"The Earned Income Tax Credit, Welfare Reform, and the Employment of Low Skill Single Mothers"

Hilary Hoynes University of California, Davis hwhoynes@ucdavis.edu

Paper prepared for Chicago Federal Reserve Bank of Chicago Conference on "Strategies for Improving Economic Mobility of Workers"

November 15-16, 2007

Preliminary Draft, Nov 1, 2007

Abstract

In the past 15 years there have been enormous changes in federal and state income assistance for low income single families with children. Welfare reform has led to a dramatic reduction in the generosity of state cash assistance through the AFDC (now TANF) program. At the same time, there has been tremendous expansion in cash assistance for low income families through the tax system: currently, twenty-two million families receive a total of \$34 billion dollars in benefits from the EITC. In fact, the EITC is now the largest cash transfer program for lower-income families at the federal level. An unusual feature of the credit is its explicit goal to use the tax system to encourage and support those who choose to work. Consequently, low income single mothers have faced a large increase in the financial gains to employment through welfare reform and the expansions in the EITC. In this paper, we describe these important policies, present trends in employment for single mothers, and summarize what is known about how the changes in welfare and the EITC have affected employment.

1. Introduction

Cash assistance for low income families with children underwent tremendous change in the 1990s. Welfare reform led to a dramatic reduction in the generosity of state cash assistance and an elimination of the Aid to Families with Dependent Children (AFDC) program. At the same time, cash assistance through the tax system, in the form of the Earned Income Tax Credit (EITC), increased substantially. In fact, the EITC is now the largest federal cash transfer program for lower-income families generating a total cost (in 2005) of \$34 billion compared to \$24 billion in TANF expenditures.

This shift in the structure of cash assistance for low income families, away from welfare and towards tax based assistance, is the outcome of a long-standing criticism that traditional welfare programs generate adverse incentives for work and family. Importantly, the policy changes to welfare and the EITC in the 1990s both provided incentives (financial and otherwise) for single mothers with children to increase employment. Indeed, employment rates of single mothers with children increased 11 percentage points over the past twenty years, from 0.66 in 1987 to 0.77 in 2006. Even more striking is the 20 percentage point change that occurred between 1992 and 1999 (from 0.63 to 0.83). No other group of women (single women without children, married women with or without children) or men experienced such a dramatic increase in employment. In this paper, I describe these important policies, present trends in employment for single mothers, and summarize what is known about how the changes in welfare and the EITC have affected employment.

2. Welfare Reform and the Earned Income Tax Credit

The AFDC program has provided cash assistance to low income single mothers with children since the 1930s. The program was designed to provide an income transfer for needy families in an era when women with children had minimal labor market attachment.

Consequently, AFDC benefits are phased out at a very high rate: after a small disregard, benefits are reduced by one dollar for every additional dollar in earned income. This creates a targeting of benefits to those with the lowest income levels (by design) but also creates a disincentive to enter the labor force because the increase in earnings is offset by a reduction in the cash transfer.

Concerns about the labor supply disincentives in the AFDC program had an important impact on welfare reform at the state and federal level. Beginning in the early 1990s, many states were granted waivers to change their AFDC programs and by 1995 about half of the states implemented some sort of welfare waiver. On the heels of this state experimentation, PRWORA was enacted in 1996, replacing AFDC with Temporary Assistance for Needy Families. The key elements of reform in the state waivers and TANF legislation include: work requirements, lifetime time limits, financial sanctions, and enhanced earnings disregards. These changes were designed to increase work and reduce welfare participation. Figure 1 shows the dramatic decline in welfare caseloads that occurred during this period.

The EITC began in 1975 as a modest program aimed at offsetting social security payroll taxes for low-income families with children. It was the outcome of a vigorous policy debate surrounding the efficacy of a Negative Income Tax as a means of reducing poverty. The concern was that the NIT would discourage labor market activity as it is gradually phased out. Ultimately the EITC was born out of a desire to reward work. The EITC provides a cash transfer to low income working families through the tax system. The EITC is refundable so that a taxpayer with no federal tax liability, for example, would receive a tax refund from the government for the full amount of the credit. Eligibility for the credit requires positive earned income, and adjusted gross

income and earned income below a specified amount; in 2007, the maximum allowable income for single taxpayer with one child (two or more children) is \$33,241 (\$37,783).¹

The amount of the credit to which a taxpayer is entitled depends on the taxpayer's earned income, adjusted gross income, and, since 1991, the number of EITC-eligible children in the household. There are three regions in the credit schedule. The credit for those in the phase-in region is equal to the subsidy rate times their earnings. The subsidy rate is quite high at 34 percent for taxpayers with one child and 40 percent for taxpayers with two or more children. In the flat region, the family receives the maximum credit (\$2853 and \$4716, respectively in 2007); while in the phase-out region the credit is phased out at the phase-out rate (16 and 21 percent).

