

The Effects of Welfare Reform on Employment and Income: Evidence from California*

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In recent years there have been unprecedented changes in welfare. The 1996 Personal Responsibility, Welfare and Opportunity Reconciliation Act (PRWORA) abolished AFDC and created Temporary Assistance for Needy Families (TANF), a set of block grants that gave states nearly complete freedom in designing their welfare programs.¹ Between March 1994 and March 2001, welfare caseloads fell 59 percent, to 2.1 million families from 5.1 million. These changes in welfare caseloads mirror changes in employment rates of single women with children, which rose to 73.9 percent in March 2000 from 56.9 percent in March 1994.²

After a recession early in the decade, the economy experienced the longest economic expansion in U.S. history beginning in March 1991, with GDP growing for 120 consecutive months. The unemployment rate fell to 4.0 percent in 2000, its lowest level since 1969. With the strong economy, state and federal budgets prospered. The good fiscal climate and the funding and flexibility of TANF allowed many states to expand childcare benefits, health insurance, and transportation services for low-income families and to change welfare rules so that recipients could keep a greater share of earned income than was previously the case.

The overwhelming majority of pre-TANF welfare waivers and current state TANF plans employ one or more of the following building blocks: mandatory employment services, earnings supplements, and time limits on welfare receipt. There is a considerable amount of emerging evidence that these changes along with the strong economy and expansion of the earned income tax credit increased employment of low-skilled families.³ Yet if state policymakers face deteriorating fiscal climates, they may contemplate cutting welfare benefits.

¹ States are required to spend at least 75 percent of their “historic” level of AFDC spending, a 5-year lifetime limit is imposed on receipt of federally supported assistance (though hardship exemptions are included in the law), and states have to meet certain targets in moving portions of their caseloads into specific work activities.

² Employment rates come from the 2001 (table #577) and 1998 (table #654) *Statistical Abstract of the United States*.

³ See, for example, Bloom and Michalopoulos (2001); Grogger (2001); Meyer and Rosenbaum (2001); and Hotz, Mullin, Scholz (2002).

This paper examines one piece of potentially relevant recent history for understanding the consequences of welfare benefit cuts. Starting in 1991, California experienced a severe economic downturn. The recession hit hardest in Los Angeles County, which experienced four consecutive years of negative year-over-year employment growth. Prompted by the very weak state economy and sharply rising welfare caseloads, California implemented the California Work Pays Demonstration Project (the CWPDP) in four counties – Alameda, Los Angeles, San Bernardino, and San Joaquin. Unlike the vast majority of welfare initiatives around the country that followed, the CWPDP reduced benefits 15 percent for treatment households (other features of the experiment are described in more detail below). We think benefit cuts, like those embodied in the CWPDP, will enter policy debates in the current period of hard state fiscal choices.⁴

This paper examines the employment effects of the CWPDP. In addition to examining an unusual welfare change, it is one of a small number of papers that provides long-term evidence on the employment effects of a welfare reform.⁵ A goal of work-based welfare reforms is to create an environment where families with low levels of human capital can work and eventually earn enough to be economically self-sufficient. In the last part of the paper we also provide evidence on the evolution of financial resources available to families in our sample.

1. The California Work Pays Demonstration Project

In 1992 and 1993 California altered several aspects of its Aid to Families with Dependent Children program, including reducing available cash benefits. Since the AFDC benefit reductions were greater than federal regulations allowed, the state was required to obtain a

⁴ See Jenny (2001) for more details on the difficult fiscal situation facing most states.

⁵ Also see Couch (1992), Friedlander and Burtless (1995), and Hotz, Klerman and Imbens (2001) for other long-term studies of specific welfare interventions.

federal waiver. The waiver included an evaluation, which led to the California Work Pays Demonstration Project (CWDPDP).

The CWDPDP made the following seven changes to California's welfare system:

Reduced the Maximum Aid Payment: The maximum amount of AFDC cash aid was reduced by 15 percent.

Eliminated the 100 hour (per month) work limitation for remaining eligible for AFDC-U: This change does not affect the eligibility for the AFDC Unemployed Parent program (AFDC-U), but does affect conditions under which one remains eligible. This change affected only AFDC-U cases; the rule was not in effect for AFDC-FG (single-parent) cases.

Removed the time limit for the \$30 and 1/3 income disregard: This change became effective in July 1993. Prior law required that if AFDC recipients earned income after four months on AFDC, they were subject to a 100 percent benefit reduction rate. The new law removed the 4-month time limit and allowed eligible AFDC recipients to keep \$30 plus one-third of their earnings for as long as they otherwise remained eligible for welfare.

Implemented the Cal-Learn program: This program encouraged pregnant teens and teen parents to stay in or return to school by providing child care, transportation, and other assistance, and by creating disincentives for bad grades or for dropping out of school.

Increased personal resource limits and allowed savings accounts for education: This provision raised the limits on personal resources and the value of automobiles that AFDC recipients could hold and still remain eligible for AFDC. It allowed recipients to retain up to \$5,000 per family in a restricted account to be used for a child's post secondary education, for down payment on a home, or for starting a business. These new rules do not apply to resources allowed at the time of eligibility determination, in which case the old rules still apply.

Implemented the California Alternative Assistance Program (CAAP): This provision enabled AFDC-eligible persons to decline an AFDC cash grant, but still receive Medi-Cal (the Medicaid program in California) and child-care assistance.

Changed employment services programs: Several provisions were implemented to make California's Job Opportunities and Basic Skills (JOBS) training program and the Greater Avenues for Independence (GAIN) program more work-oriented.

The treatment group in the CWDPDP and the AFDC caseload in the rest of the State were subject to the CWDPDP changes.

Case sampling for the CWDPDP evaluation began in December 1992. Fifteen thousand AFDC recipients in the four counties were randomly selected to participate in the study. One-

third of the recipients were assigned to a control group subject to the provisions of the State's AFDC program, including benefit levels in place as of September 1992.⁶ Two-thirds were assigned to the treatment group that, along with AFDC recipients throughout California, were subject to the changes in the State's AFDC program granted by the Federal government under several waivers.⁷

The CWPDP continued until the latter part of the 1990s. Upon passage of the PRWORA, all states had the option to continue their waiver demonstrations or terminate them. California chose to stop enrolling new entrants into the CWPDP as of March 1997 and, with the passage of California's welfare reform program, CalWORKs, the CWPDP was concluded at the end of 1997. Beginning in January 1998, all households in the CWPDP, including control group members, were subject to the provisions of California's TANF program and the other provisions of CalWORKs.

