



REDESIGNING THE EITC: ISSUES IN DESIGN, ELIGIBILITY, DELIVERY, AND ADMINISTRATION

Elaine Maag, Donald Marron, and Erin Huffer June 10, 2019

ABSTRACT

The earned income tax credit provides substantial assistance to low- and moderate-income workers. Benefits tilt heavily to families with children. Prompted in part by the success of the credit and in part by shortcomings in the credit, policymakers, advocates, and analysts have offered up reform proposals. In this report, we describe the credit's current effects and then analyze the credit's basic elements (its eligibility requirements, design, timing, administration, and effects on other programs including State EITCs and transfer programs) to help guide thinking on these potential reforms.

ABOUT THE TAX POLICY CENTER

The Urban-Brookings Tax Policy Center aims to provide independent analyses of current and longer-term tax issues and to communicate its analyses to the public and to policymakers in a timely and accessible manner. The Center combines top national experts in tax, expenditure, budget policy, and microsimulation modeling to concentrate on overarching areas of tax policy that are critical to future debate.

Copyright © 2019. Tax Policy Center. Permission is granted for reproduction of this file, with attribution to the Urban-Brookings Tax Policy Center.

CONTENTS

ABSTRACT	II
CONTENTS	Ш
ACKNOWLEDGMENTS	IV
INTRODUCTION	1
THE EARNED INCOME TAX CREDIT Design Eligibility Impacts	3 3 4 6
REFORMING THE EITC Design Eligibility Timing Administration Linkages to Other Programs	13 13 21 27 30 32
CONCLUSION	36
NOTES	37
REFERENCES	39
ABOUT THE AUTHORS	44

The Tax Policy Center thanks the Economic Security Project for its support of this work.

The views expressed are those of the authors and should not be attributed the Urban-Brookings Tax Policy Center, the Urban Institute, the Brookings Institution, their trustees, or their funders. Funders do not determine research findings or the insights and recommendations of our experts. Further information on Urban's funding principles is available at http://www.urban.org/aboutus/our-funding/funding-principles; further information on Brookings' donor guidelines is available at http://www.brookings.edu/support-brookings/donor-guidelines.

The authors thank Mark Mazur, Janet Holtzblatt, and Sam Ungar for thoughtful comments on earlier drafts of this paper; Kevin Werner for help tabulating CPS data; and Surachai Khitatrakun, Jeff Rohaly, and Philip Stallworth for assistance with model runs.

INTRODUCTION

The earned income tax credit (EITC) is among the US's most effective income-support programs. The EITC lifted nearly 5.8 million people out of poverty in 2017,¹ more than any other means-tested program (Fox 2018). In 2019, the EITC will deliver about \$70 billion to 26 million families.²

The EITC is designed to benefit workers with low incomes.³ The credit amount starts at zero and then increases with a household's earnings.⁴ The credit plateaus once income reaches an initial threshold, and then it phases down for incomes above a second threshold until reaching zero again. This means EITC benefits focus on workers with low to moderate incomes.

Benefits from the EITC tilt heavily toward families with children living at home. Workers without children at home qualify for a relatively modest credit. The credit amount jumps sharply for households with one child, with additional, smaller increases for a second and third child. The credit for married couples is based on the couple's combined earnings; the maximum benefit is the same as that for unmarried people, but the credit starts to phase out for married couples with higher incomes.

The EITC operates through the federal income tax. Beneficiaries claim the credit when they file their returns. The EITC is first used to offset any federal income taxes owed. Any remaining credit is then refunded to beneficiaries.

Almost one in five households filing a federal income tax return claims the EITC in any given year (Holt 2015). Most individuals qualify for the credit for a short period of years and do not claim the credit in many consecutive years. A 2005 analysis of Internal Revenue Service (IRS) data showed that between 40 and 50 percent of EITC recipients claim the EITC for one or two years (Dowd 2005). More recent work from 2009 showed 30 percent of credit claimants claimed the credit once in a seven-year period. (Ackerman et al. 2009) Analysis in 2011 showed that 61 percent of claimants claimed the credit for only one or two years and about 20 percent of EITC recipients claimed the credit for more than five years (Dowd and Horowitz 2011). The main reason people lose eligibility over time is because of increases in income: 43 percent become ineligible because of increased earnings and 15 percent become ineligible because their last eligible child is no longer present in the household (Horowitz 2002).

The EITC has successfully encouraged work, reduced poverty, and provided financial support to families with children. Inspired by those successes as well as by concerns about the current EITC, policymakers, analysts, and advocates have proposed many ways to redesign it. These proposals concern five main features of the EITC and possible alternatives to how they work:

 Design, including the maximum amount of the credit, its phase-in and phase-out rates, its treatment of children, and its treatment of married couples.

- Eligibility, including worker age requirements, income levels, and definitions of work.
- Timing, meaning when tax filers receive the credit payment.
- Administration, including eligibility requirements, errors in claiming the credit, and the potential or incentive for fraud.
- Effect on other programs including state-level EITCs and federal and state transfer programs.

In this report, we offer a framework for understanding and evaluating these proposals. We begin by analyzing the current EITC and its effects. We then identify concerns that have prompted proposals to redesign the credit and analyze potential changes and the policy trade-offs they pose. A companion report (Maag, Marron, and Huffer 2019) provides a more in-depth analysis of a proposal developed by the Economic Security Project, the Cost-of-Living Refund, which was created in part based on the analysis in this report. (Senator Cory Booker recently introduced a version of this proposal as the Rise Credit.)

DESIGN

The EITC benefits working families with low and moderate incomes. Families receive a credit equal to a fixed percentage of earnings from their first dollar of earnings until the credit reaches its maximum. For a single worker with one child, for example, the credit increases 34 cents for each dollar of earnings until reaching the maximum of around \$3,500. This family's credit thus increases proportionally for any earnings up to just over \$10,000. The maximum credit is paid until the family's earnings or income reach a higher threshold, at which point the credit begins to phase out. For a worker with one child, income above roughly \$19,000 reduces the credit by about 16 cents for each dollar of additional income. Workers with one child receive no credit once their income reaches roughly \$43,500.

Married couples have the same phase-in rates, maximum credits, and phase-out rates as single workers. But married couples have a higher income threshold before their credit begins to phase out. For a married couple with one child, for example, that threshold is roughly \$25,000 rather than the \$19,000 for single workers.

With its phase-in, plateau, and phase-out, the EITC benefit structure is often described as a trapezoid (figure 1). The height, width, and slopes of the trapezoid depend on the number of qualifying children. Workers without qualifying children (often described as "childless" for tax purposes even though they may have nonresident children or children too old to qualify for the EITC) can receive almost \$530 from the credit. They



Source: Urban-Brookings Tax Policy Center. Note: Assumes all income comes from earnings. Dashed lines represent married couples.

have the slowest phase-in and phase-out rates. Families with one child can receive just over \$3,500 and have substantially higher phase-in and phase-out rates. Families with two children can receive just over \$5,800, and those with three or more children can receive more than \$6,500.

Each year, the maximum credit and the point the credit begins to phase out increase with inflation. The pace of those automatic annual increases was slowed by the Tax Cuts and Jobs Act of 2017, which indexes most income tax parameters to the Chained Consumer Price Index for urban consumers (C-CPI-U), which typically increases less rapidly than the regular Consumer Price Index for urban consumers.

ELIGIBILITY

The EITC is based on several factors, including earnings and other resources, whether a person has qualifying children, and the citizenship of each member of the tax unit. Childless workers must also be at least age 25 and not older than 64. Finally, special rules apply in limited circumstances based on a person's profession, some of which we detail below.

Earnings and Resources

Only people with earnings in the qualifying range can benefit from the EITC. Families with no earnings receive no credit. Families with incomes beyond the phase-out range also receive no credit. Credit amounts less than the maximum are available to people with incomes in the phase-in and phase-out ranges of the credit.

Tax forms do not capture all financial resources a person can access. Credit eligibility depends on specific statutory rules that attempt to ensure benefits go to people who have low and moderate income, not just those who appear so based on reported labor earnings on a tax form. For example, claimants may not have investment income that exceeds \$3,500 (indexed each year), and the credit phases out based on adjusted gross income rather than earnings. People who have low earnings but high unearned income, such as pensions, alimony, interest, dividends, and rental income, are therefore ineligible for the EITC. People who must file a form declaring foreign earned income are also ineligible for the credit.

Benefit Unit

Eligibility for the EITC is determined annually at the tax unit level. Tax units rely on information such as how long a child lived with a particular adult and whether two adults were married on December 31 of the tax year. This differs from traditional transfer programs that support people based on households or a broader concept of family and can change throughout the year.

Basing EITC benefits on the tax unit sometimes captures everyone who provides support to the household or is a child in the household. This occurs, for example, when a married couple lives only with children they are related to biologically or through adoption. In other cases, a tax unit may not match the pattern of financial support families experience. The tax unit may miss resources available to some people and will fail to account for resources needed by people outside the tax unit. A cohabiting couple that is not married, for example, will typically file as two separate tax units, even if they share financial resources or jointly parent one or more children. Multigenerational households often form several tax units even if they jointly share resources. In cases such as these, the tax system does not account for the broader living situations of taxpayers and children. In some cases, focusing on the tax unit will underestimate how well off people are such as by missing other sources of income supporting the household. In other cases, focusing on a tax unit may not fully reflect a person's needs. For example, a person in the household (but not in the tax unit) may lack the resources needed for his or her own care.

Qualifying Children

To be eligible for the EITC for workers with children, a person must have at least one child that meets all the following tests:

- Relationship: The child must be the person's son, daughter, stepchild, foster child, brother, sister, half-brother, half-sister, stepbrother, stepsister, or a descendant of any of those.
- Age: The child must be under age 19 as of December 31 of the tax year or ages 19 to 24 and in school full time in at least five months of the year. This test is waived for those who meet the other requirements and who are permanently and totally disabled.
- Residency: The child must have lived with the taxpayer or spouse in the United States for more than half the year.
- Joint return: The child must not file a joint return for a purpose other than claiming a tax refund of withheld or estimated taxes.

If more than one person meets these tests for a particular child and both are parents of that child, the parents may agree on who will claim the child for the credit. If they do not agree, complex tiebreaker rules can be applied. If a parent and another relative are both eligible to claim the child, the parent may choose to claim the child or tiebreaker rules can be used to determine who will claim the child. A child can be a qualifying child on only one tax return each year. In this way, the tax system is not fully responsive to changing family structures. This is particularly important to potential EITC beneficiaries because children growing up poor are more likely than wealthier children to live in complex and unstable families (McLanahan 2004).

The definition of a qualifying child for the EITC is inconsistent with the definition used by other tax provisions. For example, to be a qualifying child for the \$2,000 child tax credit (CTC), a child needs to be under age 17. To qualify under the EITC, children can be either under age 19 or they can be ages 19 to 24 and in school full time in at least five months of the year.

The relationship and residency tests are difficult to determine and administer (Fichtner, Gale, and Trinca 2019). One reason for this is that tax filers and the IRS have access to limited administrative data to verify these relationship and residency factors (Pergamit et al. 2014). In contrast, most individuals claiming an EITC receive a

statement of wages (which is shared directly with the IRS) from their employers, which aids the taxpayer in correctly declaring his or her income.

Citizenship Requirements

Every person on the tax return must also have a Social Security number eligible for employment by the due date of the tax return and have been a US citizen for the entire year.

Age Limits

The credit has no age limit for workers with qualifying children who claim the EITC. Workers without qualifying children must be at least age 25 and not older than 64.

Rules That Apply in Limited Cases

Additional EITC-specific rules apply to some disability benefits, members of the clergy, and combat pay, and temporary exceptions have been made relating to victims of natural disasters. These rules apply to fewer people than the other rules but add significant complexity to the credit.

IMPACTS

A large and growing body of evidence finds that the EITC has succeeded along many dimensions and that its impacts vary substantially among different types of workers. Surveying the evidence in detail is beyond the scope of this report (for recent reviews, see Maag 2015; Center on Budget and Policy Priorities 2016, 2018; Lundberg and Norell 2018), but five points are worth emphasizing: the credit delivers substantial benefits to low- and moderate-income workers; most benefits of the credit go to families with children; the credit reduces poverty; the credit encourages many people to work (further reducing poverty); and the design of the credit means that often, low-income taxpayers receive higher benefits if they are single than if they are married.

