three months during which the exiter was still receiving cash assistance.

literature on welfare leavers (Johnson & Corcoran, 2003). To measure this, job-specific information such as hourly wages and hours worked per week were taken from the leavers' primary job. The primary job was the first job that was reported in the two waves after exit, or, if there were no jobs, then the first business was used. If multiple jobs and/or businesses were listed for a respondent in the same wave, the primary job was defined as the first job (or business) mentioned.⁸ *Hourly wage* is the usual hourly wage on the primary job. *Fulltime job* refers to whether or not the usual hours worked on the primary job is 35 hours or greater.⁹ *Health insurance* refers to whether or not the employer on the primary job provides health insurance. *Good job* is a categorical variable designating whether or not the primary job is usually full time and has hourly wages of \$7.50 per hour or above (in 1999 dollars).¹⁰ *Industry* and *occupation* are also specified for the primary job.

Finally, an ordinal variable was constructed following the concept of *underemployment* suggested by DeJong and Madamba (2001).¹¹ This *adequate employment* variable has three levels:

1. Underemployed: Worked < 35 hours per week on primary job
2. Poverty employment: Worked full-time on primary job, but hourly wages were below the poverty level for a family of 3 (\$6.71).

⁸ Gottschalk and Moffitt (1999) use this concept for primary and secondary job. They find only 4 % of SIPP respondents hold two jobs simultaneously (p. S109).

⁹ This was specified with varying cut points and as a continuous variable, but the findings did not differ.

¹⁰ The cutoff of \$7.50 was chosen to reflect a family supporting wage level.

¹¹ DeJong and Madamba (2001) and Lichter (1988) use similar variable definitions but their lowest category is labeled unemployed and refers to persons who are unemployed and looking for work. Using the monthly employment status recode variable we identified about 60 individuals who were unemployed and looking for work, but this small group size presented problems for our analysis. Another difference is that our underemployment variable is defined for the first primary job, and does not take into account the secondary jobs that a few individuals held simultaneously.

3. Adequately employed: Worked full-time on primary job, with hourly wages at or above the poverty level for a family of 3 (\$6.71).

Independent variables

Table 1 also lists the independent variables for the study. *Time* of exit was defined as the quarter in which the individual left TANF, numbered from 1 (1996 Q4) to 12 (1999 Q3). More specifically, the exit quarter was the quarter in which the individual had their first month off TANF. Time was specified as quarter and quarter squared and was also tested as a dummy variable for quarter.

Short lifetime limit was the primary aspect of state policy of interest in this study.¹² The time limit policy for the individual was the one that was in effect in her state in the month of her welfare exit. Economic conditions were also measured for each individual at the time of exit using the *state unemployment rate* for the individual's state of residence in that quarter.

Because the composition of the welfare leaver population may have changed over time, it was necessary to control for a wide range of individual and household factors. The variables measuring leaver characteristics are also listed in Table 1. Included are several indicators of education, age and number of children that might affect employment. Other personal factors include a categorical variable reflecting race and ethnicity and disability status. *Length of time on welfare* is included as a proxy for a number of attitudinal and experiential factors.¹³ *Other adults*

¹² Initially, it was anticipated that other aspects of state policy such as sanctions and work requirements might affect employment outcomes. However, neither of these had significant effects in any of our models. Moreover, Loprest and Wissoker (2002) found that a combination of state policy variables such as these had little effect on employment among single mothers in the National Survey of American Families.

¹³ We calculated spell length for the most recent welfare spell at the time of exit. For women who were on welfare at the beginning of the SIPP panel (the first month of wave 1), we were able to determine the beginning date of the spell using welfare history information from Topical Module 1. For the portion of the spell that occurred after the beginning of the panel, we smoothed the data so that we discounted one-month gaps in welfare receipt. For 58

in the household are included as a dichotomous variable because they might provide financial support obviating the need for employment or provide child care that would enable employment. *Residence in public housing and government subsidized rent* were included because they may reduce the need to work by lowering expenses or be a proxy for isolation from job opportunities (Bania, Coulton, Leete, 2003)..

Analysis

The primary goal of the study was to determine whether employment outcomes differed based on the quarter of exit and whether state time-limit policies modified the trends. A secondary goal was to determine the degree to which the trends were the result of changes in the composition of the leaver cohorts or to the strength of the economy. For all dichotomous outcomes, dependent variables were modeled using multiple logistic regression.¹⁴ The basic form of the initial logistic regression model was of the form:

$$\log [P_i / (1-P_i)] = \beta_0 + \sum_{j=1}^k \beta_{cj} X_{cj}$$

where P_i is the probability of a labor market outcome and X_c is a vector of dummy variables representing cohort membership with the 1996Q4 leavers excluded as the reference cohort. This allowed for the detection of both linear and non-linear trends in the effect of time. Likelihood ratio tests were used to determine if there was an overall effect of time of exit (cohort).

Replacing the cohort dummies with a single continuous measure representing the number of quarters since the onset of welfare reform provided a test of whether or not there was a linear

women who entered the SIPP after wave 1 and were on welfare when they were first observed, we used the observed spell length during the SIPP panel because they were not included in Topical Module 1 and so were not asked welfare history. It is possible that spell lengths are underestimated for these women.

