



May 2016

# REFUNDABLE TAX CREDITS

## Comprehensive Compliance Strategy and Expanded Use of Data Could Strengthen IRS's Efforts to Address Noncompliance

Accessible Version

# GAO Highlights

Highlights of [GAO-16-475](#), a report to congressional requesters

## Why GAO Did This Study

Refundable tax credits are policy tools available to encourage certain behavior, such as entering the workforce or attending college. GAO was asked to review the design and administration of three large RTCs (the EITC, AOTC, and ACTC). The ACTC is sometimes combined with its nonrefundable counterpart, the Child Tax Credit. For this report GAO described RTC claimants and how IRS administers the RTCs. GAO also assessed the extent to which IRS addresses RTC noncompliance and reviewed proposed changes to the RTCs.

GAO reviewed and analyzed IRS data, forms and instructions for claiming the credits, and planning and performance documents. GAO also interviewed IRS officials, tax preparers, and other subject-matter experts.

## What GAO Recommends

GAO recommends 1) IRS develop a comprehensive compliance strategy that includes all RTCs, 2) use available data to identify potential sources of noncompliance, 3) ensure reliability of collections data and use them to inform allocation decisions, and 4) assess usefulness of third-party data to detect AOTC noncompliance. IRS agreed with three of GAO's recommendations, but raised concerns about cost of studying collections data for post-refund enforcement activities. GAO recognizes that gathering collections data has costs. However, a significant amount of enforcement activity is occurring in the post-refund environment and use of these data could better inform resource allocation decisions and improve the overall efficiency of enforcement efforts.

View [GAO-16-475](#). For more information, contact James R. McTigue, Jr. at (202) 512-9110 or [mctiguej@gao.gov](mailto:mctiguej@gao.gov).

May 2016

## REFUNDABLE TAX CREDITS

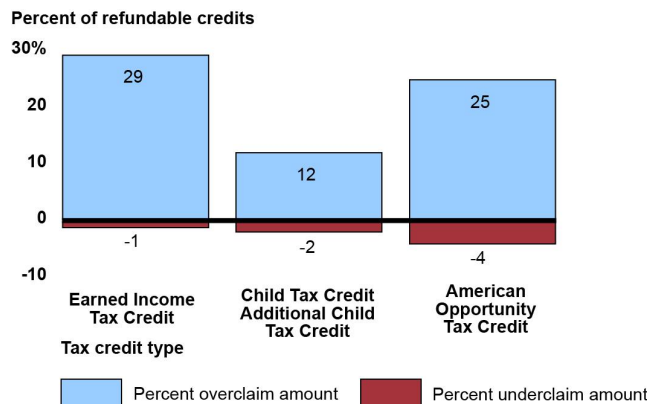
### Comprehensive Compliance Strategy and Expanded Use of Data Could Strengthen IRS's Efforts to Address Noncompliance

## What GAO Found

The Earned Income Tax Credit (EITC), the Additional Child Tax Credit (ACTC), and the American Opportunity Tax Credit (AOTC) provide tax benefits to millions of taxpayers—many of whom are low-income—who are working, raising children, or pursuing higher education. These credits are refundable in that, in addition to offsetting tax liability, any excess credit over the tax liability is refunded to the taxpayer. In 2013, the most recent year available, taxpayers claimed \$68.1 billion of the EITC, \$55.1 billion of the CTC/ACTC, and \$17.8 billion of the AOTC.

Eligibility rules for refundable tax credits (RTCs) contribute to compliance burden for taxpayers and administrative costs for the Internal Revenue Service (IRS). These rules are often complex because they must address complicated family relationships and residency arrangements to determine who is a qualifying child. Compliance with the rules is also difficult for IRS to verify due to the lack of available third party data. The relatively high overclaim error rates for these credits (as shown below) are a result, in part, of this complexity. The average dollar amounts overclaimed per year for 2009 to 2011, the most recent years available, are \$18.1 billion for the EITC, \$6.4 billion for the CTC/ACTC, and \$5.0 billion for the AOTC.

**Overclaims and Underclaims as a Percent of Total Credit Amount**



Source: GAO analysis of IRS National Research Program (NRP) data 2009-2011. | [GAO-16-475](#)

IRS uses audits and automated filters to detect errors before a refund is sent, and it uses education campaigns and other methods to address RTC noncompliance. IRS is working on a strategy to address EITC noncompliance but this strategy does not include the other RTCs. Without a comprehensive compliance strategy that includes all RTCs, IRS may be limited in its ability to assess and improve resource allocations. A lack of reliable collections data also hampers IRS's ability to assess allocation decisions. IRS is also missing opportunities to use available data to identify potential noncompliance. For example, tracking the number of returns erroneously claiming the ACTC and AOTC and evaluating the usefulness of certain third party data on educational institutions could help IRS identify common errors and detect noncompliance.

Proposals to change the design of RTCs--such as changing eligibility rules--will involve trade-offs in effectiveness, efficiency, equity, and simplicity.

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### Abbreviations

|           |                                 |
|-----------|---------------------------------|
| ACTC      | Additional Child Tax Credit     |
| AGI       | adjusted gross income           |
| AOTC      | American Opportunity Tax Credit |
| CBO       | Congressional Budget Office     |
| CRS       | Congressional Research Service  |
| CTC       | Child Tax Credit                |
| Education | U.S. Department of Education    |
| EIN       | employer identification number  |
| EITC      | Earned Income Tax Credit        |

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|          |   |
|----------|---|
| IPIA     | Improper Payments Information Act of 2002         |
| IRS      | Internal Revenue Service                          |
| ITIN     | individual taxpayer identification number         |
| JCT      | Joint Committee on Taxation                       |
| MEA      | math error authority                              |
| NRP      | National Research Program                         |
| OMB      | Office of Management and Budget                   |
| PATH Act | Protecting Americans from Tax Hikes Act           |
| PEPS     | Postsecondary Education Participants System       |
| PPACA    | Patient Protection and Affordable Care Act        |
| PTC      | Premium Tax Credit                                |
| RCPPM    | Refundable Credits Policy and Program Management  |
| RTC      | refundable tax credits                            |
| SNAP     | Supplemental Nutritional Assistance Program       |
| SOI      | Statistics of Income                              |
| SSN      | Social Security numbers                           |
| TIGTA    | Treasury Inspector General for Tax Administration |
| Treasury | U.S. Department of the Treasury                   |



May 27, 2016

Congressional Requesters

Congress provides assistance in the form of tax credits targeted to individuals and businesses generally to promote certain social and economic objectives. These tax credits can be nonrefundable, where the amount claimed is limited to the taxpayer's tax liability, or refundable, where the amount claimed is payable to the taxpayer as a refund to the extent that the tax credit exceeds the taxpayer's tax liability. The total cost of the three largest refundable tax credits (RTC) in 2013, including both reduction in revenues and increase in outlays, was just under \$141 billion.<sup>1</sup> The Internal Revenue Service (IRS) administers these tax credit programs and disburses the credits to taxpayers.

The Earned Income Tax Credit (EITC), the largest RTC, was enacted in 1975 to encourage work by offsetting payroll taxes for low-income taxpayers. Research shows the EITC has helped millions of low-income families move out of poverty and these benefits carry over from one generation to the next. However, IRS estimates show that the EITC has also consistently had a high improper payment rate. For the past 5 years, the estimated improper payment rate averaged 24.7 percent annually, and for fiscal year 2015, IRS reported that total EITC payments were \$65.6 billion, of which \$15.6 billion were estimated to be improper.<sup>2</sup> The EITC shares similar design features with other, less studied RTCs, raising questions about how they are designed and administered.

You asked us to review a number of issues related to the design and administration of three large RTCs available to taxpayers: the EITC, the Additional Child Tax Credit (ACTC), and the American Opportunity Tax

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<sup>1</sup>We calculated this using IRS Statistics of Income (SOI) data for 2013. This estimate includes the Earned Income Tax Credit, the Child Tax Credit and Additional Child Tax Credit, and the American Opportunity Tax Credit.

<sup>2</sup>An improper payment is defined by statute as any payment that should not have been made or that was made in an incorrect amount (including overpayments and underpayments) under statutory, contractual, administrative, or other legally applicable requirements. Among other things, it includes payment to an ineligible recipient, payment for an ineligible good or service, and any duplicate payment.

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Credit (AOTC). The objectives of this report are to (1) describe the claimant population including the number of taxpayers and the amount they claim along with other selected characteristics for the EITC, ACTC, and the AOTC; (2) describe how IRS administers these credits and what is known about the administrative costs and compliance burden associated with each credit; (3) assess the extent to which IRS identifies and addresses noncompliance with these credits and collects improperly refunded credits; and (4) assess the impact of selected proposed changes to elements of the EITC, ACTC, and AOTC with respect to criteria for a good tax system such as efficiency, equity, and simplicity.

To address the first objective, we reviewed taxpayer data on EITC, ACTC, and AOTC claimants and amounts claimed from the IRS Statistics of Income (SOI) Individual Tax Return File for tax years 1999 to 2013.<sup>3</sup> For each objective, we used the most recent available data extended as far back as needed for the purpose of the objective. For the first objective, where the purpose is descriptive, we extended the data as far back as necessary to capture important changes in the structure of the credits.

For the second objective, we collected and reviewed IRS forms, instructions, and worksheets for claiming the three credits; government and private sector reports on the IRS filing season and taxpayer experience; IRS policies and procedures describing how IRS verifies refundable credit claims prior to refund; and the most recent available IRS data on costs and enforcement. We also interviewed IRS officials and organizations representing paid and volunteer preparers and taxpayers.

For the third objective, we analyzed National Research Program (NRP) data on audits of a representative sample of all taxpayers for the most recent available tax years 2009 to 2011 to calculate noncompliance for the credits overall and for subcategories of taxpayers and preparers. We also reviewed and analyzed IRS, GAO, and other reports that explore the root causes of refundable tax credit noncompliance; IRS policies and procedures on their compliance strategy; and performance information the U.S. Department of Treasury (Treasury) and IRS collect to monitor

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<sup>3</sup>We used micro-level SOI data from 2006 onward in order to get information on the credits before and after the recession. The 2013 SOI data were the most recent data available. Prior to 2006 we relied on publicly available SOI data, available at [https://www.irs.gov/uac/SOI-Tax-Stats-Individual-Income-Tax>Returns-Publication-1304-\(Complete-Report\)](https://www.irs.gov/uac/SOI-Tax-Stats-Individual-Income-Tax>Returns-Publication-1304-(Complete-Report)).



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the effectiveness of various compliance efforts. We interviewed Treasury and IRS officials, subject-matter experts, and tax preparers on challenges IRS faces reducing noncompliance with these three refundable credits. For criteria, we compared IRS information on performance measures and decision making to Standards for Internal Control in the Federal Government and federal guidance on performance management.<sup>4</sup> We also applied criteria concerning the administration, compliance burden, and transparency that characterize a good tax system, as developed in our guide for evaluating tax reform proposals.<sup>5</sup>

For the fourth objective, we conducted a literature review and held interviews with subject-matter experts from government, academia, think tanks, and professional organizations knowledgeable about refundable tax credits and specifically the EITC, ACTC, and AOTC. We spoke to those with expertise on how IRS administers RTCs, how low-income taxpayers claim the credits, and how tax preparers interact with the credits. We also spoke to experts across the ideological spectrum. We conducted interviews to obtain views on criteria commonly used to evaluate refundable tax credits and possible modifications to the credit. Based on these interviews and our review of studies, we discuss the likely impact of modifying elements of the RTC with respect to three criteria for a good tax system that we identified in prior work—efficiency, equity and simplicity—and the tradeoffs among these criteria that must be weighed and evaluated when proposing a change in the credit. More detailed information on our scope and methodology appears in appendix I.

To assess the reliability of the data we analyzed, we reviewed related documentation, interviewed knowledgeable agency officials, and conducted electronic data testing for obvious errors. We also shared our methodology and preliminary results with knowledgeable agency officials and asked them to comment on whether the data were sufficiently reliable for our specific purposes. Based on this review, we determined that the data we used were sufficiently reliable for the purposes of this report.

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<sup>4</sup>GAO, *Standards for Internal Control in the Federal Government*, [GAO-14-704G](#) (Washington, D.C.: September 2014); GAO, *Tax Administration: IRS Needs to Further Refine its Tax Filing Season Performance Measures*, GAO-03-143 (Washington, D.C.: Nov. 22, 2002); and GAO, *Managing for Results: Practices for Effective Agency Strategic Reviews* [GAO-15-602](#) (Washington, D.C. Jul. 29, 2015).

<sup>5</sup>GAO, *Understanding the Tax Reform Debate: Background, Criteria, & Questions*, [GAO-05-1009SP](#) (Washington, D.C.: Sept. 1, 2005).

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We conducted this performance audit from July 2015 to May 2016 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

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## Background

Refundable tax credits (RTC) differ from other credits because a taxpayer is able to receive a refund check from IRS for the amount their credit exceeds their tax liability. For example, a person who owed \$2,000 in taxes, but qualified for \$3,000 in EITC would receive a \$1,000 refund from IRS.<sup>6</sup> A nonrefundable credit can be used to offset tax liability, but any excess of the credit over the tax liability is not refunded to the taxpayer. If, instead of claiming the EITC, that same person claimed \$3,000 in a nonrefundable credit, the person would use \$2,000 to reduce the tax liability to zero, but would not receive the remaining credit amount as a refund.

According to the Congressional Budget Office (CBO), the number and costs associated with refundable tax credits have varied over the past 40 years. The first refundable credit, the EITC, was enacted in 1975. In 1998, additional RTCs became effective and by 2010 there were 11 different refundable tax credits. The cost of refundable tax credits peaked in 2008 at \$238 billion, but declined over the next 4 years because of the expiration of several credits designed to provide temporary economic stimulus.<sup>7</sup> Starting in 2014, the refundable Premium Tax Credit (PTC) was made available to some low-income households for the purchase of health insurance through newly created exchanges, as part of the Patient

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<sup>6</sup>The \$1,000 refund the person receives is the refunded portion of the credit, while the remaining \$2,000 of the credit offsets the tax liability.