Aids Low- and Moderate-Income Workers

In 2019, the credit will deliver \$70 billion to 26 million families. As shown in figure 2, all but about 10 percent of benefits from the credit go to the bottom 40 percent of the income distribution.⁵

TAX POLICY CENTER | URBAN INSTITUTE & BROOKINGS INSTITUTION





Source: Tax Policy Center microsimulation model version 0319-1; table T19-0026.

On average, families in the lowest income quintile who receive a benefit will receive a benefit of \$2,700. Families who benefit in the second income quintile will receive about \$2,370. The modest number of families in the third income quintile that benefit from the EITC receive an average benefit of about \$1,330. Few benefits to go families in the top two income quintiles (figure 3).

FIGURE 3 Average Earned Income Tax Credit For people with some benefit Average benefit (\$) 3,000 2,500 2,500 1,500 1,500 0 Lowest quintile Second quintile Middle quintile Fourth quintile Top quintile All

Income quintile

Source: Tax Policy Center microsimulation model version 0319-1; table T19-0026 **Note**: Values for fourth and top quintiles are excluded because less than 0.5 percent of tax units in those quintiles receive EITC benefits.

Aids Families with Children

Almost all benefits from the EITC (97 percent) go to families with children. Among families with children who receive a benefit, their average benefit will be about \$3,100. Research consistently shows that increasing incomes to children can provide a lifetime of benefits. Studies analyzing data as far back as the early 1900s have found that increasing the income of disadvantaged children yields significant benefits. For example, a recent study found that children in families who received monthly cash assistance from the Mothers' Pensions program as early as the 1910s and 1920s had better nutrition, more education, and higher adult income than peers whose mothers applied for benefits but were not approved. The children whose families participated in the program were half as likely to be underweight, were more likely to finish high school, had 13 percent higher adult incomes on average, and lived an average of one year longer (Aizer et al. 2016).

Likewise, studies of the 1990s expansion of the EITC showed that infants born into families with the largest increases in EITC benefits had the greatest improvements in birth weight (Hoynes, Schanzenbach, and Almond 2016), an important factor predicting improved future health. Larger EITCs affect low-income children's shortand long-term educational attainment by not only improving test scores in the year the family receives the EITC but also increasing the likelihood the children will graduate high school and attend college (Maxfield 2015). Other demonstrations have similarly found that increasing family incomes for young children (ages 2 to 5) boosted later academic achievement (Duncan et al. 2011), and an income boost of \$3,000 in a given year has been shown to produce academic gains equivalent to about two months of extra schooling as measured by standardized test scores.⁶

Reduces Poverty

If a poverty measure that captures the EITC benefits is used, the EITC lifts a substantial number of people out poverty each year. The official measure of poverty excludes the impact of taxes on household well-being. Partly because the US social safety net is shifting toward tax programs such as the EITC, the US Census Bureau has developed a supplemental poverty measure that includes additional resources available to families (and additional expenses) not captured in the official measure (Fox 2018). To determine how well off a family is, the supplemental poverty measure compares resources available to resources needed and accounts for regional differences.

Resources needed include not only basic items such as food and housing but also taxes and expenses such as those associated with work and health care. Resources available include government transfers, including noncash transfers, and refundable tax credits such as the EITC. US Census Bureau publications show that together, the child tax credit and the EITC lifted 8.1 million people out of poverty in 2016 (Fox 2018). The Center on Budget and Policy Priorities separates the effects of the EITC and the CTC and calculates that the EITC was responsible for lifting 5.8 million people out of poverty in 2016.⁷ This makes the EITC the single most effective means-tested program targeted at reducing poverty for working-age households.

Encourages Work

The EITC encourages many people to work. The EITC encourages work among single recipients because they cannot receive the credit without working. Relative to single women without children, single women with children who were eligible for the EITC (the bulk of people eligible for the EITC) worked more, likely because of the EITC expansion in 1987, which increased the EITC from \$550 to \$851 (Eissa and Liebman 1996; Meyer and Rosenbaum 2001). The credit increased again in 1991, when a higher benefit was added for workers with at least two children. Meyer and Rosenbaum (2001) accounted for all of the changes in the EITC between 1984 and 1996 (including changes in state income taxes) and changes to other safety net programs; they conclude that over these years, the EITC accounted for a significant amount of the increase in employment, with stronger effects for workers with at least two children. Finally, Hotz and Scholz (2006) were able to examine single-parent families in California who used public benefits and found that during the 1990s, the EITC increased employment. Again, they find stronger effects for workers with two or more children (who are eligible for a larger maximum benefit) than workers with one child, and they further find that workers with two children and workers with more than two children experience the same employment effects (as would be predicted since they are eligible for the same maximum benefits). The estimates of how much the EITC increased work range from 2 to 10 percentage points. Although the exact size of the employment effect from the EITC might be uncertain, general consensus is that the EITC encourages people to work. Recently, a small number of authors have suggested claims of increased employment are overblown (Kleven 2018).⁸

Although the EITC strongly encourages participation in the workforce, it produces theoretically ambiguous incentives for how much people work. In the credit's phase-in range, the EITC raises the net return from working more. For example, a person with one child receives 34 cents in additional credits for every additional dollar of earnings in the EITC phase-in range. Although the credit has an offsetting "income effect," meaning it might discourage work because people need to work fewer hours to achieve a given income target, most empirical evidence suggests that the higher after-credit return (the "substitution effect") is more important (Eissa and Hoynes 2006).

In the flat range of the credit, when workers receive a credit that neither rises nor falls with a change in earnings, the income effect could reduce work: people have more income, so they may work less. Analysts have found little evidence of this effect (Eissa and Hoynes 2006).

In the phase-out range of the credit, both the income and substitution effects predict working fewer hours. This effect may extend beyond the EITC eligibility range. And a lower-earning spouse in a married couple may have an incentive to reduce earnings to avoid losing tax credits. Even isolating the effects to this phase of the EITC yields little evidence of a reduction in work hours for single parents (Eissa and Liebman 1996). This dearth of evidence to support the hypothesis of reduced work hours may be because people exercise more control over their decision to enter or exit the labor force than over how many hours they will work while employed.

The credit's complexity may also make it difficult for people to predict exactly how many hours they should work for maximum benefit.

For married couples, some studies have documented a small disincentive to work, particularly for secondary earners (Eissa and Hoynes 2006; Kearney and Turner 2013). Essentially, the EITC becomes a small subsidy for athome care for these households.

Creates Marriage Penalties and Bonuses

Two aspects of the EITC's design create marriage bonuses and penalties: nonuniform benefits for each additional child and the credit's phase-out range. Penalties receive much more attention. Although many factors influence a couple's decision regarding marriage, many of which are not financial, policymakers may be concerned about policies that treat similarly situated couples differently based on whether they marry. Some research has found that marriage penalties resulting from the federal income tax system are associated with a reduction in the likelihood of marriage, though the effects are often small (Alm and Whittington 2003). Marriage penalties also provide an incentive for couples to misreport marital status (IRS 2014).

Couples can face a marriage penalty when they combine one or two child households into two or three child households because each additional child beyond one provides smaller (or no) marginal benefits. The subsidy rate for the first qualifying child is 34 percent. The credit rate increases 6 percentage points with a second child and another 5 percentage points with a third child. Two filers with one child each can go from each receiving a credit worth 34 percent of earnings to receiving a credit worth 40 percent of earnings when their two tax units combine to form one tax unit with two children, lowering their total credit. Couples can also face a marriage penalty when their combined income pushes them well into the phase-out range or beyond credit eligibility entirely. This is most common for couples with similar earnings or when a low-income parent marries a higher-income spouse. A somewhat extreme example highlighting both of these conditions is if two parents, each with one child and moderate earnings, marry. Before marriage, each parent would have been eligible for a credit worth up to about \$3,400 for a total of \$6,800. After marriage, the couple would be eligible for a maximum credit of about \$5,800 (the maximum credit for a family with two children), but they may be eligible for much less depending on how far into the phase-out range their combined earnings are. Phasing the credit out at higher incomes for married couples than for single workers mitigates some of the marriage penalty that stems from combining incomes, but even couples in the maximum credit range can still face marriage penalties (Fichtner and Feldman 2015; Maag and Acs 2015).

Table 1 shows marriage penalties or bonuses from three sources for two hypothetical workers with children. The first is how much income they can have without owing tax (the standard deduction).⁹ As single parents, both would be eligible for head-of-household filing status rather than single status. This allows them each to have \$18,350 of income without being taxed (the standard deduction). This is more than the \$12,200 they would each be allowed if single parents did not have a head-of-household filing status. If the couple marries, they can have \$24,400 exempted from tax. Exempting less aggregate income from tax as a married couple

means they will owe tax on more income as a married couple than they would as two single-parent tax units. The couple will also qualify for much lower EITCs married than if they remain single. Filing as single parents, both partners would each receive a substantial EITC. The lower-earning partner example would get an EITC worth \$3,371 and the higher-earning partner would get an EITC worth \$1,773, totaling \$5,144. As a married couple, they would combine their income and be phased out of almost all of their EITC. They would receive a credit of just \$525, meaning the EITC marriage penalty is \$4,619. A portion of this penalty would be offset because they would receive a higher CTC as a married couple than as two single parents. A maximum \$1,400 of the CTC can be received as a tax refund. So when single, the lower-earning partner can offset \$165 in tax and get a \$1,400 refund, totaling \$1,565 of child credits. The higher-earning partner when single owes enough income tax before credits to get the full \$2,000 CTC. As a married couple, they would owe enough in tax before credits to get the maximum \$4,000 CTC for their two children. That amounts to a CTC marriage bonus of \$435. As two unmarried parents, the couple would receive a combined net tax refund of \$7,340; married, that refund would drop to \$1,841. By marrying, but changing nothing else, the couple would see a drop in their tax refund of \$5,499.

TABLE 1

Marriage Penalty for Two Workers with Children Who Qualify for the EITC



	Person 1	Person 2	Not Married	Married
Children	1	1	2	2
Earnings	\$20,000	\$30,000	\$50,000	\$50,000
Standard deduction	\$18,350	\$18,350	\$36,700	\$24,400
Taxable income	\$1,650	\$11,650	\$13,300	\$25,600
Income tax before credits	\$165	\$1,204	\$1,369	\$2,684
Earned income tax credit	-\$3,371	-\$1,773	-\$5,144	-\$525
Child tax credit	-\$1,565	-\$2,000	-\$3,565	-\$4,000
Income tax after credits	-\$4,771	-\$2,569	-\$7,340	-\$1,841
Marriage penalty				\$5,499

Source: IRS Revenue Procedure 2018-57; authors' calculations. **Note:** EITC refers to the Earned Income Tax Credit.

Some couples get marriage bonuses, meaning they receive a higher credit as a married couple than they would if each person filed as a single worker. Couples can receive an EITC marriage bonus when a person with children and no earnings marries a person with moderate earnings and no child. Before marriage, the parent

was ineligible for a credit because she or he had no earnings. After marriage, the couple would likely be eligible for a sizable EITC (as well as a CTC). A similar situation can occur when the parent has low (but not zero) earnings.

In the next example (table 2), the couple still earns \$50,000 and has two children, but this time, only one person in the couple is related to the children and that parent has no earnings. Because the parent has no income, he or she owes no tax, and neither the EITC nor the CTC provide a benefit because both require earnings. The second person in the couple can offset \$12,200 of his or her earnings with the standard deduction, which yields a federal income tax bill of \$4,342. The partner with earnings has income too high to qualify for the childless EITC and receives no benefit from the CTC. As unmarried partners, the couple owes a total of \$4,342 in federal income tax.

If the couple marries, they would calculate their taxes as shown in table 2 for the married couple with two children and \$50,000 of earnings. This results in a tax refund of \$1,841, meaning a total marriage bonus of \$6,183.