1.1 The CWPDP Sample and Data

The data for our analysis come from several sources. Data on AFDC and food stamp participation and demographic characteristics of families and individuals that constitute assistance units in the four counties were gathered in the County Welfare Administrative Database (CWAD). We also use data on welfare participation *prior* to enrollment in the CWPDP that come from California's Medi-Cal Eligibility Data System (MEDS).⁸ MEDS provides AFDC participation histories of individuals in the CWPDP sample from 1986 until their

⁶ Control group members retain their status even if they move out of their original CWPDP county, as long as they remain in California.

⁷ A sample of the new cases that entered the AFDC caseloads in the four analysis counties also were drawn into the study and randomly assigned to either the control or treatment statuses starting in 1993.

⁸ The MEDS is a statewide administrative system that contains information on monthly participation in the state's Medicaid program (Medi-Cal), AFDC/TANF programs, as well as the Food Stamps, SSI and California's General Assistance (GA) programs.

entry into the CWPDP.

We measure labor force participation using quarterly data on employment (and earnings) from the California Employment Development Department (EDD) Base Wage Files. The EDD Base Wage File contains employer-reported taxable wage payments for jobs covered by unemployment insurance (UI) and disability insurance (DI).⁹

Two sample restrictions are necessary due to gaps or inconsistencies in the data. First, data in the CWAD are maintained for persons who were in the case at the time of sampling as well as for persons who enter the case after the sampling date. Persons in this latter group were not submitted for a match to Base Wage File records; we exclude these persons from our analysis since we cannot observe their earnings. Second, administrative difficulties in San Joaquin County resulted in incomplete information for the treatment cases. Consequently, we exclude cases from San Joaquin.

Beyond these overall sample restrictions, other sample complications arise. First, a portion of the remaining sample is composed of cases where no adult is a member of the AFDC assistance unit.¹⁰ These child-only cases occur when children are eligible for AFDC but the adults who live with them are ineligible. The adults may be undocumented workers or may have been sanctioned out of the case for violating aid regulations. We eliminate these child-only cases from our analysis sample, since we do not have Base Wage File earnings for the adults in the household. We also eliminate households that have three or more adults in the AFDC assistance unit at the time of sampling, since we have limited information (and often no reliable

⁹The file generally includes individuals paid cash wages of more than \$100 in a calendar quarter and domestic workers paid cash wages more than \$750 in a calendar quarter. Certain types of workers are exempt from UI/DI coverage and are not included in the Base Wage File. We discuss strengths and weaknesses of the UI data in Section III, where we examine the financial resources available to families in the CWPDP.

¹⁰We define a child as being 18 years old or younger throughout the year.

information) about relationships among assistance unit members.¹¹

Table 1 shows the characteristics of our samples after the restrictions are imposed. The table shows there are no significant demographic differences between the treatment and control households. While this is a point-in-time sample from October 1992, the average member in the sample had been on welfare for 2.5 years (though the spell is not necessarily uninterrupted). Roughly two-thirds of the households are AFDC-FG (family group or single-parent household) cases, with the remainder being AFDC-U (unemployed parent or two-parent household) cases. After the sample restrictions noted above, we were able to match 98.5 percent of the adults in sample cases to UI/EDD earnings records, the data that we use to measure employment.

1.2 The CWPDP Package and Other Programs

Any experimental-control comparison for the CWPDP sample reflects the combined effect of the bundle of changes noted above. Thus, we are not able to distinguish between the effects of the reduction in the maximum aid payments (i.e., the AFDC guarantee levels) and the benefit reduction rates or the other changes that were made under the CWPDP. Nonetheless, we note that static models of labor supply would predict, under reasonable assumptions about income and substitution effects,¹² that the combination of the *reduction* in the guaranteed levels of AFDC benefits and the *elimination* of the time limits on 33 percent benefit reduction rate would tend to increase employment. Furthermore, we note that eliminating the 100 hour rule only applied to AFDC-U cases, reinforcing the notion that the primary changes confronting one-parent (AFDC-FG) households were the reduction in the welfare benefit guarantee and the reduction in the

¹¹ We also did not include cases where we were unable to determine the date they entered the CWPDP and we deleted individuals who were missing a date of birth when we constructed our measures of whether any adults in an assistance unit worked.

¹² In particular, the assumptions would be that the effect of an increase in income, all else equal, reduces an individual's labor supply and that the substitution effects associated with a wage change dominate the income effects of such a change.

benefit reduction rates.

For new policies to have discernable effects on behavior, they need to be implemented in a way that conveys needed information to program recipients. Meyers *et al.* (1998) examine the implementation of the CWPDP based on 66 intake or recertification interviews between caseworkers and clients in the four study counties in 1993 and 1994. Their evidence suggests welfare workers initially did little to convey the details or even the broad message of Work Pays to clients.¹³ They characterize only 40 percent of the transactions they observed as providing a “high level of information about work and self-sufficiency.” If implementation of the CWPDP improved over time and the experiment affected behavior, we would expect to see stronger experimental-control differences over time.¹⁴

Low-income households in California (and elsewhere) are potentially eligible for other social assistance programs that may affect their decisions to work. These other programs, such as Medi-Cal, Food Stamps and SSI, did not change much or at all over this period. They also generally did not vary across California’s 58 counties. Thus, we have a limited ability to examine the effects of other programs on the employment of CWPDP sample members.¹⁵

2. Employment Effects of the CWPDP

Table 2 shows unadjusted treatment-control differences in employment rates for families in

¹³ Meyers *et al.* (1998) write, “Only one office had a Work Pays poster within sight of clients. Two workers were observed to have Work Pays buttons. When asked about the button, however, one of the two reported that she had obtained it from her union – as part of a campaign to make ‘work pay’ for county employees” (p. 12).

¹⁴ Anecdotal evidence provided by Jacob Klerman at Rand, a PI on the statewide CalWORKs evaluation, suggests that implementation of the CWPDP improved over time.

¹⁵ The California welfare-to-work program, Greater Avenues for Independence (GAIN), was in place during the period we analyze. While the program was implemented statewide, it was administered at the county level. Consequently counties implemented different programs and were free to change them over this period. The randomization of families into treatment and control groups allows us to ignore GAIN in this study. For more on the GAIN program and the differences in its implementation in California’s counties, see Riccio *et al.* (1989) and Hotz, Imbens, and Klerman (2001).

the CWPDP from 1990 through 1998.¹⁶ Five things stand out in the table. First, employment rates fell from 1990-92. As mentioned earlier and as shown by the employment patterns plotted in Figure 1, California was hard hit by the recession in the beginning of the 1990s. Entry into welfare is also typically precipitated by a reduction in family income. Hence, it is not surprising to see declining employment rates prior to the date at which a point-in-time sample of welfare recipients is drawn.

Second, from a low point in 1992, employment increased steadily for the control and experimental groups. Employment rates rose more than 25 percentage points for the experimental group and more than 20 percentage points for the control group.