<sup>7</sup>According to CBO, the surge in the number and cost of refundable credits between 2007 and 2010 occurred largely because of the recession, which led to the enactment of temporary new credits and the expansion of existing ones. Although the number of credits increased from 2008 to 2010, their costs were greater in 2008 largely because of the one-time economic stimulus payments that were enacted in the Economic Stimulus Act of 2008 (which defined them as refundable tax credits) and were received by most taxpayers in that year. Congressional Budget Office, Refundable Tax Credits (Washington, D.C.: January 2013)

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Protection and Affordable Care Act (PPACA).<sup>8</sup> According to estimates from the Joint Committee on Taxation (JCT) and CBO, the cost of the PTC in its first year was \$35 billion and will be about \$110 billion by 2021.

In 2015, there were five refundable credits in effect.<sup>9</sup> Four of those were available to individuals—the EITC, ACTC, AOTC, and PTC.<sup>10</sup> We issued a report last year assessing IRS’s implementation of PPACA requirements, including efforts to verify taxpayers’ PTC claims.<sup>11</sup> This report focuses on the design and administration of the other three refundable tax credits available to individuals.

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## Earned Income Tax Credit

Congress enacted the EITC in 1975 to offset the impact of Social Security taxes on low-income families and encourage low-income families to seek employment rather than public assistance. The credit was also meant to encourage economic growth in the face of a recession and rising food and energy prices. Since the credit’s enactment, it has been modified to provide larger refunds and differentiate between family size and structure. In fiscal year 2013, taxpayers received \$68.1 billion in EITC; an average amount of \$2,362 was distributed to about 29 million taxpayers.

Beginning in 1979, the credit was also available as an advance credit. This meant that filers had the option to receive their predicted credit in smaller payments throughout the preceding year and reconcile the amount received with the amount they were actually eligible for upon filing their taxes. However, as we reported, the advanced payment option had a low take-up rate of 3 percent and high levels of noncompliance (as

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<sup>8</sup>Pub. L. No. 111-148, 124 Stat. 119 (Mar. 23, 2010), as amended by the Health Care and Education Reconciliation Act of 2010, Pub. L. No. 111-152, 124 Stat. 1029 (Mar. 30, 2010). In this report, references to PPACA include all amendments made by the Health Care and Education Reconciliation Act.

<sup>9</sup>For the purposes of this report, we do not include other credits which are refunds of payment to IRS made by the taxpayer or for the taxpayer (e.g., income taxes withheld on wages). Six of the 11 RTCs in effect in 2010 expired prior to 2015.

<sup>10</sup>PPACA also established a small business tax credit, along with the PTC. This credit took effect in 2010.

<sup>11</sup>GAO, *Patient Protection and Affordable Care Act: IRS Needs to Strengthen Oversight of Tax Provisions for Individuals*, [GAO-15-540](#) (Washington, D.C.: July 29, 2015)

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many as 80 percent of recipients did not comply with at least one of the program requirements), which led to its repeal in 2010.<sup>12</sup>

The EITC divides the eligible population into eight different groups based on the number of eligible children claimed by the filer and filing status. The basic structure of the credit remains the same for each group: the credit phases in as a percentage of earned income; upon reaching the maximum benefit, the credit plateaus; and when income reaches a designated point, the benefit begins to phase out as a percentage of income. The phase-in and phase-out rates, maximum benefit, and phase-out point all differ depending on filing status (such as single or married filing jointly) and the number of eligible children claimed.<sup>13</sup>

In order to claim the EITC, the tax filer must work and have earnings that do not exceed the phase-out income of the credit.<sup>14</sup> Additional eligibility rules apply to any children that a tax filer claims for the purpose of calculating the credit. A qualifying child must meet certain age, relationship, and residency requirements.<sup>15</sup> For example, the child must be younger than 19 (or 24 if a full-time student) and be a biological, adopted, or foster child, grandchild, niece/nephew, or sibling of the filer and live with the filer in the United States for at least 6 months of the year.<sup>16</sup> Additionally, the child must have a valid Social Security number (SSN).

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<sup>12</sup>GAO, *Advanced Earned Income Tax Credit: Low Use and Small Dollars Paid Impede IRS Efforts to Reduce High Noncompliance*, [GAO-07-1110](#) (Washington, D.C.: Aug. 10, 2007).

<sup>13</sup>Filing status can also determine EITC eligibility. Taxpayers cannot claim the EITC if they are married filing separately.

<sup>14</sup>For taxpayers who are married and filing a joint return, the work requirement is met if at least one spouse works and has earned income, which includes all of the gross income earned in a taxable year, and any net earnings from self-employment.

<sup>15</sup>Qualifying children must also not have filed a joint return, unless that return was only to claim a refund.

<sup>16</sup>These age restrictions do not apply to dependents that are permanently and totally disabled.

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The Improper Payments Information Act (IPIA) of 2002, as amended,<sup>17</sup> requires federal agencies to review programs and activities that may be susceptible to significant improper payments and report on actions taken to reduce improper payments.<sup>18</sup> In addition, the Office of Management and Budget (OMB) identifies high-priority (or high-risk) programs, one of which is EITC, for greater levels of oversight and review.<sup>19</sup> For fiscal year 2015, IRS estimated that, \$15.6 billion—or 23.8 percent—of EITC program payments were improper. The estimated improper payment rate for EITC has remained relatively unchanged since fiscal year 2003 (the first year IRS had to report estimates of these payments to Congress), but the amount of improper EITC payments increased from an estimated \$10.5 billion in fiscal year 2003 to nearly \$16 billion in fiscal year 2015 because of growth in the EITC program overall.<sup>20</sup>

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## Additional Child Tax Credit

The Additional Child Tax Credit (ACTC) is the refundable portion of the Child Tax Credit (CTC) and provides tax relief to low-income families with children. It also adds to the positive reward the EITC provides to those who work. The credit was initially created in 1997 by the Taxpayer Relief Act of 1997 as a nonrefundable child tax credit for most families, but in

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<sup>17</sup>Improper Payments Information Act of 2002 (IPIA), Pub. L. No. 107-300, 116 Stat. 2350 (Nov. 26, 2002), as amended by the Improper Payments Elimination and Recovery Act of 2010 (IPERA), Pub. L. No. 111-204, 124 Stat. 2224 (July 22, 2010), and the Improper Payments Elimination and Recovery Improvement Act of 2012 (IPERIA), Pub. L. No. 112-248, 126 Stat. 2390 (Jan. 10, 2013) (IPIA, as amended), and codified as amended at 31 U.S.C. § 3321 note.

<sup>18</sup>IPIA, as amended, 31 U.S.C. § 3321 note, section 2 requires executive branch agencies, among other things, to (1) review all programs and activities, (2) identify those that may be susceptible to significant improper payments, (3) estimate the annual amount of improper payments for those programs and activities, (4) implement actions to reduce improper payments and set reduction targets, and (5) report on the results of addressing the foregoing requirements. For fiscal year 2014 and beyond, IPIA, as amended, defines “significant improper payments” as gross annual improper payments in a program exceeding (1) both 1.5 percent of program outlays and \$10 million or (2) \$100 million.

<sup>19</sup>See section 2, IPIA, as amended by IPERIA, Pub. L. No. 112-248, 126 Stat. at 2390-91, codified as amended at section 2(b), 31 U.S.C. § 3321 note; Office of Management and Budget, *Appendix C to Circular No. A-123, Requirements for Effective Estimation and Remediation of Improper Payments*, OMB Memorandum M-15-02 (Oct. 20, 2014); see also Executive Order 13520, *Reducing Improper Payments and Eliminating Waste in Federal Programs*, 74 Fed. Reg. 66201 (Nov. 25, 2009). Risk assessments are not required for high-priority programs.

<sup>20</sup>According to IRS, improper payments decreased by \$2.1 billion dollars from \$17.7 billion in fiscal year 2014 to \$15.6 billion in fiscal year 2015.

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2001 was expanded to include the current refundable ACTC for which more low-income families were eligible.<sup>21</sup> Like the EITC, taxpayers can use the child tax credits to both offset tax liabilities (CTC) and receive a refund (ACTC); however, unlike the EITC, the nonrefundable CTC and the refundable ACTC amounts are entered separately on the Form 1040. In fiscal year 2013, taxpayers claimed \$27.9 billion in ACTC and \$27.2 billion in the nonrefundable CTC. Thus, the total revenue cost of the CTC and ACTC was \$55.1 billion.

This report will sometimes combine these credits (referring to them as CTC/ACTC) when their combined effect is at issue or to facilitate comparison with other RTCs that do not break out refundable and nonrefundable components. In general, the ACTC is claimed by those with lower tax liabilities and lower income than those that claim only the CTC. As reported by the SOI Division of the Internal Revenue Service, in 2012, 88 percent of the ACTC went to taxpayers with adjusted gross income below \$40,000, while 17 percent of the CTC went to taxpayers below that income.<sup>22</sup>

Under current law, taxpayers can use the CTC to offset their tax liabilities by up to \$1,000 per qualifying child. If the available CTC exceeds the filer's tax liability, they may be able to receive a portion of the unused amount through the refundable ACTC. The ACTC phases in at 15 percent of every dollar in earnings above \$3,000 up to the unused portion of the CTC amount. To claim the CTC or ACTC, taxpayers must have at least one qualifying child. The criteria for qualifying children are slightly different from that used to determine eligibility with the EITC. For the CTC and ACTC, the child must be under the age of 17 and a U.S. citizen, national, or resident, but taxpayers file using either a SSN or individual taxpayer identification number (ITIN). However, the relationship and residency requirements are similar for the ACTC and EITC. See figure 1 for a description of the credits and their requirements.

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<sup>21</sup>The original CTC included a limited refundable additional credit for families with three or more children. The expansion of the credit was added by the Economic Growth and Tax Relief Reconciliation Act of 2001, Pub. L. No. 107-16, § 201(d), 115 Stat. 38 (June 7, 2001).

<sup>22</sup>GAO, *Federal Low-Income Programs: Multiple Programs Target Diverse Populations and Needs*, [GAO-15-516](#) (Washington, D.C.: July 30, 2015).

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## American Opportunity Tax Credit





The American Opportunity Tax Credit (AOTC) offsets certain higher education related expenses in an effort to lessen the financial burden of a college or professional degree for taxpayers and their dependents. The credit was created by the American Recovery and Reinvestment Act of 2009 as a modification of the nonrefundable Hope Credit and was made permanent in 2015 with the Protecting Americans from Tax Hikes (PATH) Act.<sup>23</sup> In 2013, taxpayers claimed \$17.8 billion in AOTC.

The AOTC is designed as a partially refundable credit. The entire credit is worth up to \$2,500 and a taxpayer can receive a refundable credit equal to 40 percent of their credit (for a maximum of \$1,000). The size of the entire credit is determined by taking 100 percent of the first \$2,000 in qualified education expenses and 25 percent of the next \$2,000 in qualified expenses, which include tuition, required enrollment fees, and course materials. The value of the limit on expenses qualifying for the credit is not indexed for inflation. In order to claim the AOTC a tax filer or their dependent must meet certain requirements including adjusted gross income requirements. Furthermore, they must be in their first 4 years of enrollment and be at least a half-time student at an eligible post-secondary school. Taxpayers may only claim the AOTC for 4 years.

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<sup>23</sup>The American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, § 1004, 123 Stat. 115 (Feb. 17, 2009). The PATH Act is found in the Consolidated Appropriations Act, 2016, Pub. Law 114-113, 129 Stat. 2242 (Dec. 18, 2015).

**Figure 1: Goals, Design Features, and Other Characteristics of the Earned Income Tax Credit (EITC), Additional Child Tax Credit (ACTC), and American Opportunity Tax Credit (AOTC)**

| Refundable Tax Credit 2013  | Earned Income Tax Credit (EITC)   | Additional Child Tax Credit (ACTC)   | American Opportunity Tax Credit (AOTC)  |
|---|---|--|---|
|  |    |   |    |
| <b>Goals</b>  | <b>Goals:</b> To encourage low-income individuals to work by offsetting the effect of Social Security taxes.  | <b>Goals:</b> : To reward work and provide tax relief to low-income families with children.  | <b>Goals:</b> To offset higher education-related expenses and lessen financial burden of a college or professional degree.  |
| <b>Requirements</b>   | <p><b>Income requirements</b> - Earned income must be at least \$1 and adjusted gross income (AGI) must fall below certain thresholds (depending on filing status and number of children).</p> <p><b>Filing status</b> - Not available to those filing as "married filing separately."</p> <p><b>Relationship requirements</b> - Taxpayer's son, daughter, stepson, stepdaughter, eligible foster child, brother, sister, half-sibling, stepsibling, or descendant of those individuals.</p> <p><b>Residency requirements</b> - Child must live with taxpayer for more than half the year. This residence must be in the United States.</p> <p><b>Identification requirements</b> - Valid Social Security Number (SSN) needed.</p> <p><b>Miscellaneous requirements</b> - Child must be under 19, or 24 if a full-time student and younger than the taxpayer (and the taxpayer's spouse if filing jointly).</p> <p>If the child is permanently and totally disabled, there is no age limit.</p> | <p><b>Income requirements</b> - Earned income must be at least \$3,000 and modified AGI must fall below certain thresholds (depending on filing status and number of children).</p> <p><b>Filing status</b> - No filing status restrictions.</p> <p><b>Relationship requirements</b> - Taxpayer's son, daughter, stepson, stepdaughter, foster child, brother, sister, half-sibling, stepsibling, or descendant of those individuals.</p> <p><b>Residency requirements</b> - Child must have the same principal residence as taxpayer for more than half the year.</p> <p><b>Identification requirements</b> - Valid SSN or individual taxpayer identification number (ITIN) needed. If the child uses an ITIN, they must live in the US.</p> <p><b>Miscellaneous requirements</b> - Child must be under 17 and a dependent.</p> | <p><b>Income requirements</b> - Modified AGI must be under \$90,000 or \$180,000 for married couples filing jointly.</p> <p><b>Filing status</b> - Not available to those filing as "married filing separately."</p> <p><b>Relationship requirements</b> - Taxpayers themselves, their spouse, or their dependent.</p> <p><b>Residency requirements</b> - None</p> <p><b>Identification requirements</b> - Valid SSN or ITIN needed.</p> <p><b>Miscellaneous requirements</b> - Students must (1) be attending a post-secondary education institution, (2) the program must result in a degree or certificate, (3) they must be enrolled at least half time and, (4) they cannot have a felony drug conviction.</p> |
| <b>Max amount available</b>   | <ul style="list-style-type: none"> <li>• Individual: \$503</li> <li>• One child: \$3,359</li> <li>• Two children: \$5,548</li> <li>• Three or more children: \$6,242</li> </ul>   | \$1,000 for each qualifying child, depending on income   | \$2,500 per eligible student, of which \$1,000 is refundable  |
| <b>Lifetime cap</b>   | None  | None   | 4 years per eligible student  |
| <b>Number of recipients in 2013</b>   | 28.8 million  | 20.7 million   | 10.5 million  |
| <b>Total cost in 2013</b>   | \$68.1 billion  | \$27.9 billion   | \$17.8 billion  |

