Expanding Iowa's Earned Income Tax Credit

The Long-Term Benefits to the State

Peter S. Fisher
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June 2009

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The Iowa Policy Project

Formed in 2001, the Iowa Policy Project is a nonpartisan, nonprofit organization based in Mount Vernon, with its principal office at 20 E. Market Street, Iowa City, IA 52245.

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EXECUTIVE SUMMARY

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The Earned Income Tax Credit (EITC) has garnered broad, bipartisan support in its 34 years of existence at the federal level, and in its 18-year history in Iowa. It is widely seen as a successful strategy to make low-wage work pay, and to move working families (especially those with children) out of poverty. It operates by providing an income tax credit that is a certain percent of wages, thus effectively increasing the take-home hourly wage. It is important to continue to boost Iowa's relatively low average wages through the state EITC to reward work and help families meet basic needs.

An increase in the credit from its current level of 7 percent of the federal credit to 15 percent would lift an estimated 1,300 Iowa families out of poverty, including about 4,000 children. In addition, many more families would benefit from higher incomes that move them closer to, but not over, the poverty line. An increase in the credit to 30 percent of the federal would lift an estimated 3,100 families above the poverty line, including 10,500 children.

Expansion of the EITC is important because it supports family self-sufficiency. At the same time, the program is not as costly as it appears because program beneficiaries end up paying more state taxes and relying less on public assistance. Expansion of the EITC would increase the work hours and earnings of single-parent recipients, which in turn results in higher state income and sales tax payments. We estimate that adult recipients would end up returning to the state approximately $1 million in annual revenue with an expansion of the credit to 15 percent, or $2.7 million with an expansion to 30 percent.

Expansion of the EITC also reduces child poverty rates, which in turn improves outcomes for those children as they grow into adulthood. Children who are raised in poverty tend to earn less, and to rely more on public assistance. In future years, as the children of current EITC recipients become adults, they will end up returning $2.5 million more each year to the state treasury in higher taxes, if Iowa increased the credit to 15 percent of the federal. Increasing it to 30 percent would provide a $6.5 million annual budget savings. All told, the state can expect that the annual cost of an increase in the EITC to 15 percent of the federal credit will be offset in the long run by about $3.5 million in additional revenue and cost savings each year. With an increase to 30 percent, the fiscal offset would rise eventually to about $9.3 million each year.

State Fiscal Offsets from Expansion of the EITC

	Raise EITC to: 15%	30%
Additional tax revenue from greater labor force participation of single parents	$1.0	$2.7
Long-term benefits from reduction in child poverty		
Annual gain in state tax revenue	$2.0	$5.3
Annual savings in TANF costs	$0.5	$1.3
Total long-term annual fiscal gain to the state	$3.4	$9.3

Numbers may not add to total due to rounding.

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Introduction

The Earned Income Tax Credit (EITC) has garnered broad, bipartisan support in its 34 years of existence at the federal level, and in its 18-year history in Iowa.[*] It is widely seen as a successful strategy to make low-wage work pay, and to move working families (especially those with children) out of poverty. It operates by providing an income tax credit that is a certain percent of wages, thus effectively increasing the take-home hourly wage.[†] In order to target the benefits at lower-wage workers, the credit begins to phase out at family income levels above about $15,750 for single parents and $18,750 for married parents, and disappears when income exceeds a threshold ranging from $33,995 (for a single parent with one child) to $41,646 (for a married couple filing jointly with two or more children).

The Iowa EITC is a simple percentage of the federal. An Iowa taxpayer who claims the federal EITC need only take a flat percentage, currently 7 percent, of the federal credit and claim that amount on the Iowa income tax return. The Iowa credit (like the federal credit) is now fully refundable, allowing it to effectively reach workers in the lowest-income families who might owe little or no state income tax.

Iowa is one of 24 states with an EITC. Among those states Iowa's credit ranks 17th; half of those states offer a credit equal to 15 percent or more of the federal, including 3 states (plus the District of Columbia) with a credit of 30 percent or more. While the Iowa EITC is relatively low, it plays an important role in making the state income tax fairer for families. The cost of providing basic necessities for families with children is recognized in the federal income tax through personal exemptions and credits that leave a base level of income free of tax. The Iowa income tax, however, provides little recognition of the costs of raising a family; some 70,000 working Iowa families with children pay state income tax even though the federal tax system considers them too poor to pay any taxes.[1] The state EITC can help to compensate for this feature of the tax system because it targets benefits particularly at families with children.