The program expanded in the Tax Reform Act of 1986 (TRA86), and Omnibus Reconciliation Acts in 1990 and 1993 (OBRA90 and OBRA93). Figure 2 illustrates these expansions in the program by plotting the (real) EITC payment schedule by (real) earnings for selected years between 1984 and 2006 and separately for families with one and two or more children.² The figure clearly shows that the 1993 expansion was the largest and that the 1993 expansion was much larger for families with two or more children. For example, between 1993 and 2006, single mothers with two children earning between \$15,000 and \$25,000 (in 2006 dollars) experienced a more than doubling in their real transfer from the EITC. In contrast, single mothers with one child earning \$15,000 (in real 2006\$) experienced about a 40 percent increase in the real EITC while those earning \$25,000 experienced about a 25 percent increase in the real EITC.

These expansions have led to a dramatic and recent increase in the total cost of the EITC. Figure 3 plots the number of EITC recipients (taxpaying units or families) and the total tax cost

¹ There is also a small credit for childless taxpayers. We ignore that here and focus on the main recipients, families with children.

² Figure 2 plots the EITC schedule that applies to single taxpayers. Beginning in 2002, the flat and phase-out regions were expanded modestly (\$1000 in 2002, \$2,000 in 2007) for married filers.

of the EITC (in 2006 dollars) over the period 1974-2005. The figure clearly shows the rising expenditures and recipients associated with the 1986, 1990, and 1993 tax acts. Importantly, between 1990 and 1996, real EITC costs increased more than three fold.³

Finally, Figure 4 contrasts the aggregate cost of the EITC with the cost of AFDC/TANF during 1974 to 2005. In a very short time period, the EITC has overtaken AFDC/TANF and become the largest cash transfer program for low income families.

3. Policy Changes and Expected Impacts on Employment

Labor supply theory suggests that welfare reform and EITC expansions are expected to increase employment of low income single mothers.⁴ Virtually all of the provisions implemented in the state and federal welfare reform should lead to more employment through removing the entitlement nature of welfare (time limits), increasing the costs of participation in welfare (work requirements, financial sanctions), and reducing the financial work disincentives (reducing the phase out rate, increasing work disregards).

The expansions in the EITC also are expected to lead to more employment among single mothers. Because the EITC is available only to taxpayers with earned income, standard labor supply theory predicts that the EITC will encourage labor force participation. While not the focus of this paper, the EITC is expected to reduce hours worked for those women already working with earnings in the flat and phase-out regions of the credit.⁵

²

³ The popularity and perceived success of the EITC can also be seen in the increasing number of states that offer state EITC's. As of 2004, a total of eighteen states have introduced state EITC's that supplement the federal credit. Almost all states structure their credits as a share of the federal credit, varying between 5 percent (Illinois) to more than 40 percent (Minnesota and Wisconsin) and almost all make the credit refundable like the federal credit (Llobrera and Zahradnik 2004).

⁴ The focus in this paper is on single mothers, who represent the vast majority of AFDC/TANF recipients and over 75 percent of EITC claims (Eissa and Hoynes 2006a). The labor supply impacts of the EITC expansion on married couples is more complicated and is likely to lead to reductions in employment for some married women (Eissa and Hoynes, 2004, 2006a, 2006b).

⁵ In the phase-in region, the EITC leads to an ambiguous impact on hours worked due to the negative income effect and positive substitution effect. In the flat region, the EITC produces a negative income effect leading to an unambiguous reduction in hours worked. In the phase-out region, the EITC produces a negative income and negative substitution effect leading again to an unambiguous reduction in hours worked. Eissa and Hoynes (2006a)

4. Trends in Employment of Single Mothers

Figure 5 presents annual employment rates for women age 19-44 between the years of 1987 and 2006. We show the employment rates for four groups: single women with children, single women without children, married women with children, and married women without children. These groups are chosen to illustrate the dramatic changes particular to single women with children—the group most impacted by welfare reform and the EITC.

