The Earned Income Tax Credit: Program Outcomes, Payment Timing, and Next Steps for Research

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Overview

Introduction

The Earned Income Tax Credit (EITC) provides substantial support for working families with low and moderate incomes, including those who may participate in traditional safety net programs, such as TANF. Based on incomes in 2019, the Tax Policy Center estimates that more than 27 million households qualified for almost $67 billion in reduced taxes and payments. The Center on Budget and Policy Priorities estimates that annually, the EITC lifts 5 to 6 million people out of poverty and reduces the depth of poverty for many more. The structure and timing of EITC payments is an important feature of the credit, and they potentially mediate its benefits and effects for recipients. In particular, the annual, lump-sum nature of the credit payment creates potential challenges for recipients and has been the subject of attention from researchers and policymakers.

This brief reviews the design of the EITC and summarizes evidence on the relationship between the EITC and work, wages, poverty, financial stability, and other nonfinancial benefits for credit recipients. The authors conclude that research shows the EITC provides substantial support for working families with low and moderate incomes.

This brief also considers how the EITC's effects may be sensitive to how the credit is paid. Several EITC proposals reflect a view that paying the credit periodically may be appropriate, and recent evidence from a small number of experiments also suggests that recipients of periodic payments found them useful. The brief concludes by identifying promising directions for future research.

Research Questions

1. What are the financial and nonfinancial effects of the EITC on recipient outcomes, and how do those effects relate to the EITC's design and payment structure?
2. What are the potential implications of changing how the EITC is paid for its administration and its recipients?
3. What are the research gaps in these areas and options for future research and evaluation to address these gaps?

Purpose

This brief reviews the design and administration of the EITC and summarizes the literature on the EITC's effects on work, wages, poverty, financial stability, and other nonfinancial benefits, giving special attention to the way program outcomes might depend on or relate to payment timing. The authors discuss how changing the EITC's payment structures may affect recipients and how the Internal Revenue Service (IRS) carries out the EITC to highlight important considerations and possible trade-offs. The brief identifies areas where additional research is needed to better understand these relationships and trade-offs related to payment timing.

Key Findings and Highlights

- The EITC provides substantial benefits that extend to many people who are both working and participating in traditional safety net programs, such as TANF. This includes both near-term benefits, such as encouraging people to work and reducing poverty, and longer-term benefits related to improvements in health and educational attainment for children who live in households that receive the EITC.
- The form and timing of EITC payments creates potential challenges for recipients. If people prefer to use the EITC mainly to purchase large items or as a form of forced savings, a lump-sum payment may be the most appropriate delivery mechanism. However, to the extent that people prefer to use their EITC to pay down debt or meet basic needs, a more regular payment might be appropriate. Limited studies of refund use show that people do both.
- Changes to the timing of EITC payments might have implications for carrying out the credit in general and create particular challenges in the transition from a lump sum to periodic payment. The government's administrative costs of periodic payment are likely to be somewhat higher than for lump-sum payments.
- Some impacts of the credit on outcomes such as work and earnings, poverty, financial stability, and some nonfinancial outcomes might be sensitive to the payment timing. Early findings from a few small-scale demonstration projects that tried to test a different form of credit payment suggest that recipients of periodic payments found them useful.

Methods

This brief reviews the literature on several aspects of the EITC's design and credit administration, such as payment timing, size of payments, and credit participation. The brief also summarizes evidence on the relationship between the EITC and work, wages, poverty, financial stability, and other nonfinancial benefits for credit recipients. In summarizing the empirical literature, the brief focuses on journal articles and articles from think tank websites that were published in the past 5 years. The evidence cited includes a small number of demonstration projects, quasi-experimental research, and econometric analyses.

The brief then discusses how the EITC's effects may be sensitive to how the credit is paid, drawing on a range of published and unpublished literature and reports, including proposals for changing how the EITC is paid and evidence from a small number of recent experiments. The brief analyzes these sources in combination with the literature on the relationship between the EITC and recipients' financial and nonfinancial outcomes to discuss considerations in changing the EITC's payment structure and possible trade-offs.

Recommendations

Several promising paths exist for further research:

- Additional research on how the EITC and other income support programs interact for both family well-being and work incentives would inform policymakers and program administrators on how families with low incomes tend to think about potential trade-offs.
- Additional research on the opportunities and challenges created by interactions between the EITC and other safety net programs related to program administration and participation would also be valuable for understanding why some people are less likely to claim and receive the EITC than

others. Researchers could study whether there are opportunities to encourage and increase participation in the EITC through administering traditional transfer programs.

- Research to better understand how the timing of EITC payments affects program impacts is of particular interest and importance. Currently, early findings from a few small-scale demonstration projects that tried to understand how periodic payments might alter the EITC's benefits suggest that recipients of periodic payments found them useful.
- Additional research could more precisely and rigorously analyze what groups of people are most likely to benefit from the proposed alternative payment options and how they do so. Randomized controlled trials would be most useful for testing the effects on credit recipients' financial and nonfinancial outcomes.
- Research to study more closely how the EITC's size affects how people perceive and respond to the credit could build on prior work to better understand the benefits and drawbacks of monthly and quarterly payments. Analysts could also combine work on taxes and more traditional spending programs to understand how important an annual payment is in achieving longer-term goals and better understand whether some share of the EITC should continue to be paid as a lump-sum benefit, even if periodic payments are introduced.

Citation

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Glossary

Earned Income Tax Credit (EITC): The EITC is a refundable tax credit that workers with low to moderate incomes and qualifying children may be eligible to claim when they file their tax returns.

Introduction

The earned income tax credit (EITC) is a refundable tax credit that provides substantial support for working families with low and moderate incomes. Based on incomes in 2019, the Tax Policy Center estimates that over 27 million households qualified for almost $67 billion in reduced taxes and payments. Over 97 percent of all benefits from the credit go to families with children. Benefits are highly concentrated among those with income in the bottom 40 percent of the income distribution.[1] The vast majority of benefits were delivered as tax refunds in 2020 after 2019 taxes were filed.[2]

This brief explores the design of the EITC and its benefits. We summarize evidence on the relationship between the EITC and work, wages, poverty, financial stability and other non-financial benefits, areas of interest among policy makers designing policies for families with low-incomes and practitioners serving these same families.

This brief considers how the EITC's effects may be sensitive to how the credit is paid. A handful of federal policymakers have proposed increasing the credit and, at the same time, altering how it is paid. These changes could provide more support to very low-income families and change how recipients respond to the benefit. We review proposals for changing how the credit is paid, drawing on evidence that includes a small number of recent experiments that show how changes to credit administration can affect recipients. We discuss what these potential changes may mean both in terms of how individuals may respond to the credit and how the credit would be carried out.