In 2008, a single mother with two children earning the $7.25 minimum wage and working full time, year round, would have earned about $14,500 per year. The poverty guideline for a family of three in 2008 was $17,600. Thus if wages were the only source of income, this family would be below the poverty line. But the federal EITC would have boosted this mother's earnings by $4,824 (the maximum EITC

[*] The Iowa EITC legislation was passed in the 1989 session of the Legislature and took effect for tax year 1990.

[†] The federal credit for 2008 was equal to 34 percent of earnings for a single person or married couple with one child, up to the maximum credit of $2,917, or 40 percent of earnings for a single person or married couple with two or more children, up to the maximum credit of $4,824. For those with no children, the credit was only 7.65 percent of earnings, up to a maximum credit of $438.

for families with children for tax year 2008). The Iowa EITC for 2008 is simply 7 percent of the federal, or $338 in this case, boosting the total EITC to $5,162. The combined Iowa-federal EITC would have raised this family's income to $19,662, putting the family above the poverty line.

The EITC is popular with policy makers in part because it rewards work. The credit operates as a wage supplement, up to the point that the maximum credit is reached. By making work more remunerative, it is expected that the EITC draws additional people into the workforce and facilitates the transition from welfare to work. To the extent that the EITC increases employment and reduces dependence on income supports such as TANF, the state will receive fiscal benefits in the form of higher future tax payments because of higher incomes, and in the form of reduced spending on income support programs. The latter would include Medicaid to the extent that the EITC moves people into jobs with employer-sponsored health insurance.

At the same time, the EITC lifts families out of poverty. Most EITC benefits go to families with children, which means that fewer children are raised in poverty. The long-term consequences of being raised in a poor family or a high poverty neighborhood have been well-documented. Conversely, the societal benefits of lifting children out of poverty are significant.

This report estimates the long-term fiscal benefits to the state from raising the state EITC to 15 or 30 percent of the federal. An increase to 15 percent would put Iowa in the middle of those states providing a state EITC. An increase to 30 percent would put the state EITC on about equal footing with other aspects of Iowa's income tax. The average Iowa family pays in state income taxes about 30 percent of what they pay in federal income taxes. We estimate the effect of EITC expansion on work, earnings, and tax payments of parents, and the long-term benefits to children lifted out of poverty who then pay more taxes and rely less on public programs as adults.

