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The Earned Income Tax Credit: Recipients, Labor Force Participation, and Credit Constraints

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There has been a longstanding debate in the United States about how to assist low-income families. The Earned Income Tax Credit (EITC) is designed to augment income while encouraging work: The tax credit increases with earnings for low levels of household income, but declines and ultimately is phased out as incomes rise. The EITC appears to have increased labor force participation but its effects on hours worked is ambiguous. Given the low levels of net wealth of most EITC recipients, it is likely that many are credit constrained and unable to smooth their consumption patterns.

The Earned Income Tax Credit (EITC), originally introduced in 1975 and made permanent in 1978, has become the federal government's largest cash-assistance program for low-income families. Approximately $43 billion was allocated to 22 million families in the United States in 2007 through the federal EITC. This compares to $16.5 billion that was allocated through more traditional assistance programs such as Temporary Assistance for Needy Families (TANF).[1] Indeed, during the period when TANF replaced Aid to Families with Dependent Children as a result of welfare reform in 1996, the United States experienced a 50 percent reduction in welfare rolls; one study suggests that much of that drop can be attributed to the EITC and reduction in welfare benefits.[2] The perceived success of the federal EITC has led to the development of similar programs in 23 states and the District of Columbia.[3] Moreover, the American Recovery and Reinvestment Act of 2009 increased the credit for families with three or more children and expanded eligibility for married couples.

EITC Structure and Recipients

In practice, the EITC functions as a negative income tax—that is, people with earnings below a certain level do not pay taxes on their wages but instead effectively receive a subsidy. The program is structured in three stages, depending on the recipient's income. In the phase-in stage, the credit increases with earnings; in the plateau stage, the credit reaches a maximum and levels off; and in phase-out stage, the credit falls as the recipient's earnings rise. Both households with children and those without are eligible for the EITC. In a recent paper, one of the authors of this *Economic Brief* (Athreya) and two co-authors, Devin Reilly of the Richmond Fed and Nicole B. Simpson of Colgate University, used data from the Current Population Study to examine how the structure of the EITC program affects households of varying characteristics.[4] For example, for households with two or more children and low levels of income, the marginal tax rate is -40 percent for both single and married filers, which represents the phase-in stage of the EITC.

As incomes reach $13,000, the marginal tax rate is zero, meaning it has reached the plateau stage. And as incomes increase beyond $13,000, the marginal tax rate becomes positive and rises quickly. A similar pattern emerges for married and single households with one child, but for childless households the negative income tax effect is not as large and the increase in marginal tax rates is not as extreme.

The EITC benefits are relatively high for households headed by young adults (ages 18-25), fairly constant for households in their 30s, and then decline sharply for households in their late 30s and beyond. By the time households are in their 50s and 60s, the average amount of the EITC is slightly more than $500. The interaction of qualification requirements with the benefit structure, however, ensures that the EITC remains a relatively constant fraction of recipients' earnings for most of their lives, approximately 15 percent. Perhaps surprisingly, the EITC represents an even larger proportion of the income of older EITC recipient households, roughly 18 percent for those in their late 50s. This is perhaps due to the fact that households that qualify for the EITC at this age have very low incomes since they likely face the income thresholds applicable to those with no children.

EITC recipients tend to have not only relatively low annual income, but also relatively low net worth. Using data from the Federal Reserve Board of Governors' Survey of Consumer Finances, Athreya, Reilly, and Simpson find that EITC recipients, on average, hold only one-fifth of the wealth of non-EITC recipients. In fact, the bottom quartile of EITC recipients hold negative wealth on average, while the bottom quartile of non-recipients have small, positive wealth holdings. In the second quartile, EITC recipients hold $3,489 in net wealth, compared to $75,329 for non-EITC recipients; in the third quartile the comparison is $24,038 to $253,637; and in the top quartile, the comparison is $404,272 to $1,991,197. Only in the top quartile do EITC recipients hold significant wealth, with those recipients tending to be older and often homeowners. Also noteworthy, married households that are eligible for the EITC hold more wealth than single households, and wealth holdings decrease with the number of children in the household.

The EITC and Labor Force Participation

While the EITC is designed to encourage work among low-income households, there are two relevant dimensions of that decision to examine: (1) whether to enter the workforce at all, and (2) how many hours to work. On the first dimension, it appears that the EITC does, in fact, increase labor force participation, especially among single mothers; that was especially true in the 1980s and 1990s.[5] On the second dimension, the evidence is less clear. This is due, in part, to the structure of the EITC program.