Marriage Bonus for Two Workers with Children Who Qualify for the EITC				TPC
	Person 1	Person 2	Not Married	Married
Children	2	0	2	2
Earnings	\$0	\$50,000	\$50,000	\$50,000
Standard deduction	\$18,350	\$12,200	\$12,200	\$24,400
Taxable income	\$0	\$37,800	\$37,800	\$25,600
Income tax before credits	\$0	\$4,342	\$4,342	\$2,684
Earned income tax credit	\$0	\$0	\$0	-\$525
Child tax credit	\$0	\$0	\$0	-\$4,000
Income tax after credits	\$0	\$4,342	\$4,342	-\$1,841
Marriage bonus				\$6,183

Source: IRS Revenue Procedure 2018-57; authors' calculations.

Note: EITC refers to the Earned Income Tax Credit.

TABLE 2

We analyze marriage penalties and bonuses in more depth in the subsequent section on reforming the EITC.

REFORMING THE EITC

Inspired by the EITC's success in reducing poverty, helping families with children, and encouraging work, or motivated by concern about the credit's shortcomings, many policymakers, analysts, and advocates have proposed changing the credit. These proposals would change some combination of eligibility, design, timing, and administration. Next, we discuss each of these issues and how they overlap, possible changes to them, and trade-offs those changes pose.

DESIGN

The EITC involves four basic design choices: the shape of the trapezoid (how quickly the credit phases in, the maximum credit, and how quickly the credit phases out), how the credit will change over time to reflect inflation, how children will be treated, and how married couples will be treated. Each of these issues comes with budgetary and political concerns, which we highlight below.

Drawing the Trapezoid

The structure/shape of the EITC depends on how the basic parameters—the phase-in rate, maximum credit, beginning of phase-out, and phase-out rate—are set.

PHASE-IN

The credit's phase-in rate determines how much assistance the credit provides to workers with especially low earnings and how quickly workers qualify for the full credit. It thus also influences how strong a work incentive the EITC provides and the fiscal cost of the credit.

All else equal, a faster phase-in rate provides more financial assistance to people with especially low earnings. Currently, the credit phases in for a worker with two children at a rate of 40 percent, so in this range, each dollar of earnings generates a refundable tax credit of 40 cents. This means that to get the maximum \$5,828 credit, the worker must earn at least \$14,570.

If the phase-in rate were doubled to 80 percent, workers with two children would qualify for the maximum credit with only \$7,285 in earnings (figure 4). Workers earning less than \$14,570 would benefit from the faster phase-in. The largest dollar benefit would go to workers earning exactly \$7,285, who would now receive the maximum credit rather than half as much under current law.



Source: Urban-Brookings Tax Policy Center. **Note:** Assumes all income comes from earnings. EITC refers to the Earned Income Tax Credit.

Slowing the phase-in rate would have the opposite effect, reducing benefits to workers with low earnings and increasing the earnings needed to qualify for the full credit. At a phase-in rate of 30.6 percent, workers with two children would qualify for the full credit at \$19,030 in earnings. (We chose 30.6 percent because lower amounts do not allow the credit to reach its current-law maximum value before it begins to phase out. A 30.6 percent phase-in reaches the maximum credit just as the phase-out starts. Visually, it changes the trapezoid to a triangle).

A faster phase-in rate encourages more work by people in the phase-in range by raising the return to work. But that encouragement stops once people reach the maximum credit. Applying the fastest phase-in rate, 80 percent, workers earning \$15.00 an hour would receive an hourly subsidy of \$12 an hour. If the maximum credit is \$5,828, that subsidy would apply to up to 486 hours of work each year. The lower phase-in rate we examined, 30.6 percent, would provide a subsidy worth \$4.59 per hour of work for the first 1,270 hours of work.

Although research around the EITC suggests that the credit provides a strong incentive to work, the research is most suggestive of the credit affecting the extensive margin (choosing whether or not to work), with less emphasis on how the different phase-in rates might affect work incentives differently (for example, by changing hours worked).

The phase-in rate may also affect credit compliance. Research has found that among self-employed workers (but not salaried workers), EITC applicants "bunch" their earnings around the point that the EITC reaches its maximum value (Saez 2010). This could be because people who are self-employed enjoy more flexibility in hours worked, or it could be that workers misreport their earnings to get the maximum EITC. Follow-up work suggests that the latter explanation accounts for most of this bunching, not true changes in how many hours a person worked (Kuka 2014). Self-employed people are obligated to pay both the employee and employer share of payroll taxes (currently 15.3 percent of earnings). If the EITC phase-in rate is below this rate, workers have much less incentive to overreport earnings since, on net, they would owe more in payroll taxes than what they would receive as an EITC at tax time.¹⁰ If the EITC phase-in rate is higher than 15.3 percent, workers receive a larger benefit for each additional dollar of earnings reported, up to the maximum credit.

A bigger change to the phase-in rate would eliminate the phase-in range of the credit entirely, providing the maximum credit just for filing a tax return. At present, people with no earnings receive no benefits. People with earnings in the phase-in range of the credit receive a benefit that is less than the maximum credit. In 2019, approximately 16.8 million people (including adults and children) received less than the maximum EITC because they lived in a tax unit that had earnings beneath these levels. An additional 16.1 million people received no EITC because they lived in a tax unit with no earnings. In some cases, these people might have had earnings below the threshold required to file a tax return. Eliminating the phase-in range of the credit would provide the largest benefits to those with the least income, mimicking many transfer programs.

Increasing the phase-in rate of the credit would cost a relatively small amount because so few households have earnings in this very limited range. It would provide a very targeted benefit and help those with the lowest earnings. Reducing the phase-in rate would reduce program costs a bit, but most people would likely still be able to work enough to get the maximum benefit, so program savings would be limited.

MAXIMUM CREDIT

The maximum credit amount determines how much eligible workers can potentially benefit from the EITC. All else equal, a higher credit should create a larger work incentive. The maximum credit also drives how long it takes for a credit to be entirely phased in or, put another way, how many people will have some earnings but not enough to benefit from the maximum credit. Likewise, all else equal, it takes longer for a larger credit to phase out than a smaller credit.

For example, suppose we increase the maximum credit for a single parent with two children to \$7,612, an almost \$1,800 increase from the \$5,828 under current law (figure 5). This is the largest increase that would allow the maximum credit to phase in at the current threshold without phasing in beyond where the credit starts to phase out for single parents with two children under current law. Boosting the maximum credit this way would benefit workers who earn between \$14,570 and \$19,030, who would now see their EITC benefits continue to increase, rather than being fixed at the maximum credit level. Workers with two children whose earnings are in the phase-out range under current law (from \$19,030 to \$46,703 if single) would get the full benefit of this

increase, almost \$1,800. Single parents earning between \$46,703 and \$55,174 would be newly eligible for an EITC, but they would get less than \$1,800 because they would find themselves on the new, extended phase-out range for the credit. Increasing the maximum credit would provide no benefit to workers earning less than \$14,570. Because they are in the phase-in range, those workers already receive less than the maximum EITC because their earnings are too low to qualify for the full credit, thus they would not benefit from an increase in the maximum EITC.

FIGURE 5



Variations in Maximum EITC, Single Parent, Two Children

Reducing the maximum credit has the opposite effects. If the maximum credit were reduced by half (from \$5,828 to \$2,914), workers earning from \$7,285 to \$14,570 would receive a lower credit. However, workers with especially low earnings (less than \$7,285) would not be affected because they would still be in the phase-in range for the reduced credit.

The maximum credit is a key driver of work incentives. The greater the credit, the larger the incentive to enter the labor force. The maximum credit is also a key driver of the fiscal cost of the credit.

PHASE-OUT

The EITC phases out at a rate of 7.65 percent for workers without children, 15.98 percent for workers with one child, and 21.06 percent for workers with at least two children. Phasing a program out (as opposed to allowing

Source: Urban-Brookings Tax Policy Center. **Note:** Assumes all income comes from earnings. EITC refers to the Earned Income Tax Credit.

all workers who meet a minimum earning standard to receive the maximum amount of the credit) is one way policymakers can reduce program costs. It also avoids a so-called "cliff effect", someone earning more but having those additional earnings trigger a loss in benefits greater than the increase in earnings. Subsidizing work for higher-earning people might also be politically unpopular, so phase-outs may work as a way to make the credit more desirable to some of the public.

On the other hand, choosing to not phase a program out or phasing it out at very high incomes could be a way to gather support for a program because more people would benefit and may be willing to fight for that benefit. Eliminating phase-outs would also reduce complexity in the tax system and increase transparency (Burman 2019).

Economic theory would suggest that over the course of the phase out, individuals should face a disincentive to work. Work on the EITC repeatedly shows a relatively small reduction in work as the EITC phases out, mostly among secondary earners (Eissa and Hoynes 2006). In essence, the credit likely subsidizes some stay-at-home caregivers. However, the evidence does not suggest a large effect from the phase out, and this small effect is overwhelmed by the increase in labor force participation attributed to the credit. The phase out likely has a blunted effect because people typically have more control over whether they work than how much they work. The exception to this is among self-employed workers.

Lower phase-out rates imply lower marginal tax rates, but the credit will also phase out over a larger income range at greater expense than with a higher phase out rate. Conversely, higher phase-out rates imply higher marginal tax rates, but the credit will phase out over a smaller income range, reducing costs relative to a slower phase-out (figure 6). Changes in the phase-out rate have no effect on workers who earn less the phase-out threshold (\$19,030 for single parents with two children).



Source: Urban-Brookings Tax Policy Center. **Note:** Assumes all income comes from earnings. EITC refers to the Earned Income Tax Credit.

PHASE OUTS AND EFFECTIVE MARGINAL TAX RATES

The phase-out of the EITC does not happen in a vacuum. At the same time the EITC is phasing out, other taxes are being levied, including payroll taxes. In some cases, people may be losing eligibility for various forms of transfer payments. How taxes and transfers combine to create a person's effective marginal tax rate (the share of an earnings increase that will be offset by increases in taxes, reduction in tax credits, and reductions in transfers), depends on many factors, such as eligibility and participation in various government programs, family structure and the composition of his or her household, and the state the person lives in (Maag 2012; Maag et al. 2012; Chien and Macartney 2019).¹¹

Effective marginal tax rates are important both as a matter of incentives and of fairness. They may affect a person's willingness to work, marry, and save. In general, high effective marginal tax rates are thought to decrease the incentives to perform an activity, while negative effective marginal tax rates provide an incentive to perform an activity (CBO 2005). This can be seen in early work on the effects of traditional welfare programs, which found that steep benefit reductions when a person started earning money typically reduced his or her incentive to work (Moffitt and Rangarajan 1991). In contrast, the negative marginal tax rates associated with the EITC encouraged people to start working (Meyer and Rosenbaum 2001; Eissa and Liebman 1996). If people

perceive the cost of additional work to be high relative to the potential rewards, they will choose not to work more.

When considering how fast to phase a credit out, policymakers should weigh whether other programs the targeted population is likely to receive also phase out at the same time. Delaying a phase out to avoid other program phase outs will increase the cost of the tax credit.

Phase Outs and Married Couples

Phase outs are a key driver of marriage penalties in the EITC. In cases where any of the couple's children could be claimed by only one person if the couple were not married (for example, if a parent who has custody of children marries someone who is biologically or legally unrelated to the children), joining incomes may push the couple outside of (or into the phase-out range of) eligibility for the EITC. For example, if we altered the couple from table 1 such that both children could only be claimed by the lower-earning spouse before marriage, the couple would lose over \$5,000 in EITC, dropping from a pre-marriage EITC of \$5,623 to a post-marriage EITC of just \$525 (table 3). However, they would receive a bonus in their CTC, and their taxes before credits would increase less than \$2,684, which would mitigate some of that loss. In total, their marriage penalty would be \$4,465.

TABLE 3

Marriage Penalty for Two Workers with Children Who Qualify for the EITC

	Person 1	Person 2	Not Married	Married
Children	2	0	2	2
Earnings	\$20,000	\$30,000	\$50,000	\$50,000
Standard deduction	\$18,350	\$12,200	\$30,550	\$24,400
Taxable income	\$1,650	\$17,800	\$19,450	\$25,600
Income tax before credits	\$165	\$1,942	\$2,107	\$2,684
Earned income tax credit	-\$5,623	\$0	-\$5,623	-\$525
Child tax credit	-\$2,790	\$0	-\$2,790	-\$4,000
Income tax after credits	-\$8,248	\$1,942	-\$6,306	-\$1,841
Marriage penalty				\$4,465

Source: IRS Revenue Procedure 2018-57; authors' calculations.