The figure shows the dramatic increase in employment rates for single women with children during this period. For example, between 1987 and 2006 employment rates of single mothers increased by 11 percentage points—from 0.66 in 1987 to 0.77 in 2006. Most of this change occurred between 1992 and 1999 where employment rates increased by an amazing 20 percentage points (from 0.63 to 0.83). This is during the period of the largest expansion in the EITC and the dramatic reform of the welfare system. It is also during a time of rising wages and falling unemployment rates during the strong 1990s expansion. However, it is clear from this simple figure that the gains experienced by single mothers were not shared by all demographic groups.

To refine the analysis, and in recognition that EITC recipients are more likely to have lower skill and education levels, Figure 6 presents the annual employment rates limiting the sample to women with a twelve or fewer years of education. While employment rates are lower among lower educated women, the same pattern is evident—a tremendous increase in employment rates for single mothers that is concentrated in years between 1992 and 1999.

show that about three-quarters of single EITC recipients have earnings in the flat and phase-out region of the credit—thus the expectation is that the EITC will reduce the number of hours worked by most eligible single taxpayers already in the labor force.

⁶ These tabulations are calculated using the 1988-2007 March Current Population Surveys. The sample includes all women aged 19-44 who are not in school or disabled. We also drop the relatively small number of women who report working positive hours but have zero earnings or report positive earnings but zero hours. For these calculations, employment is defined by any work over the (prior) calendar year.

Finally, Figure 7 shows the employment rates for single women by number of children (none, one, two or more). This shows that the increases in employment were concentrated among single women with two or more children.

5. Did Welfare Reform and the EITC Contribute to the Increases in Employment?

Separately identifying the impact of welfare reform, the EITC, and the strong economy on single women is a challenge as the three factors were all at play in the mid to late 1990s. Many approaches are taken in the literature in an attempt to disentangle the impacts. One approach is to take advantage of the variation across states in welfare reform, the business cycle, and the state EITC's. Another approach parameteritizes the gains to work and utilizes the variation in gains to work across women over time, across states, and in different skill groups. Overall, there is strong evidence that welfare reform, the EITC and the strong economy all played a role in the rising employment rates experienced by single mothers in the 1990s.

Much of the work in this area concentrates on either the impact of welfare reform or the EITC. In the EITC literature, the studies suggest a strong positive relationship between the EITC and employment rates of single women with children. Further, the results are remarkably consistent across different policy expansions, different control groups and different methodologies. Further, several studies (Ellwood 2000, Rothstein 2005, Meyer and Rosenbaum 2000) find that groups with the most to gain from EITC expansions (e.g., women with lower wages, lower education levels, more children, and single women) also experienced larger gains in employment rates. The welfare reform studies also find positive impacts on employment, with magnitudes somewhat smaller and less statistically significant compared to the EITC studies.

6

Grogger and Karoly (2005), and Hotz and Scholz (2003).

.

⁷ This section provides a brief summary of the very large literature on the impact of the EITC and welfare reform on the labor supply of single mothers. Individual papers are cited where particularly relevant. The interested reader should consult the recent and comprehensive reviews of this literature by Blank (2002), Eissa and Hoynes (2006a),

Few studies provide a direct comparison of welfare reform and the EITC. Meyer and Rosenbaum (2001) is an important exception. Their analysis examines the impact of taxes, welfare generosity, welfare reform, other policies (minimum wages, in kind transfer programs), and demographics on the employment of single mothers. They found that of the 12 percentage point increase in employment rates of single mothers between 1984 and 1996, fully 60 percent of the increase was attributable to changes in taxes (the EITC), and 15 percent was attributable to welfare reform. During 1992 to 1996, however, the importance of welfare reform rose relative to the EITC—they found that 35 percent of the increase in employment was linked to the EITC and 20 percent was linked to welfare reform.

6. Conclusion

The 1990s were a period of tremendous change in policies affecting single mothers with children. The expansion in the Earned Income Tax Credit and welfare reform both raised the financial rewards to moving into the labor force. Furthermore, the gains in employment for single mothers during this period were sizable; and no such gains were experienced for other groups of workers. There is an extensive body of research which looks at these facts and, using a wide variety of methodologies, concludes that these changes in taxes and transfers contributed in an important way to these increases in employment. The research suggests that the expansions in the EITC were the most important contributor to these changes.