Sources: GAO analysis of IRS data and publications. | GAO-16-475



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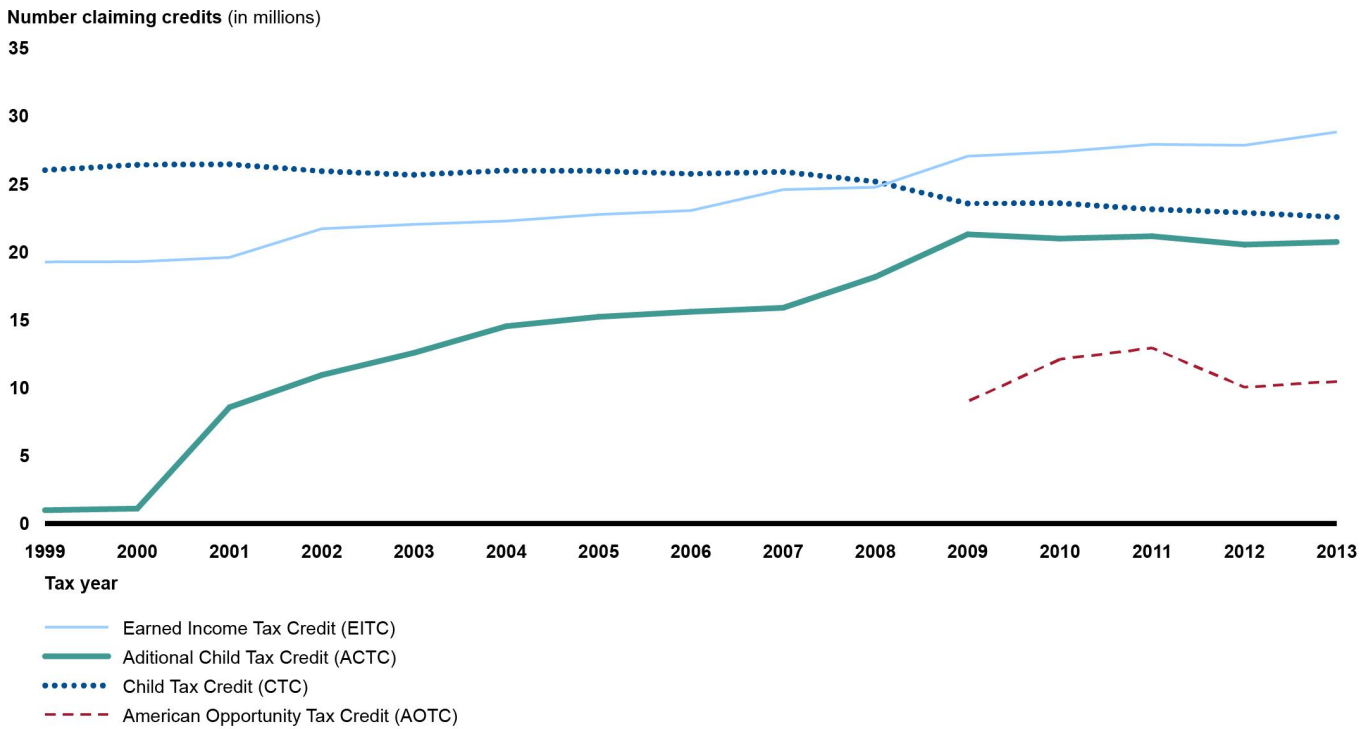
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## More Taxpayers Claim the EITC than Other Refundable Tax Credits and the Largest Share of Benefits Go to Those Making Less than \$20,000

More taxpayers claim the EITC than the other two refundable credits we examine in this report. The EITC is also the most expensive in terms of tax revenue forgone and refunds paid. In 2013, taxpayers claimed a total of \$68.1 billion in EITC with \$59 billion (87 percent) of this amount refunded; the total was \$55.1 billion for the CTC and ACTC with \$26.7 billion (48 percent) refunded as ACTC and a total of \$17.8 billion in AOTC with \$5 billion refunded (28 percent). There are several reasons why the ratio between the amount received as tax refunds and the amount used to offset tax liabilities varies from credit to credit including whether the credits are partially or fully refundable as well as income levels of the recipients.

The number of taxpayers claiming the earned income credit increased 50 percent from 1999 to 2013, and the total amount claimed after adjusting for inflation increased 60 percent, due in part to legislative changes which increased the number of people eligible for the credit and the amount they could claim. Over that same period, the ACTC also increased, with 20 times more taxpayers receiving the credit in 2013 than 1999. The AOTC did not see similar constant growth. See figures 2 and 3 for the number of taxpayers claiming credits and the amounts of credits received over time.

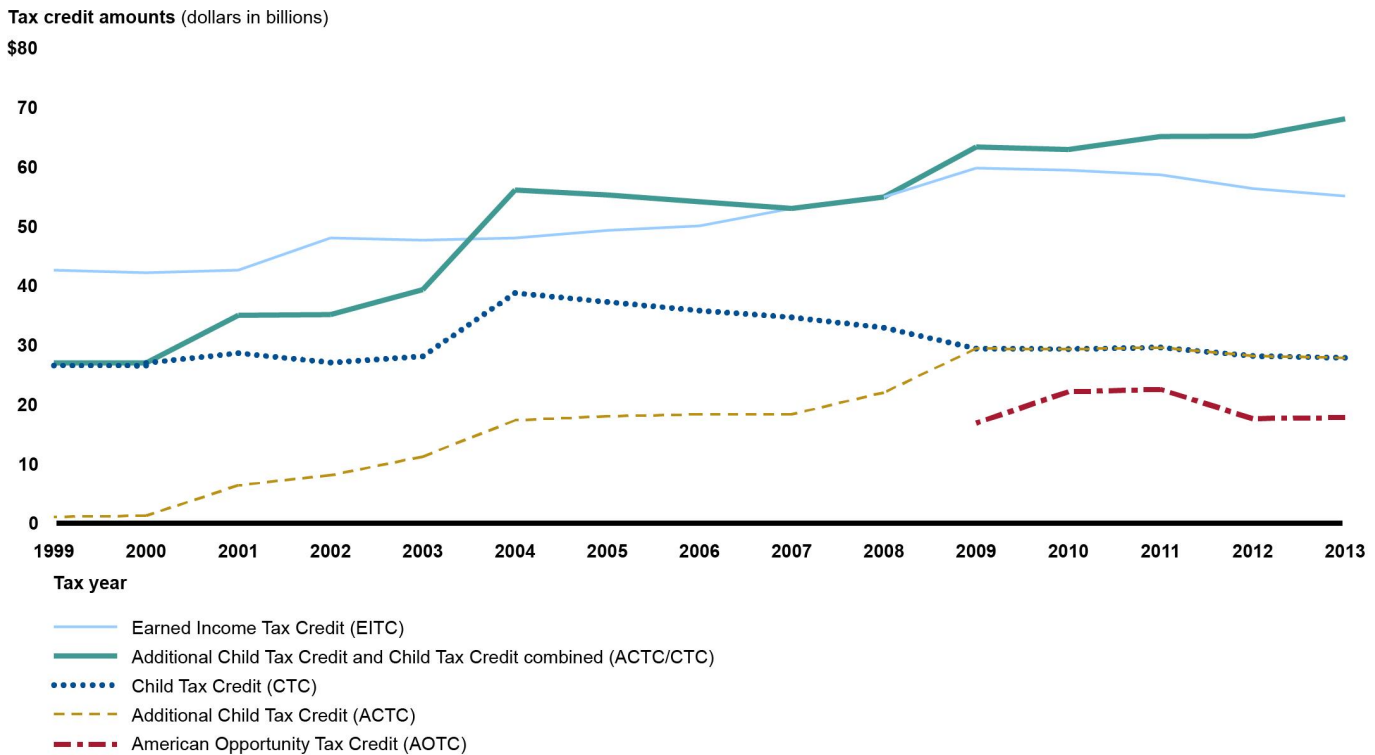
**Figure 2: Number of Taxpayers Claiming Credits, 1999 to 2013**



Source: GAO analysis of IRS Statistics of Income (SOI) data. | GAO-16-475

Note: Data pre-2011 are from SOI Historical tables. We did not include the predecessor to the AOTC—the Hope Credit—in this chart because the Internal Revenue Service did not publish estimates for it.

**Figure 3: Total Amount of Credits Received By Taxpayers, 1999 to 2013**

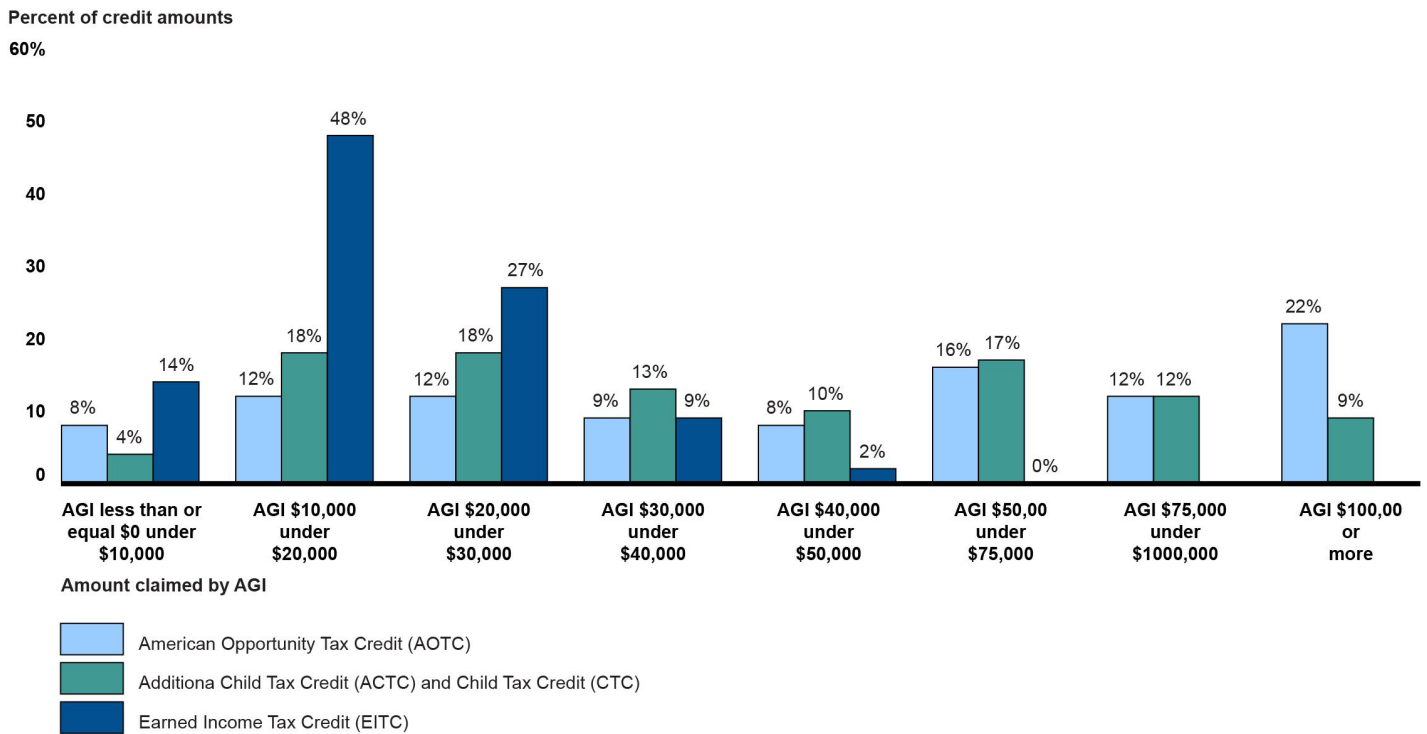


Source: GAO analysis of IRS Statistics of Income (SOI) data. | GAO-16-475

Note: Amounts reported in 2013 dollars. Data pre-2011 are from SOI Historical tables. We did not include the predecessor to the AOTC—the Hope Credit—in this chart because the Internal Revenue Service did not publish estimates for it.

As figure 4 shows, a greater share of EITC benefits goes to lower-income taxpayers. More than half (62 percent) of EITC benefits go to taxpayers making less than \$20,000, with the largest share (48 percent) going to those making from \$10,000 to less than \$20,000. For the other credits, the benefits are spread more evenly among income groups. The CTC and AOTC do not have the same income restrictions as the EITC, so higher income taxpayers also benefit from those credits. For example, taxpayers making \$100,000 or more receive 22 percent of the AOTC. Figure 4 also shows the percent of each credit claimed per adjusted gross income (AGI). Examined separately from the nonrefundable CTC, the ACTC also benefits lower income groups, but is less concentrated on the lowest income groups than the EITC, with 42 percent going to taxpayers making less than \$20,000. (See figure 11 in appendix III for a comparison of CTC and ACTC benefits by AGI.)