Key findings reviewed in this brief include:

- The EITC supports low-income working families.
    - Annually, the EITC lifts 5 to 6 million people out of poverty and reduces the depth of poverty for many more.
    - The credit also encourages people to work, particularly single mothers, further reducing poverty.
    - Longer-term benefits of the credit include improvements to health and educational attainment for children who live in households that receive the EITC.
    - About four-fifths of people eligible for EITC benefits receive them (similar to the Supplemental Nutrition Assistance Program (SNAP), formerly known as the Food Stamp Program, but higher than other transfer programs).
- Proposals to increase the EITC recognize that not all people with low and moderate incomes can benefit from the credit.
    - By design, the credit goes mostly to workers with low and moderate incomes and children at home. Workers without children at home, sometimes called "childless" for tax purposes, can receive a small credit over a relatively small income range.
- Administering the EITC through the tax code lowers administrative costs but makes it less responsive to changing living situations and monthly incomes.

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[1] Tax Policy Center, Table T20-0090 "Earned Income Tax Credit; Baseline; Current Law; Distribution of Federal Tax Change by Expanded Cash Income Percentile, 2019." *https://www.taxpolicycenter.org/model-estimates/2019-child-and-work-credit-proposals/t20-0090-earned-income-tax-credit-baseline*

[2] In a typical year, the deadline for filing federal tax returns is April 15. In 2020, the date was extended to July 15 because of the coronavirus pandemic. Most returns claiming an EITC are filed early in the filing season.

    - The EITC has relatively low administrative costs for the government and application for benefits is generally easier than for traditional support programs such as SNAP.
    - EITC benefits are based on a tax unit, which is defined based on legal relationships among household members, and support tests that are applied once to establish eligibility and benefits for the entire year. Traditional transfer programs such as SNAP and Temporary Assistance for Needy Families (TANF) can include other household members (for example, a couple that lives together but is not married) and benefits or eligibility can change throughout the year.
- Tax credits are delivered annually.
    - People claim the credit annually on tax returns as part of the regular tax-filing process, with eligibility calculated in the filing process. In contrast, traditional transfer programs calculate eligibility based on a family's monthly income and needs.
    - The annual nature of the credit, paid in one lump sum, can help people save larger amounts of money or make larger purchases, but increases income volatility and may lead workers to take on costly debt.

In this brief, we consider how changing the payment frequency may affect recipients and how the Internal Revenue Service (IRS) carries out the EITC. For example, a more frequent payment may help people meet ongoing needs such as rent, utilities, and childcare—similar to traditional transfer programs. Increasing payment frequency would likely increase administrative burden both for the IRS—to deliver multiple payments and verify eligibility—and for individuals who would likely need to claim benefits differently. Depending on the payment frequency adopted and reporting requirements, individuals might be more aware of how changes in earnings relate to changes in the EITC.

Description of the EITC

The EITC supplements wages of workers with low and moderate incomes. Only families with at least one worker can qualify for the credit. Workers receive a credit equal to a percentage of their earnings up to a maximum amount. Both the credit rate and the maximum credit vary by how many children are in the family,[3] with larger credits available to families with more children. After the credit reaches its maximum, it remains flat until earnings reach the phase-out point. Thereafter, the credit declines with each additional dollar of income until no credit is available (figure 1).

The EITC is a refundable credit, meaning that if a family qualifies for a credit greater than the federal income tax they owe, then they receive the difference as a tax refund. This feature of the credit is important for families with low incomes who may not earn enough to owe income taxes. In 2020, a single parent can earn up to $18,650 before owing federal income taxes.

Nearly all (about 96 percent) of the credit's benefits accrue to workers with low and moderate incomes and children at home.[4] Two features of the EITC cause this: a much higher maximum benefit and larger eligible income range for workers with children at home than for childless workers. The EITC goes to relatively few

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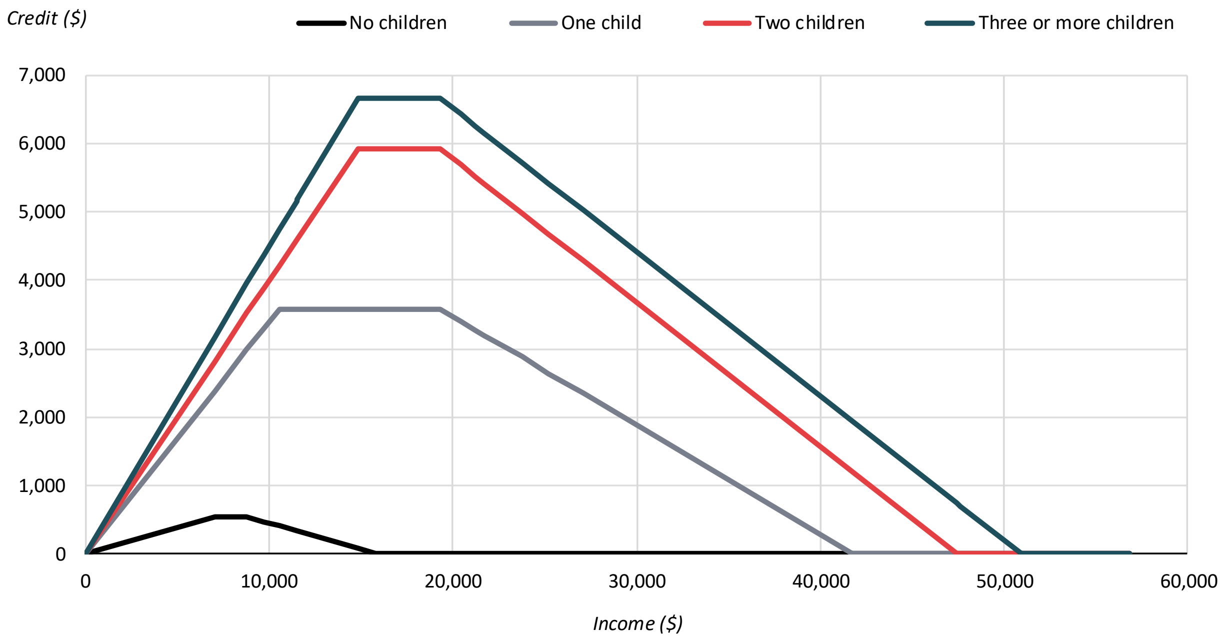
[3] For readability, we use the term "family" rather than tax unit. Tax units form the basis for calculating taxes. They are based on legal relationships, residency, and support. They are typically headed by a single adult or a married couple. Common examples of cases where a family might be composed of more than one tax unit include multigenerational households and cohabiting couples. Typically, a child can be claimed by only one tax unit, even though people in multiple tax units might support the child (Maag, Peters, and Edelstein 2016).

[4] Tax Policy Center, Table T20-0090 "Earned Income Tax Credit; Baseline: Current Law; Distribution of Federal Tax Change by Expanded Cash Income Percentile, 2019." *https://www.taxpolicycenter.org/model-estimates/2019-child-and-work-credit-proposals/t20-0090-earned-income-tax-credit-baseline*

older adults (ages 65 and older). Not only are older adults less likely to work and have children at home, but benefits for childless people are only available to taxpayers at least age 25 and under age 65. There are no age limits for workers with children at home.