Note: EITC refers to the Earned Income Tax Credit.

One way to reduce marriage penalties and bonuses is to design a credit based on the characteristics of each worker in the tax unit rather than on the tax unit taken as a whole. Each worker would receive a credit based on his or her own earnings rather than joint earnings. If only one person in a married couple works, a worker credit may be less costly than a credit based on joint earnings. Conversely, couples with two workers would likely see higher (more costly) benefits from a worker credit because two people may qualify for the credit instead of one credit per household and because there may be one eligible worker in a household that is currently ineligible for the credit. Previous analysis of several policies based on individual worker credits of varying size showed that roughly one-quarter of benefits would flow to people with higher than the targeted income (Carasso et al. 2008). Phasing a worker credit out based on adjusted gross income of the tax unit (rather than individual worker) can reduce costs and target benefits toward lower-income workers.

A more modest way to eliminate or reduce marriage penalties is to begin phasing the credit out for married couples at higher incomes than for single people. This is how the current EITC attempts to dampen penalties, though the point that phase out begins for married couples is only about \$5,600 higher than for single people. If the point at which the credit began phasing out for married people was twice the amount for single people, it would mimic how the federal income tax system treats people in the 10 percent and 12 percent income tax brackets and would provide a more effective buffer against penalties stemming from combining income. Reducing marriage penalties in this manner would likely be cheaper than a worker credit.

Indexing

The appropriate amount of the credit may change with changing economic circumstances. Like many amounts in the tax code, the maximum credit and the start of the phase-out range are indexed to inflation, now measured using the C-CPI-U. This indexing maintains the real value of the credit and the phase-out threshold over time. But other choices are possible:

- Not indexing (as with maximum CTC). Inflation would erode the real value of the credit. Nominal earnings gains would move more people into and beyond the phase-out range. Nominal earnings gains for the lowest earners would move them up the phase-in range.
- Indexing to nominal hourly compensation. This approach would link the credit's value to the average value of an hour of work. Because of productivity growth, average hourly compensation generally increases faster than overall price inflation.
- Per capita nominal gross domestic product. Indexing to per capita nominal gross domestic product would link the credit to the average value created per person, not just the portion going to labor or to the overall price level. Burman (2019) proposes this approach in his universal EITC.

Over the past decade, these indices rose at differing rates: not indexing (0 percent); inflation (1.6 percent); nominal hourly compensation (2.2 percent); nominal per capita gross domestic product (2.6 percent).

To maintain a given trapezoidal shape of the credit, one must index two parameters: the maximum credit amount and the income at which the phase-out begins.

One option for changing the shape would be to fix the nominal income level for full phase-in. Over time, this would increase the phase-in rate and reduce the phase-in's importance.

A technical issue in implementing either hourly nominal compensation or per capita nominal gross domestic product indexing is that the relevant data series are subject to larger revisions than are inflation data. Practical implementation will require some attention to addressing revisions and determining how they will be incorporated into the index calculations for the credit.

If the goal is to have the EITC grow similar to wages for low- and moderate-income workers, the best viable option would be to index the maximum credit and the point at which the credit begins to phase out to nominal hourly compensation as measured by the Bureau of Labor Statistics for the nonfarm business sector. To keep the maximum credit from ever being worth less each year, policymakers could implement two backstops. If nominal hourly compensation declines or is below a prior peak, the credit does not decline. The maximum credit amount remains unchanged until nominal hourly compensation resumes an upward trajectory. If cumulative inflation (as measured by the C-CPI-U) ever exceeds cumulative nominal hourly compensation growth for the nonfarm business sector, then the credit is indexed to inflation for that year.

None of these choices will affect the near-term cost of the credit substantially because the differences between these potential indices are small within the 10-year budget window.

ELIGIBILITY

Proposals to expand eligibility for the EITC reflect three concerns. Some workers with low incomes do not qualify for the credit. These include workers who are too young or too old under current requirements. Some people engage in productive activities that society may want to support even if they are not paid work, such as pursuing postsecondary education or caring for a relative. And some observers believe benefits should be more universal, available to every person with a low income (rather than just workers) or perhaps to every person regardless of income.

Childless Workers

Perhaps the most common type of proposals to expand eligibility are those seeking to expand the EITC for childless workers. Typically, these proposals are anchored by an increase in the maximum credit for childless workers, but they also include increasing the phase-in rate, the point at which the credit would begin to phase out, and the phase-out rate, which would all increase the number of people covered by the EITC. These address the issue that the credit for childless workers currently provides a relatively small benefit and does so over a relatively narrow income range, both of which contribute to childless workers receiving just 3 percent of total EITC benefits.¹²

Several recent proposals to expand the EITC have included substantial increases to the childless EITC (table 4). The Working Families Tax Relief Act and the Grow America's Income Now credit (renamed the Cost-of-Living Refund in 2019) would both increase the childless EITC directly. The LIFT (Livable Income for Families Today) the Middle Class Act and the Rise Credit would make benefits available based largely on marital status. In doing so, childless workers would become eligible for a credit at least as high as the credit available to workers with children with the same income and marital status. Each of the proposals would provide a benefit for childless workers that is much closer to the benefits currently available to workers with one child.

TABLE 4 Major Proposals to Expand the Childless EITC



Proposal title	Effect on childless EITC (2019)
Working Families Tax Relief Act	Increase childless EITC to \$2,036
LIFT Act	\$3,000 credit if single; \$6,000 if married
Grow America's Income Now	Increase childless EITC to \$3,054
Rise Credit	\$4,000 credit if single; \$8,000 if married
Network The LICT Astronomy we wanted as the CIT	C All other realising would replace the FITC FITC refere to

Note: The LIFT Act does not replace the EITC. All other policies would replace the EITC. EITC refers to the Earned Income Tax Credit.

In 2019, the maximum benefit a childless worker can receive is about \$530; the maximum benefit for families with at least three children is about \$6,560. Childless workers are completely phased out of benefits once income reaches \$15,570 (\$21,370 if married). Workers with at least three children phase out of benefits entirely once income reaches about \$50,160 (\$55,950 if married).

Excluding childless workers from a substantial EITC creates confusion about whether the EITC is a work incentive or a child benefit. Because workers without qualifying children are largely left out of the EITC, these workers generally miss out on the antipoverty and employment effects of the credit. This is of concern because since about 1969, employment rates among less-educated prime-age men with no children at home (those likely to be eligible for the childless EITC) have diverged from those of more highly educated men with no children at home (figure 7). Men with no children at home with lower education levels are less likely to be working than more highly educated men with no children at home. Figure 7 likely overstates the share of men with a high school diploma or less who are working, given the relatively larger share of this group who are incarcerated and not thus included in the survey data used to compile these numbers (Curley 2018).¹³ Women with less education who do not have children at home have experienced consistently lower employment rates over this same period (figure 8).

FIGURE 7

Employment Rate of Men, by Education Level



Ages 25—54, no own children at home

Share employed (%)



Source: Author's calculations using Current Population Survey.

Note: The Current Population Survey excludes institutionalized people, including people who are incarcerated.

FIGURE 8 Employment Rate of Women, by Education Level



Ages 25—54, no own children at home

Share employed (%)



Source: Author's calculations using Current Population Survey. **Note**: The Current Population Survey excludes institutionalized people, including people who are incarcerated. The EITC may be reducing wages for all low-wage workers by increasing the supply of lower-wage labor. In turn, these lower wages could be depressing employment rates for people not receiving subsidies from the credit, primarily people without custodial children (Rothstein 2010). Providing a substantial credit could offset this decline for childless workers, but it could also further reduce wages. As a larger share of people are willing to work for a given amount of income (knowing their wages will essentially be bolstered by the EITC) employers may be able to reduce wages, though laws such as the minimum wage put a limit on this ability.

Proponents of an expanded childless EITC suggest that increasing the EITC for childless workers (including noncustodial parents) could have several benefits similar to those that workers with children currently experience. Primarily, increasing the EITC for childless workers would increase the returns to work which could, in turn, increase employment rates for workers without resident children (Holzer 2015). A recent demonstration project, New York City Paycheck Plus, found a modest increase in employment rates among childless men (Miller et al. 2018).

Increasing the childless EITC could increase child support payments from noncustodial parents who would benefit from the policy. A New York EITC policy targeted at noncustodial parents who pay child support increased employment among noncustodial parents with low child support orders (below \$3,000 a year), who are likely a low-income group (Nichols, Sorenson, and Lippold 2012).

Increasing the childless EITC may also improve credit administration. People currently have a large incentive to claim children who may not be qualifying children for the EITC. Separating the child benefit of the credit into a direct child benefit would allow the work-based portion of the EITC to be administered in a much more straightforward manner, relying more heavily on information reported by third parties.

Creating a substantial childless EITC could lead to large marriage penalties.¹⁴ We describe ways to decrease marriage penalties in more detail below.

Younger Workers

Under the current credit, workers must be at least age 25 to qualify for the childless EITC. No age limit applies to parents. This may exclude people who opt to join the workforce straight out of high school or within a few years after graduating from community college or a four-year school. Extending the EITC to those potential workers could make work more attractive, which could encourage young people to work rather than attend postsecondary school. To the extent that postsecondary students are already engaged in work, the EITC may not induce more students to work, but it would raise the returns to work.

Without increasing the maximum EITC amount, the cost of expanding the EITC to younger workers is unlikely to be substantial, because its benefits are relatively small and cover a relatively small income range. But most proposals to decrease the age limits would also increase the maximum value of the credit, and some would increase the income range of the credit. A recent analysis showed that about one-quarter of costs of increasing the credit for childless workers, expanding the income range for childless workers, and reducing the age limits of childless EITC would be attributable to including workers ages 21 to 24 (Maag, Werner, and Wheaton 2019).

Older Workers

Workers cannot be older than age 64 and qualify for the childless credit. But older workers with incomes in the range of the childless EITC are extremely vulnerable (McCubbin 2009). Not allowing older workers to receive the credit incentivizes retirement over working. Instead, public policy should encourage older workers to continue to work as long as they are able and willing.

Over 4.2 million people age 65 and over were living below the federal poverty level in 2015 (US Department of Health and Human Services n.d.). Many are no longer working, but for those who are, even a few extra dollars from the EITC could be helpful.

In 1994, when childless workers began receiving the EITC, the credit fit neatly with Social Security benefits. When low-income workers retired at 65, they would lose their EITC but could immediately claim full Social Security benefits. Congress gradually raised the age of eligibility for full Social Security benefits, but it made no parallel change in EITC eligibility. Today, older adults still lose their EITC at age 65, well before they are eligible for full Social Security benefits. They still can claim partial Social Security benefits starting at age 62.

Expanding the childless EITC to older workers would be relatively inexpensive both because the benefit is modest and because the number of low-income older workers is small (though it is growing). The Tax Policy Center estimates that such a change would cost \$1.0 billion over 10 years.¹⁵ Almost three-quarters of the benefit would go to older workers in the bottom two-fifths of the income distribution, who make less than about \$50,000 annually. The cost for this change is limited because of the relatively small share of low-income older workers.

Caregivers

Child care is an important issue facing many families, particularly those with young children. In some cases, parents of young children are unable to find acceptable child care at an affordable price, or they may choose to provide child care directly for other reasons. Young children experience the highest rates of poverty of any age group and are particularly vulnerable to poverty's lasting effects. Caregivers not engaged in paid work for the entire year do not meet the EITC test of having earnings and thus do not benefit from the EITC.

Adult children can make significant personal and financial sacrifices to care for an aging parent. They may forgo current income or retirement income by leaving their jobs or by reducing their hours to care for frail parents or other relatives. They may also contribute financially by paying out of pocket for care.

Allowing caregivers to qualify for the EITC, even those without earnings, would allow the EITC to provide some buffer against financial sacrifices associated with caregiving, and it would provide additional subsidies to this vulnerable population. Subsidizing families with young children can provide long-lasting benefits to young children.