7. References

Blank, Rebecca M. (2002). "Evaluating Welfare Reform in the United States." *Journal of Economic Literature*, 2002, 40(4), pp. 1105–66.

Eissa, Nada and Hilary Hoynes (2004). "Taxes and the Labor Market Participation of Married Couples: The Earned Income Tax Credit," *Journal of Public Economics*, Volume 88, Issues 9-10, Pages 1931-1958, August 2004.

Eissa, Nada and Hilary Hoynes (2006a). "Behavioral Responses to Taxes: Lessons from the EITC and Labor Supply," *Tax Policy and the Economy* Volume 20, pp. 74-110. MIT Press.

Eissa, Nada and Hilary Hoynes (2006b). "The Hours of Work Response of Married Couples: Taxes and The Earned Income Tax Credit," CESifo/MIT Press conference volume, *Tax Policy and Labor Market Performance*, Peter Birch Sorensen ed.

Ellwood, David (2000). "The Impact of the Earned Income Tax Credit and Social Policy Reforms on Work, Marriage and Living Arrangements," *National Tax Journal* 53(4) Part 2 (December).

Grogger, Jeffrey (2003). "The Effects of Time Limits, the EITC, and Other Policy Changes on Welfare Use, Work, and Income among Female-Headed Families," *Review of Economics and Statistics*, Volume 85, Issue 2, May 2003

Grogger, Jeffrey and Lynn Karoly (2005). Welfare reform: Effects of a decade of change. Cambridge, MA: Harvard University Press.

Hotz, V. Joseph and John Karl Scholz (2003). "The Earned Income Tax Credit" in Robert Moffitt, ed., *Means-Tested Transfer Programs in the United States*. Chicago: University of Chicago Press.

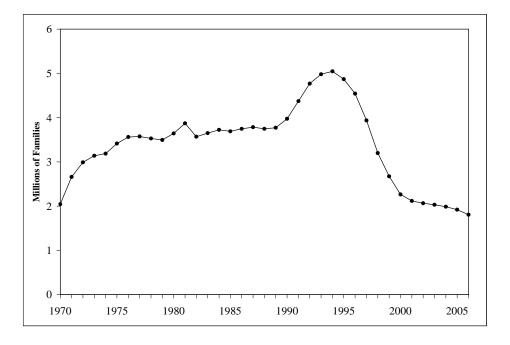
Llobrera and Zahradnik (2004). "A hand up: How state earned income tax credits help working families escape poverty in 2004". Washington, DC: Center for Budget and Policy Priorities.

Meyer, Bruce and Dan Rosenbaum (2000). "Making Single Mothers Work: Recent Tax and Welfare Policy and its Effects." *National Tax Journal* 53(4) Part 2 (December).

Meyer, Bruce and Dan Rosenbaum (2001). "Welfare, the Earned Income Tax Credit, and the Labor Supply of Single Mothers." *Quarterly Journal of Economics*, Vol. 116, Issue 3 (August).

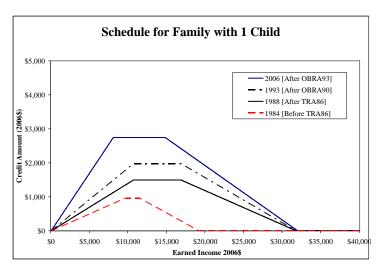
Rothstein, Jesse (2005). "The Mid-1990s EITC Expansion: Aggregate Labor Supply Effects and Economic Incidence," mimeo, Princeton University.

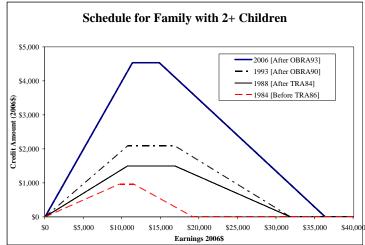
Figure 1: AFDC/TANF Caseload 1970-2006 (Millions of families)



Source: (1) Health and Human Services, Office of Family Assistance, TANF/AFDC Caseload Data http://www.acf.dhhs.gov/programs/ofa/caseload/caseload/caseloadindex.htm