Third, beginning in the first year following the experiment, employment rates for the experimental group exceed employment rates of the control group. The differences range from 1.9 percentage points in 1993 to 4.6 percentage points in 1996 and 1997. In all cases these differences are statistically significant at usual levels of confidence.¹⁷ These differences are fairly sizable. Employment rates of experimental households are more than 10 percent higher than employment rates of control households in 1996 and 1997.

Fourth, the table also shows the effect of a brief, “reverse experiment” that occurred as the CWPDP was concluded in December 1997 and the control group was subsequently covered by the same benefit package as the treatment group. As would be expected if the CWPDP experiment were influencing employment rates of adults in our samples, treatment-control differences fell by 37 percent between 1997 and 1998, the first year that the AFDC/TANF

¹⁶ P-values in Tables 2 and 5 are for one-tailed alternatives, so we are testing for positive effects.

¹⁷ Our results differ from Becerra, Lew, Mitchell, Ono (1998) who, in the final report on the California Work Pays Demonstration Project, find small, often insignificant, positive labor market effects for AFDC-FG cases and somewhat larger, significant positive effects for AFDC-UP cases. In specifications not shown (but available on request), we find similar results to those reported for both U and FG cases. We suspect the discrepancies result from differences in the way the analysis samples are constructed, but we have not yet been able to confirm this

package available to the two groups was the same.

Fifth, employment rates are very low for treatment and control households in all years of the sample. By the later years, roughly half the households have some employment income reported to the UI system at some point during the year. Hence, while the CWPDP appeared to generate a measurable, positive, significant increase in employment, over half the families on the caseload in October 1992 do not have any earnings reported to the UI system five years later.

2.1 Regression Evidence

The simple, mean-differences estimators in Table 2 illustrate the effects of the CWPDP on employment rates. If the randomization of treatment and control cases was successful, the estimates in Table 2 should be unaffected by the inclusion of additional covariates (though doing so should enhance the precision of the estimates). To confirm our estimates are indeed insensitive to including covariates, we estimate a linear probability model of employment choices. We assume that ε_{ict} is independent across households but adjust standard errors on the regression coefficients for correlations within a household across time.

Appendix Table 1 lists the variables and their definitions that we use in the regression-adjusted estimates. The demographic characteristics and local economic and labor market variables are self-explanatory, but the welfare attachment variables require further explanation. A concern that we have, motivated by Bane and Ellwood (1986) among others, is that the point-in-time caseload over-represents households with longer welfare spells. As such, looking at the employment effects of policy in this sample may not reflect the effects of policies on other samples, such as households that recently entered welfare. We address this concern by creating a set of variables capturing households' welfare history and duration.

conjecture.

Specifically, we construct dummy variables for each cohort entering welfare. These variables will capture differences in entry cohorts across years caused by changes in economic conditions. The typical family entering welfare in a recession, for example, may be different than the typical family entering welfare in an expansion. We also include dummy variables that indicate the time that has transpired between the year in which labor force participation is measured and the beginning of the family's welfare spell at the time they were selected into the CWPDP.¹⁸ These variables are intended to control for differences in labor force participation associated with the passage of time after initial AFDC receipt. In particular, we expect labor force participation to increase as the time from entry grows.

Table 3 gives the regression-adjusted point estimates. The estimates of the treatment-control differences are within 0.4 percentage points of each other in all years (and 6 of the 9 are within 0.1 percentage point). As expected, the regression-adjusted estimates are more efficient,¹⁹ but neither the qualitative or quantitative results are affected by the inclusion of covariates. The one interesting difference between the raw comparisons or means and the regression-adjusted estimates comes from the employment differences in 1992. In the raw data, the employment rate for the experimental group is 1.7 percentage points below the employment rate for the control group, and this difference is significant at the 7 percent level of confidence. Of course, if randomization successfully distinguishes otherwise identical households, we should find that the employment rates of households assigned to experimental status should not be different than those assigned to the control status in *years prior to* random assignment. The point estimate of the 1992 difference shrinks to 1.3 percentage points in the regression-adjusted estimates and it is

¹⁸ If a household entered welfare in 1988, for example, and we are examining employment in 1993, the indicator variable for Dur(6) would equal 1. The duration indicator variables can be associated with negative duration if, for example, we are measuring employment in 1990 and the family entered welfare in 1992.

¹⁹ The gain in efficiency is not large, however, averaging only 4.5 percent overall.

statistically indistinguishable from zero (its t-statistic is 1.15). The results prior to the onset of the CWPDP reinforces the general picture given by Table 1 – there are no significant differences between treatment and control household at the time the sample is defined.

The correlations between employment and the other covariates generally match our intuition. As expected, given the fact that we examine whether either adult in two-adult households were employed during a year, the employment rates are higher in AFDC-U households than in AFDC-FG households. Employment rates decline with the average age of adults in the household and are generally lower in Asian households relative to other ethnic groups. We also find that employment rates decline monotonically with the number of children in the household.

To give a sense of the magnitudes of the economic relationships shown in Tables 2 and 3, the average AFDC benefit was \$8,217 for households in our sample in 1993 (in 1998 dollars, the unit for all dollar amounts in the paper). A 15 percent reduction in benefits, therefore, would result in an average annual benefit reduction of roughly \$1,232, again in 1998 dollars. As is clear in Tables 2 and 3, employment rates of experimental households increased by 10.2 to 11.6 percent relative to the employment rates of control households. This implies an elasticity of the employment rate with respect to the guarantee of about -0.68 to -0.77 .

Perhaps coincidentally, the survey of transfer programs by Danziger, Haveman and Poltnick (1981) report elasticities of the employment rate of female-headed households with respect to the guarantee ranging between -0.7 and -0.94 (page 993).²⁰ One drawback of the experimental

²⁰ There does not appear to be work examining the effects of cutting welfare benefits since the early 1980s. Moffitt (1992), for example, simply mentions the earlier estimates. Anticipating subsequent policy developments, Moffitt focuses on the effects of lowering benefit reduction rates, instituting training and other work-related programs, adopting child support reforms, and extending benefits to two-parent families. He characterized one goal of welfare reforms as “reducing the caseload and reducing welfare participation rates in some way other than merely cutting benefits.”

evidence we report is that we cannot explore how our estimates are affected by the economy. It might be the case, for example, that there are “interaction effects” between the welfare changes and the economy. Put differently, benefit cuts might increase employment more in a strong economy than in a weak one. Hence, one needs to be cautious in applying the CWPDP results to different economic environments.

A different way of putting our results in context comes from the following. Between 1992 and 1997 (the end of the CWPDP), employment rates of control households increased by 19.2 percentage points. They increased by 25.4 percentage points for experimental households. The difference, 6.2 percentage points, is another estimate of the employment effects of the CWPDP. This is a sizeable estimate, but it also implies that more than 75 percent of the employment changes of the treatment group is driven by the strong economy, expansions of the EITC, and other factors influencing labor supply and demand.