¹⁴ For outcomes related to earning and wages, the log of earnings and wages were modeled using ordinary least squares (OLS) regression following the same strategy as for dichotomous outcomes.

time trend (Wald test). To allow for non-linearity, a squared term was also included. Dummy variables representing the season (quarter) of exit were also modeled to account for seasonal fluctuations as follows:

$$\log[P_i / (1-P_i)] = \beta_0 + \beta_c X_c + \beta_c X_c^2 + \sum_{j=1}^k \beta_{qj} X_{qj}$$

where X_c is a single continuous measure representing the number of cohorts (quarters) removed from October, 1996; X_c^2 is the quadratic term; and X_q is a vector of 3 dummy variables (2nd, 3rd, and 4th quarter of the calendar year) to capture seasonal fluctuations.

Since the constrained model seemed to fit as well as the initial model, additional models were built to include all relevant control variables:

$$\log[P_i / (1-P_i)] = \beta_0 + \beta_c X_c + \beta_c X_c^2 + \sum_{j=1}^k \beta_{qj} X_{qj} + \sum_{j=1}^k \beta_{ij} X_{ij} + \sum_{j=1}^k \beta_{sj} X_{sj}$$

where X_i represents the addition of individual level characteristics and personal factors and state variables for each quarter (X_s) represents state welfare policy and labor market factors. Finally, a series of interaction models (not shown) were tested where state time limit policy and individual characteristics such as education level and race were interacted with time (i.e. exit quarter). All models and descriptive statistics are weighted using the weight assigned to the individual in the last month on TANF.

Results

Characteristics of welfare leavers in the sample are presented in Table 2. It can be seen that the proportion of leavers by exit quarter decreases over time. Falling welfare caseloads may be a partial explanation of this decline, but it may also be due to the fact that there is more

missing data in SIPP as the panel goes on.¹⁵ Table 3 shows that approximately 70 percent of all leavers were employed in the two waves after exit. The median total earnings of all leavers in the first six months (including leavers with no earnings in any month) was approximately \$2,600. When only those with non-zero earnings are included, the median was \$4,637. These findings are consistent with many other leavers studies, but the personal characteristics of the leavers in SIPP show them to be somewhat more advantaged in terms of education than individuals in state-based leavers studies.

Table 4 presents descriptive information on the primary jobs held by leavers. The median hourly wage on the primary job was \$6.50 and 59.0 percent of employed leavers had a primary job that was full time. Only 18.2 percent of employed leavers had employer provided health insurance. Approximately one quarter of the employed leavers were classified as having a “good job” according to the study criteria. Using the alternative classification proposed by DeJong and Madamba (2001), approximately a third of those with jobs were considered “adequately employed”. Most leavers were in service and clerical occupations within retail trade and service industries.

Employment and earnings trends

The hypothesis that initial employment of welfare leavers declined over time as welfare reform was implemented is examined in Table 5. Three outcomes are modeled for the entire leaver sample: Whether or not they were employed at all in the first two waves after exit, their total earnings, and their average hours worked per month in the first six months from all jobs. It can be seen that there is a significant effect of time (i.e. quarter and quarter squared) on employment status in the first six months off welfare. Employment trends downward from 1996

¹⁵. Also, if an individual exited more than once, it is their first exit that is included in this study. Thirteen percent of the sample had more than one exit in the SIPP panel. However, including multiple exits only alters the pattern of fewer exits in later quarters of SIPP by an average of 1 percent.

through 1998 but recovers to some extent among leavers at the end of 1999. Specifying time as a vector of dummy variables (not shown) also showed significant negative effects, with most quarters having lower employment probabilities than the first quarter in the series. State time limit policy does not have a significant main effect on the chances of employment but does have an interaction effect with time suggesting that the employment trend is better in short time limit states.¹⁶ The addition of leaver characteristics and state unemployment rate does not diminish the effect of time. Also, there were no significant interactions between time and leaver characteristics, suggesting that the effects of these individual factors remained similar in all cohorts.

Total earnings for all leavers in their first six months off welfare is also modeled in Table 5. In a reduced model, which only includes time (not shown), a significant and negative linear trend for earnings is found. However, when composition of the leaver group is taken into account the linear effect of time on total earnings in six months is no longer significant.¹⁷ Nevertheless, there is a significant interaction effect with state time limits. Total earnings rose in states with shorter time limits while they dipped in states with longer time limits. Hours worked per month shows a similar pattern to the dichotomous employment outcome. For the entire sample, hours worked dips in states with longer time limits and rises in states with shorter time limits.

Figure 1, 2 and 3 graphically depict the disordinal interaction between time and state time limit policy on the three measures of employment. The trends in these figures display the estimated probability that a typical leaver would be employed after exiting welfare in each quarter, holding constant at their mean all of the other variables in the model. In other words the

¹⁶ We set the alpha level for interaction terms at .10.

¹⁷ When quarter was specified as a dummy variable, there were also no significant differences after individual characteristics were taken into account.

employment estimates are adjusted for the composition of leavers, seasonality and the economy. Figure 2 presents a similar trend for earnings. In terms of employment and earnings, the welfare exit cohorts in short time limits begin with poorer outcomes but subsequent cohorts improve, while exit cohorts in the longer time limit states show a dip and then recover in terms of employment outcomes. The observed trends are the opposite of the study's hypothesis: that welfare leavers' employment would fall more in short time limit states. However, as shown in Figure 3, monthly hours of work does comport with the hypothesized pattern. Hours worked fall in short time limited states but not in states with a 60-month or greater limit.