**Figure 4: Percent of EITC, ACTC/CTC, and AOTC Credit Amounts Claimed by Adjusted Gross Income (AGI), 2013**



Source: GAO analysis of IRS Statistics of Income (SOI) data, 2013. | GAO-16-475

In addition to being lower income, EITC and ACTC claimants are more likely to be sole proprietors—persons who own unincorporated businesses by themselves—and to be heads of households than the general taxpayer population.<sup>24</sup> As table 1 shows, 16 percent of taxpayers are sole proprietors, but they represent 25 percent of EITC and ACTC claimants. (Additionally, but not shown in the table, 29 percent of all EITC dollars go to sole proprietors.) EITC and ACTC are claimed mostly by heads of households. While people filing as head of household make up only 15 percent of the taxpayer population, they represent 56 percent of ACTC claimants and 47 percent of EITC claimants. AOTC claimants, on the other hand, are most likely to be married filing jointly (43 percent) or

<sup>24</sup>This includes any taxpayer who files a Schedule C return, including taxpayers who receive wage income and Schedule C income.

single (34 percent). Workers without qualifying children, or childless workers, make up 25 percent of EITC claimants, but receive 3 percent of benefits. Table 1 shows additional detail on how these characteristics differ across the three credits.

**Table 1: Characteristics of Refundable Tax Credit Claimants across Credits, 2013**

|   | Total taxpayer population | Earned Income Tax Credit claimants | Additional Child Tax Credit claimants | Child Tax Credit claimants | American Opportunity Tax Credit claimants |
|---|---------------------------|------------------------------------|---------------------------------------|----------------------------|---|
| Filing status                                     | -                         | -                                  | -                                     | -                          | -   |
| Single  | 47%                       | 29%                                | 10%                                   | 5%                         | 34%                                       |
| Married filing jointly                            | 37%                       | 24%                                | 33%                                   | 60%                        | 43%                                       |
| Married filing separately                         | 2%                        | -                                  | 1%                                    | 1%                         | -   |
| Head of household                                 | 15%                       | 47%                                | 56%                                   | 34%                        | 23%                                       |
| Widow(er) with dependent child (surviving spouse) | 0%                        | 0%                                 | 0%                                    | 0%                         | 0%  |
| Qualifying children or students                   | -                         | -                                  | -                                     | -                          | -   |
| Zero children/students                            | -                         | 25%                                | -                                     | -                          | -   |
| One child/student                                 | -                         | 37%                                | 44%                                   | 50%                        | 92%                                       |
| Two children/ students                            | -                         | 26%                                | 35%                                   | 34%                        | 7%  |
| Three or more children/students                   | -                         | 12%                                | 21%                                   | 15%                        | 1%  |
| Schedule C  | -                         | -                                  | -                                     | -                          | -   |
| Not sole proprietor                               | 84%                       | 75%                                | 75%                                   | 83%                        | 80%                                       |
| Sole proprietor                                   | 16%                       | 25%                                | 25%                                   | 17%                        | 20%                                       |

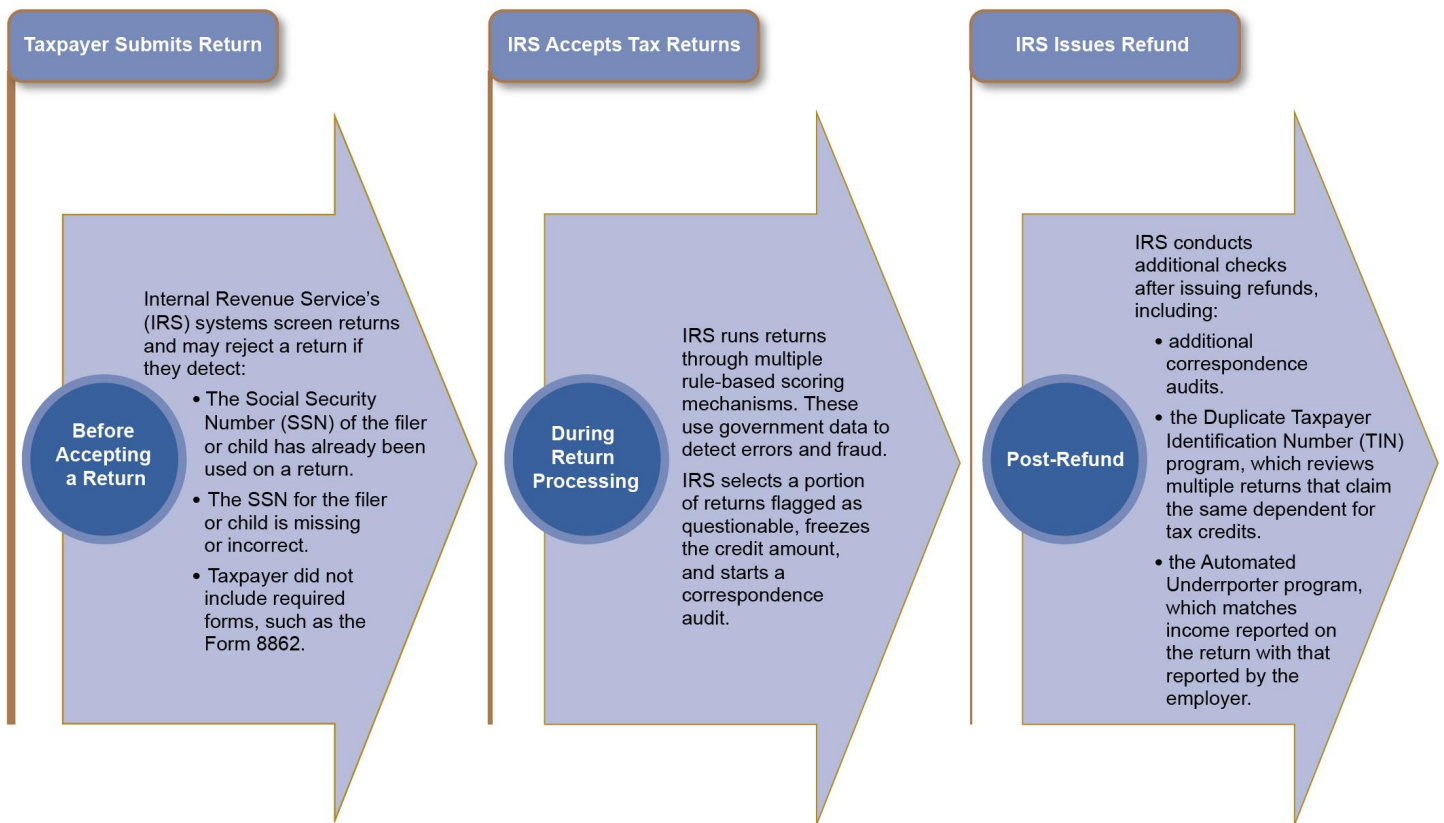
Source: GAO analysis of IRS Statistics of Income (SOI) data. | GAO-16-475

## Lack of Third Party Data Complicates IRS's Ability to Administer Credits and Complexity of Credit Requirements Contributes to Taxpayer Burden

**IRS Relies on Pre-Refund Screening Systems, Correspondence Audits, and Document Matching to Detect, Prevent, and Correct Errors**

IRS relies on pre-refund controls and filters to detect, prevent, and correct errors, a selection of which is shown in figure 5.

**Figure 5: Selected Steps IRS Takes to Identify and Correct Refundable Tax Credit Errors**



Source: GAO analysis of IRS information. | GAO-16-475

Before accepting a return, IRS checks it for completeness and attempts to verify the taxpayer's identity and credit eligibility. A series of systems use IRS and other government data to check whether returns meet certain eligibility requirements (like whether earned income falls within EITC income limits) and include the required forms (such as a Schedule EIC).

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IRS can use its math error authority (MEA) to correct or request information on electronic returns with these errors.<sup>25</sup>

During return processing, IRS runs returns through additional systems to screen for fraud and errors. One system, IRS's Electronic Fraud Detection System (EFDS), screens returns for fraud including possible identity theft. If flagged, IRS stops processing the return and sends a letter asking the taxpayer to confirm his or her identity. Another system—the Dependent Database (DDb)—incorporates IRS and other government data, such as the National Prisoner File or child custody information from the Department of Health and Human Services, along with rules and scoring models to identify questionable tax returns and further detect identity theft. Once the suspicious tax returns are identified, the DDb assigns a score to each tax return. Based in large part on these scores, as well as available resources, IRS selects a portion of suspicious returns for correspondence audits, which are audits conducted through the mail.<sup>26</sup> IRS conducts most of its EITC audits (about 80 percent) and ACTC audits (about 64 percent) prior to issuing refunds. In these pre-refund audits, IRS freezes the refund and sends a letter to the taxpayer requesting documentation such as birth certificates or school or medical records to verify eligibility. During the audit process, IRS will also freeze and examine other refundable credits claimed on the return. See table 2 for a description of how many audits IRS selects specifically for each credit and the total amount audited including returns selected for other reasons.

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<sup>25</sup>IRS can use MEA for certain purposes specified in statute, including correcting calculation errors and checking for other obvious noncompliance such as claims above income and credit limits. 26 U.S.C § 6213(g)(2). For paper returns, IRS uses MEA to adjust the return during processing and send a notice to the taxpayer explaining what change was made. In fiscal year 2014, IRS used MEA to correct 170,000 paper EITC claims. IRS does not track how often it uses MEA for the ACTC or AOTC. See *GAO Tax Refunds: Enhanced Prerefund Compliance Checks Could Yield Significant Benefits*, [GAO-11-691T](#) (Washington, D.C.: May 25, 2011) for a list of IRS's math error authorities.

<sup>26</sup>An audit—also referred to as an examination—is a review of a taxpayer's records that IRS conducts to determine whether income, expenses, credits, and other information are being reported accurately. Internal Revenue Code Sect. 6201 gives the Secretary of the Treasury, IRS's parent agency, the authority to conduct examinations. 26 U.S.C. § 6201.

**Table 2: Number of Refundable Tax Credit Audits Conducted in 2014**

|  | Component                | Pre-refund     | Post-refund    | Total          |
|--|--------------------------|----------------|----------------|----------------|
| Earned Income Tax Credit (EITC)        | Selected for EITC issues | 348,000        | 87,000         | <b>435,000</b> |
|  | <b>Total EITC audits</b> | <b>348,000</b> | <b>87,000</b>  | <b>435,000</b> |
| Additional Child Tax Credit (ACTC)     | Selected for ACTC issues | 31,000         | —              | <b>31,000</b>  |
|  | <b>Total ACTC audits</b> | <b>264,000</b> | <b>149,000</b> | <b>413,000</b> |
| American Opportunity Tax Credit (AOTC) | Selected for AOTC issues | 22,000         | 11,000         | <b>33,000</b>  |
|  | <b>Total AOTC audits</b> | <b>76,000</b>  | <b>84,000</b>  | <b>160,000</b> |

Source: Internal Revenue Service data for 2014. | GAO-16-475

IRS’s compliance activities continue after it issues refunds. In addition to post-refund audits, IRS also conducts the automated underreporter program (AUR) which matches income data reported on a tax return with third-party information about income and expenses provided to IRS by employers or financial institutions. In 2014, this document matching review process included just over 1 million EITC returns and IRS recommended \$1.5 billion in additional tax.

### Lack of Third Party Data and Filing and Refund Deadlines Complicate IRS’s Enforcement Efforts

Lack of third party data complicates IRS’s ability to administer these credits, but such data are not easy to identify. According to IRS, the data it uses should be complete and accurate enough to allow IRS to select returns with the highest potential for change without placing an undue burden on taxpayers. IRS reported that it evaluated several different databases to determine if they were reliable enough to be used under MEA to make changes to tax returns without going through the audit process. For example, IRS tested the Federal Case Registry (FCR), a national database that aids the administration and enforcement of child support laws. IRS determined that it could not identify errors related to qualifying children from this database with enough accuracy under its standards. In addition, IRS participated in a project led by Treasury and conducted by the Urban Institute that assessed the overall usefulness of state-level benefit data to help validate EITC eligibility.<sup>27</sup> The study

<sup>27</sup>The four benefit programs considered—the Supplemental Nutrition Assistance Program, Temporary Assistance for Needy Families, Medicaid, and the Children’s Health Insurance Program—provide assistance to low-income households, particularly those with children through in-kind benefits or cash transfers.



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concluded, based on a number of issues, including different data collection practices across states that this data would not improve the administration of the EITC.

Without data reliable enough to be used under MEA, IRS generally conducts a correspondence audit to verify that a taxpayer meets the requirements for income and that their children meet both residency and relationship requirements. Audits are more costly than issuing MEA notices and they can be lengthy. For example, in 2014 it cost IRS on average \$.21 to process an electronic return (including issuing math error notices), while an EITC audit cost \$410.74. However, as mentioned above, cost savings should be weighed against other goals such as fairness and burden on taxpayers.

More EITC claimants make income errors than qualifying children errors, but the dollar value of the errors due to noncompliance with qualifying children requirements is larger than the dollar value of the income errors. Verifying eligibility with residency and relationship requirements can be complicated and subject to interpretation. IRS offers training to tax examiners on various types of documentation that could be used to verify EITC requirements and tax examiners are allowed to use their judgment to evaluate whether residency or relationships requirements are satisfied. This lack of available, accurate, and complete third party data complicates IRS's efforts to verify qualifying children eligibility requirements, increasing IRS's administrative costs and taxpayer burden.

Filing and refund timelines also complicate IRS's ability to administer these credits. IRS states on its website that more than 90 percent of refunds are issued within 21 days. It is important that IRS issues refunds on time because when it is late, taxpayers' refunds are delayed, and IRS is required to pay interest on delayed refunds.<sup>28</sup> However, it is also important to allow enough time to ensure refunds are accurate and issued to the correct individuals. The IRS strategy with respect to improper payments is to intervene early to ensure compliance through outreach and education efforts as well as various compliance programs. Even so, in order to meet timeliness goals, IRS issues most refunds months before

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<sup>28</sup>If an individual files on time and is due a refund, the law requires IRS to refund any overpayment made by the individual within 45 days of the last day prescribed for filing the return. If IRS takes longer, IRS is required to pay interest beginning on the 46th day after the statutory due date for filing the return. 26 U.S.C. § 6611(e).