3. Financial Resources Available to CWPDP Families

Supporters of work-based welfare reforms believe that most people will find jobs and, even if initial wages are low, they will increase to a self-sufficient level with time. Skeptics worry that work-based welfare reform will just push low-skilled households into dead end jobs, adding stress to already harried families. Among the potential problems, single parents may have even less time to care for children and have additional work-related and child care expenses, while labor market earnings may be little more than their previous welfare benefits.

In this section we examine the level of resources available to CWPDP families and how they change over time. The most striking finding of this analysis is that there are significant discrepancies between the two available income sources for this study, UI wage records and incomes reported to the welfare and food stamp systems. We focus on UI Wage records because

they are readily available and have been used extensively in studies of low-wage labor markets.²¹ Baj, Trott and Stevens (1991), for example, write “Obtaining post-program information from state UI systems is not only a viable option, it is far more cost-effective than the current practice of gathering this information through contact with participants. Furthermore, UI data are of higher quality than corresponding survey-based information” (p. 30).

There are also reasons to think UI data are accurate. By law, any employer paying \$1,500 in wages during a calendar quarter to one or more employees is subject to a state UI tax and, hence, must report quarterly what is paid to each employee, including regular earnings, overtime, and tips and bonuses.²² While employers are liable for taxes up to an earnings threshold, there appears to be little incentive for employers to underreport earnings for most employees because the threshold is quite low. Moreover, employers’ reports are used to determine unemployment benefits. Discrepancies between employer and employee reports upon application of unemployment benefits can result in employer sanctions.

But UI wage records may have limitations. The first arises because UI wage records do not cover all forms of employment. The data do not capture the earnings of self-employed persons, most independent contractors, military personnel, federal government workers, railroad employees, some part-time employees of nonprofit institutions, employees of religious orders, and some students employed by their schools. The results of Blakemore *et al.* (1996) and Burgess, Blakemore, and Low (1998) suggest that in 1987 employers may have failed to report the presence of 11.1 million UI-eligible workers, 13.6 percent of all workers, and \$70.6 billion in

²¹ See Hotz and Scholz (2002) for information on data sources available for measuring employment and income for low-income populations.

²² Agricultural employers must report earnings if they have either a quarterly payroll of at least \$20,000 or have hired 10 or more employees in each of 20 or more weeks during the preceding calendar year. Employers of paid household help must report wages if they pay at least \$1,000 in cash wages during any quarter.

wages to State UI agencies in 1987.

The second potential weakness of UI data for some questions is that it cannot be used to form an accurate measure of family income. In assessing the impacts of welfare reform, many argue that it is important to assess how these changes affect the well-being of children and the families in which they reside. As such, families constitute the natural “unit-of-analysis” for such assessments and family income is often used as an indicator of this unit’s well-being.²³

As noted above, an alternative source of information on income comes from the AFDC and food stamp case records. In principle these should reflect family income, as well as income from jobs not covered by the UI system. But given the structure of benefit reduction rates, there are strong incentives for families to not reveal income. Moreover, sympathetic caseworkers might choose to overlook income or not have time or the inclination to ask about it. In this subsection we document the discrepancies between income reported to the UI system and income reported to the welfare system.

A critical issue when making informative comparisons across datasets is to define samples in a way to make them as consistent as possible. UI data are reported quarterly. Consequently, for the income comparisons we aggregate monthly AFDC records into quarterly reports.²⁴ We limit the sample to only those with complete AFDC records over the quarter. Furthermore, we restrict the comparisons to AFDC “family group” (or AFDC-FG cases) with one adult in the household.²⁵

²³ Rolston (1999) notes, for example, that changes in individual income may account for only 40 to 50 percent of exits from welfare. Thus, to have a complete picture of the effects of welfare reform, analysts need information on other economic and demographic changes occurring in the family. UI records do not include income not related to employment and income of partners.

²⁴ The monthly report is supposed to reflect the month the income is actually earned, as opposed to the month it is reported, which presumably is significantly later than when the money is earned.

²⁵ We restrict the comparisons of earnings in the welfare and UI records to one adult families to ensure the earnings of a second adult that we would not observe in the UI data do not cause discrepancies.

Figure 2 plots the quarterly earnings reported to AFDC administrators compared to quarterly earnings reported to the UI system. The 45 degree line would be the data pattern if the two sources had identical income reports. Instead, except at trivially low levels of earnings, mean earnings reported to AFDC administrators are substantially lower than earnings reported to the UI system.²⁶ The median and 75th percentile earnings are also uniformly below the UI earnings.

Table 4 provides more detail on the relationship between UI earnings and earnings reported to the transfer system. Each year the majority of cases remaining on AFDC do not report any income to the AFDC authorities and have no earnings record in the UI data. But of those who do have income, earnings are significantly more likely to show up in the UI system than in the welfare records. While this pattern diminishes over time, the discrepancies remain very large. In 1998, for example, 28 percent of the cases that are still receiving welfare had more income reported to the UI system than they did to the welfare system. Moreover, the average discrepancy was \$1,425 per quarter. In contrast, 16 percent had more welfare income than UI income. The average discrepancy for these households was \$1,058. The actual discrepancies are likely understated in our analysis, since the UI system does not cover all jobs and only reflects the earnings of one worker.

The patterns in Figure 2 and Table 4 are consistent with program incentives. Households have strong incentives to understate or hide income from AFDC authorities, since after certain minimal disregards, earnings reduce AFDC benefits dollar for dollar. Our tabulations suggest that income appears to be severely underreported to welfare program officials. Moreover, the underreporting is not simply attributable to the failure to report “off-the-books” earnings from casual labor, as documented by ethnographic work of Edin and Lein (1997). We also show that

²⁶ The mean in Figure 2 is computed by a local linear regression. The quantile lines come from kernel regressions. A quadratic function – $AFDC\ Earnings = .58*(UI\ earnings) - .000065*(UI\ earnings)^2$ – fits the mean relationship

verifiable, documentable employment earnings are substantially underreported as well.

3.1 The Evolution of Household Resources

One of the goals of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 is to “end the dependence of needy parents on government benefits by promoting job preparation, work, and marriage” (see Section 401 of H.R. 3734). To satisfactorily meet this goal, families must be able to find and hold jobs that allow them to nurture the physical and psychological well-being of the adults and children in the household.