Caregivers without earnings likely represent a small portion of all caregivers. Likely, most caregivers combine caregiving and paid work. As a result, expanding the credit to caregivers would likely cost very little, but it would make a statement about the value public policy places on caregivers. Subsidizing caregivers without paid employment somewhat diminishes the link between the EITC and the established definition of work. Further, it may be quite difficult for the IRS to determine whether an adult child is providing caregiving services. This could increase credit noncompliance.

Students

Independent students do not receive the EITC if they have no earnings (making them ineligible for benefits) or if they are below the minimum age eligible for the credit. To receive the EITC for childless workers, students must be at least 25 years old (no age limit applies to workers with custodial children).

In 2017, the National Center for Education Statistics reported that 43 percent of full-time undergraduate students (students taking at least 12 hours of classes) were employed. The share of employed students is higher among part-time students at 81 percent. In many cases, hours of employment were relatively modest: 7 percent of full-time undergraduate students were employed less than 10 hours a week, and 8 percent were employed 10 to 19 hours a week.¹⁶ Among part-time undergraduate students, 46 percent were employed at least 35 hours a week. Although combining school and work is nothing new, as concern about mounting postsecondary education debt increases, policymakers may need to explore ways to limit the need for loans.

Reducing or removing the age limits for the childless EITC would allow postsecondary students to receive the EITC. If the policy goal is to allow students not working for pay to receive the credit, eligibility would need to be further redefined to include some people not engaged in paid work. The credit could be targeted to the most needy students by only allowing independent students (those who cannot be claimed on another tax return) to claim the EITC.

Universality

Some observers suggest expanding EITC eligibility more broadly, making it available to all people with low incomes or even to qualifying people regardless of income. There are four basic ways to do this. First, the universal EITC could provide a smaller benefit for all low-income workers and then add a larger credit for people with earnings.¹⁷ For example, all people with two children and low incomes might qualify for a credit of \$2,914, half the current maximum (figure 9). With a lower phase-in rate, workers with earnings might then qualify with a larger credit up to the current maximum (solid orange line in figure). A second approach would be to provide a full \$5,828 credit to all people with low incomes, which would phase out consistent with current law (dashed orange line in phase-in, then blue). A third approach is a universal EITC that would phase in with earnings, but never phase it out (blue during phase-in, then yellow). All workers would receive some credit, and

most would receive the full credit.¹⁸ Finally, a credit could provide a universal basic income through the tax system to everyone (orange dashed, then blue, then yellow). This would provide the credit to everyone regardless of income—no phase in and no phase out.¹⁹ Moving toward universality would increase—perhaps dramatically—the benefits provided by the EITC and its corresponding fiscal cost. Moving toward universality would also reduce incentives for paid work; reduced incentives to enter the labor force would more than offset any incentive benefits from reducing or eliminating phase outs. Income gains for people with the lowest incomes, however, could improve employment opportunities for them and their children in the longer term (Hoynes and Rothstein 2019).



Source: Urban-Brookings Tax Policy Center. **Note:** Assumes all income comes from earnings. EITC refers to the Earned Income Tax Credit.

TIMING

The vast majority of EITC recipients receive the credit as a tax refund a few weeks after filing their tax return. Beneficiaries thus receive the EITC well after the year in which they qualified for it. In contrast, transfer program participants may cycle on and off programs over the course of a year (Mills et al. 2014). A few beneficiaries with relatively high earnings can offset this timing mismatch, at least in part, by having less federal income tax withheld from their paycheck. But such adjustments apply only to the small fraction of EITC benefits that offset income taxes.²⁰ When a family receives the credit is an important issue. For many people, the EITC represents a substantial portion of their annual income. In many cases, is it their single largest financial transaction each year.²¹ Delivered as a lump sum after filing a tax return, the credit provides an opportunity to boost savings (Mendenhall et al. 2012) and purchase durable goods (Barrow and McGranahan 2000; Goodman-Bacon and McGranahan 2008). But a lump-sum credit does not provide adequate assistance to low-income families who might struggle with regularly recurring expenses such as child care, rent, and groceries. Evidence suggests this might be the case, because a large share of EITC refunds help people pay down accumulated consumption debts (Despard et al. 2015).

Several analysts have posited that if low- and moderate-income families had access to part of their EITC during the year, they would be more likely to have incomes sufficient to cover expenses, and they would enjoy higher levels of economic security (Halpern-Meekin et al. 2015; Holt 2008, 2009, 2015; Vallas, Boteach, and West 2014). The credit could also be a tool for promoting income stability rather than adding additional variation to already unstable incomes.²² Spreading the credit over several payments might even be preferred by some people. When surveyed, many low-income people expressed a stronger preference for stable income than for more income (Pew Charitable Trusts 2015). Income instability is a significant issue for many households, especially low-income households. Analysis of the Survey of Income and Program Participation showed that almost two-thirds of low-income families experience at least one month where income spikes above or dips below 25 percent of average monthly income. Nearly 40 percent of low-income households have incomes that spike or dip in at least six months of the year (Maag et al. 2017).

For those people who cycle on and off the credit, providing the credit contemporaneous with need could make the EITC much more useful, helping them avoid other financial stressors. If policymakers opted to allow the credit to be advanced (paid out before recipients file a tax return), several issues would arise.

Advancing Payments

Before 2011, an advanced payment option existed for the EITC. Employees would alert their employers that they would likely be eligible for the EITC, and employers would advance a portion of the expected credit to those employees (USGAO 2007).

Ultimately, few people (less than 3 percent of those eligible) chose to receive the credit ahead of the tax filing season. Uncertainty surrounding the credit (both eligibility and amount) and the concern over having to repay excess credits received could have reduced participation in the advanced option. The exact amount of credit that a person will qualify for is unknown until the end of the year (USGAO 2007).

Advocates of the advanced credit claimed that people chose to not take the advanced option because they were unaware the option existed. Others posit that the advanced payment option was unpopular because recipients see the regular credit as a beneficial forced savings mechanism (Romich and Weisner 2000).

Particularly for people who do not have bank accounts or who have bank accounts with high fees, having the government serve as a savings account may be a good financial choice.

Other activities suggested an advanced payment option might be necessary. In particular, refund anticipation loans and refund anticipation checks, two products that low-income workers could purchase after having their taxes calculated by certain paid preparers, were in high demand. Presumably, this reflected the fact that people needed their tax refund amounts (including EITCs) as quickly as possible, though it could simply reflect a preference to receive money as quickly as possible regardless of need (Theodos et al. 2010).

Since the elimination of the advance payment option, several small-scale experiments have been conducted that indicate an alternative advance payment option could help low-income families that qualify for the EITC. A recent experiment in Chicago advanced the EITC to a small group of likely eligible taxpayers. The analysis found that when the EITC was advanced on a quarterly basis, participants in the experiment were more likely to be able to afford child care and education. Recipients reported being more likely to make ends meet than in the prior year, when their credit was distributed as a lump sum. Recipients were less likely to face financial stress and experience food insecurity and more likely to pay rent and basic bills on time (Mendenhall et al. 2015). It is not clear whether these results would be generalizable to monthly or more frequent payments.

Delaying Payments

If eligible individuals are unwilling to take advantage of an advanced option, credit designers could delay credit receipt in order to provide a periodic payment. In essence, EITC payments for earnings in one year would be paid out periodically through the following year (instead of being received as a lump sum early in that year). Delaying payments after eligibility has been established could compound existing financial stress and mean that the payments are delivered even later than under the current system. Recent analysis showed that delaying refunds even a few weeks affected spending patterns. EITC payments (and other refund amounts) help pay for daily living expenses, such as groceries and gas (Aladangady et al. 2018). Delaying tax refund payments can create cash flow problems for EITC claimants. At one point, about one-third of low-income filers in a small regional study reported that even a one-week delay in receiving a tax refund would hurt household finances (Maag, Roll, and Oliphant 2016).

Currently, when tax refunds are delayed, the IRS is obligated to make interest payments after a certain period. An incentive beyond this could be added, as was proposed in recently introduced legislation in the District of Columbia. The Rainy Day Refund Act would allow recipients to save up to 30 percent of the District EITC in a bank account, prepaid card, or other eligible savings method. If the participant does not withdraw that money for six months, they will get the portion of their EITC that has been saved plus a 50 percent match of that savings.

More Frequent Payments

Determining whether the EITC should be spread over multiple payments and when those payments should be made may depend entirely on how the credit is framed. For the EITC, two arguments are often made, and both may be true for some credit recipients: (1) the credit is needed to help taxpayers make ends meet, and (2) the credit is designed as a safety net to offset losses from temporary shocks to income, employment, or family structure. The EITC can be thought of as both. For people who receive the EITC year after year, the credit is helping families make ends meet. But for the majority of people receiving the EITC, the credit likely serves as an offset to temporary losses from changes in income or family structure.

If the former is true, and the goal of the credit design is to make ends meet, then a monthly payment makes sense because a significant portion of expenses for low- and middle-income families are monthly or more frequent (e.g., rent, child care, and utility bills). However, consideration should be given to whether monthly credit payments come so frequently that they will be easily absorbed into a person's budget. This would raise a person's overall well-being, perhaps, but provide no insulation from shocks. Some evidence suggests that when economic recovery payments are delivered to individuals in paychecks, they go largely unnoticed and are spent quickly, particularly among low-income workers (see, for example, Sahm, Shapiro, and Slemrod 2012).

If the latter is true, a quarterly schedule may make more sense than monthly payments and would be beneficial given recent analysis on how many people are unable to withstand even relatively small shocks. Receiving a larger amount on a quarterly basis might insulate people from absorbing the extra income payments into their monthly budget rather than saving the extra infusion of cash. Messaging around this new credit could influence how recipients treat the new income. Various strategies have been used to encourage low- and moderate-income taxpayers to save a portion of their tax refund (Center for Social Development 2018).

Quarterly payments may also be more practical than monthly payments. The government would be tasked with delivering payments to claimants, and administrative issues increase as payment frequency rises.

Substantial research shows that the EITC benefits many facets of life, and whether these benefits would hold if the credit were not delivered as a lump sum is unclear (though many of the benefits of the EITC will likely persist in a system delivering more frequent payments).

ADMINISTRATION

Delivering the EITC through the federal income tax system has had profound implications for credit design, eligibility, and timing. Relying on an established structure allows the program to be administered at low cost, estimated at less than 1 percent of all claims paid.²³ But the system that has developed is complex, which may undermine the IRS's ability to administer the credit effectively, leading to improper payments, reduced participation, and reliance on paid tax preparers.

Improper Payments

The US Treasury Department estimates that in fiscal year 2013, between 22 and 26 percent of EITC payments were improperly made (US Department of the Treasury 2013). This improper payment rate likely overstates actual improper payments. A 2004 study by the Taxpayer Advocate found that in 2002, among 67,000 people who sought reconsideration of their audit results, 43 percent were owed the entire or almost entire EITC claim that had initially been denied (National Taxpayer Advocate 2004).

Errors can stem from intentional fraud or innocent mistakes likely caused by complex rules associated with claiming the EITC. Studies by Treasury analysts indicate that only a minority of improper payments stem from fraudulent actions (Holtzblatt and McCubbin 2003).

A more recent IRS study of returns claiming the EITC found that from 2006 to 2008, between 28.5 and 39.1 percent of all EITC dollars claimed were overclaims totaling between \$14.0 billion and \$19.3 billion (IRS 2014). The largest source was error in classifying children as qualified. Roughly 75 percent of all tax returns with qualifying-child errors violated the requirement that children live with the taxpayer in the United States for more than six months of the year (IRS 2014). The IRS receives no administrative data that can verify where a child resided for most of the year, making it difficult for the agency to monitor compliance. Attempts to use administrative data from other programs to verify child residence have not proven successful (Pergamit et al. 2014).

Participation Rate

Complex rules can also dampen participation in the tax credit (Goldin 2018). In tax year 2015 (the latest year for which data are available), the IRS estimates that between 77 percent and 80 percent of people who appear eligible for the EITC actually receive benefits.²⁴

Paid Tax Preparation

Many low-income families owe no tax but still must file a tax return to receive refundable tax credits, including the EITC. Those who do file often seek help, which nearly always comes from a paid preparer (table 5). The cost of that help erodes the net value of refundable credits. Increasing access to free low-income tax preparation clinics can help reduce the costs of tax preparation for EITC claimants.