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receiving and matching information returns, such as the W-2 to tax returns, rather than holding refunds until all compliance checks can be completed. As a result, IRS ends up trying to recover fraudulent refunds and unpaid taxes after matching information and pursuing discrepancies. We previously reported that, in 2010, it took IRS over a year on average to notify taxpayers of matching discrepancies, increasing taxpayer burden.<sup>29</sup> In August 2014, we recommended that IRS estimate the costs and benefits of accelerating W-2 deadlines and identify options to implement pre-refund matching using W-2 data as a method to combat the billions of dollars lost to identity theft refund fraud, allowing the agency more opportunity to match employers' and taxpayers' information.<sup>30</sup> In response to our recommendation, IRS conducted such a study and presented the results to Congress in 2015.

In December 2015, Congress moved the W-2 filing deadlines to January 31 and required IRS to take additional time to review refund claims based on the EITC and the ACTC.<sup>31</sup> As such, most individual taxpayers who claim either credit would not receive a refund prior to February 15.<sup>32</sup> JCT estimated that the entire provision will result in \$779 million in revenue from fiscal years 2016 to 2025.<sup>33</sup> According to IRS officials, they are evaluating how to implement these changes and the impact on the administration of the credits.

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<sup>29</sup>GAO, *Tax Refunds: IRS Is Exploring Verification Improvements, but Needs to Better Manage Risks*, [GAO-13-515](#) (Washington, D.C.: June 4, 2013).

<sup>30</sup>GAO, *Identity Theft: Additional Actions Could Help IRS Combat the Large, Evolving Threat of Refund Fraud*, [GAO-14-633](#) (Washington, D.C.: Aug. 20, 2014).

<sup>31</sup>Consolidated Appropriations Act, 2016, Pub. Law 114-113, 129 Stat. 2242 (December 18, 2015).

<sup>32</sup>According to JCT, the provision requires that no credit or refund for an overpayment for a taxable year shall be made to a taxpayer before the 15th day of the second month following the close of that taxable year, if the taxpayer claimed the EITC or ACTC on the tax return. Individual taxpayers are generally calendar year taxpayers; thus, for most taxpayers who claim the EITC or ACTC this rule would apply such that a refund of tax would not be made to such taxpayers prior to February 15 of the year following the calendar year to which the taxes relate. Technical Explanation of the Protecting Americans from Tax Hikes Act of 2015 House Amendment #2 to the Senate Amendment H.R. 2029 (Rules Committee Print 114-40). Prepared by the staff of the Joint Committee on Taxation, Dec. 17, 2015.JCX-114-15.

<sup>33</sup>JCT did not estimate the revenue effects of the specific refundable credit component of the broader provision.

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## Complexity of Eligibility Rules and Complying with IRS Enforcement Activities Contribute to Taxpayer Burden

The complexity of eligibility requirements, besides being a major driver of noncompliance and complicating IRS's ability to administer these credits, are also a major source of taxpayer burden. For example, for the EITC and ACTC, each child must meet certain age, residency and relationship tests. However, given complicated family relationships, determining whether children meet these eligibility requirements is not always clear-cut, nor easily understood by taxpayers. This is especially true when filers share responsibility for the child with parents, former spouses, and other relatives or caretakers, as the following figure illustrates.

### **Examples of Complications that Can Arise when Applying the EITC Eligibility Rules**

#### **Scenario 1:**

A woman separated from and stopped living with her husband in **January** of last year, but they are still married. She has custody of their children. She is likely **eligible** for the Earned Income Tax Credit (EITC) because she can file using the head of household status.

However.....If the couple separated in **November**, she is likely **not eligible** for the EITC because she was not living apart from her husband for the last 6 months of the year and therefore cannot claim the head of household filing status.

#### **Scenario 2:**

An 18-year old woman and her daughter **moved home** to her parents' house in November of last year. She is likely **eligible** for the EITC because she was supporting herself and her child.

However.....If she **always lived** at her parents' house, she is likely **NOT eligible** for the EITC because she was a dependent of her parents for the full tax year and therefore cannot claim the EITC on her own behalf.

#### **Scenario 3:**

A young man lives with and supports his girlfriend and her two kids. He and the mom **used to be married**, got divorced, and are now back together. He is likely **eligible** for the EITC because the children are his stepchildren and therefore meet the relationship requirement.

However...If he and the mom were **never married**, he is likely **NOT eligible** for the EITC because the children are not related to him.

Source: GAO analysis of Internal Revenue Service materials. | GAO-16-475

Differences in eligibility requirements among the RTCs also contribute to complexity. In 2013, according to our analysis of IRS data, 11.4 million taxpayers claimed both the EITC and ACTC while another 5.3 million claimed the EITC, ACTC, and CTC, navigating multiple sets of requirements for income levels and child qualifications. We have also previously reported that the complexity of education credits like the AOTC

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means that some taxpayers do not make optimal choices about which education credits to claim.<sup>34</sup> Faced with these complexities, many potential credit recipients seek help filing their tax returns, typically from paid preparers. Fifty-four percent of taxpayers claiming the EITC use paid preparers to help them navigate these requirements and complete the tax forms. These preparers provide a service that relieves taxpayers of costs in terms of their own time, resources, and anxiety about the accuracy of their returns. However, the preparer costs may be an additional burden if their fees are excessive or their advice inaccurate. As we previously reported, the fees charged for tax preparation services vary widely and may not always be explicitly stated upfront.<sup>35</sup> As noted later in this report, unenrolled paid preparers—those generally not subject to IRS regulation—have higher error rates for the RTCs than taxpayers who choose to prepare their own returns.

Taxpayers who choose to prepare their own returns file a tax return (some version of Form 1040) along with additional forms, such as the Earned Income Credit schedule, Schedule 8812 for the CTC, or Form 8863 to claim education credits. To determine both eligibility and the amount of the credit, taxpayers can consult separate worksheets included with the forms. These can be long and detailed; Publication 596, which includes instructions and worksheets for claiming the EITC, is 37 pages long. IRS reported that most taxpayers who self-prepare use tax software when they file their returns and that, on average, the burden for RTC returns was about 11 hours per return in 2013.

In addition to the costs of filing a claim for a credit, complying with IRS enforcement activities also contributes to taxpayer burden. In tax year 2013, IRS rejected over 2 million electronically filed EITC claims. IRS rejects these claims for a variety of reasons, such as missing forms, incorrect SSNs, or if another taxpayer has claimed the same child. Taxpayers can handle some of these issues, such as a mistyped SSN, by correcting their electronic returns. IRS reported that a majority (74.4 percent) of rejected returns are corrected and resubmitted electronically. IRS also reported that this process takes taxpayers on average half an

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<sup>34</sup>GAO, *Higher Education: Improved Tax Information Could Help Families Pay for College*, [GAO-12-560](#) (Washington, D.C.: May 18, 2012).

<sup>35</sup>GAO, *Paid Tax Return Preparers: In a Limited Study, Preparers Made Significant Errors*, [GAO-14-467T](#) (Washington, D.C.: Apr. 8, 2014).

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hour—shorter than if they had to make this correction after filing. Other issues impose a larger burden. To claim a child that someone else has already claimed for the EITC, taxpayers can fill out and resubmit their return on paper and then face a possible audit with its associated costs.

When processing the tax return, if IRS identifies potential noncompliance with eligibility requirements it can initiate a correspondence audit and send a letter to the taxpayer requesting documentation showing that the taxpayer meets those eligibility requirements. For taxpayers overall, IRS estimated that participating in a correspondence exam takes taxpayers 30 hours, which, combined with any out of pocket costs, is valued on average at \$500. In 2015, IRS conducted just under 446,000 EITC exams, which means that approximately 1.6 percent of people filing a EITC claim were audited compared to about .9 percent for individual taxpayers overall in 2014.

However, this compliance burden may be larger for some populations. For example, according to attorneys who represent low-income tax filers, these filers may have difficulty proving they meet residency and relationship requirements due in part to language barriers, limited computer literacy, and complicated family structures. To prove a residency requirement—that a child lived with the taxpayer in the United States for more than half the year—taxpayers may submit a document with their address, name, and the child’s name that could include school or medical records or statements on letterhead from a child-care provider, employer, or doctor. Again, according to low-income tax clinic representatives, these can be hard to cobble together for families with limited English proficiency or who move multiple times throughout the year. To prove a relationship requirement, unless they are claiming their son or daughter, taxpayers must submit birth certificates proving the relationship. For example, to claim a great-grandchild, the taxpayer must submit the child’s, grandchild’s, and great-grandchild’s birth certificates. The names must be on the birth certificates, or they will also need to submit another type of document such as a court decree or paternity test. For multigenerational families or situations in which another relative is taking care of the child, locating and assembling the necessary chain of birth certificates can be a challenge.

If IRS determines that a taxpayer improperly claimed the EITC due to reckless or intentional disregard of rules or regulations, it may ban the

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taxpayer from claiming the credit for 2 years—even if the taxpayer qualifies for it.<sup>36</sup> However, the National Taxpayer Advocate reported that IRS’s procedures automatically imposed the ban on taxpayers who did not respond to IRS’s notices and put the burden of proof onto taxpayers to show they should not have received the ban.<sup>37</sup> According to IRS officials, in response to these concerns, IRS implemented new training programs, strengthened managerial oversight, and added protections for taxpayers to ensure they only systematically issue bans to taxpayers with a history of noncompliance. In 2015, IRS issued fewer 2-year bans than in previous years.

Despite the compliance burden and costs associated with these RTCs, the burden may be lower than benefits from spending programs. For example, tax credit recipients can self-certify, they do not need to meet with caseworkers, nor submit up-front documentation as is required with some direct service antipoverty programs such as Supplemental Security Income (SSI) or Temporary Assistance for Needy Families (TANF). The simplified up-front process may contribute to higher participation rates. The EITC participation rate — over 85 percent as reported by Treasury—is in the high end of the range for antipoverty programs. GAO previously reported that the SSI participation rate in 2011 was about 67 percent of adults who were estimated to be eligible, while the TANF participation rate was about 34 percent.<sup>38</sup> IRS does not estimate participation rates for AOTC or ACTC.

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<sup>36</sup>IRS can also impose 10-year bans in instances of fraud. Both the 2- and 10-year bans used to apply only to the EITC; the PATH Act of 2015 expanded the bans to apply to the CTC and AOTC starting with tax year 2016. Pub. L. No. 114-113, § 208, 129 Stat. 2242, (Dec. 18, 2015).

<sup>37</sup>National Taxpayer Advocate, *2013 Annual Report to Congress, Volume 1*. December 31, 2013.

<sup>38</sup>For more information on how these rates are calculated, see GAO, *Federal Low-Income Programs: Multiple Programs Target Diverse Populations and Needs*, [GAO-15-516](#). (Washington, D.C.: Jul. 30, 2015)

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## Developing a Comprehensive Strategy for RTC Compliance Efforts and Greater Use of Available Data Could Help IRS Better Target Limited Enforcement Resources

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### IRS's Lack of a Comprehensive Compliance Strategy for RTCs Hampers Its Ability to Make Informed Resource Allocation Decisions

Sustained annual budget reductions at IRS have heightened the importance of determining how best to allocate declining resources to ensure it can still meet agency-wide strategic goals of increasing taxpayer compliance, using resources more efficiently, and minimizing taxpayer burden. In an effort to improve efficiency, IRS consolidated administration of the EITC, ACTC, and AOTC across several different offices within the Wage & Investment Division. Return Integrity and Compliance Services (RICS) oversees the division's audit functions. Within RICS, Refundable Credits Policy and Program Management (RCPPM) is responsible for refundable credit policy, enforcement, and establishing filters for computerized selection of returns for audit. Refundable Credits Examination Operations is responsible for conducting the audits, oversight and training of personnel, maintaining the phone and mail operations, and addressing personnel and union issues. Although these offices work collaboratively to formulate and implement policies and process workload, they lack a comprehensive strategy for RTC compliance efforts. IRS is working on an operational strategy to document all current EITC compliance efforts and identify and evaluate potential new solutions to address improper payments. However, this review only focuses on efforts to improve EITC compliance and does not include the other refundable credits. The lack of a comprehensive strategy that takes into account all ongoing compliance efforts for the three RTCs (the EITC, ACTC, and AOTC) presents several potential challenges, as discussed below.

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IRS Does Not Report Error Rates for All RTCs and It Is Unclear How It Uses Compliance Data to Make Resource Allocation Decisions

IRS measures compliance by estimating an aggregate error rate for the EITC and error rates for certain subcategories of EITC claimants (e.g., claimants grouped by type of tax preparer).<sup>39</sup> IRS uses National Research Program (NRP) data for these estimates because it employs a representative sample that can be used to estimate error rates for the universe of taxpayers. In addition to measuring compliance with the tax code, the error rates help IRS understand taxpayer behavior; information IRS could use to develop compliance strategies and allocate resources. According to IRS, it estimates net overclaim percentages (net misreported amount divided by the amount reported) for the RTCs.<sup>40</sup> IRS reported it uses these overclaim percentages to identify areas for potential future research. However, IRS does not report the frequency of these errors or amounts claimed in error across credits, which makes it difficult to compare noncompliance across the credits. Analyses which incorporate relative frequencies and the magnitudes of these errors could be used by IRS to inform resource allocation decisions.

In order to show how IRS can use these error rates to inform its compliance strategy and resource allocations, we estimated aggregate error rates for the EITC, the AOTC, and the CTC/ACTC, which combines the refundable ACTC with its nonrefundable counterpart the CTC. Estimating the CTC/ACTC makes it possible to compare error rates for this credit with those for the EITC and AOTC because these credits include the refunded amounts as well as the amounts used to offset tax liabilities. The CTC/ACTC error rate estimate will exclude any adjustments due to dollars shifted between refundable ACTC and

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<sup>39</sup>For the purpose of this report, we use the term error rate to refer to overclaims based on NRP audits; there are a few instances through the report where we also mention underclaims. The error rate is different than the improper payment rate because it does not net out protected revenue—money that IRS identifies and prevents sending as a refund. Also, the improper payment rate requires a certain level of statistical precision consistent with OMB guidelines. Both error and improper payment estimates start with the amount of EITC overclaims—the difference between the amount of credits claimed by taxpayers and the correct amount of EITC as a result of examinations. To calculate the error estimate, IRS then divides the amount of overclaims by the total amount of credits claimed. IPJA, as amended, requires a high level of precision when estimating and reporting improper payment rates. To achieve that level of precision when conducting NRP audits, IRS oversamples the taxpayer population claiming the EITC. To achieve the same level of precision for the CTC/ACTC and AOTC with a single year of data, IRS would likely have to oversample, requiring additional resources.