Quality of primary job

In addition to expecting trends in employment levels, this study also hypothesized that the quality of the primary jobs that leavers obtained would deteriorate as welfare reform was implemented and would deteriorate more in states with short time limits. Three attributes of the leavers primary job are modeled in Table 6: Hourly wages, whether the job is full time and whether the leaver was insured by employer provided health insurance. It can be seen that time of exit, specified as quarter and quarter squared, has no significant effect on any of these outcomes. Similarly, when time was specified as a set of dummy variables (not shown), there were no significant effects. However, interaction terms between time and short welfare time limits suggest that women in these states were increasingly less likely to be insured by their employer as welfare reform implementation proceeded. Also, later exit cohorts were less likely to have full time jobs than those who exited early in states with short time limits (See Figures 4 and 5).

Table 7 presents two composite measures of job quality. In the first column, a good job is defined as one that is full time and has hourly wages of \$7.50 and above. Though the main effect

for time is not significant in this model, being in a state with a short welfare time limit does exhibit a negative time trend in terms of the probability of having a good job. The adequate employment measure has three ordered categories, which are from low to high: employed part time, employed full time at poverty wages and adequately employed. No significant time trends or interactions were found in the ordinal model.

Conclusions

This study examined whether employment outcomes of women leaving welfare worsened as welfare reform went from the initial federal legislation to full implementation in the states. This was a dynamic period of sustained economic growth, rapidly declining caseloads, innovation in welfare programs and wide variation in program implementation between and within states. It was hypothesized that there would be a trend toward worse employment outcomes between 1996-2000, net of changes in the economy and the composition of leaver cohorts. The decline was expected to show up more clearly in states with shorter than Federal time limits because of the increased pressure on women to leave welfare before using up eligibility.

Considering the nation as a whole, the study showed a gradual decline in employment and earnings of welfare leavers during 1997 and 1998 followed by a slight recovery by the end of 1999. However, contrary to expectations, the dip in employment was in the longer time limit states. Leavers in short time limit states actually increased in their employment rates and earnings, adjusted for leaver characteristics and the economy. This finding that welfare leavers had greater labor market participation in states with stringent time limits is consistent with trends reported by Blank and Schoeni (2003) for very poor families with children in the Current Population Survey. Their analysis showed that incomes for such families grew more in states

with strict time limits and sanctions than in states with longer time limits and less severe sanctions.

One explanation for the employment gains in short time limit states may be that agencies in these states moved more quickly to implement work participation and other employment related programs. Moreover, welfare recipients may have gotten a clearer message that the program and its expectations had changed. The fact that employment in states with longer time limits began to trend upward toward the end of the study period could suggest that program developments eventually caught up in those states. If a culture change occurred in welfare agencies (Corbett, 1995), it may have been pushed along more rapidly in places where the time limits were more imminent.

Even though the trends in employment levels were positive in states with short time limits, this study suggests that there may have been a slight worsening of job quality among leavers in these states. The chances of employed leavers having a full time job and employer provided health insurance declined in these states. Also, the chance of the job being a good one according to the composite measure used in this study fell in short time limit states more than in states with a 60-month limit. It is possible therefore, that some of the increase in employment levels was achieved by tapping into less desirable job opportunities in these states. As the pressure of time limits mounted, women may have been more willing to take any job rather than holding out for better wages, hours or benefits.

The differences among the states should not obfuscate the fact that the quality of the first job held by most employed welfare leavers was generally poor regardless of location. Full time jobs with health insurance and non-poverty wages were infrequent for this population, despite the strong economy and progress in implementing state's TANF programs. It appears that the

process of putting welfare reform into operation did little to improve the position of employed welfare leavers within the labor market; they continued to enter marginal jobs when they did find work.¹⁸

This study has a number of limitations and given these, the findings should not be interpreted as causal but descriptive. First, the study examined welfare leavers and did not look at individuals who stayed on welfare. Although an effort was made to control for changes in the composition of the leaver group, the scope of the study did not allow for modeling how selection into the leaver group changed over time. It is possible that there were unobserved differences over time in who left welfare and these might have influenced employment outcomes.

A second drawback is that the influence of maturing TANF policy is difficult to separate from other economic and policy changes that occurred during the period. The economy was generally improving during 1996-2000 and, because it moved along with TANF implementation, they could have had off setting influences. Moreover, other policies, such as the earned income tax credit, the expansion of child care subsidies and child support enforcement may have affected the observed trends but these were not explicitly taken into account.

An additional shortcoming is that state unemployment rates were the only economic indicators included in these models, because smaller areas were not available in SIPP. However, it would have been preferable to measure the availability of low-skill jobs within labor market regions. This is particularly important because welfare leavers are often concentrated in a few big cities within states where labor market conditions may be unique.¹⁹ It is possible that

¹⁸ It should be noted that this study examined the first job off welfare. Bavier (2002) and others have found that income for individuals who remain off welfare increases gradually over a more extended time period.