TABLE 5Tax Preparation MethodBy adjusted gross income, 2010



		Tax preparation method (%)				
Adjusted gross income (thousands of dollars)	Tax returns (millions)	No identified preparer	Paid preparer	IRS prepared	Volunteer income tax assistance	Tax counseling for the elderly
Under 30	65.7	41.8	54.5	0.2	1.7	1.7
30—50	25.6	42.3	55.7	0.1	0.9	1.0
50—100	30.7	40.9	58.2	0.0	0.4	0.5
Over 100	18.2	36.6	63.2	0.0	0.1	0.1
Total	142.8	40.9	56.8	0.1	1.0	1.1

Source: Tax Policy Center tabulations of 2010 Statistics of Income Public Use File.

LINKAGES TO OTHER PROGRAMS

Many people who receive an EITC may benefit from a more traditional transfer program (such as Supplemental Nutrition Assistance Program (SNAP, formerly food stamps) benefits, or from a state-level EITC. We describe how altering the federal EITC affects eligibility for other programs.

Traditional Transfer Programs

In general, if tax refunds from the EITC are spent within a few months, receipt of the EITC does not affect eligibility for federally funded transfer programs including Medicaid, Supplemental Security Income, SNAP, or Temporary Assistance for Needy Families (IRS 2017). If a tax refund is saved long enough, it can be counted as an asset which can affect eligibility for transfer program benefits. Receipt of the EITC may, however, reduce a family's participation in transfer programs such as SNAP (Mikelson and Lerman 2004).

States with an Earned Income Tax Credit

When considering changes to the federal tax code, it is important to remember that the United States has a multitiered system of tax collection, and state tax systems rely heavily on the federal Internal Revenue Code. State tax forms often defer to federal definitions or link directly to line items on federal form 1040. In fact, most states begin their individual income tax calculations with federal taxable income or adjusted gross income (Auxier and Sammartino 2018). These federal-state connections benefit both taxpayers (through simpler calculations) and states (through simpler administration).

One such simple calculation is the state EITC: nearly every state with an EITC sets its credit as a percentage of the federal EITC. Therefore, if the eligibility rules or generosity of the federal credit were changed, the reforms would also alter state credits.
As of 2019, 28 states and the District of Columbia offer an EITC.²⁵ Twenty-two states offer refundable EITCs (that is, as with the federal credit, if the state credit exceeds a taxpayer's state income tax liability, the taxpayer receives the excess amount as a payment from the state). Six states offer nonrefundable credits that can only offset state income taxes. In every state but Minnesota, the credit is calculated as a percentage of the federal EITC (figure 10). The percentages range from 3 percent in Montana to a nonrefundable 125 percent in South Carolina (table 6).²⁶ The District of Columbia has the highest refundable credit rate at 40 percent.



Sources: State tax codes and forms.

Note: In Maryland, a filer can choose a 28 percent refundable credit or 50 percent nonrefundable credit.

TABLE 6State Earned Income Tax Credits, 2019



State	Percentage of Federal EITC	Refundable?	Notes
California	85%	Yes	Applies to smaller range of eligible income than the federal credit
Colorado	10%	Yes	
Connecticut	23%	Yes	
Delaware	20%	No	
District of Columbia	40%	Yes	100% match for childless workers
Hawaii	20%	No	
Illinois	18%	Yes	
Indiana	9%	Yes	
lowa	15%	Yes	
Kansas	17%	Yes	
Louisiana	5%	Yes	
Maine	5%	Yes	
Maryland	28%	Yes	50% if not refundable
Massachusetts	30%	Yes	
Michigan	6%	Yes	
Minnesota	Percentage of income	Yes	
Montana	3%	Yes	
Nebraska	10%	Yes	
New Jersey	37%	Yes	
New Mexico	17%	Yes	
New York	30%	Yes	
Ohio	30%	No	
Oklahoma	5%	No	
Oregon	8%	Yes	
Rhode Island	15%	Yes	
South Carolina	125%	No	
Vermont	36%	Yes	
Virginia	20%	No	
Wisconsin	4% one child; 11% two children; 34% three or more	Yes	Not available to childless workers

Sources: "State Earned Income Tax Credits," Urban Institute, accessed June 7, 2019, https://www.urban.org/policy-centers/cross-center-initiative/state-and-local-finance-initiative/state-and-local-backgrounders/state-earned-income-tax-credits.

"Earned Income Tax Credit," Tax Credits for Workers and their Families, accessed June 7, 2019,

http://www.taxcreditsforworkersandfamilies.org/federal-tax-credits/earned-income-tax-credit; state tax codes; authors' calculations.

Authors' calculations.

Minnesota's Working Family Credit is calculated as a percentage of income rather than as a percentage of the federal EITC. However, eligibility for Minnesota's Working Family Credit is determined by eligibility for the federal EITC, so federal changes would also affect its credit. For example, a federal law that expands the EITC to new taxpayers would increase the number of eligible Minnesota workers for the Working Family Credit.²⁷

State links to the federal tax code are either static or rolling. Static conformity links states to federal law as it was enacted on a specific date, and states must update their date to adopt federal tax changes. Rolling conformity links state statutes to current law, and those statutes automatically update as federal law changes.

Most states use rolling conformity for their EITCs, even states that otherwise use static conformity for their income tax laws. California, for example, asserts that for each taxable year, the value of California's EITC is determined using Section 32 of the Internal Revenue Code (which defines the EITC) as it stands in that tax year.²⁸ Similarly, eligibility for Minnesota's working family credit is contingent on a taxpayer being "eligible for a credit under section 32 of the Internal Revenue Code" in that year.²⁹

If a state links to the EITC through Section 32 of the Internal Revenue Code, any change to that section will automatically flow through to the state. Therefore, if the federal government were to expand the EITC, that expansion would flow through to most states, generating an automatic increase in state budget costs. Though it is uncertain how states might respond, there is some precedent for these kinds of changes. The last federal EITC expansion, passed as part of the 2009 American Recovery and Reinvestment Act, temporarily expanded benefits for married couples and families with three or more children at an estimated annual federal revenue cost of about \$2.5 billion per year (US Department of the Treasury 2010). In response to this federal expansion, one state (New Jersey) lowered its match rate, though it is difficult to determine how much the state was responding to budgetary pressure generated by the federal EITC expansion or to other budgetary pressures present during the Great Recession.

Expanding the EITC—particularly if the expansion is large—could put pressure on state budgets. States might opt to curtail their credits or decouple from federal law. A large federal expansion could also give states a simple way to provide tax relief to low-income earners in ways they may not be willing or able to do without the assistance of the federal government. In either case, federal reformers should keep state actors in mind when considering tax reform that would affect states' bottom lines.

CONCLUSION

The EITC provides substantial assistance to low- and middle-income families, lifting many out of poverty. It does this both by providing a refundable tax credit—a credit that can be received, regardless of how much tax is owed—as well as by encouraging people to work. In 2019, the Tax Policy Center estimates the credit will deliver \$70 billion in benefits to 26 million families. The vast majority of benefits go to families with children. We analyze several aspects of credit design, administration, and linkages to other programs including state-level EITCs to better understand how proposals could affect the EITC.

Despite the credit's success at raising the incomes of low-income families, the credit has been criticized on several fronts, all of which could be addressed by redesigning today's benefit. But any redesign would involve trade-offs. The largest hole in the EITC that many reformers highlight is its lack of support for workers without children at home. A sizable benefit could be provided to this group, but that could increase marriage penalties (a loss of benefits upon marriage) and incur substantial costs. More modest benefits could be added for this group while having a lower risk of increasing marriage penalties and lower costs.

The lowest-income households tend to receive the smallest benefit. In particular, only people who are working can receive the credit, and because the credit phases in with earnings, the lowest-income workers receive the smallest credit benefits. Larger benefits could be provided to people who are either not working or earning less, but this may shift the credit away from being a work incentive depending on how work is defined and who is included as eligible for the credit even if they do not have earnings.

Credit administration is left to the IRS, which can administer the credit at relatively low cost because most households already file income tax returns. For credit recipients, the credit rules can be complicated, but much of the information is needed for other tax-filing purposes, making the additional burden generated by the credit likely less than it would be under a transfer program outside the tax system.

An implication of IRS administration is that most families receive the credit during tax filing season, after they have had low or moderate incomes over the year, rather than contemporaneous with need. This limits the credit's ability to assist families with recurring expenses such as rent or child care. On the other hand, families can use the credit as a savings device and use the relatively large tax refund the EITC generates to fund highercost items that might be needed. Several proposals have sought to alter the payment schedule. Monthly or quarterly payments might provide substantial benefits to recipients whose income is already volatile.

NOTES

- ¹ "Policy Basics: The Earned Income Tax Credit," Center on Budget and Policy Priorities, last updated April 19, 2018, https://www.cbpp.org/research/federal-tax/policy-basics-the-earned-income-tax-credit.
- ² "T19-0026 Tax Benefit of the Earned Income Tax Credit, Baseline: Current Law, Distribution of Federal Tax Change by Expanded Cash Income Percentile, 2019," Urban-Brookings Tax Policy Center, May 10, 2019., https://www.taxpolicycenter.org/model-estimates/tax-benefit-earned-income-tax-credit/t19-0026-tax-benefit-earnedincome-tax-credit.
- ³ For simplicity, we use the term "workers" to include both members of a couple, even if only one member is working. This aligns with the IRS practice of typically treating a married couple as one tax unit. If a married couple opts to file as two separate tax units under the filing status "married, filing separately" they are ineligible for the EITC.
- ⁴ For simplicity, we use the term "household" to mean "tax unit." In some cases, more than one tax unit lives together in a household. For example, a cohabiting unmarried couple or multigenerational household will often contain several tax units.
- ⁵ "T19-0026 Tax Benefit of the Earned Income Tax Credit, Baseline: Current Law, Distribution of Federal Tax Change by Expanded Cash Income Percentile, 2019," Urban-Brookings Tax Policy Center, May 10, 2019., https://www.taxpolicycenter.org/model-estimates/tax-benefit-earned-income-tax-credit/t19-0026-tax-benefit-earnedincome-tax-credit.
- ⁶ Greg J. Duncan and Katherine Magnuson, "The Long Reach of Early Childhood Poverty," Pathways: A Magazine on Poverty, Inequality, and Social Policy (Stanford University), Winter 2011.
- ⁷ "Policy Basics: The Earned Income Tax Credit," Center on Budget and Policy Priorities, last updated April 19, 2018, https://www.cbpp.org/research/federal-tax/policy-basics-the-earned-income-tax-credit.
- ⁸ Lawrence M. Mead, "Overselling the Earned Income Tax Credit," National Affairs 39 (Fall 2014), https://www.nationalaffairs.com/publications/detail/overselling-the-earned-income-tax-credit.
- ⁹ When filing tax returns, people may choose to use the standard deduction or itemize certain deductions. Almost all lowand moderate-income families benefit more from the standard deduction, so we include that in our examples. Itemized deductions do not vary based on marital status, except to the extent that each person's deductions may be used to calculate the tax unit's total deductions.
- ¹⁰ Workers would get credit for more hours worked and earnings for computing Social Security benefits in the future.
- ¹¹ Elaine Maag, "A New Urban Institute Calculator Shows What Taxes and Transfers Mean for Low-Income Families," TaxVox (blog), May 25, 2012, https://www.taxpolicycenter.org/taxvox/new-urban-institute-calculator-shows-what-taxesand-transfers-mean-low-income-families.
- ¹² "T19-0026 Tax Benefit of the Earned Income Tax Credit, Baseline: Current Law, Distribution of Federal Tax Change by Expanded Cash Income Percentile, 2019," Urban-Brookings Tax Policy Center, May 10, 2019., https://www.taxpolicycenter.org/model-estimates/tax-benefit-earned-income-tax-credit/t19-0026-tax-benefit-earnedincome-tax-credit.
- ¹³ Caitlin Curley, "How Education Deficiency Drives Mass Incarceration," GenFKD, November 18, 2016, http://www.genfkd.org/education-deficiency-drives-mass-incarceration.
- ¹⁴ C. Eugene Steuerle, "EITC Expansion Backed by Obama and Ryan Could Penalize Marriage for Many Low-Income Workers," *TaxVox* (blog), April 5, 2016.
- ¹⁵ "T18-0226 Earned Income Tax Credit Options; Change in Individual Income Tax Revenue, 2018-2027 (\$ billions); Baseline: Current Law," Urban-Brookings Tax Policy Center, October 30, 2018. https://www.taxpolicycenter.org/modelestimates/options-expand-childless-eitc-oct-2018/t18-0226-earned-income-tax-credit-options.