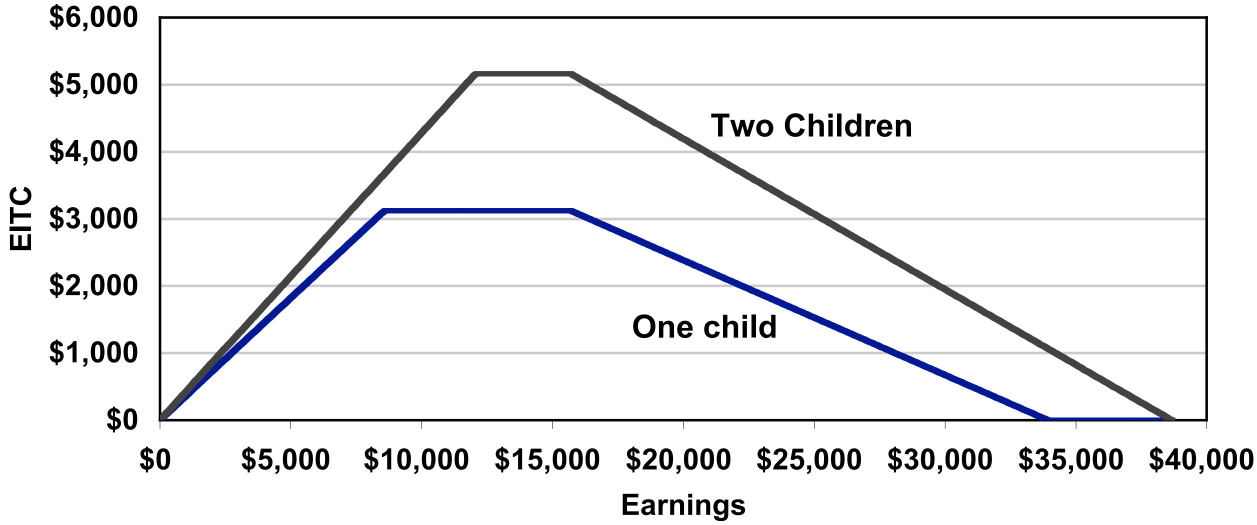
How the EITC Affects Work and Earnings

A considerable body of research has accumulated over the past 10 years examining the effect of the EITC on work. One result is quite clear: The EITC, because it raises the rewards from working by as much as 34 or 40 percent, draws single parents into the workforce. On the basis of a review of a number of such studies, we can infer that an increase in the EITC that boosted incomes of recipients by 10 percent would be expected to increase the labor force participation of single parents by approximately 10 percent.*

It has also been argued that the EITC has the potential to reduce the number of hours worked by those already receiving the credit who are in the "phase-out range." The graph below shows how the EITC (federal plus Iowa) rises and then falls as earnings increase, for a single parent with two children. The credit is a flat percentage of income until it reaches the maximum credit amount of $5,162 ($4,824 federal plus $338 Iowa) at an income level of $12,050. Then the dollar amount of the credit remains at $5,162 until income reaches $15,750. This is the beginning of the "phase-out range." The credit is gradually reduced as income increases until it reaches zero at an income of $38,646. The EITC for a single parent with one child operates similarly, but with a lower maximum credit of $3,121, as can be seen in the chart below (page 3).

* That is, the elasticity of labor force participation with respect to an increase in net income produced by an expansion of the EITC is about 1.00. The elasticity is the percentage increase in labor force participation divided by the percentage increase in income. In the seven studies examined, this elasticity ranged from .70 to 1.69, with a median of .97 and a mean of 1.05 (when the two outliers were eliminated). Labor force participation means working or actively seeking work.

Figure 1. How the Combined Federal and Iowa EITC Changes with Earnings for Single-Parent Families with One or Two Children



Once a person is in the EITC phase-out range, the reduction in the credit acts as a tax on additional earnings. This creates a small disincentive to working more hours, since the additional work creates more income which reduces the credit. This is potentially significant because the majority of EITC claimants (70 percent to 80 percent) have incomes that put them in the phase-out range. However, a number of studies on this issue have found no significant effect of the EITC on hours worked by single parents, one way or the other.[2]

The effect of the EITC on labor force participation and hours worked among married couples is somewhat ambiguous. There is some evidence that the EITC, by raising the take-home pay of one wage earner in a married-couple household, makes it more feasible for the spouse to remain at home to care for the children. This works against the incentive effect of the EITC that makes work more profitable. The general conclusion drawn by researchers is that there is on balance a small negative effect of the EITC on total hours worked by married-couple households with children.

The effects of the EITC on persons without children are probably quite small, given the meagerness of the credit. This would certainly be the case for the state EITC, since the maximum credit currently in Iowa would be 7 percent of $438, or $31. This is not enough to change anyone's decision about work. Even if Iowa's credit were raised to 30 percent (or $131 maximum), it is doubtful any effect on workers without children would be measurable.

Expansion of the State EITC Would Increase Earnings and Taxes

In estimating the effects of an increase in Iowa's EITC, we consider three separate groups of recipients: childless households, married-couple families with children, and single parents. Of all the households claiming the EITC nationally in 2002, 82 percent had children, and 98 percent of EITC credit dollars went to families with children. For this reason, we focus on the employment effects for families with children.[3] In Iowa in 2004, only 13 percent of Iowa claimants were single persons without dependents, while 51 percent were single parents. The remaining 36 percent were married couples.[4]

The effects of the EITC on labor force participation and hours worked for married couples, considering the research on this issue, are ambiguous and small. We therefore assume that the net effect of an increase in the Iowa EITC on work, incomes and taxes paid of married-couple recipients and on childless single persons is, for all practical purposes, nil.

An expansion of the Iowa EITC would, however, have a positive effect on work and earnings of single parents with children. We estimate that if Iowa increased the state EITC to 15 percent or 30 percent of the federal, the labor force participation of single parents in the state would increase by 1.3 percent or 3.8 percent, respectively. This translates into approximately 1,138 additional workers with a 15 percent credit, or 3,272 additional workers with the 30 percent credit. If the newly employed EITC recipients have earnings similar to existing Iowa workers with family incomes in the EITC-eligible range, the 1,138 workers would earn in total about $17.1 million per year, the 3,272 workers $49.2 million. These higher earnings would translate into additional state sales and income tax revenue of about $0.95 million with an increase to a 15 percent state EITC, and $2.7 million with an increase to 30 percent.