¹⁹ Ribar (2002) finds that low skill employment conditions in counties are stronger predictors of employment for single mothers. Also, Cancian et al. (2002) finds Milwaukee welfare leavers to experience different employment effects of welfare reform than leavers in the balance of Wisconsin.

unobserved changes in local labor markets were confounded with time or with limits policies. For example, it is possible that some large metropolitan areas with many welfare recipients initially had higher unemployment rates for low-skill workers than their respective states, but then adjusted to absorb the increased number of available workers, resulting in lower unemployment rates. Controlling for state unemployment rates would have failed to adjust for this potentially significant fluctuation.

Finally, the fact that more individuals in SIPP had missing data towards the end of the panel may have resulted in declining representativeness of the leaver sample in later quarters. Although attrition is a common problem in longitudinal studies, it could have had particular significance in a study such as this one that was examining time trends. The selection bias introduced by attrition may have lead to overestimation or underestimation of the effects of time on employment levels in this study. For example, if welfare reliant women with the least employment potential were the most likely to drop out of the study, their welfare exit would not have been observed. This would have the effect of biasing employment rates upward in latter leaver cohorts. Thus, the upturn in the employment trend towards the end of the study could be attributable to selection bias rather than real improvement.

Despite these limitations, the 1996-2000 SIPP does present an opportunity to go beyond the early period of welfare reform and examine some of the outcomes of this policy as it has become fully implemented. Addressing the question of whether selected employment outcomes changed over this period is useful to see if early results were sustained and to suggest what might be anticipated in the future. The study's focus on markers of job quality complements existing work in the literature on employment and earnings. The analysis suggests that welfare reform has induced many women to leave welfare but that there have been recent periods in which increased

proportions of these individuals did not get work immediately. Job quality, while not declining across the board, remained marginal throughout the period despite variations in state policy and the maturing of TANF programs. States with short time limits seemed to achieve better employment outcomes initially, but the quality of these jobs was slightly worse than in states that adopted the Federal 60-month time limit. It will be important to monitor the employment levels and job quality indicators of welfare leavers in the future and to consider additional policies that might promote their labor market advancement.

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Table 1. Study variable definitions

Variable	Description
Employment Measures	
Employed	Employed at all during the first two waves after exit
Total earnings	Log of combined total earnings (in 1999 dollars) on all jobs in first six months
Hours worked per month	Average monthly hours for all jobs during the first six months
Hourly Wage	Log of hourly wage for primary job
Full time job	Typically worked 35 hours or more on primary job
Health insurance	Leaver had health insurance through employer on primary job
Good job	Full time job with hourly pay \geq \$7.50 (1999 dollars)
Adequate employment	Ordinal (1=Part-time, 2=full-time ($<$ \$6.71/hr) 3=full-time (\geq \$6.71/hr)
Occupation Classification (primary job)	
Managers and professionals	Reference group includes occupation codes 003-179
Clerical and office support	Indicator variable for occupation codes 203-259, 303-389
Service	Indicator variable for occupation codes 183-199, 403-469
Laborers	Indicator variable for occupation codes 473-889
Retail sales	Indicator variable for occupation codes 263-285
Industry Classification (primary job)	
Mfg/mining/agric/constr	Reference group includes industry codes 010-392
Trans/comm/util/finance/insur	Indicator variable for industry codes 400-471, 700-712, 900-932
Wholesale/retail trade	Indicator variable for industry codes 500-691
Services	Indicator variable for industry codes 721-893
Exit Cohort Measures	
Time (+ Time ²)	Quarter of first month off cash. Coded as quarters 1-12, where 1 = 4Q 1996
Season of exit	Dummy variables for month of exit (Apr-Jun, Jul-Sep, Oct-Dec)
Short lifetime limit	State lifetime limit $<$ 60 months at month of exit (Welfare Rules Database)
State unemployment rate	Unemployment rate at time of the last month on cash.
Personal and Household Characteristics	
Age (+ Age ²)	Age in years. Squared term included in all models.
Race/ethnicity/origin	3 indicator variables representing Non-Hispanic black, Hispanic and other
Disability	Physical, mental or other health condition that limits work
Educational attainment	Indicator variables for high school education and more than high school
Enrollment in school at exit	Separate indicators for status as part-time or full-time at any level of schooling
Enrollment after exit	Separate indicators for status as part-time or full-time at any level of schooling
Years on welfare	Length of most recent welfare spell prior to exit (years)
Number of children, by age	Number of children of each age or age range ($<$ 1, 1, 2, 3-5, 5-11, 12-17)
Other adult in household	Other adult in immediate family at time of exit
Public housing	Residence in a public housing project at time of exit
Government subsidized rent	Received government subsidized rent at time of exit