While the rhetoric of self-sufficiency is appealing, it collides with an exceptionally difficult reality. The labor market skills of families on welfare are generally very weak. Among the nearly 55,000 welfare recipients in Wisconsin in July 1995, for example, 44 percent had less than a high school degree. Nearly two-thirds had earnings under \$2,500 in the two years prior to July 1995. Only 17 percent earned more than \$7,500 in the prior two-year period. Given that these families had more than two children on average, their ability to support the family at anything even close to poverty line earnings was limited.²⁷

The educational attainment of families on welfare in Wisconsin mirrors the characteristics of the welfare caseload nationally. In 1995, prior to welfare reform, 42 percent of the families who received welfare benefits at some point during the year had less than a high school diploma. The overall employment rate of prime-age workers with less than a high school degree in 1995 was 68.2 percent. As the average educational attainment of workers increases over time and as technological changes in the economy place ever-increasing remunerative value on skills, the employment and earnings handicap facing low-skilled workers will only increase. Consequently, the degree to which work will be the primary antidote to poverty will depend on

very closely.

the ability of low-skilled people to maintain employment and, over time, increase income so as to become self sufficient.

A considerable amount of prior work has examined earnings growth of families leaving welfare. Card, Michalopoulos and Robins (2001) report that people induced to work by the Self Sufficiency Project (SSP) in Canada experienced real log wage growth of about 2.5 to 3 percent per year. They write “The slow rate of real wage growth for people who were induced to enter work by the financial incentives of SSP suggests a limited role for work experience to boost the earnings of welfare leavers.”

Gladden and Taber (2000) also find no significant differences in the rate of wage growth for less well-educated women relative to other groups.²⁸ Like Card *et al.*, they caution that “work experience is not a magic bullet... evidence indicates that low-skilled workers will not have huge wage gains from work experience.”

Data from our California sample shown in Table 5 give a similar picture.²⁹ The top panel shows the evolution of earnings (from the UI data). Since the sample is composed of households on welfare in October 1992, it is not surprising that there is a sharp downward annual earnings trajectory between 1990 and 1992.³⁰ From 1992, earnings increase over time, going from under \$1,000 (in 1998 dollars) to over \$5,500 in 1998. There are significant differences in earnings between households in the experimental group and in the control group. In the last year of the

²⁷ Numbers in this paragraph come Cancian *et al.* (1999).

²⁸ They also note that with similar growth in the log of wages, the level of wages become more unequal with age. Pavetti and Acs (2001) also find little evidence that low-skilled women with children will easily move into jobs with additional labor market experience that allow them to have incomes above the poverty line.

²⁹ Log wage growth for control group households was 1.3 percent per year between 1990-98, and 3.9 percent per year between 1992-98. Log wage growth for experimental group households was 1.4 percent per year between 1990-98, and 4.3 percent per year between 1992-98.

³⁰ As with the 1992 employment difference, the regression-adjusted earnings difference in 1992 is smaller and insignificant. Other than this difference, the qualitative and quantitative patterns of the regression-adjusted estimates are identical to what is in the text.

experiment (1997) the difference is \$496.

AFDC and food stamp benefits decrease steadily over the period, as would be expected with the increase in employment. There are also significant differences in benefit receipt between households in the experimental group and in the control group, reaching \$495 in 1997.

The change in AFDC and food stamp benefits shown in Table 5 are roughly equivalent to the increase in earnings for CWPDP treatment households. Consequently, there are no significant experimental-control group differences in disposable income until the experiment is over (in 1998). These calculations account for the earned income tax credit, which increased sharply over this period,³¹ as well as the cash value of food stamp (and AFDC) benefits, less the employee portion of social security payroll taxes. Consequently, it is a broad measure of the resources available to households.

Putting aside, for a moment, treatment-control differences, looking at the changes in disposable income over time, there is little evidence that families in our sample are acquiring sufficient resources to avoid poverty.³² Households in both the treatment and control groups go from roughly \$12,000 in disposable income in 1993 (in 1998 dollars) to roughly \$10,500 in 1998. This occurs despite the unusually strong economy and EITC expansions that occurred during this period. Both the low level and downward trend of disposable income are worrisome, as average disposable income in all years is well below the poverty line.³³

Welfare use falls for the sample over time, but even in 1998 more than 50 percent of the

³¹ Between 1990 and 1998 the maximum earned income tax credit for a taxpayer with one-child increased to \$2,271 from \$953 (in nominal dollars). For a taxpayer with two or more children, it increased from \$953 to \$3,756. See Hotz and Scholz (2001) for more details of the EITC.

³² This point is distinct from the issue of self-sufficiency. The fraction of total household disposable income accounted for by earned income increases sharply over time. The reduction in disposable income is driven by a sharp reduction in AFDC and food stamp benefits.

³³ In 1998 the poverty line was \$10,850 for a 2-person household, \$13,650 for a 3-person household, and \$16,450 for a 4-person household.

sample still receives welfare benefits at some point during the year. Other than in 1995, when the treatment group is 2.1 percentage points less likely to receive welfare, there are no significant treatment-control differences.³⁴

While the fact that we do not have information on the income of other people who might be contributing resources to the household is an important caveat, it nevertheless appears that the earnings of people leaving welfare frequently do not exceed the poverty line, even many years after leaving welfare. This is despite the fact that our data cover a period when the economy is very strong.

4. Conclusions

There has been little work since the early 1980s examining the effects of cutting welfare benefits. But some states, perhaps those with higher than average welfare benefits and who face deteriorating fiscal conditions, may consider benefit cuts along with other measures unrelated to income support. Evidence from the California Work Pays Demonstration Project in the early 1990s indicates that cutting welfare benefits had a modest, positive effect on employment. The cuts, which reduced the maximum aid payment by 15 percent, resulted in the experimental group having employment rates that were 10 to 11.5 percent higher than the control group.

The increased earnings resulting from the higher employment rates averaged around \$500 per year and were almost exactly offset by benefit reductions. In short, the members of the experimental group on average ended up with the same amount of disposable income, but they

³⁴ Recall that our data do not include non-employment income and income of partners. The practical consequence of this limitation is not clear. Meyer and Cancian (1998) found, for example, that five years after leaving welfare 64.2 percent of women still have incomes below the poverty line, while, when considering the broader family unit, only 40.5 percent have incomes below the poverty line. In a related calculation, however, Primus *et al.* (1999) conclude “for most single-mother families, including the income of unrelated male individuals does not materially change the picture drawn of a decline in overall disposable income between 1995 and 1997.” More needs to be learned about the importance of these issues when assessing the level and trend in family well-being following welfare reform.

worked somewhat more than the control group.

Stepping back from the effects of the experiment, we show sharp discrepancies between income reported to the welfare system and income reported to the UI system, with the evidence suggesting that income is severely underreported to welfare program officials. Moreover, the underreporting is not simply attributable to the failure to report “off-the-books” earnings from casual labor, as documented by recent ethnographic work. We also show that verifiable, documentable employment earnings are substantially underreported as well.

Finally, our evidence on the evolution of disposable income available to these families is even more pessimistic than that documented in many “leavers” studies that have been conducted on families leaving welfare.³⁵ For the sample of households in the CWPDP in October 1992, real disposable income fell steadily for the six years they are observed in the data. This occurred despite the significant increase in the earned income tax credit over the period (which benefited these households, since their earned income increased steadily over this period) and the strikingly strong economy.