<sup>40</sup>These estimates do not follow the same methodology as the EITC improper payments methodology nor do they follow the same methodology as IRS tax gap estimates.



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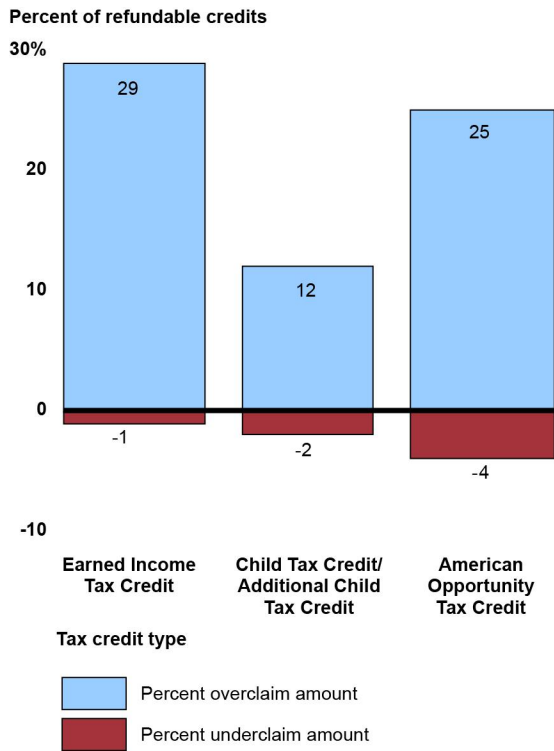
nonrefundable CTC. For example, a taxpayer who understates her income may claim a higher ACTC, but if IRS adjusts the income, the effect could be that the refundable ACTC decreases and the nonrefundable CTC increases. This adjustment does not necessarily result in saved dollars or revenue protected, but rather a shifting of dollars from a refund to a lower tax liability, depending where the taxpayer is in relation to the income phase-out rate. Without making these adjustments for the CTC/ACTC estimates, the error rates for the credits would not be comparable.

The relative frequency of error rates by different types of credit could be useful information for determining the allocation of enforcement resources. As figure 6 shows, the estimated average error rates for overclaims and underclaims from 2009 to 2011 can vary considerably by credit type. The EITC and AOTC have similar average error rates for overclaims of 29 percent and 25 percent, respectively, but the CTC/ACTC error rate for overclaims is 12 percent—less than half of the other two credits.<sup>41</sup> Although they are much smaller, the underclaim rates vary in a similar way, with the 4 percent AOTC error rate being twice as large as the CTC/ACTC rate. The relative frequency of errors by type of credit may help IRS better focus its limited resources.

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<sup>41</sup>We also estimated an average error rate of 29 percent for just the ACTC.

**Figure 6: Overclaims and Underclaims as a Percent of Total Credit Amount, 2009 to 2011**



Source: GAO analysis of IRS National Research Program (NRP) data 2009-2011. | GAO-16-475

Note: Claimed credit amounts do not represent net amounts (e.g., credit underclaims do not offset credit overclaims). See appendix II for more information on these estimates.

In addition to the error rates, information about the amount estimated to be claimed in error would also be useful for resource allocation. From 2009 to 2011, the average amount overclaimed for the RTCs also had considerable variation by credit type. The average yearly amount overclaimed for the EITC was \$18.1 billion, for the CTC/ACTC was \$6.4 billion, and for the AOTC was \$5.0 billion. (See appendix II for more details about credit amounts erroneously claimed.) Combining these dollar amounts with the error rate information can further inform resource allocation. For example, although the AOTC had an overclaim rate of 25 percent—nearly as large as the EITC’s 29 percent rate—the amount overclaimed was only about one-third of the EITC’s amount. Both the rate

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and the amount—among other considerations like effects on equity and compliance burden—would factor into a plan for allocating enforcement resources.<sup>42</sup>

The lack of a comprehensive compliance strategy that includes information on error rates by type of credit and categories of taxpayers could limit IRS's ability to recognize gaps in its enforcement coverage and compliance efforts. For example, IRS previously reported in its EITC compliance studies that unenrolled paid preparers have higher error rates than other preparer types. Our analysis of NRP data, discussed later in this report, showed that this pattern of noncompliance by type of preparer is also true for the ACTC and AOTC. With this information, a compliance strategy can be devised that takes into account these other credits.

Additional information could also help IRS better plan resource allocations among the RTCs. IRS devotes a large percentage of its RTC enforcement resources to the EITC, but has not made clear the basis for this allocation. As previously noted, in 2014, IRS selected 87 percent (or 435,000) of its RTC audits based on issues related to the EITC and 6 percent (or 31,000) of its audits based on issues related to the ACTC. The returns that IRS selects for EITC audit may also be audited for other RTC issues. For example, in addition to the 31,000 returns selected for ACTC audits in 2014, another 382,000 returns were audited for the ACTC even though they were selected for another RTC issue—almost always an EITC issue. This approach allows IRS to pick up a lot of potentially erroneous ACTC claims, which IRS can then also freeze as part of the EITC audit. However, this approach raises several concerns about whether IRS is achieving an optimal resource allocation: (1) the very low audit coverage of the approximately 5 million claimants who claim the ACTC but not the EITC could risk a reduction in voluntary compliance, (2) using EITC tax returns as a selection mechanism for ACTC audits may not be the best way to identify ACTC noncompliance, and (3) questions about equity in audit selection for ACTC arise because EITC claimants are generally lower-income than claimants for other credits. Weighing these concerns and other factors like administrative costs could help IRS create a comprehensive strategy for the RTCs that could provide a

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<sup>42</sup>For a discussion on economic guidelines for enforcement allocation resource decisions, see [GAO-13-151](#).

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framework for IRS to make decisions about how to allocate resources and to communicate what criteria it uses to make these allocations.

Although IRS lacks a comprehensive RTC strategy, it has been able to identify some compliance trends for other credits besides the EITC. IRS officials observed an increase in the ACTC overclaim percentage from 2009 to 2011. According to IRS, confirming and understanding the nature of that potential increase will require more research. To that end, IRS plans to begin work in 2016 on an ACTC compliance study similar in nature to the recent EITC 2006-2008 Compliance Study. Officials could not provide a start date or timeline for completion and said the rate at which this work progresses will depend on competing priorities given limited budget and staff. However, they stated that the CTC/ACTC compliance study remains a high priority project. Previously, we reported that IRS could identify ways to reduce taxpayer noncompliance through better use of NRP data and that ACTC was one area where further research could provide information on how to address noncompliance.<sup>43</sup>

RTC Performance Indicators  
Are Difficult to Interpret and Do  
Not Include Indicators for  
Equity and Compliance Burden

Another challenge related to the lack of a comprehensive plan is that certain IRS performance indicators may be difficult to interpret. IRS relies on the no-change rate and default rates to make resource allocation decisions. IRS closes audits as defaults when the taxpayer (1) does not respond to any IRS notice or (2) responds to some notices but not the last one asking for agreement with a recommended additional tax assessment. IRS officials stated that they believe that taxpayers who default are generally noncompliant because taxpayers selected for audit receive multiple notices and the refunds can equal several thousand dollars, giving them the information and incentive to engage with IRS. Therefore, when there is a high default and a low no-change rate, IRS officials said that they interpret that as an indicator that the taxpayers selected for audit were not entitled to the credit claimed.

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<sup>43</sup>GAO, *Using Data from the Internal Revenue Service's National Research Program to Identify Potential Opportunities to Reduce the Tax Gap*, [GAO-07-423R](#) (Washington, D.C.: Apr. 19, 2007). We recommended that IRS should develop a plan for capturing complete NRP examination files in order to ensure it maximizes its return on investment. Capturing this data electronically would allow IRS to perform additional analysis such as calculating an error rate for the ACTC. IRS substantially implemented this recommendation and has documentation in electronic form, but has not used that information to publish an official error rate for the ACTC.

Even so, it can be difficult to interpret a low no-change rate when it includes defaults. As we previously reported, in fiscal years 2009 through 2013, the no-change rate ranged from 11 percent to 21 percent for all closed correspondence audits but rose to 28 percent to 45 percent when IRS had contact with the taxpayers throughout the audit and did not close the audit through a default. Without knowing the reasons why taxpayers default, it is difficult to know how to interpret the no-change rate. To the extent that some of the taxpayers who default are compliant, the reported no-change rate underestimates what would be the actual no-change rate. The Taxpayer Advocate has raised concerns that taxpayers may not understand the notices, which could be contributing to the low response rate.

The difficulty interpreting the no-change rates and default rates can make the results of IRS’s assessments of its programs less certain. According to IRS, two of the most effective and reliable enforcement programs for addressing RTC compliance and reducing improper payments are post-refund document matching and audits. IRS stated that it protects over \$3 billion dollars in revenue based on these enforcement activities, but the default rate is over 50 percent. The no-change rate indicates that the overwhelming majority of the cases IRS selects have mistakes that require an adjustment. However, because the defaults are included among the no-change audits and the default rate is high, it calls into question the extent to which the cases being selected are actually noncompliant. Table 3 shows the number of returns IRS identifies through these various enforcement activities, the no-change rate, and the default rate.

**Table 3: Performance Indicators for Selected Earned Income Tax Credit (EITC) Enforcement Initiatives**

| 2014 EITC enforcement initiatives | Post-refund document matching reviews | Pre-refund audits | Post-refund audits |
|-----------------------------------|---------------------------------------|-------------------|--------------------|
| Number of compliance activities   | 1.042 million                         | 348,000           | 87,000             |
| IRS calculated no-change rate     | 7.1%                                  | 9.1%              | 12.7%              |
| IRS calculated default rate       | 65%                                   | 57.4%             | 58.7%              |

Source: Internal Revenue Service data. | GAO-16-475

The no-change rates for these enforcement activities are very low but the associated default rates are high. This disproportion can make the no-

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change rate misleading as an indicator of noncompliance. For example, if 10 percent of the defaulting taxpayers in the case of document matching were actually compliant, the no-change rate would double to about 14 percent, and if 50 percent were compliant, the no-change rate would increase to about 40 percent. These figures could call into question whether IRS is getting useful information out of no-change rates when the default rate is so high and little is known about the compliance characteristics of defaulting taxpayers.

Another challenge that IRS faces is that the set of indicators that it uses to make resource allocation decisions does not include indicators for equity and compliance burden. When evaluating enforcement strategies, such as developing new screening filters for exam selection, IRS officials look at filters that produce a low response rate and a low no-change rate. For example, at the 2015 annual strategy meeting, IRS managers recommended increasing the number of Disabled Qualifying Child (DQC) cases that they plan to work each year based on a high default rate (70 percent compared to a 54 percent default rate for other programs) and a low no-change rate of between 3 and 6 percent.<sup>44</sup> Based on these high default and low no-change rates, program managers recommended increasing the number of cases that they plan to work or replacing cases waiting to be worked with DQC cases as a way to reduce their backlog of unclosed cases. The managers did not evaluate the recommendation on the basis of equity or compliance burden. In addition, IRS did not provide any reliable indicator of compliance burden associated with any of the refundable tax credits that we reviewed. According to IRS officials, reviewing taxpayers' responses is resource intensive, and by reducing that process, IRS could perform more audits elsewhere. However, as discussed above, the no-change rate on which they based their decision may be an unreliable estimate of actual taxpayer noncompliance when, as the officials said, they do not know why taxpayers did not respond to notices.

A more comprehensive strategy that documents RTC compliance efforts could help IRS officials determine whether their current performance indicators are giving them reliable information and their current allocation of resources is optimal, and if not, what adjustments are needed. IRS

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<sup>44</sup>Disabled Qualifying Child cases are cases in which there are indications that the taxpayer has triggered one or more of four different filters such as claiming multiple disabled children older than the taxpayer.

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Agency-wide Administrative  
and Compliance Challenges  
Complicate RTC Oversight

officials could also use this review as an opportunity to ensure program managers have a balanced suite of performance measures which adequately address all priority goals.<sup>45</sup> For example, the desire to reduce inventory or concentrate resources on efforts with the lowest no-change rate could take precedence over undue taxpayer burden.

IRS faces administrative and compliance challenges which also complicate the administration of RTCs. Due in part to long-standing concerns about the EITC improper payment rate, EITC examinations account for nearly 39 percent of all individual income tax return audits each year. However, the EITC only accounts for about 5 percent of the tax gap in tax year 2006 (the most recent estimate available). In a 2013 report, we demonstrated that a hypothetical shift of about \$124 million in enforcement resources among different types of audits could have increased direct revenue by \$1 billion over the \$5.5 billion per year IRS actually collected in 2013.<sup>46</sup> An agency-wide approach that incorporates ROI calculations could help IRS allocate enforcement resources more efficiently not just among the credits, but also across EITC and non-EITC returns. We previously recommended that IRS develop a long-term strategy and use actual ROI calculations as part of resource allocation decisions to help it operate more effectively and efficiently in an environment of budget uncertainty.<sup>47</sup> In response to our recommendation, IRS has begun a project to develop ROI measures that could be used for resource allocation decisions.

We have previously reported that while IRS publishes information regarding the coverage rates and additional taxes assessed through various programs, relatively little information is available on how much revenue is actually collected as a result of these enforcement activities.<sup>48</sup>

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<sup>45</sup>For a discussion of how a balanced suite of performance measures is necessary to ensure that an organization's various priorities are covered, see GAO, *Tax Administration: IRS Needs to Further Refine Its Tax Filing Season Performance Measures*, [GAO-03-143](#) (Washington, D.C.: Nov. 22, 2002).

<sup>46</sup>GAO, *Tax Gap: IRS Could Significantly Increase Revenues by Better Targeting Existing Resources*, [GAO-13-151](#) (Washington, D.C. Dec. 5, 2012).

<sup>47</sup>GAO, *IRS 2015 Budget: Long-Term Strategy and Return on Investment Data Needed to Better Manage Budget Uncertainty and Set Priorities*, [GAO-14-605](#) (Washington, D.C.: June 12, 2014).

<sup>48</sup>[GAO-13-151](#).