FIGURE 1. EARNED INCOME TAX CREDIT BENEFITS DEPEND ON FAMILY SIZE AND INCOME

Earned Income Tax Credit, 2020

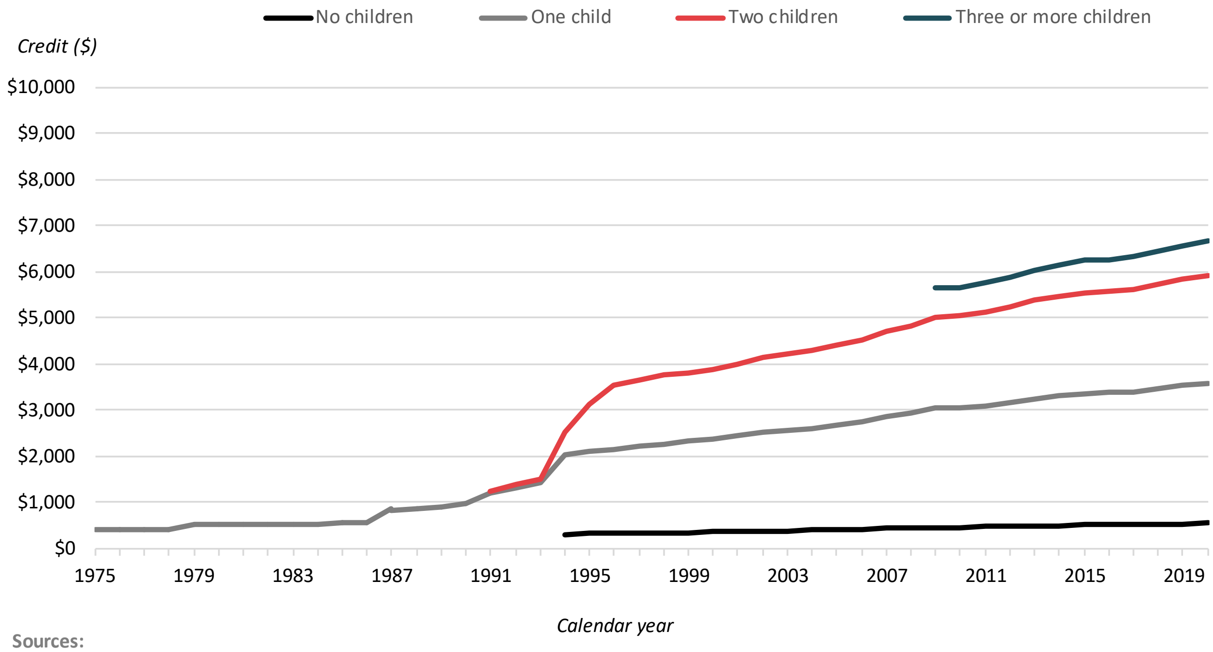


Source:
Tax Policy Center.
Note:
Assumes all income comes from earnings. The credit for married couples begins to phase out at income $5,890 higher than shown on chart.

The EITC's structure has been consistent since its inception, but the credit amount has increased many times throughout its history. The first credit payments were made in 1975. Families with children could receive a credit worth 10 percent of earnings of up to $4,000 for a maximum credit worth up to $400 a year. Families stopped receiving the credit once their income reached $8,000. The maximum credit increased to $500 in 1979, to $550 in 1985, and to $851 in 1987 – at which point the credit was indexed for inflation. The largest expansions happened in 1990 and 1993 (effective in 1991 and 1994). During this time, families with at least two children became eligible for a higher credit, the maximum credit was increased by over $1,000 and the credit for workers without children was implemented (figure 2) (Urban Institute 2015). As part of the Tax Cuts and Jobs Act of 2017, the measure of inflation used for indexation was changed from the Consumer Price Index-Urban consumers (CPI-U) to the chained CPI-U (C-CPI-U), a measure that is designed to be a closer approximation to a cost-of-living index and tends to grow slightly slower.

FIGURE 2. MAXIMUM EARNED INCOME TAX CREDIT, BY NUMBER OF CHILDREN

1975–2020



Sources:
1975-2003: Joint Committee on Taxation; Ways and Means Committee, 2004 Green Book. 2004-2009: Internal Revenue Service, Form 1040 Instructions. 2010-2013: Internal Revenue Service, Revenue Procedures from various years. 2014: Internal Revenue Service, Revenue Procedure 2013-35 downloaded January 23, 2014 from irs.gov/pub/irs-drop/rp-13-35.pdf. 2015: Internal Revenue Service, Revenue Procedure 2014-61 downloaded November 11, 2014 from irs.gov/pub/irs-drop/rp-14-61.pdf.2016: Internal Revenue Service, Revenue Procedure 2015-53 downloaded January 5, 2016 from irs.gov/pub/irs-drop/rp-15-53.pdf. 2017: Internal Revenue Service, Revenue Procedure 2016-55 downloaded February 8, 2017 from irs.gov/pub/irs-drop/rp-16-55.pdf. 2018: Internal Revenue Service, Revenue Procedure 2018-18 downloaded July 24, 2018 from irs.gov/irb/2018-10_IRB#RP-2018-18. 2019: Internal Revenue Service, Revenue Procedure 2018-57 downloaded August 5, 2019 from irs.gov/pub/irs-drop/rp-18-57.pdf 2020: Internal Revenue Service, Revenue Procedure 2019-44 downloaded November 20, 2019 from irs.gov/pub/irs-drop/rp-19-44.pdf compiled in Tax Policy Center, 2019, "Earned Income Tax Credit Parameters, 1975–2020." taxpolicycenter.org/statistics/eitc-parameters
Note: Prior to 1991, all families with children were eligible for the same maximum credit; prior to 2008, families with three or more children were eligible for the same maximum credit as families with two children.

Little research exists on the overlap of people receiving the EITC and other traditional transfer programs. A somewhat unique feature of the EITC is that you must work for pay to benefit. People who are working and receiving other benefits are likely to receive the EITC if they have children. Research focusing on the 24 million households with children with income less than 200 percent of the poverty level found that the most common combination of benefits was SNAP, the child tax credit, the EITC, and Medicaid, true for about 3 million households (Chien and Macartney 2019). The same study found that about 0.3 million people received those programs plus TANF. A separate analysis of SNAP and EITC recipients in Florida showed that about half of people who receive SNAP also receive the EITC and about half of EITC recipients receive SNAP. SNAP families that do not tend to receive the EITC are those with no earnings or those with people over age 65. In contrast, EITC recipients who do not also receive SNAP tend to have earnings too high to qualify for SNAP (Maag et. al 2015).