NOTES

- ¹⁶ "College Student Employment," National Center for Education Statistics, last updated February 2019, https://nces.ed.gov/programs/coe/indicator_ssa.asp.
- ¹⁷ Arindrajit Dube, "An Antipoverty Tool with Bipartisan Support Can Be Made Even Better," *The Hill*, October 24, 2018.
- ¹⁸ Leonard E. Burman, "A Universal EITC: Sharing the Gains from Economic Growth, Encouraging Work, and Supporting Families," Washington, DC: Urban Institute. May 20.
- ¹⁹ Stein, Jeff. "Rep. Rashida Tlaib introduces closest plan in Congress to universal basic income" Washington Post, June 6, 2019.
- ²⁰ In 2018, the EITC delivered \$66.5 billion in benefits. Of that, \$8.1 billion offset taxes owed (OMB 2019), so could have been delivered over the course of the calendar year as reduced withholding.
- ²¹ JP Morgan Chase Institute, "Taking the Financial Stress Out of Tax Time," April 13, 2016, https://www.jpmorganchase.com/corporate/institute/insight-taking-financial-strees-out-of-tax-time.htm.
- ²² Julie Siwicki, "Creating an Income Spike, Part 1: Tax Time," US Financial Diaries blog, March 10, 2015. https://www.usfinancialdiaries.org/blog/2015/3/5/creating-an-income-spike-part-i-taxtime?rq=earned%20income%20tax%20credit.
- ²³ "About EITC," Internal Revenue Service, last updated March 11, 2019, https://www.eitc.irs.gov/eitc-central/abouteitc/about-eitc.
- ²⁴ "EITC Participation Rate by States," Internal Revenue Service, last reviewed March 11, 2019, https://www.eitc.irs.gov/eitccentral/participation-rate/eitc-participation-rate-by-states.
- ²⁵ New York City and the territories of Puerto Rico and Guam also have local-level EITCs. Washington state includes an EITC in its state tax code, but the credit has never been funded or implemented, so we exclude it from this list.
- ²⁶ "State Earned Income Tax Credits," Urban Institute, accessed May 29, 2019, https://www.urban.org/policy-centers/crosscenter-initiative/state-and-local-finance-initiative/state-and-local-backgrounders/state-earned-income-tax-credits.
- ²⁷ Minnesota Department of Revenue. 2019. "Working Family Credit."
- ²⁸ "Imposition of Tax," Cal. Rev. & Tax Coe § 17052 (2018). https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=RTC§ionNum=17052.&highlight=tru e&keyword=earned%20income%20tax%20credit.
- ²⁹ "Minnesota Working Family Credit," Minn. Stat. § 290.0671 (2018). https://www.revisor.mn.gov/statutes/cite/290.0671.

- Ackerman, Deena, Janet Holtzblatt, and Karen Masken. 2009. "The Pattern of EITC Claims over Time: A Panel Data Analysis." Washington, DC: US Department of the Treasury.
- Aizer, Anna, Shari Eli, Joseph Ferrie, and Adriana Lleras-Muney. 2016. "The Long-Run Impact of Cash Transfers to Poor Families." American Economic Review 106 (4): 935–71. https://www.aeaweb.org/articles?id=10.1257/aer.20140529.
- Aladangady Aditya, Shifrah Aron-Dine, David Cashin, Wendy Dunn, Laura Feiveson, Paul Lengermann, Katherine Richard, and Claudia Sahm. 2018. "High-Frequency Spending Responses to the Earned Income Tax Credit." Washington, DC: Board of Governors of the Federal Reserve System. https://www.aeaweb.org/conference/2019/preliminary/paper/hrHDteTn.
- Alm, James, and Leslie A. Whittington. 2003. "Shacking Up or Shelling Out: Income Taxes, Marriage, and Cohabitation." Review of Economics of the Household 1 (3): 169–86.
- Auxier, Richard, and Frank Sammartino. 2018. The Tax Debate Moves to the States: The Tax Cuts and Jobs Act Creates Many Questions for States that Link to Federal Income Tax Rules. Washington, DC: Urban-Brookings Tax Policy Center.
- Banerjee, Abhijit, Paul Niehaus, and Tavneet Suri. 2019. "Universal Basic Income in the Developing World." Working paper 25598. Cambridge, MA: National Bureau of Economic Research.
- Barrow, Lisa, and Leslie McGranahan. 2000. "The Effects of the Earned Income Credit on the Seasonality of Household Expenditures." *National Tax Journal* 53 (4): 1211–44.
- Burman, Leonard E. 2019. "A Universal EITC: Sharing the Gains from Economic Growth, Encouraging Work, and Supporting Families." Washington, DC: Urban-Brookings Tax Policy Center. https://www.taxpolicycenter.org/sites/default/files/publication/157206/a_universal_eitc_6.pdf.
- Carasso, Adam, Harry Holzer, Elaine Maag, C. Eugene Steuerle. 2008. "The Next Stage for Social Policy: Encouraging Work and Family Formation among Low-Income Men." Washington, DC: Urban-Brookings Tax Policy Center. https://www.urban.org/research/publication/next-stage-social-policy.
- Center on Budget and Policy Priorities. 2016. "Chart Book: The Earned Income Tax Credit and Child Tax Credit." Washington, DC: Center on Budget and Policy Priorities.
 - ——. 2018. "Policy Basics: The Earned Income Tax Credit." Washington, DC: Center on Budget and Policy Priorities.
- Center for Social Development. 2018. "Promoting Savings at Tax Time: Insights from Online and In-Person Tax Preparation Services." Research report 18-33. St. Louis: Washington University in St. Louis. https://csd.wustl.edu/18-33/.
- Chien, Nina, and Suzanne Macartney. 2019. What Happens When Low-Income People Increase Earnings? Effective Marginal Tax Rates for Low-Income Households. Washington, DC: US Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation. https://aspe.hhs.gov/system/files/aspe-files/260661/brief2overviewmtranalyses.pdf.
- CBO (Congressional Budget Office). 2005. Effective Marginal Tax Rates on Labor Income. Washington, DC: Congressional Budget Office.
- Despard, Mathieu R., Dana C. Perantie, Jane Oliphant, and Michal Grinstein-Weiss. 2015. "Do EITC Recipients Use Tax Refunds to Get Ahead? New Evidence from Refund to Savings." St. Louis: Washington University in St. Louis, Center for Social Development, George Warren Brown School of Social Work. https://openscholarship.wustl.edu/cgi/viewcontent.cgi?article=1589&context=csd_research.
- Dowd, Timothy. 2005. "Distinguishing between Short-Term and Long-Term Recipients of the Earned Income Tax Credit." National Tax Journal 58 (4): 807–28.
- Dowd, Timothy, and John B. Horowitz. 2011. "Income Mobility and the Earned Income Tax Credit: Short Term Safety Net or Long-Term Income Support." *Public Finance Review* 39 (5): 619–52.
- Duncan, Greg J., Pamela A. Morris, and Chiris Rodriguez. 2011. "Does Money Really Matter? Estimating Impacts of Family Income on Young Children's Achievement With Data From Random-Assignment Experiments." Developmental Psychology 47 (5): 1263-1279.

- Eissa, Nada, and Hilary W. Hoynes. 2006. "The Hours of Work Response of Married Couples: Taxes and the Earned Income Tax Credit." In *Tax Policy and Labor Market Performance*, edited by Jonas Agell and Peter Birch Sorensen, 187–228. Cambridge, MA: MIT Press.
- Eissa, Nada, and Jeffrey B. Liebman. 1996. "Labor Supply Response to the Earned Income Tax Credit." Quarterly Journal of Economics 111 (2): 605–37.
- Fichtner, Jason J., William G. Gale, and Jeff Trinca. 2019. *Tax Administration: Compliance, Complexity, and Capacity*. Washington, DC: Bipartisan Policy Center. https://bipartisanpolicy.org/wp-content/uploads/2019/04/Tax-Administration-Compliance-Complexity-Capacity.pdf.
- Fichtner, Jason L., and Jacob M. Feldman. 2015. "The Hidden Cost of Federal Tax Policy." Arlington, VA: George Mason University, Mercatus Center. https://www.mercatus.org/system/files/fichtner_hidden_cost_ch7_web.pdf.
- Fox, Liana. 2018. The Supplemental Poverty Measure: 2017. Report P60-265. Washington, DC: US Census Bureau. https://www.census.gov/library/publications/2018/demo/p60-265.html.
- Goldin, Jacob. 2018. "Tax Benefit Complexity and Take-Up: Lessons from the Earned Income Tax Credit." Olin Working Paper 514. Stanford, CA: Stanford Law School. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3101160.
- Goodman-Bacon, Andrew, and Leslie McGranahan. 2008. "How Do EITC Recipients Spend Their Refunds?" *Economic Perspectives* 32 (2): 17–32.
- Halpern-Meekin, Sarah, Kathryn Edin, Laura Tach, and Jennifer Sykes. 2015. It's Not Like I'm Poor: How Working Families Make Ends Meet in a Post-Welfare World. Oakland: University of California Press.
- Holt, Steve. 2008. Periodic Payment of the Earned Income Tax Credit. Washington, DC: Brookings Institution. https://www.brookings.edu/research/periodic-payment-of-the-earned-income-tax-credit/.
- Holt, Steve. 2009. "Beyond Lump Sum: Periodic Payment of the Earned Income Tax Credit." Community Investments 21 (1): 26–40.
- Holt, Steve. 2015. Periodic Payment of the Earned Income Tax Credit Revisited. Washington, DC: Brookings Institution. https://www.brookings.edu/wp-content/uploads/2016/07/HoltPeriodicPaymentEITC121515.pdf.
- Holtzblatt, Janet, and Janet McCubbin. 2003. "Complicated Lives: Tax Administrative Issues Affecting Low-Income Filers." Washington, DC: US Department of the Treasury.
- Holzer, Harry J. 2015. "Should the Earned Income Tax Credit Rise for Childless Adults?" Bonn, Germany: IZA World of Labor. https://wol.iza.org/uploads/articles/184/pdfs/should-earned-income-tax-credit-rise-for-childless-adults.pdf.
- Horowitz, John B. 2002. "Income Mobility and the Earned Income Tax Credit." Economic Inquiry 40 (3): 334-47.
- Hotz, V. Joseph, and John Karl Scholz. 2006. "Examining the Effect of the Earned Income Tax Credit on the Labor Market Participation of Families on Welfare." Working paper 11968. Cambridge, MA: National Bureau of Economic Research.
- Hoynes, Hilary, Diane W. Schanzenbach, and Douglas Almond. 2016. "Long-Run Impacts of Childhood Access to the Safety Net." American Economic Review 106 (4): 903–34. https://www.aeaweb.org/articles?id=10.1257/aer.20130375.
- Hoynes, Hilary W., and Jesse Rothstein. 2019. "Universal Basic Income in the US and Advanced Countries." Working paper 25538. Cambridge, MA: National Bureau of Economic Research.
- IRS (Internal Revenue Service). 2014. Compliance Estimates for the Earned Income Tax Credit Claimed on 2006-2008 Returns. Publication 5162 (8-2014). Washington, DC: Internal Revenue Service. https://www.irs.gov/pub/irssoi/EITCComplianceStudyTY2006-2008.pdf.
- IRS (Internal Revenue Service). 2017. Do I Qualify for the Earned Income Tax Credit? FS 2017-02. Washington, DC: Internal Revenue Service. https://www.irs.gov/newsroom/do-i-qualify-for-the-earned-income-tax-credit
- Kearney, Melissa S., and Lesley J. Turner. 2013. "Giving Secondary Earners a Tax Break: A Proposal to Help Low- and Middle-Income Families." Hamilton Project discussion paper 2013-07. Washington, DC: Brookings Institution. http://www.hamiltonproject.org/assets/legacy/files/downloads_and_links/THP_Kearney_DiscPaper_Final.pdf.