Remember, as income increases, the EITC benefits decrease or are even phased-out altogether. Thus, households must decide how much to work. At low levels of income, the benefits of work (income received both from labor and from the EITC) are unambiguously positive. This is not true at higher levels of income. Households must make decisions about labor output as they reach the plateau and phase-out stages: On the margin, are more hours worked worth the diminished amount of EITC benefits received? How households respond is ambiguous not only theoretically but also empirically. One study suggests that since most households receiving the EITC fall in the plateau or phase-out region, it is likely that the overall effect of the EITC on hours worked is negative.[6] However, other studies have shown that while higher-income households are sensitive to marginal tax rates, lower-income households are less so.[7] This may be due to lower-income workers holding jobs that do not permit them to easily adjust their work hours.[8] If it is true that lower-income workers are not particularly responsive to marginal tax rates, the EITC probably has little or no effect on their number of hours worked, a finding that seems to be generally held among labor economists.

Credit Constraints and EITC Recipients

As noted above, EITC recipients, on average, tend to have relatively low levels of net wealth. In addition, they are more likely than non-EITC recipients to frequently have late debt repayments and relatively low credit scores. These factors, by themselves, likely constrain their ability to borrow and thus smooth their consumption of goods relative to non-EITC recipients. The EITC may mitigate this issue to some

degree, as it would be relatively clear to lenders that this benefit is forthcoming and the loan could be repaid. But that may be true for only a segment of EITC recipients—those who do not possess characteristics that typically make lenders wary of extending credit. On balance, it would appear that EITC recipients have different access to credit markets than non-recipients and hence use those markets in ways (probably more limited) than the population more generally.

Conclusion

Economists and policymakers have long considered ways to assist low-income people. On net, there is a strong presumption among economists that the most efficient way to accomplish this goal is to simply allocate lump-sum payments to those households who would qualify and let them use the payments in ways they deem most effective in meeting their goals. For a variety of reasons, however, such a proposal seems unpalatable to many and, hence, other policies have been pursued. The EITC, which links assistance to work, appears to not only have gained widespread acceptance but also to have been relatively effective at assisting those in need. There are still open questions, however, about how sensitive the supply of labor among EITC recipients is to the way benefits are structured. In addition, it appears that EITC recipients, like most of the poor or relatively poor, do not have similar access to credit markets as non-EITC recipients. To the extent that such differential access is undesirable and improvements can be made without distorting credit markets, policymakers may wish to address this issue. ■

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Endnotes

[1] Nada Eissa and Hilary Hoynes, "Taxes and the Labor Market Participation of Married Couples: The Earned Income Tax Credit," *Journal of Public Economics*, August 2004, vol. 88, iss. 9-10, pp. 1,931-1,958.

[2] Jeffrey Grogger, "Welfare Transitions in the 1990s: The Economy, Welfare Policy, and the EITC," *Journal of Policy Analysis and Management*, Autumn 2004, vol. 23, no. 4, pp. 671-695.

[3] Jason Levitis and Jeremy Koulish, "State Earned Income Tax Credits: 2008 Legislative Update," Center on Budget and Policy Priorities, October 8, 2008.

[4] Kartik B. Athreya, Devin Reilly, and Nicole B. Simpson, "Earned Income Tax Recipients: Income, Marginal Tax Rates, Wealth, and Credit Constraints," Federal Reserve Bank of Richmond *Economic Quarterly*, Third Quarter 2010, vol. 96, no. 3, pp. 229-258.

[5] Bruce D. Meyer, "Taxes, Welfare, and Work by Single Mothers," National Bureau of Economic Research *Reporter OnLine*, Fall 2001.

[6] V. Joseph Hotz and John Karl Scholz, "Not Perfect but Still Pretty Good: The EITC and Other Policies to Support the U.S. Low-Wage Labour Market," *OECD Economic Studies*, April 2000, no. 31/II, pp. 25-42.

[7] See, for example, Michael Keane and Robert Moffitt, "A Structural Model of Multiple Welfare Program Participation and Labor Supply," *International Economic Review*, August 1998, vol. 39, no. 3, pp. 553-589; and Jon Gruber and Emmanuel Saez, "The Elasticity of Taxable Income: Evidence and Implications," *Journal of Public Economics*, April 2002, vol. 84, no. 1, pp. 1-32.

[8] Jennifer L. Romich, "Difficult Calculations: Low-Income Workers and Marginal Tax Rates," *Social Service Review*, March 2006, vol. 80, no. 1, pp. 27-66.