The results also raise an interesting question for future research. While real earnings increased by roughly 30 percent per year between 1993 and 1998 for CWPDP households, welfare benefits fell by nearly \$6,000, which in turn drove the reductions in real disposable income. Yet there were no dramatic changes in food stamp rules over the period and the California TANF plan was not implemented until 1998. If transfer receipts fell because of diversion efforts, sanctions or other policies that discouraged transfer program participation, household wellbeing in the CWPDP sample almost certainly fell. If transfer receipts fell because some households were now working more and chose not to receive benefits, wellbeing in the

³⁵ For a discussion of studies of families receiving welfare, see <http://aspe.hhs.gov/hsp/welf-ref-outcomes00/index.htm>.

CWPDP sample may not have fallen and the rapidly growth of earnings may be a harbinger of a better future. Learning more about the factors driving the striking reduction in transfer receipts will be central to assessing household wellbeing.

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TABLE 1: DESCRIPTIVE STATISTICS FOR THE CALIFORNIA WORK PAYS DEMONSTRATION PROJECT SAMPLE			
		Controls	Experimentals
Sample Size		2275	4492
Family Composition			
Adults		1.60	1.58
Children		2.37	2.35
Female Head		39%	41%
AFDC-UP		32%	32%
Case History			
Age in '92		31.42	31.36
Years Since First Welfare Receipt (Censored in 01/86)		2.48	2.58
Race			
White		30%	30%
Hispanic		25%	23%
Black		30%	32%
Asian		13%	14%
Mixed		1%	1%
County			
Alameda		28%	29%
Los Angeles		47%	47%
San Bernardino		25%	24%

TABLE 2: EMPLOYMENT RATES FOR ONE-ADULT FG CASES

Year	Control	Experimental	Percentage Point Difference	Percentage Change	P-Value for Difference
1990	35.2%	34.4%	-0.7	-2.1%	0.277
1991	28.7%	28.2%	-0.5	-1.7%	0.341
1992	25.3%	23.6%	-1.7	-6.5%	0.068
1993	26.5%	28.5%	1.9	7.2%	0.048
1994	32.4%	34.7%	2.3	7.1%	0.029
1995	36.7%	39.8%	3.1	8.5%	0.006
1996	39.6%	44.2%	4.6	11.6%	0.000
1997	44.5%	49.0%	4.6	10.2%	0.000
1998	46.0%	48.9%	2.9	6.3%	0.012

TABLE 3: REGRESSION-ADJUSTED TREATMENT-CONTROL DIFFERENCES IN EMPLOYMENT RATES, FG CASES

Variable	Coefficient Estimate	Standard Error	t-Value
Intercept	0.007	0.486	0.01
EXP ₈₇	0.001	0.013	0.09
EXP ₈₈	0.015	0.013	1.17
EXP ₈₉	-0.003	0.013	-0.20
EXP ₉₀	-0.007	0.012	-0.59
EXP ₉₁	-0.004	0.011	-0.36
EXP ₉₂	-0.013	0.011	-1.15
EXP ₉₃	0.021	0.011	1.85
EXP ₉₄	0.025	0.012	2.06
EXP ₉₅	0.031	0.012	2.53
EXP ₉₆	0.046	0.013	3.63
EXP ₉₇	0.046	0.013	3.62
EXP ₉₈	0.030	0.013	2.38
AFDC-U	0.135	0.005	29.82
Adults	-0.041	0.014	-2.93
Mean Age, Adults	-0.004	0.000	-19.58
Female	-0.012	0.014	-0.86
White	-0.083	0.016	-5.36
Hispanic	-0.020	0.016	-1.29
Black	0.005	0.016	0.31
Asian	-0.120	0.016	-7.64
Kid2	-0.077	0.016	-4.96
Kid3	-0.086	0.016	-5.49
Kid4	-0.119	0.016	-7.54
Alameda	0.255	0.124	2.06
San Bernardino	0.290	0.086	3.35
Yr87	0.000	0.029	0.01
Yr88	-0.009	0.036	-0.25
Yr89	0.010	0.043	0.24
Yr90	-0.019	0.061	-0.31
Yr91	-0.081	0.072	-1.11
Yr92	-0.127	0.083	-1.53
Yr93	-0.073	0.095	-0.78
Yr94	-0.027	0.102	-0.27
Yr95	0.016	0.114	0.14
Yr96	0.028	0.126	0.22
Yr97	0.056	0.128	0.44
Yr98	0.049	0.132	0.37
Dur(-6)	0.109	0.056	1.93
Dur(-5)	0.108	0.047	2.32
Dur(-4)	0.099	0.038	2.64
Dur(-3)	0.093	0.029	3.24

Dur(-2)	0.107	0.020	5.26
Dur(-1)	0.103	0.013	8.21
Dur(+1)	-0.104	0.012	-8.61
Dur(+2)	-0.110	0.020	-5.52
Dur(+3)	-0.110	0.028	-3.88
Dur(+4)	-0.109	0.037	-2.93
Dur(+5)	-0.108	0.046	-2.35
Dur(+6)	-0.102	0.055	-1.85
Dur(+7)	-0.093	0.064	-1.45
Dur(+8)	-0.087	0.073	-1.18
Dur(+9)	-0.102	0.082	-1.24
Dur(+10)	-0.090	0.092	-0.98
Dur(+11)	-0.095	0.101	-0.94
Dur(+12)	-0.078	0.108	-0.72
New Entrant in Yr88	0.017	0.018	0.95
New Entrant in Yr89	0.000	0.026	-0.02
New Entrant in Yr90	-0.032	0.035	-0.93
New Entrant in Yr91	0.016	0.044	0.38
New Entrant in Yr92	-0.003	0.053	-0.06
GAIN Prop.	-0.012	0.039	-0.31
Employmt. Rate	-0.898	0.511	-1.76
Empl. Share, Manu	-0.153	0.806	-0.19
Empl. Share, Service	2.377	1.094	2.17
Empl. Share, Retail	-0.987	1.065	-0.93
Inc/Worker	0.027	0.034	0.80
Inc/Worker, Manu	-0.007	0.011	-0.64
Inc/Worker, Service	0.018	0.018	0.99
Inc/Worker, Retail	-0.026	0.018	-1.42
2+Kids ₈₇	0.003	0.021	0.15
2+Kids ₈₈	0.019	0.021	0.89
2+Kids ₈₉	0.002	0.021	0.10
2+Kids ₉₀	-0.016	0.020	-0.78

Table 4: Quarterly Earnings Reported to AFDC Administrators and to the UI System

		AFDC GEI < EDD							EDD < AFDC GEI	
Year	Sample size	% of cases where UI=AFDC=0	Percent of Cases	Avg. Amount Underreported	Avg. Percent Underreported	Percent of Cases	Avg. Amount Underreported	Avg. Percent Underreported		
1993	11453	71	25	1385	84	4	588	71		
1994	10510	67	27	1317	80	6	732	72		
1995	9494	64	28	1219	76	8	687	72		
1996	8600	61	29	1236	73	10	731	73		
1997	7730	57	31	1329	69	12	837	71		
1998	4691	56	28	1425	68	16	1058	73		
Cases in which AFDC GEI = EDD > 0 comprise less than 1/4 of one percent of the sample. Amounts are currently in nominal terms.										