Table 1. Increase in Iowa EITC Results in More Work, Earnings and Taxes (Effects for Single Parents)

	Increase in EITC to:	
	15%	30%
Percentage increase in labor force participation	1.3%	3.8%
Additional workers due to expansion	1,138	3,272
Average annual earnings of new workers	$15,037	$15,037
Total additional earnings (millions)	$17.1	$49.2
Additional annual state taxes per worker	$837	$837
Total additional annual state tax revenue (millions)	$0.95	$2.74

Source: Author's estimates. See appendix for more detail.

The EITC and Poverty Reduction

Previous research has shown that the EITC has been an effective anti-poverty tool. Scholz and Levine calculated that about half of total federal EITC payments went to reducing the poverty gap. That is, the payments went to those who were below the poverty threshold prior to receipt of the EITC, and helped fill the gap between their incomes and the poverty line. They also found that over 60 percent of EITC recipients were poor prior to the EITC. Other research has found that, from 1995 to 1999, the overall poverty rate was reduced by about 1.5 percentage points by the EITC.[5] Holt reports that in 2003, the EITC pulled 4.3 million persons above the poverty line, about half of them children, making it the most effective program in reducing child poverty. The child poverty rate in fact would be 25 percent higher in the absence of the EITC.[6]

Closing the poverty gap, or lifting people out of poverty, is not equivalent to making families self-sufficient. The official poverty measure is an inadequate indicator of the ability of families to meet basic needs. Still, it is the most widely used benchmark for measuring the resources of persons and families relative to the cost of food, housing and other necessities.

The Urban Institute has developed a model that simulates the effects of policy changes such as expansions of the EITC. They modeled three expansions of the federal EITC: increasing the childless-worker credit from 7.65 percent of earnings to 20 percent, reducing the marriage penalty by excluding one-half of the earnings of the lower-earning spouse wherever this increased the EITC, and raising the credit for families with three or more children from 40 percent to 45 percent. They found that this combination of measures would reduce the number of persons in poverty by 6 percent.[7]

State EITCs would clearly have more modest effects in reducing poverty. Nonetheless, a study by the National Center for Children in Poverty found that refundable state EITCs reduced the poverty gap among children with a working parent by 1.4 percent to 9 percent (depending on the state and the generosity of the credit).[8] States with a credit equal to about 15 percent of the federal EITC saw a 5 percent to 6 percent reduction in the poverty gap, while those with a credit near 30 percent saw about a 9 percent decline. Non-refundable EITCs, on the other hand, did little or nothing to reduce poverty because they failed to provide significant benefit to those who needed it the most — those who make too little income to owe state income taxes.

Expanding Iowa's EITC Would Reduce Poverty

An increase in the Iowa EITC from 7 percent to 15 percent of the federal EITC would mean an additional $233 per year to families with one child (whether married or single-parent families) who are currently near, but below, the poverty line. An increase to 30 percent would mean an additional $671 per year for such families. For those families with two to four children near the poverty line, the increase to 15 percent would provide an additional $235 to $378 per year, while a 30 percent state EITC would add $677 to $1,110 to their annual income.

Given these boosts to incomes of the near-poor, an increase in the Iowa EITC from 7 percent to 15 percent of the federal would, we estimate, lift out of poverty about 1.5 percent of the poor single-parent families in Iowa and 3.7 percent of the married couple families who are now poor, or about 1,290 families (see Table 2). An increase in the state EITC to 30 percent would lift about 5.3 percent of the poor single-parent families and about 6.8 percent of the poor married-couple families out of poverty, or about 3,100 families. Any increase would, of course, also provide more income to many thousands of other single-parent families who are now just above the poverty line, or who would remain below the poverty line after the increase. Based on research cited earlier, Iowa could expect that an increase in the credit from 7 percent to 15 percent would narrow the child poverty gap by about an additional 2 percent, while an increase to 30 percent would further reduce the gap by about 7 percent.

The above results indicate that about 4,000 children would be lifted out of poverty with an EITC at 15 percent. At 30 percent, the number of children raised out of poverty would rise to 10,500.