Table 2. Characteristics of Welfare Leavers

	Employed (N = 575) [*]	Not employed (N = 262)	Total (N = 837)
Quarter of exit (%)			
1Q 1999	14.3	11.3	13.4
1Q 1997	14.0	9.9	12.8
2Q 1997	13.1	13.5	13.2
3Q 1997	10.2	11.2	10.5
4Q 1997	8.4	10.8	9.1
1Q 1998	6.3	10.7	7.6
2Q 1998	8.4	5.0	7.4
3Q 1998	7.0	6.5	6.9
4Q 1998	5.3	8.0	6.1
1Q 1999	4.3	4.8	4.4
2Q 1999	6.3	6.8	6.5
3Q 1999	2.4	1.8	2.2
Season of exit (%)			
Jan-Mar	24.6	25.3	24.8
Apr-Jun	27.8	25.3	27.1
Jul-Sep	19.7	19.4	19.6
Oct-Dec	27.9	30.0	28.6
Short lifetime limit state (%)	12.5	9.1	11.5
Age (median)	28.0	33.0	28.0
Race/ethnicity (%)			
Non-Hispanic white	41.9	36.4	40.3
Non-Hispanic black	41.8	35.9	40.1
Hispanic	13.7	23.7	16.6
Other	2.6	4.0	3.0
Disability (%)	9.3	29.6	15.3
Educational attainment (%)			
Less than high school	24.6	45.3	30.7
High school education	41.9	30.6	38.5
Education beyond HS	33.6	24.1	30.8
School enrollment (%)			
Full-time at exit	11.0	12.6	11.5
Part-time at exit	6.3	5.0	5.9
Full-time after exit	10.6	15.5	12.0
Part-time after exit	6.3	2.3	5.1
Recent welfare spell years (median)	1.1	1.0	1.1
Total children all ages (mean)	1.7	1.5	1.6
Other adult in household (%)	13.1	24.8	16.5
Living in public housing (%)	14.3	14.4	14.3
Government subsidized rent (%)	15.2	11.5	14.1
State unemployment rate (median)	4.7	4.9	4.7

*N=561 for employment outcomes involving first 6 months after exit

Table 3. Description of employment and earnings among welfare leavers (N = 837)

Employed during first 2 waves post exit (%)	70.5
Earnings during first 6 months, all jobs (median)	
Employed leavers	\$4,637
All leavers	\$2,616
Hours worked per month during first 6 months (median)	
Employed leavers	129.5
All leavers	86.2

Table 4. Descriptive characteristics of welfare leavers' primary jobs (N = 575)

Hourly wage (median)	\$6.50
Full-time job (%)	59.0
Employer provided health insurance (%)	18.2
Job Quality (%)	
Good job	24.6
Bad job	75.4
Adequacy of Employment (%)	
Adequately employed	33.7
Full-time job, poverty wage	25.8
Part-time job	40.6
Occupation (%)	
Managers and professionals	10.8
Clerical and office support	24.8
Service, entertainment	36.6
Laborers	15.5
Retail sales	12.3
Industry (%)	
Mfg/mining/agric/construction	11.5
Trans/comm/util/finance/insur/govt	10.6
Wholesale/retail trade	30.1
Services	47.8

Table 5. Models of employment and earnings among all welfare leavers (n = 837)

	Employment			Total Earnings (log)			Hours worked per month		
	Coef.	S.E.	p-value	Coef.	S.E.	p-value	Coef.	S.E.	p-value
Intercept	-0.59	1.17	0.610	2.21	1.72	0.200	159.78	39.05	0.000
Time	-0.31	0.12	0.000	-0.28	0.16	0.080	9.02	3.82	0.018
Time ²	0.02	0.01	0.010	0.02	0.01	0.100	-0.62	0.31	0.045
Season of exit									
Apr-Jun	0.18	0.25	0.480	0.15	0.38	0.700	-15.67	8.06	0.052
Jul-Sep	0.26	0.29	0.370	0.15	0.42	0.730	-18.11	9.02	0.045
Oct-Dec	-0.07	0.24	0.770	0.02	0.37	0.960	-3.28	7.85	0.676
Short lifetime limit	-1.18	0.65	0.070	-1.09	0.88	0.210	35.11	18.06	0.052
Time x short lifetime limit	0.31	0.12	0.010	0.29	0.14	0.030	-9.00	2.89	0.002
Age	0.17	0.06	0.000	0.28	0.08	0.000	-2.62	1.91	0.170
Age ²	0.00	0.00	0.000	0.00	0.00	0.000	0.05	0.02	0.038
Race/ethnicity									
Non-Hispanic black	-0.05	0.21	0.790	-0.03	0.29	0.910	4.41	6.55	0.501
Hispanic	-0.44	0.26	0.090	-0.57	0.41	0.160	15.49	8.88	0.082
Other	-0.62	0.53	0.240	-1.23	0.91	0.170	9.29	18.61	0.618
Disability	-1.12	0.25	0.000	-1.85	0.44	0.000	26.20	9.55	0.006
High school education	0.62	0.22	0.000	1.35	0.34	0.000	-1.56	7.81	0.842
Education beyond HS	0.88	0.24	0.000	1.81	0.37	0.000	-0.67	8.04	0.934
School Enrollment									
Full-time at exit	-0.01	0.35	0.970	-0.08	0.56	0.880	-7.19	13.41	0.592
Part-time at exit	-0.09	0.45	0.840	-0.18	0.63	0.760	-7.70	13.80	0.577
Full-time after exit	-0.78	0.34	0.020	-1.38	0.56	0.010	7.46	13.64	0.585
Part-time after exit	0.78	0.53	0.140	1.37	0.55	0.010	-0.94	12.54	0.940
Years on welfare	-0.02	0.02	0.150	-0.04	0.03	0.110	0.66	0.56	0.236
Number of children									
(age < 1)	0.06	0.30	0.850	-0.15	0.43	0.730	-4.24	10.29	0.680
(age 1)	1.18	0.32	0.000	1.28	0.33	0.000	-19.70	9.12	0.031
(age 2)	0.26	0.28	0.350	0.34	0.38	0.360	-8.30	9.47	0.381
(age 3-5)	0.03	0.16	0.840	0.28	0.22	0.200	2.78	4.95	0.574
(age 6-11)	0.05	0.12	0.680	-0.04	0.17	0.830	-2.59	3.79	0.494
(age 12-17)	-0.01	0.14	0.920	-0.10	0.23	0.650	-0.14	4.84	0.977
Other adult in household	-0.41	0.23	0.070	-0.62	0.39	0.110	14.58	8.16	0.074
Public housing	-0.01	0.26	0.960	-0.12	0.38	0.750	-9.15	8.76	0.297
Government subsidized rent	0.26	0.27	0.330	0.13	0.37	0.720	-12.03	7.75	0.121
State unemployment rate	-0.08	0.09	0.350	-0.11	0.13	0.400	2.65	2.86	0.355
	Log likelihood -426.3			R ² = .195			R ² = .118		

