

I. Introduction

The federal Earned Income Tax Credit (EITC) and the Food Stamp Program (FSP) are the largest means-tested transfer programs for low-income working parents in the United States. Together, the two programs spend nearly \$50 billion per year and comprise the bulk of the social safety net for working poor families. They are central to the strategy for moving welfare recipients to work. The combination of food stamps, EITC, and other supports allow even low-wage workers to raise their families' incomes above the poverty line. But supplements can only achieve a significant anti-poverty impact if people use them. Since 1994, when welfare rolls plummeted and the supplementary contribution of food stamps should have been playing an expanded role, the proportion of eligible families receiving food stamps declined sharply.

The recent reduction in FSP participation rates is not entirely a surprise. The working poor have historically had lower participation rates than the non-working poor, especially those on welfare. One reason is that FSP eligibility comes automatically with welfare receipt but is not automatic for eligible households headed by low-wage workers not on welfare. As the low-income population moved off the welfare rolls and into low-wage jobs, the share of eligible households in the groups least likely to use food stamps increased while FSP eligibles on welfare decreased. From this perspective, the shift in the composition of eligibles explains some of the decline in FSP participation rates. But, from another perspective, why should former welfare recipients have lowered their participation rates? After all, former welfare recipients have received and used food stamps in the past and should be familiar with the workings of the program and with the ability to use the benefits to pay part of their food budget. Yet, in the latter half of the 1990s, only 42-43 percent of former welfare recipients still eligible for food stamps actually participated in the FSP (Zedlewski and Brauner 1999; Zedlewski with Gruber 2001). It is possible that, as Zedlewski and Brauner (1999) point out, low participation rates by former welfare recipients may be, in part, due to misinformation about continued eligibility for food stamps.

Certainly, the expanding economy in the 1990s played a role as discussed in greater detail in Section II. For example, according to a recent study by Ziliak, Gunderson, and Figlio (2001), declining unemployment rates and rising employment accounted for up to 45 percent of the 1994-1998 decline in food stamp participation while changing welfare programs contributed another five to eight percent.

Between 1990 and 1999, federal EITC spending jumped from \$9.6 billion to \$31.1 billion in 1999 dollars (see textbox below).¹ The maximum credit under EITC more than tripled between 1990 and 1999 from \$1,215 to \$3,816 in 1999 dollars.² In addition, 16 states have adopted state earned income credits, largely patterned after the federal EITC. Meanwhile, according to Rosso (2001), FSP participation rates declined between 1994 and 1999 from 74 to 57 percent of eligibles (see Figure 1). While the decline in FSP participation rates and the expansion in EITC benefits appear to be related, regression analyses controlling for intervening factors may be able to determine whether this negative correlation is real or spurious.

It is in this context that we hypothesize that the EITC may have an effect on FSP participation rates. Since EITC payments are not counted as income in determining food stamp eligibility, any connection between the EITC and FSP participation must be through the effect of the EITC on the desire of eligible families to participate in the program. Two competing hypotheses may explain the relationship between the EITC and FSP participation. (1) It may be that people who benefit from EITC learn about and understand how government programs can help provide for their families. If this is the case, we would expect that claiming the EITC would be positively correlated with receiving food stamps. (2) On the other hand, expanded EITC benefits may reduce the need for food stamp benefits, causing families not to go through the trouble of obtaining food stamps or suffer any stigma associated with food stamp receipt and use. If this is the case, we would expect a negative correlation between the EITC and FSP receipt.

¹ Committee on Ways and Means, U.S. House of Representatives. 2000a. "Tax Provisions Related to Retirement, Health, Poverty, Employment, Disability and Other Social Issues." In *2000 Green Book*, 808-13. Washington, DC: U.S. Government Printing Office. <http://aspe.hhs.gov/2000gb/index.htm>, (Accesses August 2003).

The Earned Income Tax Credit: What Is It and How Does It Work?

The Earned Income Tax Credit (EITC) is a refundable federal income tax credit for low-income working individuals and families. The federal EITC was implemented to provide incentives to work and to offset social security taxes. The EITC, the nation's largest income supplement program, was expanded from \$9.6 billion in 1990 to \$31.1 billion in 1999 (in 1999 dollars).³ The \$31.1 billion spent in 1999 provided assistance for 19.4 million working families.⁴

Household earnings and household size determine the amount of EITC received. In 2002, income had to be less than \$29,201 for a single individual with one child. The table below provides information about the maximum benefit allowed by the federal EITC as well as the federal government's total spending on the program per year.

Characteristics of the Federal EITC (1999 Dollars)⁵

	Maximum Credit					
	1995	1996	1997	1998	1999	2000
No children	\$343	\$343	\$345	\$354	\$360	\$366
1 Child	\$2,289	\$2,285	\$2,294	\$2,357	\$2,400	\$2,442
2+ Children	\$3,400	\$3,776	\$3,795	\$3,899	\$3,961	\$4,036
Annual Spending (Millions)	\$28,375	\$30,607	\$31,544	\$33,569	\$31,104	\$31,142

In 2000 and 2001, ten states implemented or expanded state Earned Income Credit (EIC)⁶ programs bringing the total number of states offering EICs based upon the federal EITC to 16.⁷ Out of the 16 states offering EICs, 15 of these states' EICs piggyback on the EITC. The states that piggyback on the EITC use federal rules to determine who is eligible for the EIC, and express EIC amounts as a percentage of EITC. The table below provides a listing of states with EIC programs and whether they are refundable or non-refundable programs.