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Additional analysis of available RTC collections data could also inform resource-allocation decisions. Currently, IRS reviews the amount of revenue collected annually based on EITC post-refund enforcement activities, but it could not verify the reliability of that data during the timeframe of the GAO audit. Such data could be used to calculate a collections rate—the percentage of tax amounts assessed that is actually collected. A reliable collections rate could be used as an additional data point for informing and assessing allocation decisions.

According to federal internal control standards, managers need accurate and complete information to help ensure efficient and effective use of resources in making decisions.<sup>49</sup> Recognizing that not all recommended taxes would be collected or collected soon after the audit, IRS could still use available data to compute a collections rate for post-refund enforcement activities and conduct further analyses of assessments from post-refund audits and document-matching reviews. IRS officials said they have conducted such studies in the past, and they were resource-intensive. Nonetheless, given that collections data are needed for both the detailed analyses described above, as well as for an agency-wide analysis of the relative costs and results of various enforcement activities to inform resource-allocation decisions, there may be opportunities to coordinate the data collection efforts to reduce overall costs.

In addition to collections, an agency-wide approach could help IRS develop a strategy for addressing Schedule C income misreporting—a long-time challenge for IRS—and a key driver of EITC noncompliance. According to IRS, income misreporting is the most commonly made error on returns claiming the EITC, occurring on about 67 percent of returns with overclaims.<sup>50</sup> Self-employment income misreporting represents the largest share of overclaims (15 to 23 percent) while wage income misreporting represents the smallest (3 to 6 percent).<sup>51</sup> In the claimant population as a whole, 76 percent of taxpayers earn only wage income,

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<sup>49</sup>GAO, *Standards for Internal Control in the Federal Government*, [GAO/AIMD-00-21.3.1](#) (Washington, D.C.: Nov. 1, 1999) p.19.

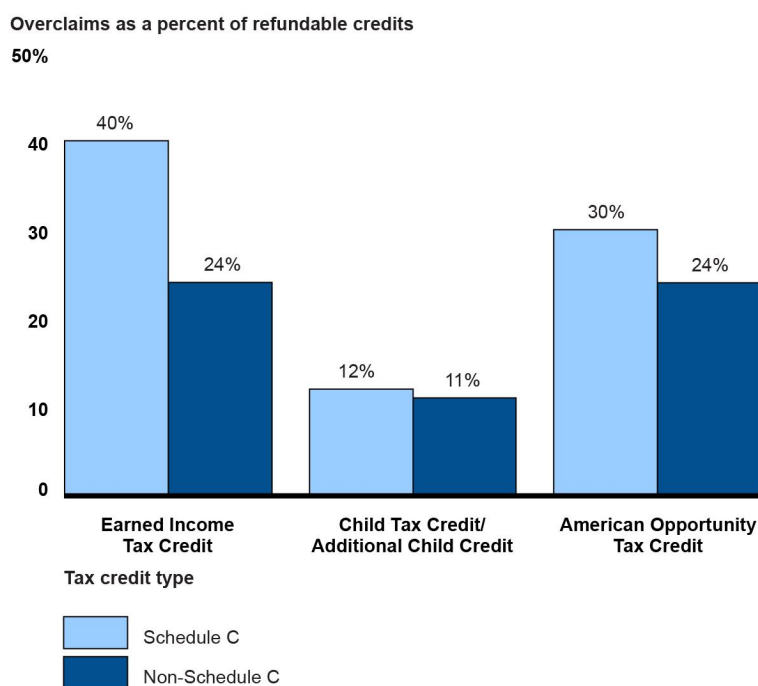
<sup>50</sup>As mentioned earlier in this report, the largest EITC amounts claimed in error are due to noncompliance with the relationship eligibility rules for qualifying children.

<sup>51</sup>The range of estimates that IRS reported is not due to statistical uncertainty but is based on approaches IRS takes in its compliance study to attribute more or fewer overclaim dollars to each error type when multiple types of errors are detected.



while the remaining 24 percent earn at least some self-employment income.<sup>52</sup> As shown in figure 7, error rates in terms of overclaimed amounts of credit were largest for Schedule C filers for the EITC and AOTC. The error rate for Schedule C filers claiming the CTC/ACTC was not statistically different from the error rate for filers without a Schedule C.

**Figure 7: Overclaim Percentage by Income Type, 2009 to 2011**



Source: GAO analysis of IRS National Research Program (NRP) data for 2009-2011. | GAO-16-475

Note: Overclaimed credit amounts do not represent net overclaim amounts (i.e., credit underclaims do not offset overclaims). See appendix II for more information on these estimates.

Although Schedule C income misreporting is larger for EITC claimants, IRS’s enforcement strategies are more likely to be effective with wage income misreporting than Schedule C income misreporting. According to IRS, it addresses income misreporting through (1) DDb filters designed to identify taxpayers making up a fake business; (2) the questionable refund program designed to identify and follow-up with taxpayers lying about where and how long they worked; and (3) the post-refund document

<sup>52</sup>Ten percent report both wages and self-employment income.

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matching program that matches returns with other information such as W-2s. While these methods may catch some income misreporting by the self-employed, they rely to a great extent on the types of third party income and employment documentation that are likely to be available for wage earners but are largely absent for the self-employed. According to IRS officials, starting in tax year 2011, IRS started matching other information such as Form 1099K Merchant Card payments to tax returns to verify self-employment income. IRS also addresses EITC noncompliance through correspondence audits but Schedule C income issues are more conducive to field audits than correspondence audits. However, EITC Schedule C returns are less likely to be selected for field audits because the dollar amounts do not meet IRS thresholds.

Addressing Schedule C income misreporting has been a long-standing challenge for IRS. In 2009, we reported that according to IRS, sole proprietor income was responsible for about 20 percent of the tax gap.<sup>53</sup> A key reason for this misreporting is well known. Unlike wage and some investment income, sole proprietors' income is not subject to withholding and only a portion is subject to information reporting to IRS by third parties. We have made several recommendations over the years to address this issue. In 2007, we recommended that Treasury's tax gap strategy should cover sole proprietor compliance in detail while coordinating it with broader tax gap reduction efforts. As of March 2015, no executive action has been taken to address this recommendation, nor has Treasury provided us with plans to do so. We maintain that without taking these steps, Treasury has less assurance that IRS is using resources efficiently to promote sole proprietor compliance.

In 2009, we recommended IRS develop a better understanding of sole proprietor noncompliance, including sole proprietors improperly claiming business losses. As of November 2015, IRS partially addressed this recommendation by researching sole proprietor noncompliance and focusing on those who improperly claim business losses. The results of this research will take several years to compile but IRS plans to provide at least rough estimates of disallowed losses in 2016. This research, when completed, could help IRS to identify noncompliant sole proprietor issues and address one of the drivers of EITC noncompliance.

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<sup>53</sup>GAO, *Tax Gap: Limiting Sole Proprietor Deductions Could Improve Compliance but Would Also Limit Some Legitimate Losses*, [GAO-09-815](#) (Washington, D.C.: Sept. 10, 2009).

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## IRS Is Missing Opportunities to Use Available Data to Identify Drivers of ACTC and AOTC Noncompliance

IRS does not track the number of returns erroneously claiming the ACTC and AOTC identified through screening activities. (IRS currently tracks this information for the EITC). As we noted earlier, according to federal internal control standards, managers need accurate and complete information to help ensure efficient and effective use of resources in making decisions. IRS conducts various activities to identify and prevent the payment of an erroneous refund, such as screening returns for obvious mistakes and omissions. IRS officials said this information would help them deepen their understanding of common errors made by taxpayers claiming these credits and the insights could then be used to develop strategies to educate taxpayers. IRS officials reported that they are working to figure out how to extract these data for the ACTC and AOTC so they can begin to track the data and use them to refine their overall compliance strategy. Although IRS said that it understands the potential usefulness of these data, it has not yet developed a plan that includes such desirable features as timing goals and resource requirements and a way to develop indicators from the data that would be most effective for understanding and increasing compliance.

IRS may also be missing an opportunity to use information from the Department of Education (Education) to detect and correct AOTC errors. Education collects in its Postsecondary Education Participants System (PEPS) a list of institutions and their employer identification numbers (EIN), which would indicate whether the institution the student attends is eligible under the AOTC.<sup>54</sup> The PATH Act of 2015 requires taxpayers claiming the AOTC to report the EIN for the education institutions to which they made payments.

There is some evidence that PEPS may be a useful tool for detecting noncompliance. In a review of the AOTC, the Treasury Inspector General for Tax Administration (TIGTA) used PEPS data and identified 1.6 million taxpayers claiming the AOTC for an ineligible institution in 2012.<sup>55</sup> TIGTA recommended that IRS coordinate with Education to determine whether IRS could use Education data to verify the eligibility of educational

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<sup>54</sup>Eligible educational institutions are those schools that offer education beyond high-school and participate in a student aid program run by the U.S. Department of Education.

<sup>55</sup>Treasury Inspector General for Tax Administration, *Billions of Dollars in Potentially Erroneous Education Credits Continue to Be Claimed for Ineligible Students and Institutions*, Reference Number:-2015-40-027 (Washington, D.C.: Mar. 27, 2015).

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institutions claimed on tax returns. While IRS agreed that these PEPS data could identify potentially erroneous claims, it did not agree to further explore using the data.

IRS has not determined whether PEPS can be used for enhancing AOTC compliance for two reasons. First, IRS does not have math error authority (MEA) to correct errors in cases where taxpayer-provided information does not match corresponding information in government databases.<sup>56</sup> IRS would still need to conduct an exam to reject a claim with an ineligible institution. For example, if the EIN on a submitted return is not contained in the PEPS database of eligible institutions, IRS does not have the authority to automatically correct the return and notify the taxpayer of the change. Instead, IRS would have to contact the taxpayer for additional documentation or open an examination to resolve discrepancies between PEPS data and the tax return information.<sup>57</sup> Secondly, IRS believes its current selection process is sufficient because IRS already identifies more potentially fraudulent returns with its filters than it can examine given its current resources. In 2012, IRS identified 1.8 million returns with potentially erroneous education claims and selected 9,574 for exam, for an exam rate of 0.5 percent. To identify these returns for exam, IRS used its pre-refund filters of students claiming the credit for more than 4 years, returns without the 1098-T form, or students in an unexpected age range.

The administration submitted legislative proposals for fiscal years 2015 and 2016 that, among other things, would establish a category of correctable errors. Under the proposals, Treasury would be granted MEA to permit IRS to correct errors in cases where information provided by a taxpayer does not match corresponding information provided in

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<sup>56</sup>IRS does have this authority to correct or adjust AOTC claims for other reasons.

<sup>57</sup>IRS is authorized to make inquiries, determinations, and assessments of all taxes, including interest and penalties, under the Internal Revenue Code. 26 U.S.C § 6201. Generally, before assessing additional tax due, IRS issues correspondence to request that a taxpayer address the discrepancy by providing documentation or missing information. If IRS and the taxpayer cannot reach agreement or the taxpayer does not respond to the IRS correspondences, the discrepancy case will then be referred to Examination. To pursue assessment and collection of the taxes due, IRS must issue a Statutory Notice of Deficiency—a legal notice that formally notifies a taxpayer of IRS's intention to assess a tax deficiency and gives the taxpayer 90 days to contest the tax deficiency with the Tax Court. 26 U.S.C §§ 6212(a), 6213(a).

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government databases.<sup>58</sup> We have previously reported that expanding MEA with appropriate safeguards could help IRS meet its goals for the timely processing of tax returns, reduce the burden on taxpayers of responding to IRS correspondence, and reduce the need for IRS to resolve discrepancies in post-refund compliance, which, as we previously concluded, is less effective and more costly than at-filing compliance.<sup>59</sup> However, Congress has not granted this broad authority.

Although correctable error authority may reduce compliance and administrative burden, it raises a number of concerns. Experts have raised concerns that such broad authority could put undue burden on taxpayers. For example, the National Taxpayer Advocate has raised concerns that IRS's current math error notices are confusing and place a burden on taxpayers as they try to get answers from IRS. The JCT also raised concerns about whether all government databases are considered sufficiently reliable under this proposal.

However, an assessment of the completeness and accuracy of PEPS data may be useful for IRS enforcement efforts even in the absence of correctable error authority. First, while IRS believes its current selection process is sufficient, without assessing the PEPS data, it cannot know whether its case selection could be improved by this additional information about ineligible institutions. Second, if an IRS assessment of PEPS data determined that pre-refund corrections based on those data would be effective, the case for correctable error authority would be easier to make to Congress. As our work on strategies for building a results-oriented and collaborative culture in the federal government has shown, stakeholders, including Congress, need timely, action-oriented information in a format that helps them make decisions that improve program performance.<sup>60</sup>

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<sup>58</sup>Department of the Treasury, *General Explanations of the Administration's Fiscal Year 2016 Revenue Proposals* (February 2015), 245-246; and *General Explanations of the Administration's Fiscal Year 2015 Revenue Proposals* (March 2014), 229-230.

<sup>59</sup>[GAO-15-540](#).

<sup>60</sup>GAO, *Government Performance: Strategies for Building a Results-Oriented and Collaborative Culture in the Federal Government*, [GAO-09-1011T](#) (Washington, D.C.: Sept. 24, 2009).

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IRS Could Use Previous Years' Tax Returns to Identify AOTC Noncompliance, but Congressional Action Is Needed

Taxpayers can only claim the AOTC for 4 years, but IRS does not have MEA to freeze a refund on a claim that exceeds the lifetime-limit rule. In 2015, TIGTA found that more than 400,000 taxpayers in 2012 received over \$650 million for students claiming the AOTC for more than 4 years.<sup>61</sup> According to IRS officials, they have processes to identify students who exceed the 4-year lifetime limit based on information from prior returns. Those returns are candidates for audits. However, as noted earlier, IRS identifies far more candidates for audits than it can perform given current staffing levels. In 2011, we recommended that Congress consider providing IRS with MEA to use tax return information from previous years to ensure that taxpayers do not improperly claim credits or deductions in excess of lifetime limits where applicable.<sup>62</sup> Granting this authority would help IRS disallow clearly erroneous claims, reduce the need for an audit, and promote fairness by limiting claims to taxpayers who are entitled to them. It would also assist taxpayers in self-correcting unintentional mistakes where they may have chosen an incorrect educational tax benefit since they exceeded the lifetime limit. As we recommended in 2011, we continue to believe that Congress should consider providing MEA to be used with credits and deductions with lifetime limits. Any RTCs that contain these limits such as the AOTC should fall under this authority as well if it is granted by Congress.