Table 6. Models of primary job attributes (n = 575)

	Full Time Hours			Health Insurance			Hourly Pay (log)		
	Coef.	S.E.	p-value	Coef.	S.E.	p-value	Coef.	S.E.	p-value
Intercept	2.40	1.64	0.140	1.18	1.82	0.510	1.67	0.24	0.000
Time	0.12	0.13	0.350	0.09	0.17	0.580	0.00	0.03	0.880
Time ²	-0.01	0.01	0.470	-0.01	0.01	0.700	0.00	0.00	0.990
Season of exit									
Apr-Jun	-0.31	0.29	0.280	-0.27	0.36	0.450	0.06	0.05	0.260
Jul-Sep	-0.25	0.32	0.420	0.17	0.40	0.670	0.11	0.05	0.040
Oct-Dec	-0.18	0.28	0.510	-0.07	0.35	0.830	0.06	0.06	0.310
Short lifetime limit	0.89	0.58	0.120	2.19	0.69	0.000	-0.07	0.12	0.570
Time x short lifetime limit	-0.18	0.10	0.060	-0.40	0.13	0.000	0.00	0.02	0.990
Age	-0.04	0.08	0.660	-0.17	0.09	0.060	0.01	0.01	0.240
Age ²	0.00	0.00	0.680	0.00	0.00	0.020	0.00	0.00	0.340
Race/ethnicity									
Non-Hispanic black	0.19	0.23	0.420	-0.15	0.31	0.620	0.06	0.04	0.120
Hispanic	0.14	0.34	0.680	-0.14	0.41	0.730	0.00	0.05	0.990
Other	-0.04	0.55	0.940	0.70	0.67	0.290	0.16	0.09	0.070
Disability	-0.13	0.40	0.730	-0.07	0.46	0.880	-0.08	0.08	0.320
High school education	0.29	0.27	0.280	-0.03	0.41	0.930	0.04	0.06	0.470
Education beyond HS	0.32	0.30	0.270	0.67	0.39	0.080	0.07	0.06	0.190
School enrollment									
Full-time at exit	1.09	0.46	0.010	0.20	0.51	0.690	0.10	0.07	0.160
Part-time at exit	0.50	0.42	0.230	-0.29	0.58	0.620	0.16	0.07	0.030
Full-time after exit	-2.05	0.49	0.000	-0.13	0.55	0.810	-0.15	0.07	0.020
Part-time after exit	-0.43	0.42	0.300	-0.15	0.52	0.770	0.09	0.07	0.230
Years on welfare	-0.04	0.02	0.070	0.00	0.03	0.870	0.00	0.01	0.570
Number of children									
(age < 1)	-0.07	0.31	0.820	0.46	0.39	0.230	-0.02	0.05	0.730
(age 1)	0.18	0.31	0.550	-0.47	0.48	0.330	-0.06	0.05	0.270
(age 2)	0.20	0.33	0.530	0.02	0.38	0.960	0.01	0.05	0.830
(age 3-5)	0.35	0.18	0.050	0.23	0.22	0.290	0.02	0.03	0.450
(age 6-11)	0.06	0.15	0.700	-0.32	0.19	0.090	-0.04	0.03	0.170
(age 12-17)	0.09	0.19	0.640	-0.25	0.25	0.320	-0.01	0.04	0.690
Other adult in household	0.38	0.32	0.230	1.11	0.34	0.000	0.06	0.08	0.480
Public housing	-0.35	0.31	0.260	-0.51	0.49	0.290	-0.06	0.05	0.270
Government subsidized rent	-0.52	0.29	0.070	0.11	0.38	0.760	0.01	0.05	0.790
State unemployment rate	-0.02	0.10	0.860	-0.02	0.13	0.850	0.01	0.02	0.410
Occupation									
Clerical and office support	-0.71	0.41	0.080	0.00	0.40	0.990	-0.12	0.07	0.100
Service	-1.64	0.39	0.000	-1.09	0.43	0.010	-0.34	0.07	0.000
Laborers	-0.44	0.52	0.390	-0.17	0.54	0.740	-0.18	0.07	0.010
Retail sales	-2.17	0.48	0.000	-0.84	0.58	0.140	-0.21	0.07	0.000
Industry									
Trans/comm/util/finance/insur	-0.63	0.54	0.240	-0.08	0.53	0.880	0.01	0.08	0.860
Wholesale/retail trade	-0.56	0.49	0.250	-0.89	0.58	0.120	-0.13	0.06	0.030
Services	-0.67	0.47	0.150	-0.17	0.46	0.720	0.04	0.06	0.550
	Log likelihood -334.9			Log likelihood -228.2			R ² = .184		