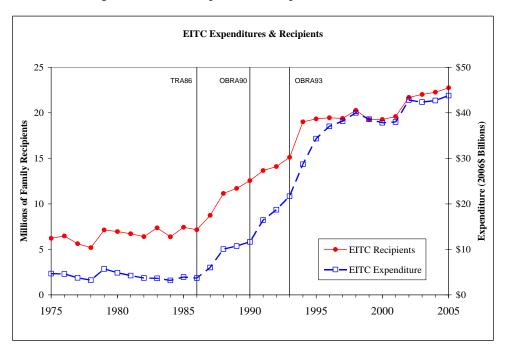
Figure 2: Real EITC Schedule for Single Mothers by Real Earnings (2006\$)





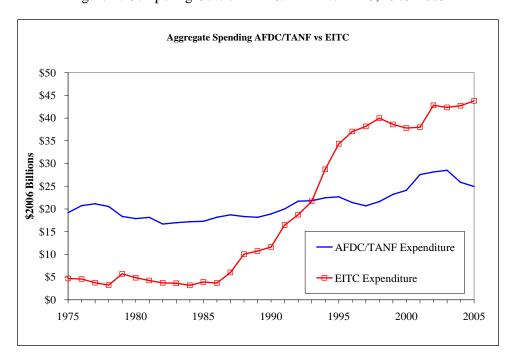
Source: Authors tabulations.

Figure 3: EITC Recipients and Expenditures 1975-2005



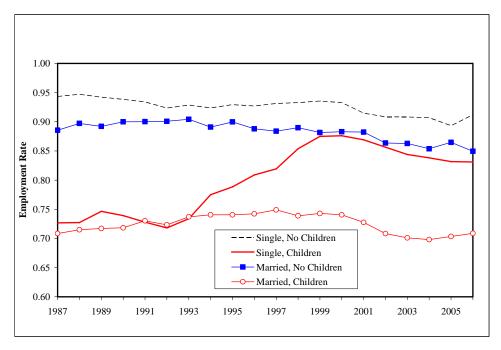
Source: Tax Policy Center, Tax Facts: "Historical EITC Recipients" http://www.taxpolicycenter.org/taxfacts/displayafact.cfm?DocID=37&Topic2id=40&Topic3id=42.

Figure 4: Comparing Cost of AFDC/TANF to EITC, 1975-2005



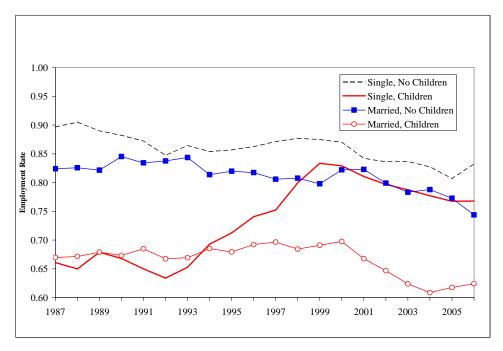
Source: AFDC/TANF figures from Budget of the US Government, Fiscal Year 2008: Historical Table 8.5 "Outlays for Mandatory and Related Programs," http://www.gpoaccess.gov/usbudget/fy08/pdf/hist.pdf. EITC expenditures from Tax Policy Center, Tax Facts: "Historical EITC Recipients" http://www.taxpolicycenter.org/taxfacts/displayafact.cfm?DocID=37&Topic2id=40&Topic3id=42.

Figure 5: Female Annual Employment Rates by Marital Status and Presence of Children



Source: Author's tabulation of the 1988-2007 March Current Population Survey

Figure 6: Annual Employment Rates by Marital Status and Presence of Children Women with a High School Education or Less



Source: Author's tabulation of the 1988-2007 March Current Population Survey

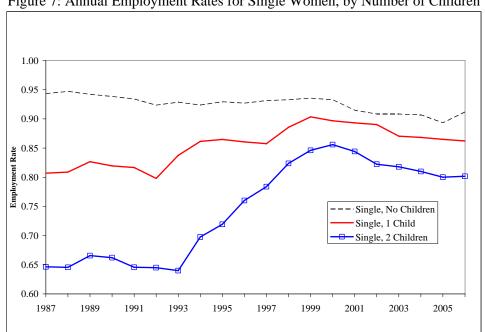


Figure 7: Annual Employment Rates for Single Women, by Number of Children

Source: Author's tabulation of the 1988-2007 March Current Population Survey