Kleven, Henrik. 2018. "Taxation and Labor Force Participation: The EITC Reconsidered." Presentation given at University of California, Berkeley Public Finance Seminar, Berkeley, CA, November 5. https://eml.berkeley.edu//~saez/course131/KlevenEITCSlides.pdf.

Kuka, Elira. 2014. "EITC and the Self-employed: Real or Reporting Effects?" Public Finance Review 42 (6): 691–719.

- Lundberg, Jacob, and John Norell. 2018. "Taxes, Benefits and Labour Force Participation: A Survey of the Quasiexperimental Literature." Ratio Working Paper 313. Stockholm, Sweden: Ratio Institute. http://ratio.se/app/uploads/2018/10/jl_jn_taxes_benefits_and_labour_force_participation_313.pdf.
- Maag, Elaine. 2012. "State Tax Systems Can Be Important Parts of Safety Net." Tax Notes May 21: 1073.
- Maag, Elaine. 2015. "Earned Income Tax Credit in the United States." *Journal of Social Security Law* 22 (1): 20–30. https://www.taxpolicycenter.org/publications/earned-income-tax-credit-united-states.
- Maag, Elaine, and Gregory Acs. 2015. "The Financial Consequences of Marriage for Cohabitating Couples with Children." Washington, DC: Urban-Brookings Tax Policy Center. https://www.urban.org/research/publication/financialconsequences-marriage-cohabiting-couples-children.
- Maag, Elaine, Donald Marron, and Erin Huffer. 2019. Expanding the Earned Income Tax Credit: The Economic Security Project's Cost-of-Living Refund. Washington, DC: Urban-Brookings Tax Policy Center.
- Maag, Elaine, H. Elizabeth Peters, Anthony Hannagan, Cary Lou, and Julie Siwicki. 2017. Income Volatility: New Research Results with Implications for Income Tax Filing and Liabilities. Washington, DC: Urban-Brookings Tax Policy Center. https://www.taxpolicycenter.org/publications/income-volatility-new-research-results-implications-income-tax-filing-andliabilities.
- Maag, Elaine, Stephen Roll, Jane Oliphant. 2016. "Delaying Tax Refunds for Earned Income Tax Credit and Additional Child Tax Credit Claimants." Washington, DC: Tax Policy Center. https://www.taxpolicycenter.org/publications/delaying-taxrefunds-earned-income-tax-credit-and-additional-child-tax-credit-claimants.
- Maag, Elaine, C. Eugene Steuerle, Ritadhi Chakravarti, and Caleb Quakenbush. 2012. "How Marginal Tax Rates Effect Families at Various Income Levels." National Tax Journal 65 (4): 759–82. https://www.urban.org/sites/default/files/alfresco/publication-pdfs/412722-How-Marginal-Tax-Rates-Affect-Families-at-Various-Levels-of-Poverty.PDF.
- Maag, Elaine, Kevin Werner, and Laura Wheaton. 2019. "Expanding the EITC for Workers without Resident Children." Washington, DC: Urban Institute. https://www.urban.org/research/publication/expanding-eitc-workers-without-residentchildren.
- Maxfield, Michelle. 2015. "The Effects of the Earned Income Tax Credit on Child Achievement and Long-Term Educational Attainment." Greenville, SC: Institute for Child Success.
- McCubbin, Janet. 2009. "Insight on the Issues: The Earned Income Tax Credit and Older Workers." Washington, DC: AARP Public Policy Institute. https://assets.aarp.org/rgcenter/econ/i20_eitc.pdf.
- McLanahan, Sara. 2004. "Diverging Destinies: How Children Are Faring under the Second Demographic Transition." Demography 41 (4): 607–27.
- Mendenhall, Ruby, Kathryn Edin, Susan Crowley, Jennifer Sykes, Laura Tach, Katrin Kriz, and Jeffrey R. Kling. 2012. "The Role of the Earned Income Tax Credit in the Budgets of Low-Income Households." Social Service Review 86 (3): 367– 400. https://www.jstor.org/stable/10.1086/667972.
- Mendenhall, Ruby, Renee Lemons, Flavia Andrade, Andrew Greenlee, Karen Kramer, Loren Henderson, Lizanne DeStefano, Christopher Larrison, Ilana Redstone Akresh, and Kevin Franklin. 2015. *Chicago Earned Income Tax Credit Periodic Payment Pilot Final Evaluation*. University of Illinois, Urbana-Champaign.
- Meyer, Bruce D., and Dan T. Rosenbaum. 2001. "Welfare, the Earned Income Tax Credit, and the Labor Supply of Single Mothers." Quarterly Journal of Economics 116 (3): 1063–1114. https://www.ssc.wisc.edu/~scholz/Teaching_742/Meyer_Rosenbaum.pdf.

- Mikelson, Kelly S., and Robert I. Lerman. 2004. "Relationship Between the EITC and Food Stamp Program Participation Among Households with Children." Washington, DC: Urban Institute. https://www.urban.org/sites/default/files/publication/58031/411033-Relationship-between-the-EITC-and-Food-Stamp-Program-Participation-Among-Households-with-Children.PDF
- Miller, Cythia, Lawrence F. Katz, Gilda Azurdia, Adam Isen, Caroline Schultz, and Kali Aloisi. 2018. Boosting the Earned Income Tax Credit for Singles. New York, NY: MDRC. https://www.mdrc.org/publication/boosting-earned-income-taxcredit-singles.
- Mills, Gregory, Tracy Vericker, Heather Koball, Kye Lippold, Laura Wheaton, and Sam Elkin. 2014. Understanding the Rates, Causes, and Costs of Churning in the Supplemental Nutrition Assistance Program (SNAP) Final Report. Washington, DC: US Department of Agriculture, Food and Nutrition Service, Office of Policy Support. https://www.urban.org/sites/default/files/publication/33566/413257-Understanding-the-Rates-Causes-and-Costs-of-Churning-in-the-Supplemental-Nutrition-Assistance-Program-SNAP-.PDF.
- Moffitt, Robert, and Anuradha Rangarajan. 1991. "The Work Incentives of AFDC Tax Rates: Reconciling Different Estimates." Journal of Human Resources 26 (1): 165–79.
- Nichols, Austin, Elaine Sorensen, and Kye Lippold. 2012. The New York Noncustodial Parent EITC: Its Impact on Child Support Payments and Employment. Washington, DC: Urban Institute.
- National Taxpayer Advocate. 2004. 2004 Annual Report to Congress. Washington, DC: Internal Revenue Service. https://www.irs.gov/advocate/national-taxpayer-advocates-2004-annual-report-to-congress.
- Office of Management and Budget. 2019. "A Budget for a Better America: Promises Kept. Taxpayers First. Analytical Perspectives Fiscal Year 2020." Washington, DC: US Government Publishing Office. https://www.whitehouse.gov/wpcontent/uploads/2019/03/spec-fy2020.pdf.
- Pergamit, Mike, Elaine Maag, Devlin Hanson, Caroline Ratcliffe, Sara Edelstein, and Sarah Minton. 2014. *Pilot Project to Assess Validation of EITC Eligibility with State Data*. Washington, DC: Urban Institute. https://www.urban.org/research/publication/pilot-project-assess-validation-eitc-eligibility-state-data.
- Pew Charitable Trusts. 2015. "Americans' Financial Security." Washington, DC: Pew Charitable Trusts. https://www.pewtrusts.org/-/media/assets/2015/02/fsm-poll-results-issue-brief_artfinal_v3.pdf.
- Romich, Jennifer L., and Thomas Weisner. 2000. "How Households View and Use the EITC: Advance Payment versus Lump Sum Delivery." *National Tax Journal* 53 (4 part 2): 1245–65.
- Rothstein, Jesse. 2010. "Is the EITC as Good as an NIT? Conditional Cash Transfers and Tax Incidence." American Economic Journal: Economic Policy 2 (1): 177–208. https://www.aeaweb.org/articles?id=10.1257/pol.2.1.177.
- Saez, Emmanuel. 2010. "Do Taxpayers Bunch at Kink Points?" American Economic Journal: Economic Policy 2 (August): 180–212.
- Sahm, Claudia R., Matthew D. Shapiro, and Joel Slemrod. 2012. "Check in the Mail or More in the Paycheck: Does the Effectiveness of Fiscal Stimulus Depend on How It Is Delivered?" *American Economic Journal: Economic Policy* 4 (3): 216–50.
- Theodos, Brett, Rachel Brash, Jessica F. Compton, Nancy Pindus, and C. Eugene Steuerle. 2010. "Who Needs Credit at Tax Time and Why? A Look at Refund Anticipation Loans and Refund Anticipation Checks." Washington, DC: Urban Institute. https://www.urban.org/research/publication/who-needs-credit-tax-time-and-why-look-refund-anticipationloans-and-refund-anticipation-checks.
- US Department of Health and Human Services. n.d. A *Profile of Older Americans: 2016*. Washington, DC: US Department of Health and Human Services. https://www.giaging.org/documents/A_Profile_of_Older_Americans_2016.pdf.
- US Department of the Treasury. 2010. General Explanations of the Administration's Fiscal Year 2010 Revenue Proposals. Washington, DC: US Department of the Treasury. https://www.treasury.gov/resource-center/taxpolicy/Documents/General-Explanations-FY2010.pdf.

- US Department of the Treasury. 2013. "Fiscal Year 2013 Agency Financial Report." Washington, DC: US Department of the Treasury. https://www.treasury.gov/about/budget-performance/annual-performance-plan/Documents/2013%20Department%20of%20the%20Treasury%20AFR%20Report%20v2.pdf.
- US GAO (US Government Accountability Office). 2007. "Advance Earned Income Tax Credit: Low Use and Small Dollars Paid Impede IRS's Efforts to Reduce High Noncompliance." Washington, DC: US GAO.
- Vallas, Rebecca, Melissa Boteach, and Rachel West. 2014. "Harnessing the EITC and Other Tax Credits to Promote Financial Stability and Economic Mobility." Washington, DC: Center for American Progress.

ABOUT THE AUTHORS

Elaine Maag is a principal research associate in the Urban-Brookings Tax Policy Center at the Urban Institute, where she studies income support programs for low-income families and children. Before joining Urban, Maag worked at the Internal Revenue Service and Government Accountability Office as a Presidential Management Fellow. She has advised congressional staff on the taxation of families with children, higher education incentives in the tax code, and work incentives in the tax code. Maag codirected the creation of the Net Income Change Calculator, a tool that allows users to understand the trade-offs between tax and transfer benefits, and changes in earnings or marital status. She is a member of the National Poverty Research Center – US Collaborative of Poverty Centers network of researchers. Maag holds an MS in public policy analysis from the University of Rochester.

Donald Marron is an Institute fellow and director of economic policy initiatives at the Urban Institute. He conducts research on tax policy and federal budgeting and identifies opportunities for Urban to develop policy-relevant research on economic and financial issues. From 2010 to 2013, he led the Urban-Brookings Tax Policy Center. Before joining Urban, Marron served in senior government positions, including as a member of the President's Council of Economic Advisers and acting director of the Congressional Budget Office. He has also taught at the Georgetown Public Policy Institute and the University of Chicago Graduate School of Business, consulted on major antitrust cases, and been chief financial officer of a health care software start-up. Marron currently serves on the boards of FairVote and the Concord Coalition, advises Fair Observer and YieldStreet, and is a senior research fellow at the Climate Leadership Council. He studied mathematics at Harvard College and received his PhD in economics from the Massachusetts Institute of Technology.

Erin Huffer is a research assistant in the Urban-Brookings Tax Policy Center, where she contributes to the State and Local Finance Initiative. Huffer graduated with honors from Dartmouth College and holds a BA in economics.



The Tax Policy Center is a joint venture of the Urban Institute and Brookings Institution.



BROOKINGS

For more information, visit taxpolicycenter.org or email info@taxpolicycenter.org