Table 2. Iowa EITC Expansion Raises Families Out of Poverty

	Increase in EITC to:	
	15%	30%
Percent of poor families lifted out of poverty		
Single-parent families	1.5%	5.3%
Married couple families	3.7%	6.8%
Number of families lifted out of poverty		
Single-parent families	404	1,468
Married couple families	887	1,639
Total	1,291	3,107
Children lifted out of poverty		
Single-parent families	797	2,750
Married couple families	3,217	7,753
Total	4,014	10,502

Reducing Child Poverty Increases State Revenue and Lowers Costs

The consequences of growing up in poverty have been well-documented.[9] Children growing up below the poverty line have poorer health outcomes, lower educational attainment and are more likely to become involved with the criminal justice system compared to children growing up in higher-income families. These consequences often carry into adulthood. Relative to adults who grew up in middle- or upper-income families, adults who grew up in poverty complete less schooling, earn lower wages, and are more likely to experience physical and mental issues, face criminal charges and become a teen parent. Recent estimates suggest that growing up in poverty costs Iowa $3.6 billion annually in the form of forgone earnings, criminal activity and costs associated with poor health.[10]

Childhood poverty drains public resources into the future as poor job skills, limited participation in the labor force and early childbearing reduce potential tax revenues and increase the likelihood of food stamp and TANF cash assistance. At the national level, it is estimated that eliminating poverty from the prenatal year through age 5 provides more tax revenues (between $10,600 and $20,000 per child), as well as fewer expenditures on food stamps ($2,000 per child) and TANF assistance ($1,600 per female child). The total federal and state taxpayer benefits of raising children out of poverty range from $14,200 to $23,600 per child.[11] Additionally, the benefits of bringing a poor child's family income up to 150 percent of the poverty level is correspondingly greater, with increased tax revenue accounting for most of the increase and reductions in TANF adding smaller sums.

The long-term benefits from poverty reduction are greatest when they occur in the earliest years of a child's life. We assume, conservatively, that just half of the children lifted out of poverty by the expansion of the state EITC would be under age 6, and we focus on the lifetime benefits to those children. Eliminating poverty for a child under the age of 6 will, according to research, increase earnings as an adult by 28.7 percent per year, for a lifetime earnings increase of between $53,000 and $100,000 (depending on the length of time over which the increase is sustained).[12] This gain in earnings would produce additional state income and sales tax revenue in Iowa of about $400 per year for each person.

The gain in earnings resulting from reductions in child poverty comes about in part because of improved academic achievement. A recent study showed significant improvements in math and reading test scores for children whose family incomes were raised by the EITC.[13] Higher test scores, in turn, have been shown to be linked to higher earnings as an adult.

These gains in income and tax revenue accumulate, as over time more and more of the adult population consists of those who would have been poor as children were it not for their family receiving the EITC. We assume that half of those children will remain in Iowa through 30 years of adult work, or to age 55, while the other half will migrate elsewhere before reaching age 25, which is a somewhat conservative assumption based on census migration data. The total gain in tax revenue from these adults who remain would eventually reach $2.0 million per year with an increase in the credit to15 percent, or $5.2 million per year with an increase to 30 percent.

Research also shows significant public-sector cost savings from reduced spending on Food Stamps and TANF benefits.[14] Female children who were raised in poor families when they were under age 6 on average received $1,200 per year more in TANF benefits as an adult than their non-poor counterparts. This translates into a state savings of $449 per year for each female child lifted out of poverty in Iowa and an eventual total annual savings of $0.5 to $1.3 million (depending on the size of the credit).

An EITC expansion to 15 percent would cost the state an estimated $23.4 million (beyond the $20.4 million cost of the 7 percent credit in fiscal year 2009).[15] It is important to take into account, however, that a portion of this cost would be offset by increased taxes and reduced expenditures. We estimate then that the total state fiscal offset from expansion of the EITC to 15 percent would eventually reach $2.5 million annually because the reduced poverty rates among young children result in higher earnings and lower reliance on TANF benefits when those children become adults (see Table 3, next page). With an increase in the state credit to 30 percent, the annual fiscal offset would eventually reach $6.5 million.