States can also have their own EITCs, which build on the federal EITC. Twenty-nine states and the District of Columbia have implemented an EITC, generally calculated as a percentage of the federal credit.[5]

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[5] Washington state also has an EITC but it has not yet been implemented. http://www.taxcreditsforworkersandfamilies.org/state-tax-credits/

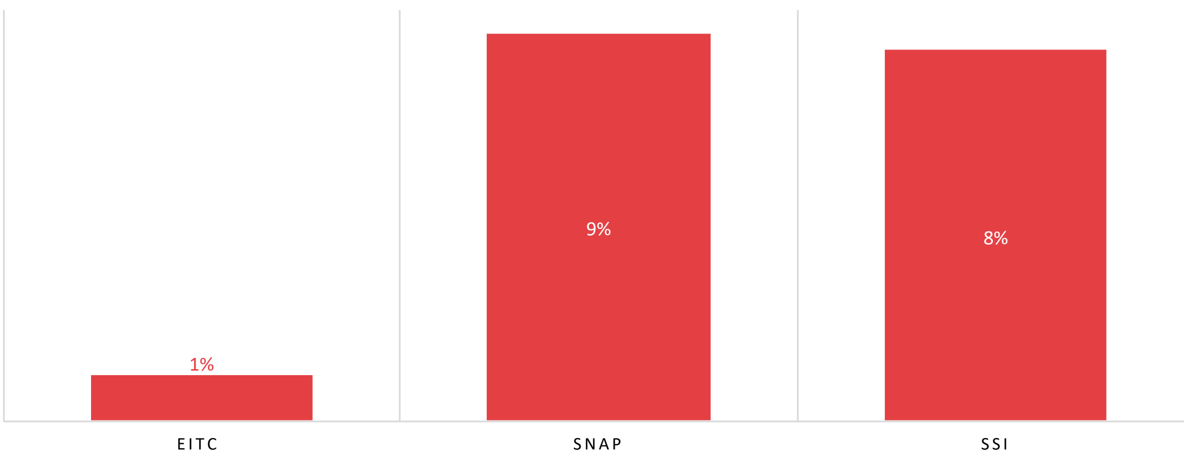
For states that set their EITC as a percentage of the federal credit, a change in the value of the federal credit will also lead to a change in the value of the state credit. In some cases, state rules diverge from those of the federal EITC. For example, in California, families with children under 6 are eligible for a larger credit than families with older children; Maine calculates its state credit as a higher percentage of the federal credit for workers without children at home than for workers with children at home.

Benefit Administration

The EITC is carried out as part of the tax code. Families claim the credit by providing the appropriate information on their federal income tax return. **Because claiming the EITC is part of the annual tax-filing process and relies on self-reported information, the government's associated administrative costs are low.** As a percent of total benefits paid out, the IRS estimates the cost of program administration to be about 1 percent (Taxpayer Advocate Service Special Report to Congress 2019). Comparable administrative fees for SNAP and Supplemental Security Income (SSI) are 9 percent and 10 percent, respectively (figure 3).

FIGURE 3. EITC HAS LOW OVERHEAD COSTS COMPARED TO OTHER MEANS-TESTED PROGRAMS

EITC Overhead Costs Compared to Other Means-Tested Programs



Sources:
EITC (data for FY2018): Payment Accuracy.gov, https://paymentaccuracy.gov/ (last visited June 24, 2020); IRS SOI Table 2.5: Returns with Earned Income Credit; Cost of administering EITC program ratio to claims paid: House Committee on Ways and Means, Subcommittee on Oversight, Hearing on Improper Payments in the Administration of Refundable Credits, May 25, 2011.
SNAP (data from FY2019): Payment Accuracy.gov, https://paymentaccuracy.gov/ (last visited June 24, 2020); USDA Supplemental Nutrition Assistance Program Participation and Costs (March, 2020).
SSI (data for FY2019): Payment Accuracy.gov, https://paymentaccuracy.gov/ (last visited June 24, 2020); Social Security Administration 2019 Annual Report of the Supplemental Security Income Program Table IV.EI - Selected SSI Costs, Social Security Administration 2019 Annual Report of the Supplemental Security Income Program Table IV.C2 - SSI Federal Payments in Current Dollars

Claiming the credit is convenient for families who would otherwise need to file a tax return (for example, to either meet their filing obligation or claim a refund of taxes that had been withheld throughout the year but were not owed), compared with traditional transfer programs. Families fill out a tax return, typically sometime between mid-February and mid-April. No offices must be visited or caseworkers met with before determining eligibility. Typically. employers provide earnings information key to determining benefits, which is reported to both the individual filing taxes and the Social Security Administration (which then shares it with the IRS). Self-employed workers must compute their own earnings independently. If a family moves throughout the year, they do not need to reapply for benefits with the agency in a new state.

Though not required, many families with low incomes likely eligible for benefits from the EITC use paid tax preparation services, which can reduce how much of their tax refunds they get to keep, essentially shifting administrative costs onto the people claiming the credit (Government Accountability Office 2019). Although free preparation services are available to families with low incomes through Volunteer Income Tax Assistance clinics, a very small portion of families with low incomes use them (table 1). Most families use paid tax preparers, which may ultimately benefit EITC recipients. An earlier study showed that people with low incomes who know about the EITC are more likely to receive it if they use a paid preparer than if they file their return themselves (Maag 2005). In some cases, tax preparers can create problems for EITC claimants by erroneously claiming the EITC (something that the taxpayer will be liable for if audited, not the preparer). Unenrolled tax preparers—someone that prepares a return that is not an attorney, CPA, or an enrolled agent licensed by the IRS—have the highest overclaim rate of all paid preparer types. More EITC claimants use this type of paid preparer than other types of paid preparers (IRS 2014).

TABLE 1. TAX PREPARATION METHOD

By adjusted gross income, 2010

AGI (thousands of dollars)	Tax returns (millions)	Tax Preparation Method				
		No identified preparer	Paid Preparer	IRS Prepared	Volunter 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.

Claiming the EITC is often simpler for families than claiming other types of transfer benefits. For example, SNAP applicants typically need to either visit a local SNAP office in-person or submit an online application to a state agency.[6] After submitting the SNAP application, that person must complete an eligibility interview and provide various supporting documents to verify the information provided in their application. A face-to-face eligibility interview is required unless that individual meets the conditions for a waiver.[7] Applicants typically must wait to receive a written notice informing them of whether they are eligible to receive SNAP benefits, a process that can take up to 30 days. If a person moves to a different state, they will need to reapply for benefits. In contrast, eligible families claim their EITC on their tax return during the annual tax filing process.

Defining Eligibility

Most transfer benefits calculate eligibility for benefits based on a group of people sharing resources, which can change throughout the year. The EITC is calculated based on a tax unit that is defined once each

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[6] "SNAP Eligibility," USDA Food and Nutrition Service, updated August 14, 2019, https://www.fns.usda.gov/snap/recipient/eligibility.

[7] Waivers of the face-to-face interview are determined on a case-by-case basis depending on the household's circumstances that include but are not limited to illness, prolonged severe weather, transportation difficulties, or work hours during normal agency office hours.

calendar year. This is a consequence of delivering the EITC through the income tax system, which defines who is eligible for programs based on legal relationships (typically defined on December 31st) and place of residence (defined throughout the year). As a result, distributing benefits through this system can miss changing needs.