TABLE 5: ANNUAL EARNINGS, TRANSFERS, DISPOSABLE INCOME FOR ONE-ADULT FG CASES

	Year	Control	Experimental	Difference	Percentage Change	P-Value for Difference
Earnings	1990	\$2,480	\$2,477	-\$4	-0.1	0.491
	1991	\$1,521	\$1,495	-\$25	-1.7	0.407
	1992	\$979	\$863	-\$116	-11.9	0.051
	1993	\$1,553	\$1,606	\$53	3.4	0.316
	1994	\$2,381	\$2,496	\$115	4.8	0.230
	1995	\$3,120	\$3,345	\$225	7.2	0.116
	1996	\$3,763	\$4,112	\$349	9.3	0.049
	1997	\$4,730	\$5,226	\$496	10.5	0.022
	1998	\$5,692	\$6,131	\$439	7.7	0.052
AFDC+FS	1993	\$10,363	\$10,160	-\$203	-2.0	0.055
	1994	\$8,824	\$8,520	-\$304	-3.4	0.020
	1995	\$7,642	\$7,325	-\$316	-4.1	0.021
	1996	\$6,762	\$6,269	-\$493	-7.3	0.001
	1997	\$5,585	\$5,090	-\$495	-8.9	0.001
	1998	\$4,232	\$4,168	-\$64	-1.5	0.343
Disposable Income (EARN+AFDC +FS+EITC)	1993	\$11,989	\$11,836	-\$153	-1.3	0.141
	1994	\$11,374	\$11,186	-\$187	-1.6	0.148
	1995	\$11,007	\$10,927	-\$80	-0.7	0.346
	1996	\$10,817	\$10,714	-\$104	-1.0	0.321
	1997	\$10,636	\$10,696	\$60	0.6	0.404
	1998	\$10,242	\$10,675	\$433	4.2	0.056
Welfare Receipt	1993	98.9%	98.6%	-0.3%	-0.3	0.135
	1994	85.5%	85.5%	0.0%	0.0	0.496
	1995	77.2%	75.1%	-2.1%	-2.7	0.026
	1996	69.2%	68.0%	-1.2%	-1.7	0.166
	1997	61.4%	59.8%	-1.6%	-2.6	0.106
	1998	52.6%	51.8%	-0.7%	-1.4	0.287

Figure 1
 Annual Growth Rates in Employment: All Industries, 1985 - 1998

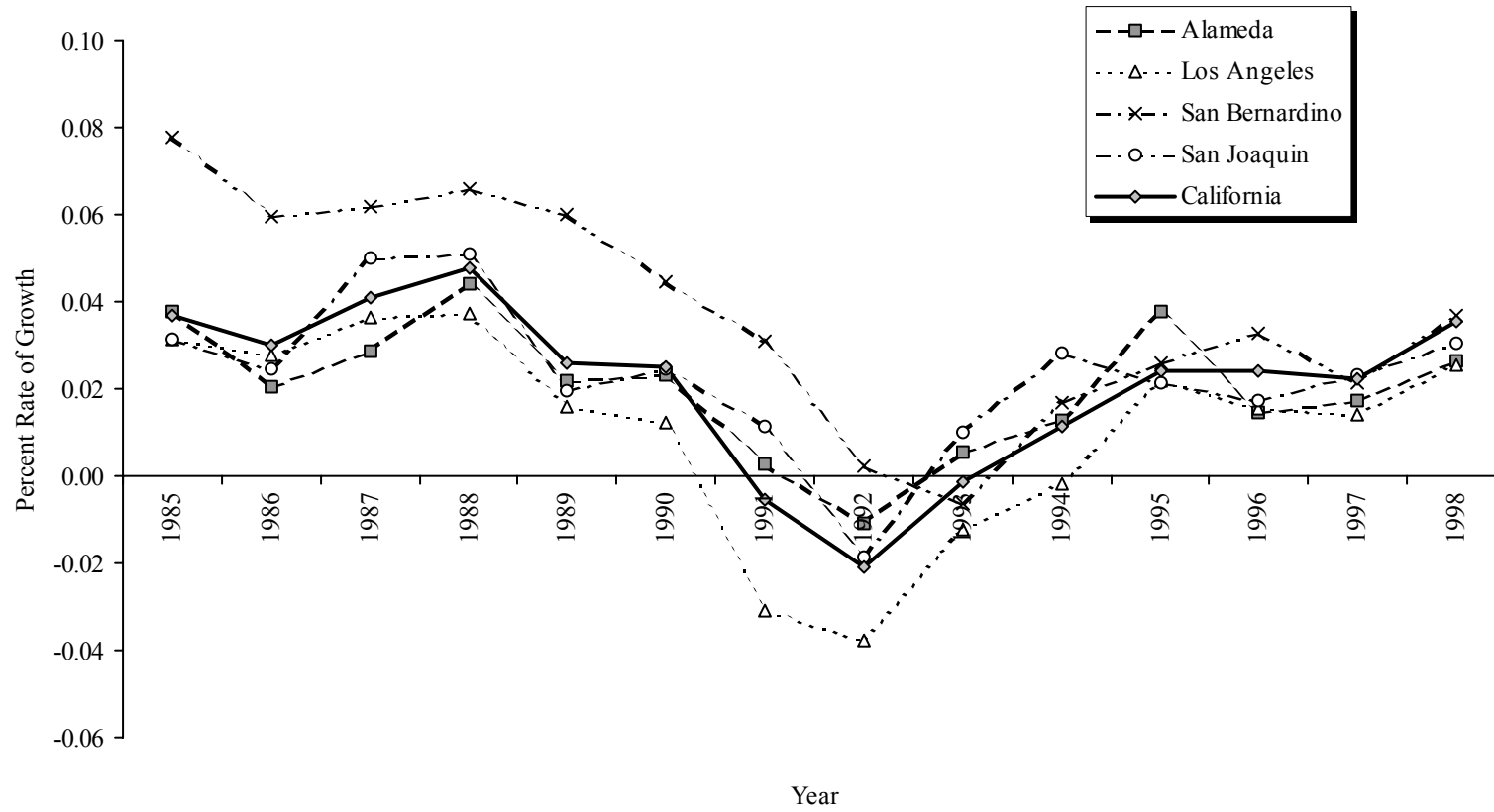
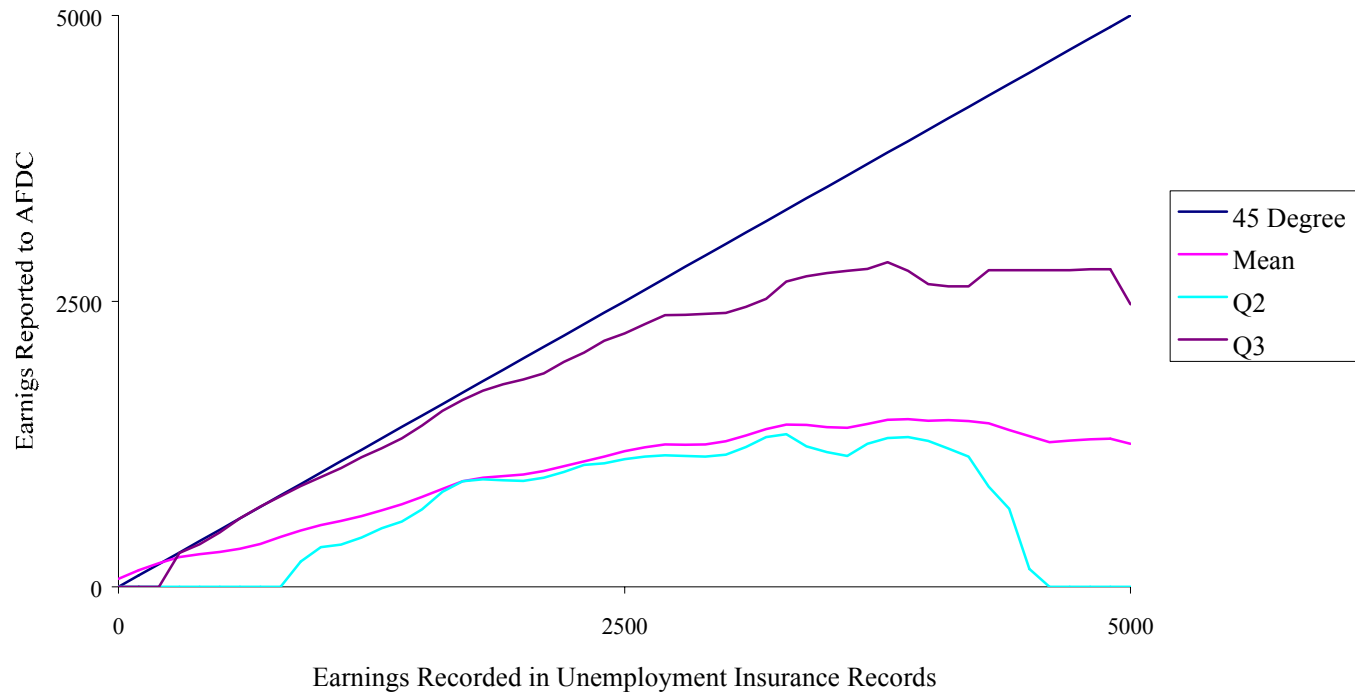