Table 3. Long-Run Annual Fiscal Offset to the State from Reductions in Child Poverty

	Increase in EITC to:	
	15%	30%
Annual gain in state tax revenue	$2.0	$5.3
Annual savings in TANF costs	$0.5	$1.3
Total annual fiscal gain to the state	$2.5	$6.5

The EITC and Other Program Savings

EITC expansions will save public dollars in other ways. A study by Grogger in 2003 found that for each $1,000 increase in the maximum credit, welfare use (AFDC or TANF) was reduced by 1.5 percentage points among families with younger children (age 3 to 10) and by 3.1 percentage points among families whose youngest child was age 10 or more.[16] Grogger concluded that "the EITC may be the single most important policy measure for explaining the decrease in welfare and the rise in work and earnings among female-headed families in recent years." The dollar amount of these savings, however, is likely to be quite small.

Conclusions

The state Earned Income Tax Credit is an important anti-poverty program, in large part due to its refundability. It reduces poverty rates by supplementing the wages of low-wage workers in Iowa. Refunding the credit for those with little income tax liability allows the credit to help those with the lowest earnings. With Iowa's relatively low average wages, it is important to continue to boost those wages through the state EITC in order to reward work and to help families meet basic needs.

An increase in the credit from its current level of 7 percent of the federal credit to 15 percent would lift an estimated 1,300 Iowa families out of poverty, including about 4,000 children. In addition, many more families would benefit from higher incomes that move them closer to, but not over, the poverty line. An increase in the credit to 30 percent of the federal would lift an estimated 3,100 families above the poverty line, including 10,500 children.

Expansion of the EITC is important because it supports family self-sufficiency. At the same time, the program is not as costly as it appears because program beneficiaries end up paying more state taxes and relying less on public assistance. Because the EITC makes work more remunerative, expansion of the EITC would increase the work hours and earnings of single-parent recipients, which in turn boosts their income and results in higher state income and sales tax payments. We estimate that adult recipients would end up returning to the state approximately $1 million in annual revenue with an expansion of the credit to 15 percent, or $2.7 million with an expansion to 30 percent.

Expansion of the EITC also reduces child poverty rates, which in turn improves outcomes for those children as they grow into adulthood. Children who are raised in poverty tend to earn less, and to rely more on public assistance. In future years, as the children of current EITC recipients become adults, they will end up returning $2.5 million more each year to the state treasury in higher taxes, if Iowa increased the credit to 15 percent of the federal. Increasing it to 30 percent would provide a $6.5 million annual budget savings. All told, then the state can expect that the annual cost of an increase in the EITC to 15 percent of the federal credit will be offset in the long run by about $3.5 million in additional revenue and cost savings each year. With an increase to 30 percent of the federal EITC, costs would eventually be offset by approximately $9.3 million each year.

Appendix: Methodology

Employment and Earnings

Estimates of the effects of an increase in the state EITC on the employment, work hours and earnings of recipients begins with an estimate of the elasticity of employment with respect to a change in net hourly earnings. A review of studies indicates that a reasonable middle estimate is an elasticity of 1.00 for single parent beneficiaries of the EITC. This means that a given percentage increase in net income brought about by a change in the EITC will produce an equal percentage increase in the labor force participation of single parents in Iowa.

We estimate that if Iowa increased the state EITC to 15 percent or 30 percent of the federal, then the labor force participation of single parents in the state would increase by 1.3 percent or 3.8 percent. According to the most recent data from the Current Population Survey, there are about 85,714 employed single parents in Iowa.[17] The EITC changes would thus be expected to increase the ranks of employed single parents by 1.3 or 3.8 percent of this figure, or by 1,138 additional workers with a 15 percent credit, 3,272 additional workers with the 30 percent credit.

From national data we know that the federal EITC represents about 16.6 percent of total net income for the average EITC recipient. (This is a conservative figure, since it includes single childless recipients, who get very little, and many recipients near the upper range of income eligibility, where the EITC is phasing out.) An increase in the Iowa EITC from 7 percent to 15 percent thus represents an 8 percent increase in the EITC component of the average recipient's income, or a 1.3 percent increase in total net income (8 percent of 16.6 percent). An increase to 30 percent represents a 3.8 percent increase in total net income for EITC claimants.

The next step in the analysis was to estimate the annual earnings of the additional workers. We assumed that the newly employed EITC recipients would be much like existing Iowa workers with family incomes in the EITC-eligible range, in terms of the hourly wage, hours worked per week, and weeks worked per year. Data from the Current Population Survey indicates that the average worker would earn about $15,000 per year. Based on these assumptions, the 1,138 workers would earn about $17.1 million per year, the 3,272 workers $49.2 million.