A tax unit for claiming the EITC and a family claiming transfer benefits can be the same (for example, a married couple that lives all year with only biological children), but they can also differ. As the American family has changed to include divorced couples and couples who live together without being married (cohabit; Carlson and Meyer 2013)—as well as children who may move regularly between households, including living with relatives other than parents (Vandivere et. al 2012, Kalil and Ryan 2010)—the tax unit has become less reflective of how people live their lives. The point is particularly true for multigenerational families that live together, unmarried and younger mothers, and more economically disadvantaged families (Raley et. al 2019). A child usually is allowed to be claimed in only one tax unit, even if multiple tax units provide support for the child (Maag, Peters, and Edelstein 2017). For example, if a child lives part of the year with one parent and the rest of the year with the other parent, only one parent will receive the EITC.

Credit Participation

Not all people who are eligible for the credit receive it. **The IRS and Census Bureau estimate that almost 80 percent of workers eligible for the EITC claim it.** Because people eligible for higher credits are more likely to claim the credit than those eligible for lower credits, about 85 percent of potential benefits are claimed each year (IRS 2019). IRS researchers have found that EITC non-participants are more likely to be people who are living in rural areas, self-employed, receiving disability income or have children with disabilities, not proficient in English, grandparents raising grandchildren, eligible for the credit for workers without children, or recently changed marital or employment status (IRS 2020).

Some research has investigated factors that might influence claiming among eligible families, as well as interventions that promote participation. The existence of a state EITC may encourage participation in the federal EITC (Neumark and Williams 2016). Mailed notices have some positive short-term effects on EITC take-up, and can be effective in particular among people who have filed a tax return who appear to be eligible for the credit but fail to claim it (Bhargava and Manoli 2015; Manoli and Turner 2014). Other studies have found some positive short-term effects of sending notices to individuals who have not filed a tax return but who may be eligible for the EITC (Guyton et al. 2017). A recent experiment in California, which attempted to inform people of their potential eligibility for the California EITC, demonstrated limited effectiveness of outreach efforts. Though a few more people viewed online resources related to California's EITC, the letters and texts did not result in more people filing a tax return, using a free tax preparation service, or claiming a federal or state EITC (Linos et. al 2020).

Credit Payment

Traditional transfer programs such as SNAP and TANF typically pay benefits monthly. In contrast, **most benefits of the EITC are paid annually, after an income tax return is filed.** The IRS estimates that less than 20 percent of EITC benefits offset income taxes owed and the rest are in excess of income taxes owed (IRS 2018). When a credit offsets taxes owed, it is theoretically possible for a person to receive that credit throughout the year in the form of reduced withholding from each paycheck (individuals can adjust their withholding to pay less in income taxes with each paycheck, essentially receiving the EITC throughout the year). It is not possible to reduce withholding below $0, so any EITC that exceeds income taxes owed must be paid as a one-time payment after taxes are filed. Between 1979 and 2010, some families were eligible to receive a portion of their anticipated EITC in advance of tax filing. Very few families utilized this option for various reasons, such as both employers and employees being unaware of the option and fear of becoming ineligible and having to repay all or a portion of the credit at tax time (GAO 2007; Holt, 2008).

The lump-sum nature of the EITC increases income volatility (defined as an increase or decrease of 25 percent over an average month) for those who receive a credit (Maag, Peters, et al. 2018; USFD 2017), because they can receive a relatively large sum of money when they file taxes. For single parents in the bottom one-fifth of the income distribution who have earnings, the EITC contributes on average more than 16 percent of total annual income. For 10 percent of parents in this income group, the EITC represents at least 25 percent of their annual income.[8] In many cases, it is the largest single payment of income over the course of the year.

In some families, their tax credits (both the EITC and child tax credit) amounted to more than double their average monthly income, according to data analysis from a small sample of individuals with low incomes through the U.S. Financial Diaries project. Among the lowest-income households in the study, tax credits were three times their average monthly income (Siwicki 2015). Although the EITC increases income volatility among recipients, it is typically helpful since it is an increase in income instead of a decrease. When the credit is delivered as an annual lump sum, it may benefit families by resembling a savings program.

How the EITC Affects Work, Wages, Poverty, Financial Stability and Other Non-Financial Benefits

Effects of the EITC have been well studied and include both near-term effects, such as encouraging people to work and reducing poverty, and longer-term effects related to improvements in education and health. Both types of effects are important to understanding the full impact of the EITC.

Work

Most research suggests the EITC encourages people to work, particularly single mothers (summarized in Hoynes 2019). More recent analysis suggests the EITC encourages single women with low incomes to work more months, reducing the frequency with which they enter and exit work (Wilson 2020). The large majority of credit recipients are single parents, representing just over 80 percent of all claimants in 2019.[9]

Married couples, by contrast, have different incentives from the EITC. While the EITC might encourage one person in the couple to work, a second earner can put the couple's joint earnings in the phase-out range of the credit. As a result, secondary earners may work less than they otherwise would since the married couple would receive a smaller credit for each additional dollar of income. Overall, the pull of the EITC into the labor force for single people outweighs the small incentive for some married couples to reduce work (Eissa and Hoynes 2006).

Though most research into the employment effects of the EITC has focused on families with children, some evidence shows that the EITC also increases employment among childless workers, as demonstrated by an expansion to the credit in New York City. Nichols, Sorensen, and Lippold (2012) found that a New York

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[8] Authors' calculations using the Tax Policy Center microsimulation model, version 0319-2.

[9] Tax Policy Center, Table T20-0090 "Earned Income Tax Credit; Baseline; Current Law; Distribution of Federal Tax Change by Expanded Cash Income Percentile, 2019." *https://www.taxpolicycenter.org/model-estimates/2019-child-and-work-credit-proposals/t20-0090-earned-income-tax-credit-baseline*

EITC policy targeted at noncustodial parents who pay child support increased employment among those with relatively small-dollar child support orders (who are likely people with low incomes). A recent EITC demonstration project in New York City, the Paycheck Plus demonstration, found that an expanded credit for childless workers modestly increased employment rates (Miller et al. 2018).

Some analysis suggests that claims of the EITC increasing work are overstated. One recent paper argues that the positive effects of the EITC on work apply only to a particularly large expansion of the credit enacted in 1993, contending that work increases among single women since then have been driven more by reductions in welfare benefits and overall economic conditions (Kleven 2019). That analysis was based on a weekly measure of work, rather than an annual measure of employment and it does not account for business cycle effects. Measuring work on an annual basis and including controls for the unemployment rate suggests that the EITC does, indeed, encourage work (Schanzenbach and Strain 2020). Additional analysis using matched data from the Current Population Survey's Annual Social and Economic Supplement and tax data from the IRS concludes that recent expansions of the EITC increased work and reduced reliance on other transfer programs (Bastian and Jones 2019).