State EIC programs can be either refundable (like the federal EITC) or non-refundable. This is an important distinction since refundable benefits allow taxpayers to receive the full amount of the tax

² Ibid, 2000a.

³ Ibid, 2000a.

⁴ Ibid, 2000a.

⁵ Ibid., 2000a; Committee on Ways and Means, U.S. House of Representatives. 2000b. "Description of the Marriage Penalty Relief Act of 2000." <http://www.house.gov/jct/x-3-00.pdf>, (Accessed August 2003), February 2.

⁶ For simplicity, in this paper we use the acronym EIC when referring to state-level Earned Income Credit programs and EITC when referring to the federal Earned Income Tax Credit program.

⁷ Minnesota and Indiana have or have had EICs that are not expressed as a percentage of the federal EITC or follow different eligibility guidelines; however, Indiana adopted the practice of expressing their EIC in terms of the federal EITC in January 2003.

credit even if the amount of the credit exceeds the individual's tax liability. For example, if an individual has a tax liability of \$500 and is eligible for a credit of \$550, then the credit covers the \$500 tax liability and this individual will receive \$50 under a refundable benefits system. On the other hand, if the credit is non-refundable, an individual receives benefits less than or equal to their tax liability. In the above example, the individual will have their \$500 tax liability covered but will not receive the \$50 that is not needed to cover the taxes.

There are also nine states without an income tax. In terms of financial assistance to the working poor, states without income taxes are less generous than the states with refundable EIC programs and more generous than the states with non-refundable EIC programs.

State-level Earned Income Credit (EIC) Programs⁸

State	Type	Year Enacted
Colorado	Refundable	1999
District of Columbia	Refundable	2000
Illinois	Refundable	2000
Indiana	Refundable	1999
Iowa	Non-refundable	1998
Kansas	Refundable	1998
Maine	Non-refundable	2000
Maryland	Refundable	1998
Maryland	Non-refundable (optional)	1987
Montgomery County, MD	Refundable	1999
Massachusetts	Refundable	1997
Minnesota	Refundable	1991
New Jersey	Refundable	2000
New York	Refundable	1994
Oklahoma	Refundable	2002
Oregon	Non-refundable	1997
Rhode Island	Non-refundable	1986
Vermont	Refundable	1988
Wisconsin	Refundable	1989

Research Questions

This study examines how EITC benefits interact with the receipt of food stamp benefits, building on prior research examining the determinants of changes in the food stamp caseload, such as the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) of 1996 and the

⁸ Johnson, Nicholas. 2001. *A Hand Up: How State Earned Income Tax Credits Help Working Families Escape Poverty in 2001*. Washington, DC: Center on Budget and Policy Priorities.

expanding economy in the 1990s. We estimate EITC's impact on FSP participation during the post-welfare reform era—the years 1996 to 1999. Our study focuses on two research questions:

1. What are the patterns of EITC receipt, food stamp receipt, and joint EITC-food stamp receipt among various subgroups? How do these trends vary over time?
2. Does the EITC, holding constant food stamp eligibility, change participation in the Food Stamp Program?

To answer these questions, we analyze data from the 1996 panel of Survey of Income and Program Participation (SIPP), which follows individuals from 1996 through early 2000. For the first research question, we employ descriptive analyses of the SIPP data. In answering the second research question, we rely on three econometric models (described below), each using a different methodological strategy.

Organization of the Paper

Section II describes the relevant literature on food stamp caseload decline and EITC participation in the 1990s and the current research estimating the magnitude of the effect of welfare reform and the macroeconomy on food stamp caseload declines. Section III discusses our study population and presents our econometric models. Data and methods are described in Section IV followed by a discussion of our findings in Section V and conclusions in Section VI.

II. Relevant Literature

The EITC has grown steadily in terms of real spending since its inception in 1975, with much of this growth occurring in the 1990s. EITC expansions, each with three-year phase in periods, began in 1990 and 1993, increasing overall spending every year from 1990 to 1996. The expansions raised the maximum credit a household is eligible for, the credit rate, and the threshold at which the credit was phased out, thereby increasing eligibility (Hotz and Scholz 2000). Figure 1 illustrates the change in the average EITC credit per household between 1994 and 1999. A credit for childless workers, introduced in 1994, further increased the number of eligible families.

Despite the size and growth of the EITC, only a few attempts have been made to estimate the number of eligible households receiving the credit. Hotz and Scholz (2000) attribute this to the lack of available data including the number of eligible taxpayers, the number of people filing tax returns, and the number receiving the EITC.