The final step is to estimate the Iowa sales and income taxes paid by the new workers. Workers under $16,000 per year were assumed to have no state income tax liability, and to pay 4.4 percent of their income in sales and excise taxes.[18] Those with incomes above $16,000 were assumed to pay a small amount of income taxes (2.3 percent of income), and to pay 3.5 percent of their income in sales and excise taxes. The result is total additional state tax payments of about $.95 million with an increase to a 15 percent state EITC, and $2.7 million with an increase to 30 percent.

Child Poverty and Future Earnings

To estimate the poverty reducing effects of a state ETIC expansion, we began with an estimate of the number of Iowa working families with children at various levels of earnings, based on the Current Population Survey. We then focus on the subset of such families with incomes low enough to qualify for the EITC. About 88 percent of eligible EITC recipients in Iowa actually claim the credit.[19] We assume that those who do claim it are distributed in the same way across the various income levels as all Iowa working families with children. This allows us to estimate the proportion of current EITC recipients whose income after the federal EITC and current state EITC is below the poverty level, and approximately how many of those families or individuals are close enough to the poverty level that an expansion of the state EITC would raise them above it.

The gains in income and the reduced reliance on public assistance associated with being raised in a non-poor family rather than a poor family are based on previous long-term research. Applying these findings to the number of children raised out of poverty by an EITC expansion in Iowa, we find rather large gains in earnings in the long term.

It might seem that we are attributing quite large effects to rather small changes in family income — just enough to lift a family above the poverty line. What, you might ask, is so magical about that line that those below it behave one way, those above it another? The answer is two-fold. First of all, any estimate of the benefits to children from raising their family income must rely on previous empirical research, and this research has focused on the overall differences between all families below poverty and all families above poverty. Inferences about the EITC can be drawn only on the basis of this research — that is, only in proportion to the program's effect in reducing the number of families in poverty. But while it may seem to be overstating the effects because those families lifted out of poverty in fact made only a small gain in income, we have ignored any effects on all the other families whose incomes were raised in similar fashion but who remained below the poverty line, or not far above it. The number lifted out of poverty then can be viewed as an indicator of the effectiveness of the program more broadly in raising the incomes of the poor and near poor. It is this overall income enhancement that produces effects for some of the many children who benefit, just as the effects found in the research are the effects of being less poor generally.

The gains in income and tax revenue from adults who are lifted out of poverty as children accumulate, as over time more and more of the adult population consists of those who would have been poor as children were it not for their family receiving child care assistance. We assume that half of the 4,000 or 10,500 children lifted out of poverty at a point in time are under the age of 6, and that these children are distributed equally from ages 0 through 5, so that each year one-sixth (333 or 875) "graduate" to school age. As those children become adults, each year another 333 or 875 persons are contributing $400 more to the state treasury than they otherwise would have.

The research by Duncan et al. on the benefits of poverty reduction for young children found that the higher earnings as adults would persist for at least 13 years.[20] The research also showed, however, that these earnings gains did not fall off with age during the first 13 years of labor force participation. It seems highly likely, therefore, that the earnings gains would persist; the study assumed an upper limit of 30 years (age 25 to age 55). Under this assumption, the revenue gain to the state would eventually reach $2.0 million or $5.2 million each year. This total would be reached at the point where there are in any given year 30 cohorts of adults, ranging in age from 25 to 55, who benefited in childhood from the reduction in poverty. At that point, there would be about 5,000 or 13,000 adults in Iowa who are better off because their family was raised out of poverty by the state EITC.

The above calculations include an adjustment for change in residency. We cannot assume that all of the children who were lifted out of poverty by Iowa's expanded EITC will spend their adult working lives in Iowa. We can estimate the fraction that will remain from census migration data. Of all adults who were age 25-55 at the time of the 2005-2007 American Community Surveys, who currently reside in the U.S. and who were born in the State of Iowa, 55 percent currently reside in Iowa. The fraction varies by age. For those who age 25-34 the percentage was 58, while for those now age 45-55 the percent was 52. It thus seems reasonable to assume that about half of those born in Iowa will remain through 30 years of adult working life, or to age 55. This assumption then does not count any benefits from those who stay only through age 30 or 35 or 40, for example, which is why it is conservative. On the other hand, it does not consider those born in Iowa who will not live to age 55 or who will migrate outside the U.S., though these numbers are presumably small. It also does not consider that some probably small proportion of those now in Iowa at later ages (45-55) only recently moved back to the state.