Wages

Both workers and their employers may benefit from the EITC, but workers benefit more. By supplementing workers' wages and encouraging work, the EITC potentially allows some employers to reduce how much they pay employees. The EITC increases how much people benefit from working, which can draw more workers into the labor force. Firms may be able to attract workers even while offering lower wages than they would in the absence of the EITC. If employers are able to reduce wages, they effectively capture some of the benefits of the EITC. Early studies showed that employees received almost three-quarters of every dollar paid out in the EITC (Rothstein 2020). Overall, the limited research on this aspect of the EITC suggests that employees are better off with the credit than without it, and coupled with a strong minimum wage policy, employers have limited opportunity to reduce wages in response to their employees receiving the credit (Rothstein and Zipperer 2020).

Poverty

The EITC reduces poverty through two channels. First, the EITC directly increases incomes for people who receive the credit. The Supplemental Poverty Measure (SPM) is a poverty measure designed to, among other things, account for the effects of tax programs on a person's well-being. Since 2011, the Census Bureau has published the SPM in addition to the official poverty measure, which does not account for the effect of items such as the EITC. In 2018 (the most recent estimates available), the Census Bureau estimates, using the SPM, that the EITC along with the refundable portion of the child tax credit reduced poverty for 8.9 million people (Fox 2019). The Center on Budget and Policy Priorities (CBPP) estimates that the EITC alone lifted 5.6 million people out of poverty, including about 3 million children. Further, CBPP estimates that the EITC reduced poverty for an additional 16.5 million people, including 6.1 million children (Center on Budget and Policy Priorities 2019). These estimates are calculated by estimating the number of people in poverty without including the value of the EITC and then adding in the value of the credit. The difference between the two is the effect of the EITC on poverty. The credit is particularly effective for young parents, who often have lower wages than older parents (Carson 2020).

The second way the EITC reduces poverty is through increasing work, discussed above. Research suggests that when this indirect effect of the EITC is fully accounted for, the total effect of the EITC in reducing poverty is nearly 50 percent larger than the direct effects of the credit alone (Hoynes and Patel 2016).

Financial Stability

The EITC can improve household financial stability. Income tax refunds can provide an important pathway for households with low incomes to save and build assets (Grinstein-Weiss et al., 2015). Studies show that the EITC improves financial stability by increasing the likelihood that single mothers with some college will save, and balances saved are larger now than before the EITC was expanded in the early 1990s. Among less-educated single mothers (those with a high school diploma or less), the EITC expansion was correlated with recipients being less likely to hold unsecured debt such as payday loans, in part because people are working more in response to the EITC (Jones and Michelmore 2018).

EITC receipt at tax time presents an opportunity for low- and moderate-income taxpayers to save money and begin to build wealth (Consumer Financial Protection Bureau 2019). Some demonstration projects have built on that opportunity and encouraged EITC recipients to save a portion of their refunds and matched those savings. Tax filers with low and moderate incomes participating in the $aveNYC program through Volunteer Income Tax Assistance (VITA) sites were encouraged to deposit and maintain a portion of their refund in a savings account for a one-year period to receive a 50 percent match added to their account. Most of these filers (70 percent) kept these refund portions saved for the entire year, with 72 percent continuing to save after the program ended (Tucker, Key, & Grinstein-Weiss, 2014). Those savings can act as a buffer for future hardships. Compared with a group of tax filers not offered the program, savers in the $aveNYC study were less likely to have experienced financial hardship during the one-year period following the intervention (Key, Tucker, Grinstein-Weiss, & Comer, 2015).

The EITC can help stabilize households during a recession. In theory, a person could lose their EITC if they are out of work for an entire year, however it is more likely a person will experience reduced earnings during a recession year, working fewer hours or at reduced wages. In many cases, individuals will receive a larger EITC as they move inward from being outside the income eligibility range or in the phase-out range for the credit as their earnings are reduced. In these cases, the larger EITC can offset some of their wage losses (Maag and Marron 2020). Following the Great Recession, the EITC appeared to be a stabilizer overall (Nichols and Rothstein 2016; Bitler, Hoynes, and Kuka 2017).

Non-Financial Benefits

Beyond the direct financial benefits of the credit, research has also identified how the EITC translates into improved outcomes for individuals and families along numerous dimensions including health and education. In some cases, these benefits last into the future, not only when people receive the credit.

Health benefits of the EITC

Research consistently finds the EITC is associated with improvements in health for children. Employing quasi-experimental designs that look at outcomes prior to and following expansions to the federal EITC and to the New York State and New York City EITCs, analysts have found that the EITC reduces rates of low birthweight in infants, and raises average birthweights (Hoynes, Miller, and Simon 2015; Wicks-Lim and Arno 2017). The same has been found using variation in state-level EITCs comparing states with a state-level EITC to those without a state-level EITC (Wagenaar et al. 2019). Benefits for children in their early years can last into later years, providing a lifetime of benefits (Shonkoff and Phillips 2000). During school-age years, parents who received more generous state EITC benefits report health improvements for their children (Baughman and Duchovny 2016). Even after EITC receipt, children in families who received the EITC report improved health outcomes including lowered body mass index and improved self-reported health as young adults. Likely, these health effects are in part a result of increased health insurance coverage during childhood stemming from either a parent gaining employer provided health insurance from increased work or simply additional resources from the credit that can be used to purchase insurance (Braga, Blavin, and Gangopadhyaya 2020).

For adults, the EITC is associated with general health improvements such as reduced mortality rates and a higher quality of life, based on estimates using variation in state-level EITCs (Muennig et al. 2016). Assessing state and federal EITC expansions, analysts find that mothers who received the EITC report improved mental health, a result the authors attribute to their higher incomes and, among unmarried mothers, increases in employment (Gangopadhyaya, Blavin, Braga, and Gates 2020).

Education benefits

The EITC is linked with higher test scores, higher graduation rates, and increases in college enrollment. Increases to the EITC have been linked with higher test scores among young students and, later in these students' lives, an increased likelihood of graduating from high school and completing at least one year of college (Maxfield 2015). The timing of the EITC helps boost college enrollment. An analysis of tax data showed that high school seniors in families that received the maximum EITC in the spring were more likely to enroll in college the following fall than those who did not receive the maximum EITC (Manoli and Turner 2018).

Rethinking EITC Payment: Proposals to Change How the EITC is Paid and What That Would Mean for Recipients and Credit Administration

The National Academy of Sciences recently convened a panel focusing on child poverty. The panel's report documents that millions of children remain in poverty – even after accounting for safety net programs including the EITC. It documents the many harms throughout children's lifetimes associated with living in poverty during childhood (National Academy of Sciences 2019).

Using the supplemental poverty measure (SPM), analysts find that the EITC coupled with the child tax credit reduces poverty by more than any other government program outside of Social Security (Fox 2019). Policy makers continue to consider whether it could be changed to make it even more effective. One aspect of the EITC that sticks out is the lump sum payment schedule, which is very different from the monthly benefits provided by most safety net programs.