Table 7. Models of composite indicators of primary job quality (n = 575)

	Good Job			Adequately Employed		
	Coef.	S.E.	p-value	Coef.	S.E.	p-value
Intercept	-4.22	1.89	0.020	-1.43	1.49	
				-0.14	1.49	
Time	0.21	0.17	0.200	0.08	0.12	0.530
Time ²	-0.02	0.01	0.160	0.00	0.01	0.640
Season of exit						
Apr-Jun	-0.13	0.36	0.710	-0.07	0.26	0.780
Jul-Sep	-0.12	0.43	0.770	-0.19	0.28	0.490
Oct-Dec	0.38	0.33	0.240	-0.01	0.24	0.960
Short lifetime limit	0.87	0.93	0.340	0.64	0.52	0.210
Time x short lifetime limit	-0.30	0.17	0.080	-0.06	0.09	0.470
Age	0.22	0.10	0.020	0.00	0.00	0.690
Age ²	0.00	0.00	0.060	0.20	0.21	0.340
Race/ethnicity						
Non-Hispanic black	0.22	0.29	0.440	-0.05	0.29	0.860
Hispanic	-0.52	0.38	0.160	0.22	0.59	0.700
Other	1.55	0.77	0.040	0.26	0.25	0.300
Disability	-0.35	0.44	0.420	-0.04	0.02	0.060
High school education	0.44	0.38	0.250	0.21	0.28	0.460
Education beyond HS	0.47	0.40	0.230	1.01	0.38	0.000
School enrollment						
Full-time at exit	1.57	0.54	0.000	0.57	0.40	0.160
Part-time at exit	0.55	0.58	0.340	-2.12	0.44	0.000
Full-time after exit	-2.34	0.61	0.000	-0.18	0.43	0.670
Part-time after exit	-0.02	0.55	0.960	0.11	0.29	0.700
Years on welfare	-0.04	0.03	0.100	-0.15	0.09	0.100
Number of children						
(age < 1)	0.51	0.35	0.130	0.00	0.26	0.980
(age 1)	-0.18	0.42	0.670	0.12	0.28	0.660
(age 2)	0.38	0.39	0.330	0.33	0.16	0.040
(age 3-5)	0.34	0.19	0.070	-0.03	0.13	0.810
(age 6-11)	-0.17	0.16	0.260	0.18	0.17	0.290
(age 12-17)	0.06	0.18	0.750	0.26	0.28	0.350
Other adult in household	0.37	0.35	0.290	-0.42	0.28	0.140
Public housing	-0.78	0.39	0.040	-0.74	0.26	0.000
Government subsidized rent	-0.70	0.37	0.050	-0.30	0.36	0.410
State unemployment rate	-0.09	0.12	0.440	0.04	0.08	0.590
Occupation						
Clerical and office support	-0.26	0.37	0.470	-0.64	0.36	0.070
Service	-1.61	0.37	0.000	-1.86	0.33	0.000
Laborers	-1.03	0.45	0.020	-0.87	0.41	0.030
Retail sales	-1.92	0.55	0.000	-2.19	0.45	0.000
Industry						
Trans/comm/util/finance/insur	-0.31	0.50	0.540	-0.43	0.44	0.330
Wholesale/retail trade	-0.85	0.47	0.060	-0.56	0.33	0.090
Services	-0.48	0.41	0.240	-0.48	0.33	0.140
	Log likelihood -255.3			Log likelihood -553.1		

Figure 1. Estimated probability of employment after exit by state time limit policy

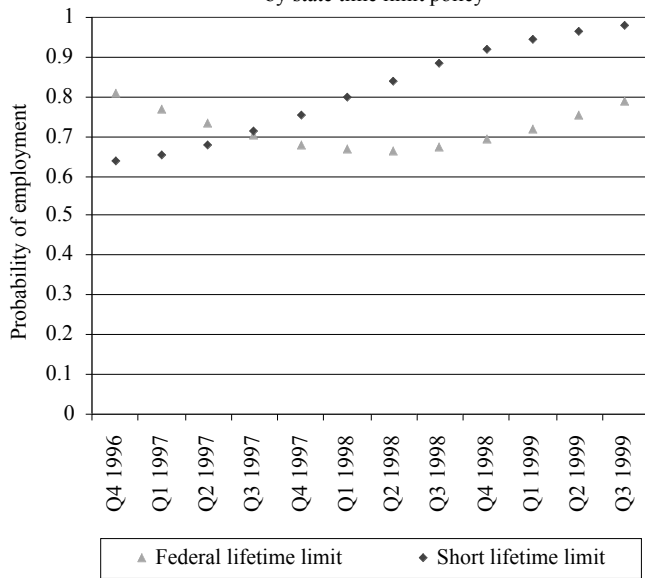


Figure 2. Estimated total earnings (log) during first 6 months by state time limit policy