The estimates of state savings in TANF benefits proceeded similarly. Iowa's federal matching rate for TANF benefits is 62.62 percent for FY2009. Thus 37.38 percent of the $1200 in TANF benefits saved per adult female lifted out of poverty as a child, or $449, represents a savings in state costs. We assume that half of the children lifted out of poverty each year are female, so that 167 or 438 women each year become adults receiving $449 less in TANF benefits. We also assume that the reduced benefits persist for 13 years, which is what Duncan et al. found at a minimum. Once again, we assume that only half of the female children remain in Iowa at least through age 37.

While the state saves TANF funds, this does not automatically translate into a savings in taxpayer money because the federal funds for TANF are a block grant. However, any TANF savings can be put into the child care assistance program, hence reducing the state's commitment to funding that program out of state dollars. In this way TANF savings do translate into savings for the state.

Notes

[1] *A Matter of Fairness: How Expanding Iowa's EITC can Improve Tax Fairness.* Iowa Fiscal Partnership backgrounder, March, 2008.
[2] See Bruce Meyer, "The U.S. Earned Income Tax Credit, Its Effects, and Possible Reforms." Harris School Working Paper, University of Chicago, August, 2007.
[3] Steve Holt, "The Earned Income Tax Credit at Age 30: What We Know." Brookings Institution Research Brief, February 2006, p. 8.
[4] Angela Gullickson, Michael Lipsman and Bob Rogers, *Iowa's Earned Income Tax Credit Tax Credits Program Evaluation Study,* February 2007. Iowa Department of Revenue.
[5] Hoffman and Seidman, 2003.
[6] Steve Holt, "The Earned Income Tax Credit at Age 30."
[7] Linda Giannarelli, "Estimating the Anti-Poverty Effects of Changes in Taxes and Benefits with the TRIM3 Microsimulation Model." Urban Institute Technical Report, April 2007.
[8] Neil G. Bennett and Hsien-Hen Lu. *Untapped Potential: State Earned Income Credits and Child Poverty Reduction.* National Center for Children in Poverty, April 2001.
[9] Golonka and Hoffman. State Strategies to Reduce Child and Family Poverty. June 2008.
[10] Lori Pfingst. *The Cost of Child Poverty State by State*. March 2008.
[11] Greg Duncan, Ariel Kalil, and Kathleen Ziol-Guest, *Economic Costs of Early Childhood Poverty* (Washington, D.C.: Partnership for America's Economic Success, February, 2008).
[12] Duncan, Kalil and Ziol-Guest. *Economic Costs of Early Childhood Poverty*. February 2008.
[13] Gordon Dahl and Lance Lochner. "The Impact of Family Income on Child Achievement." Working Paper 11279, National Bureau of Economic Research, April 2005.
[14] Duncan, Kalil and Ziol-Guest. *Economic Costs of Early Childhood Poverty*. February 2008.
[15] Jeremy Koulish and Jason Levitis. *How Much Would a State Earned Income Tax Credit Cost in 2009?* Washington, D.C.: Center on Budget and Policy Priorities, 2008.
[16] Jeffrey Grogger, "The Effects of Time Limits, the EITC, and Other Policy Changes in Welfare Use, Work, and Income among Female-headed Families." Review of Economics and Statistics, v. 85, no. 2, May 2003, pp. 394-408.
[17] From the March, 2008 current population survey, the number of unmarried persons in Iowa who were employed at the time of the survey and who had at least one child of their own under the age of 18 who resided with them.
[18] Six percent is the average percent of income paid in sales and excise taxes by taxpayers with incomes under $16,000 according to an analysis by the Institute on Taxation and Economic Policy. See *Who Pays Iowa Taxes?* November 2008, Iowa Policy Project, available at: http://www.iowapolicyproject.org/2008docs/081110-WhoPays.pdf.
[19] Elaine Ditsler, Peter S. Fisher and Kristi Lohmeier. *Bridging the Gaps in Iowa*. The Iowa Policy Project, June 2007.
[20] Duncan, Kalil, and Ziol-Guest. *Economic Costs of Early Childhood Poverty*. February 2008.