This form and timing of payments creates potential challenges for recipients. A number of policy proposals under consideration would change how the EITC is paid. Below, we briefly discuss these proposals, and review the research on how recipients use the EITC and how the impact of the EITC is related to the timing of payments, including results from some recent experiments with different EITC payment schedules.

Proposals to Change Timing

Several large-scale EITC proposals would change the EITC from an annual payment following eligibility verification to a series of payments throughout the year. These include the Cost-of-Living Refund Act, the LIFT (Livable Incomes for Families Today) the Middle Class Act, and the Working Families Tax Relief Act (Maag and Airi 2020; table 2). Proposals range from allowing recipients to get a small share of the credit prior to filing their income tax returns to providing a substantial monthly advance. All of these proposals reflect a view that paying the credit periodically may be beneficial, particularly if the credit is increased to become an even more important income source.

TABLE 2. ADVANCED PAYMENT OPTIONS

	Advanced payment option
Current law, earned income tax credit	No advanced payment option. Majority of credit delivered as tax refund in the calendar year following the year of eligibility.
Cost-of-Living Refund Act	Option to receive up to $500 of credit before tax filing.
LIFT (Livable Incomes for Families Today) the Middle Class Act	Monthly advanced payment option.
Working Families Tax Relief Act	Option to receive up to $500 of credit before tax filing.

Sources:
Internal Revenue Service, Revenue Procedure 2018-57, downloaded August 5, 2019; H.R. 1431, "The Cost-of-Living Refund Act," 116th Cong. (2019); S. 4, "LIFT (Livable Incomes for Families Today) the Middle Class Act," 116th Cong. (2019); S. 1138, 116th Cong. (2019).

Alternative Payment Demonstrations

Two small-scale experiments have tried to test whether paying the credit differently could increase its effectiveness. The first demonstration, in 2013 and 2014, asked a small group of EITC recipients in Colorado to consider how they might use periodic payments of the credit differently than a lump sum payment. Participants in the exercise noted that if they had access to their credit on a more regular basis, they could use it to pay past-due bills they were juggling and deal with surprise expenses such as a healthcare need or car repair (Holt 2015). In the second demonstration, in tax year 2014, a group of taxpayers in Chicago were given the opportunity to receive half of their expected EITC payment in four quarterly payments. Researchers compared outcomes and experiences of individuals who did and did not participate in the demonstration to gauge some of the effects of periodic payments. They found that 90 percent of those who received quarterly payments wished to continue receiving quarterly payments and these periodic payments had improved their financial stability (Bellisle and Marzahl 2015). We review issues related to timing of the EITC below.

Timing and Use of the Credit

If people prefer to use the EITC mainly to purchase large items or as a form of forced savings, a lump-sum payment may be the most appropriate delivery mechanism. However, to the extent that people prefer to use their EITC to pay down debt or meet basic needs, a more regular payment might be appropriate. Limited studies of refund use show people do both. A small study of 115 EITC recipients asked individuals how they spent their refunds. On average, the families interviewed spent 25 percent of their refunds paying debts or bills, and 11 percent of the refund went to discretionary expenditures— "treats" for the family, which brought the EITC recipients social-psychological rewards. On average, these EITC recipients saved about 17 percent of their refund and the rest was used to try and build assets and pay for education (Sykes et. al 2020). A more frequent payment could help prevent costly debt, but individuals in the study indicated that their refund represented a chance to save, purchase used cars and durable goods such as appliances or furniture, invest in education, and make home improvements. The annual payment was a key part in encouraging savings.

The Refund to Savings initiative was a large-scale randomized experiment intended to better understand the role of various interventions on savings at tax time (Washington University in Saint Louis n.d.). EITC recipients indicated they used the money to catch up on short-term debt, typically related to prior consumption as opposed to secured debt like equity in a house. Almost four-fifths of people used some of their refund for purchasing basic necessities like food and housing, and two-thirds spent some of their refund on other needs such as clothing, shoes, and school supplies. About one-third of recipients reported spending part of their refund on big-ticket items like furniture (Despard et. al 2015). Receiving the credit throughout the year could have helped avoid the debt in the first place, but receiving the payment as a lump sum was critical to those who used it as savings to purchase a larger item.

Paying the credit periodically may leave recipients better or worse off depending on not only how they prefer to use the credit, but whether they are able to realize their preferences. Standard economic theory suggests that periodic payments should leave people at least as well off as an annual payment. This is because people who preferred the lump-sum payment could, at least in theory, imitate that annual payment by saving their periodic payments. In reality, turning an annual payment into a periodic payment is complicated by human nature and how people think about and take actions related to savings and debt (Thaler 1999; Prelec and Loewenstein 1998). If individuals find it difficult to commit to saving or avoiding debt, a lump sum EITC held by the government until released at tax time, and that is truly inaccessible until then, might leave these individuals better off.

Timing and Credit Impacts

Some impacts of the credit, as reviewed above, on outcomes such as work and earnings, poverty, financial stability, and some non-financial outcomes, might also be sensitive in some ways to the timing of payment.

Work and Earnings

For a periodically paid EITC to have the same effect of changing people's behavior as the lump-sum payment, such as taking work or working additional months, the relationship between the credit and working would need to remain at least as clear to workers as under the current system of payments. Evidence on how many people know about the EITC is mixed. Early research suggested that about 58 percent of people with incomes under twice the poverty level knew about the EITC, and knowledge was much higher among white or Black people than among Hispanic people (Maag 2005). More recent analysis has shown that, at least among people who are self-employed, knowledge of the EITC is high enough to affect EITC use (Chetty and Saez 2013; Saez 2010; and Mortenson and Whitten 2019).

How large the EITC is may also affect how much people will notice and react to the payment. If the payment is too small, people may not notice it and will be unlikely to react to it. Some evidence from earlier payment efforts by the federal government suggests that smaller payments may not be as noticeable as larger payments. In 2020, many households received an Economic Impact Payment of $1,200 per adult and $500 per dependent child in response to the COVID-19 pandemic. This was similar to 2008 when households received economic stimulus payments that averaged $950. Analysis of the 2008 payments suggested that a majority of people could identify when the payment came, and even people who could not remember when the payments came remembered receiving it (Broda and Parker 2008). Another government benefit, the Making Work Pay tax credit (about $400 per adult) was provided in 2009 and 2010. This credit went largely unnoticed. It was delivered in relatively small amounts through reduced tax withholding in people's regular paychecks. A poll from the *New York Times* showed only 10 percent of people noticed the credit (Gleckman 2010).

Depending on which advance payment option is adopted, the salience of the payments—or how noticeable they are to recipients—could be reduced substantially. Alternatively, if the credit was sufficiently large and received as a separate check (rather than simply increasing someone's regular paycheck), it could be more salient. If the program was designed so that payments adjusted automatically with changes in earnings, something that has not been proposed to date, the link between earnings and the EITC could be made more apparent to recipients.