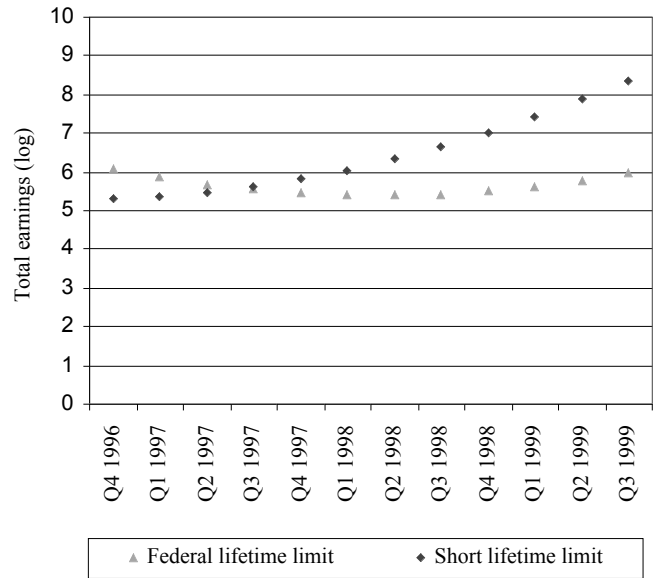


Figure 3. Estimated hours worked per month by state time limit policy

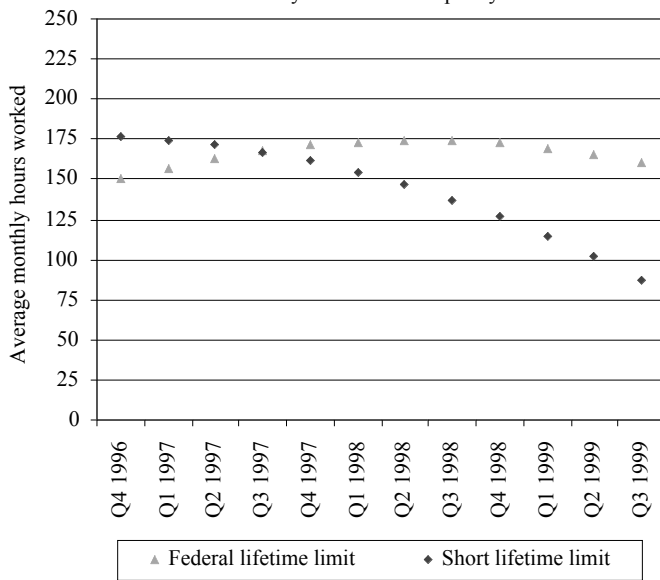


Figure 4. Estimated probability of full-time hours on primary job by state time limit policy

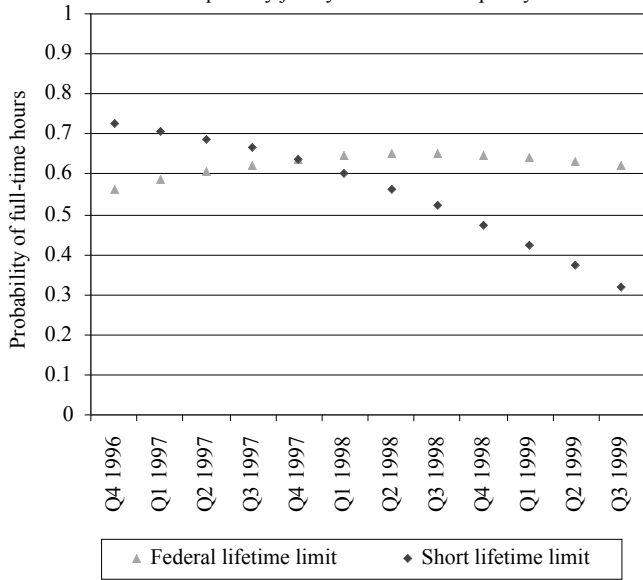


Figure 5. Estimated probability of health insurance coverage through employer

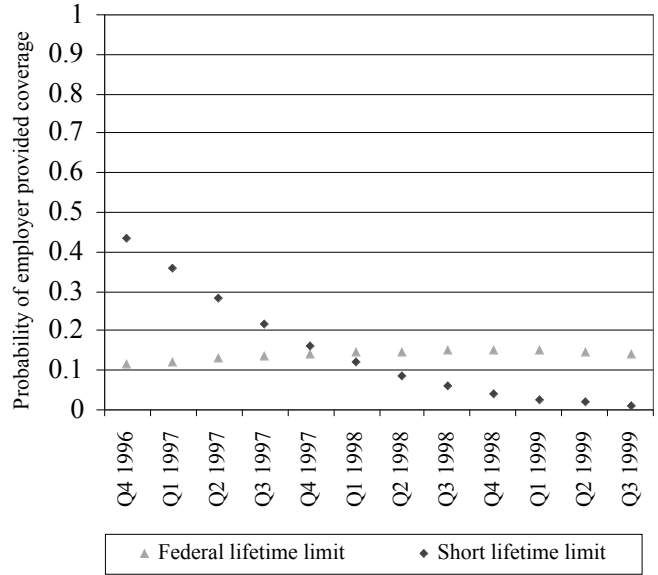


Figure 6. Estimated probability of having a "Good Job" by state time limit policy