Figure 2: Quarterly Earnings Reported to AFDC Administrators and to the UI System



Appendix Table 1: Definition of Variables Used in Regression Analysis

<i>Variable</i>	<i>Definition</i>
<u>Dependent Variable:</u>	
Emp	= 1 if one or more adult in household worked in year t ; = 0 otherwise
<u>Treatment Variables:</u>	
$EXP_t (T_i^{AFDC})$	= 1 if household randomly assigned to experimental treatment in years on and after enrollment into CWPDP; = 0 if randomly assigned to control group.
<u>Demographic Characteristics (X_{ict}):</u>	
$2+Kids_t (T_i^{EITC})$	= 1 if household has 2 or more kids in year t ; = 0 otherwise
Adults	Number of adults in household
Mean Age, Adults	Average age of adults in household
Female	= 1 if head of household is a female; = 0 otherwise
Male	= 1 if head of household is a male; = 0 otherwise (omitted category in regressions)
White	= 1 if household is white; = 0 otherwise
Hispanic	= 1 if household is Hispanic; = 0 otherwise
Black	= 1 if household is black; = 0 otherwise
Asian	= 1 if household is Asian; = 0 otherwise
Other Ethnic	= 1 if household is some other ethnic group; = 0 otherwise (omitted category in regressions)
Kid1	= 1 if 1 child in household at time of enrollment into CWPDP; = 0 otherwise (omitted category in regressions)
Kid2	= 1 if 2 children in household at time of enrollment into CWPDP; = 0 otherwise
Kid3	= 1 if 3 children in household at time of enrollment into CWPDP; = 0 otherwise
Kid4	= 1 if 4 or more children in household at time of enrollment into CWPDP; = 0 otherwise
<u>Local Economic and Labor Market Conditions (L_{ict}):</u>	
Alameda	= 1 if household resided in Alameda County at time of enrollment into CWPDP; = 0 otherwise
Los Angeles	= 1 if household resided in Los Angeles County at time of enrollment into CWPDP; = 0 otherwise (omitted category in regressions)
San Bernardino	= 1 if household resided in San Bernardino County at time of enrollment into CWPDP; = 0 otherwise
YrZ	= 1 if year t is equal to Z , $Z = 87, \dots, 98$; = 0 otherwise.
GAIN Prop.	Proportion of AFDC caseload in county of residence receiving GAIN services in year t
Empl Rate	Employment rate (total employment/total population) in county of residence in year t
Empl. Share, Manu	Share of employment in Manufacturing sector in county of residence in year t
Empl. Share, Service	Share of employment in Service sector in county of residence in year t
Empl. Share, Retail	Share of employment in Retail Trade sector in county of residence in year t
Inc/Worker	Income per Worker (in 1000 of 1987\$) in county of residence in year t
Inc/Worker, Manu	Income per Worker (in 1000 of 1987\$) in Manufacturing sector in county of residence in year t
Inc/Worker, Service	Income per Worker (in 1000 of 1987\$) in Service sector in county of residence in year t
Inc/Worker, Retail	Income per Worker (in 1000 of 1987\$) in Retail Trade sector in county of residence in year t
<u>Timing of Welfare Entry and Duration Variables (W_{ict}):</u>	
New Entrant in YrZ	= 1 if most recent spell on AFDC at or prior to household enrolled in CWPDP started in YrZ, where $Z = 93, \dots, 97$; = 0 otherwise.
Dur(+Z)	= 1 if household's most recent spell on AFDC at or prior to enrollment in CWPDP started Z years <i>after</i> year t ; = 0 otherwise.
Dur(-Z)	= 1 if household's most recent spell on AFDC at or prior to enrollment in CWPDP started Z years <i>prior</i> to year t ; = 0 otherwise.