Poverty

In the current system of annual payments, people receive the EITC after the year in which they had qualifying income, creating a separation between the identified need and credit receipt. **Periodic payments of the credit could better align payments and needs, and to that extent potentially be more effective at alleviating poverty.** A change to periodic payments would also improve the ability of policymakers and researchers to measure and understand the true effects of the EITC on poverty. Currently, when measuring the credit's effect on poverty, analysts typically include the EITC in the year it was earned, not in the year it was received. As a result, the credit's effect on poverty will be overstated in cases where a person's income increases in the year the credit is received.

Financial Stability

The two recent demonstrations described above in Colorado and Chicago provide direct tests of how recipient financial behaviors and outcomes might differ under periodic payments. A third initiative, the Refund to Savings experiment, tries to encourage EITC recipients to save all or part of their tax refund. Participants in the Colorado demonstration and participants in the Refund to Savings initiative said the most frequent use of their refund was to catch up on bills (Holt 2015). **When given the opportunity to receive part of their EITC on a quarterly basis, people in Chicago missed fewer bills, paid fewer late fees, and decreased borrowing from formal and informal sources, relative to a comparison group that received the EITC as a traditional lump-sum payment** (Bellisle and Marzahl 2015). Almost all people in this demonstration reported wanting to continue periodic payments.

Non-Financial Benefits

Finally, some of the non-financial benefits associated with the EITC may be sensitive to when people receive their benefits. Researchers have found that delivering the EITC when students are making decisions about college may be influencing more people to enroll (Manoli and Turner 2018). In Chicago, recipients received one of their payments in August, which they reported using to help with back-to-school clothing and school fees (Holt 2015). Other research suggests if people have money on hand at the start of school, it could encourage spending on children's school (Manoli and Turner 2018).

Administrative and Transition Issues

Changes to the timing of EITC payments might also have implications both for carrying out the credit in general and create particular challenges in the transition from a lump-sum to periodic payment.

The government's administrative costs of periodic payment are likely to be somewhat higher than for lump-sum payments. As noted above, the additional administrative costs the IRS incurs because of the EITC are currently relatively low in part because the credit is delivered through the existing tax system.

Eligibility determinations are made as part of the tax-filing process, and payments are delivered as part of the tax refund process. A periodic payment that preserves using tax-year income and family status to determine credit eligibility and amounts would require some additional administrative mechanisms to determine and deliver periodic payments to families. Alternatively, a periodic payment that establishes eligibility and benefit amounts in some other way would require another means of making these determinations besides a tax return.

Periodic payment administration may be complicated because it would reduce the tax refund payment eligible families receive at tax time (Barr and Dokko 2006). If too much EITC is delivered in advance, people who had received these payments would likely need to pay them back when they file their annual income tax return. Individuals may reject advance payments to avoid this possibility (Kahneman and Tversky 1979; Jones 2010). One specific lesson from the Advance EITC, noted above, suggests that making periodic payment an available option will succeed only to the extent that the option is effectively communicated to potential recipients (Government Accountability Office 1992). It would be possible to design a periodic payment that allowed only part of the anticipated EITC to be delivered throughout the year, reducing the risk of owing money at tax time and also improving the odds that some lump-sum amount would still be available at tax time.

Transitioning from an annual payment to a periodic payment could create problems for recipients. For example, for recipient families who are used to or count on receiving large refunds, the loss of an anticipated lump-sum payment may create money management challenges. Under such a change, more communication might be required with likely EITC recipients about the change in a timely, clear, and salient manner, or recipients may need assistance with planning or managing the transition. Note that these challenges may be different depending on whether families have received the EITC many times or only once or twice (Dowd 2005).

Conclusions and Directions for Research

The EITC provides substantial benefits, particularly to families with children. The credit is not only an important source of income at tax time, when benefits are received, but also has a host of positive effects across many domains. Annually, the EITC reduces poverty by about 6 million people each year, including about 3 million children. In addition, most of the evidence suggests the EITC encourages many people to start working and to work more months each year, further reducing poverty. Some recent evidence suggests the labor effects might not be as strong as early research suggests. By providing additional income for a household, the EITC improves long-term financial stability and is associated with better children's health, education, and additional schooling.

The benefits of the EITC extend to many people who are both working and participating in traditional safety net programs, such as TANF. In some cases, individuals who work more will continue to receive the EITC even as they lose eligibility for other programs. Additional research on **how the EITC and other income support programs interact for both family well-being and work incentives** would inform policy makers and program administrators. Researchers could examine how very low-income families think about the trade-off of working more and receiving higher wages and a higher EITC, but losing SNAP, TANF, or childcare benefits. For example, a single parent with one school-aged child who receives TANF, SNAP, and childcare subsidies may see all of those benefits decline if she or he begins working. Federal and state income tax credits almost completely offset these declines in many states (Chien and Macartney 2019). It is unknown how low-income families tend to think about these trade-offs.

Additional research on **opportunities and challenges created by interactions between the EITC and other safety net programs related to program administration and participation** would also be valuable. Participation gaps in the credit exist, and little research is available to understand why some people are less likely to receive the credit than others. Researchers could study whether there are opportunities to encourage and increase participation in the EITC in the course of administering traditional transfer programs.

Because the EITC is paid in a way that is unique among major income support programs—as an annual, lump sum—and because policymakers have recently proposed delivering the EITC in a smoother, more periodic way, research to better understand **how the timing of EITC payments affect program impacts is of particular interest and importance**. Existing research indicates that the lump-sum nature of the EITC may encourage savings, investments in education, and the purchase of larger items. However, it also introduces income volatility each year as incomes rise in the month when tax refunds are paid, and the net effects are not clearly established.

Researchers have implemented a few small-scale demonstration projects to try and understand how periodic payment might alter the EITC's benefits. Early findings suggest that recipients of periodic payments found them useful. Additional research could **more precisely and rigorously analyze what groups of people are most likely to benefit from expanded payment options, and how**. For example, delivering the EITC at the same time as other particular needs arise could reduce poverty in the year poverty is experienced, rather than in the following year (though it is counted in current metrics as having reduced poverty the year it was earned, not the year in which it is paid). It may also promote stability and provide a way for families to save. On the other hand, without a large lump-sum payment, the credit may become less effective in encouraging students to enroll in postsecondary school. Additional research could establish the sign and magnitude of these effects. Most useful to test these effects might be randomized controlled trials.

Future research could also study more closely **how the size of the EITC affects how people perceive and respond to the credit** to better understand whether more frequent but smaller payments might affect the influence of the EITC on work, health, and education. Analysts could study the difference between monthly and quarterly payments to better understand the benefits and drawbacks of each payment method, building on prior work (Maag, Marron, and Huffer 2019). Finally, analysts could combine work on taxes and more traditional spending programs to understand how important an annual payment is in achieving longer term goals, to better understand whether some share of the EITC should continue to be paid as a lump-sum benefit, even if periodic payments are introduced.

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