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IRS Has Made Efforts to Promote RTC Awareness and Compliance by Taxpayers and Paid Preparers

IRS has several efforts intended to educate taxpayers about eligibility requirements and improve compliance including social media messaging, webinars, and tax forum presentations. According to IRS, these efforts are intended to promote participation among taxpayers eligible for these credits, ensure that taxpayers are aware of the eligibility requirements before filing a tax return, and prevent unintentional errors before they occur. Additionally, IRS designated an EITC Awareness Day to increase awareness among potentially eligible taxpayers at a time when most are

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<sup>61</sup>There are cases where students are not eligible for the AOTC because they exceeded the lifetime limit, but could be eligible for other education benefits such as the Lifetime Learning Credit. For more information, see Treasury Inspector General for Tax Administration, *Billions of Dollars in Potentially Erroneous Education Credits Continue to Be Claimed for Ineligible Students and Institutions*, 2015-40-027 (Washington, D.C.: Mar. 27, 2015).

<sup>62</sup>GAO, *2011 Tax Filing: IRS Dealt with Challenges to Date but Needs Additional Authority to Verify Compliance*, [GAO-11-481](#) (Washington, D.C.: Mar. 29, 2011).

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filing their federal income tax returns. The 10th Annual EITC Awareness Day was January 29, 2016.

According to IRS, it currently has limited ability to measure the effectiveness of its outreach efforts. As recently as 2011, IRS officials said they were able to measure the effectiveness of the efforts through a semi-annual survey where they tested, for example, the effect of concentrating messaging in certain areas on taxpayer awareness of the EITC. Although IRS reported it no longer has the funds for that survey, officials said IRS still commissions an annual survey intended to improve services to volunteers and external stakeholders. IRS officials also said that they collect user feedback to assess use and effectiveness of their EITC website and make changes accordingly. For example, after users cited problems with easily locating information on maximum income limits for the EITC, IRS reported that it revised its website to make income information more prominent.

To address underutilization of the AOTC, IRS has been working to improve the quality and usefulness of information about the credit. We reported in 2012 that about 14 percent of filers in 2009 (1.5 million of almost 11 million eligible returns) failed to claim an education credit or deduction for which they appeared to be eligible, possibly because filers were unaware of their eligibility or were confused.<sup>63</sup> In response to the recommendation in our 2012 report, IRS conducted a limited review in 2013 that determined that over 15 million eligible students and families may not have been or were not claiming an education benefit. Identifying these potentially eligible taxpayers will help IRS develop a comprehensive strategy to improve use of these tax provisions.

We also recommended in 2012 that IRS and Education work together to develop a strategy to improve information provided to tax filers who appear eligible to claim a tax provision but do not. IRS has been implementing this recommendation by coordinating with Education to (1) create an education credit web page on the department's Federal Student Aid website and (2) improve IRS's AOTC and Lifetime Learning Credit Communication Plan. To improve understanding of requirements for education credits, IRS has enhanced information and resources on

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<sup>63</sup>GAO, *Higher Education: Improved Tax Information Could Help Families Pay for College*, [GAO-12-560](#) (Washington, D.C.: May 18, 2012).

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IRS.gov and revised the tax form for claiming education credits (Form 8863, Education Credits American Opportunity and Lifetime Learning Credits) to include a series of questions for the taxpayer to ascertain credit eligibility.

IRS has also made efforts to address compliance issues associated with certain tax preparers. As shown in figure 8, unenrolled preparers have the highest error rates for RTCs among preparers. For the EITC, unenrolled preparers have the highest overclaimed rate at 34 percent of total credit claimed,<sup>64</sup> and, as IRS reported, they are the type of preparer most often used by EITC claimants, preparing 26 percent of all EITC returns. In contrast, although comprising only 3 percent of all returns with the EITC, returns prepared by volunteers in the IRS-sponsored Volunteer Income Tax Assistance and Tax Counseling for the Elderly programs have the lowest error rate at 16 percent.<sup>65</sup>

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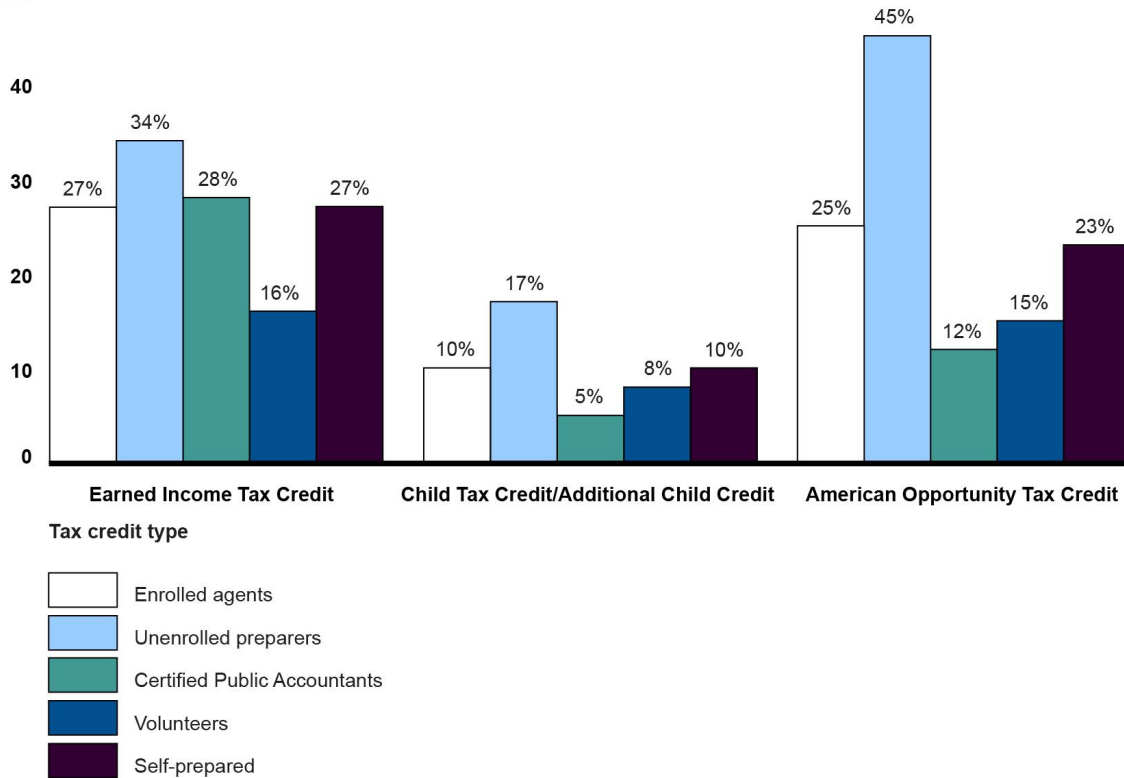
<sup>64</sup>IRS in its 2006-2008 EITC compliance study reported error rates between 33 and 40 percent where the different estimates reflect a difference in the underlying assumption about the compliance behavior of taxpayers who do not respond to the audits.

<sup>65</sup>IRS in its 2006-2008 EITC compliance study reported error rates between 11 and 13 percent where the different estimates reflect a difference in the underlying assumption about the compliance behavior of taxpayers who do not respond to the audits.



**Figure 8: Overclaim Percentages by Type of Tax Return Preparer, 2009 to 2011**

Overclaims as a percent of refundable credits  
50%



Source: GAO analysis of IRS National Research Program (NRP) data 2009-2011. | GAO-16-475

Notes: Overclaimed credit amounts do not represent net overclaim amounts (i.e., credit underclaims do not offset overclaims). See appendix II for more information on these estimates.

IRS’s chief compliance effort for paid preparers is the EITC Return Preparer Strategy designed to identify preparers submitting the highest number of EITC overclaims and tailor education and enforcement treatments to change their behavior. The strategy uses a variety of methods to address preparer noncompliance including (1) educational “knock-and-talk” visits with preparers before filing season; (2) due diligence visits where IRS officials determine whether preparers complied with due diligence regulations, such as documenting efforts to evaluate the accuracy of information received from clients; and (3) warning and compliance letters to preparers explaining that IRS has found errors in their prior returns. The EITC preparers that appear to be associated with the most noncompliance receive the most severe treatments, which include visits from revenue agents, and if necessary, an assessment of

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penalties: \$500 per noncompliant return, or if the preparer used a bad preparer tax identification number, penalties of \$50 per return, up to a maximum of \$25,000. (The PATH Act of 2015 expanded preparer due diligence requirements and penalties to the CTC and AOTC.) These preparers can also be referred to the Department of Justice for civil injunction proceedings. If fraud is identified, these preparers can be referred to criminal investigation.

The project recently found that less severe, lower cost treatments, such as warning letters, affect preparer behavior but more severe, higher cost due diligence visits improve preparer behavior the most. IRS expanded the number of preparers it selected to contact from 2,000 in fiscal year 2012 to around 31,000 in fiscal year 2015.

According to IRS data, the EITC Return Preparer Strategy has protected around \$1.7 billion in revenue of EITC and CTC/ACTC claims since fiscal year 2012.<sup>66</sup> In fiscal year 2015, the project protected over \$465 million in revenue (\$386 million in EITC savings and \$79 million in CTC/ACTC). Also, the proposed preparer penalties for the 2015 effort totaled \$30 million with an overall due diligence visit penalty rate of around 85 percent.

Any attempts to improve preparer compliance through increased regulation by Treasury and IRS are likely to require congressional action. IRS issued regulations in 2010 and 2011 to require registration, competency testing, and continuing education for paid tax return preparers and to subject these new registrants to standards of conduct in their practice. However, the courts ruled that IRS did not have the statutory authority to regulate these preparers.<sup>67</sup> In 2014, we suggested Congress consider granting IRS the authority to regulate paid tax preparers. Establishing requirements for paid tax return preparers could improve the accuracy of the tax returns they prepare, not just returns claiming EITC.

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<sup>66</sup>This does not include an additional \$414 million in revenue generated from audits or due diligence visits.

<sup>67</sup>*Loving v. IRS*, 917 F. Supp. 2d 67 (D.D.C. 2013), *aff'd* 742 F.3d 1013 (D.C. Cir. 2014).

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## Evaluating Proposed Changes to the RTCs Involves Assessing Trade-offs in Their Impact on Equity, Efficiency, and Simplicity

A variety of proposals have been made to change the design of the EITC, ACTC, and AOTC. The proposals generally focus modifications on one or more elements of the credits such as how much of the credit is refundable, the maximum amount of credit, the level of the phase-in and phase-out income ranges, and rates. Changing these elements will have certain effects on their equity, efficiency, and simplicity that are common across the credits. For example, increasing or decreasing refundability affects the distribution of the credits' benefits by income level which has implications for whether the change is viewed as increasing or decreasing equity. The following review of proposals has been organized according to the basic design elements of the credits where the effects of certain proposals to change these elements are evaluated according to the standard criteria of a good tax system.

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## Efficiency, Equity, and Simplicity Are Standard Criteria for Evaluating Tax Credits

Evaluating tax credits requires identifying their purpose (or purposes) and determining their effectiveness. The tax credits reviewed in this report are intended to encourage taxpayers to engage in particular activities, to offset the effect of other taxes, and to provide assistance for certain categories of taxpayers. The EITC, for example, has the purposes of offsetting the payroll tax, encouraging employment among low-income taxpayers and reducing poverty rates. Determining effectiveness can be challenging due to the need to separate the effect of a tax credit from other factors that can influence behavior. Even if the credit claimants increase their subsidized activities, the credits are ineffective if they merely provide windfall benefits to taxpayers who would have engaged in the activities in the absence of the credit. Even when the credits are determined to be effective, broader questions can still be asked about whether they are good tax policy. As explained in our 2012 report, these questions are addressed by applying criteria such as economic efficiency, equity, and simplicity which have long been used to evaluate proposed changes to the tax system.<sup>68</sup> The criteria may sometimes conflict with one another and some are subjective. As a result, there are often trade-offs between the criteria when evaluating a particular tax credit.

Economic efficiency deals with how resources are allocated in the economy to produce outcomes that are consistent with the greatest well-

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<sup>68</sup>See [GAO-13-167SP](#) for a more detailed description of the criteria and examples of their use in the evaluation of proposed changes to the tax code.

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being (or standard of living) of society. Tax credits may affect the allocation of resources by favoring certain activities. A credit's effect on efficiency depends on its effectiveness—whether people change their behavior in response to the credit to do more or less of the activity as intended—and its effect on resource allocation—whether the effect of the credit increases the overall well-being of society. The tax credit can increase efficiency when, for example, it is directed at addressing an externality like spillovers from research where the researchers do not gain the full benefit of their activities and might, without the credit, invest too little in research from the point of view of society as a whole.<sup>69</sup> Finally, a tax credit may be justified as promoting a social good like improving access to higher education for disadvantaged groups.

Equity deals with how fair the tax system is perceived to be by participants in the system. There are a wide range of opinions regarding what constitutes an equitable, or fair, tax system. However, there are some principles—for example, a taxpayer's ability to pay taxes—that have gained acceptance as useful for thinking about the equity of the tax system. The ability-to-pay principle requires that those who are more capable of bearing the burden of taxes should pay more taxes than those that are less capable.

Equity judgments based on the ability-to-pay principle can be separated into two types. The first is horizontal equity where taxpayers who have similar ability to pay taxes receive similar tax treatment. Tax credits affect horizontal equity when, for example, they favor certain types of economic behavior over others by taxpayers in similar financial conditions. Views of a credit's effect on horizontal equity usually depend on whether eligibility requirements that exclude some filers and include others are viewed as appropriate. The second type is vertical equity where taxpayers with different abilities to pay are required to pay different amounts of tax. Tax credits affect vertical equity through how their benefits are distributed among people at different income levels (or other indicators of ability to pay such as their level of consumption spending). Distribution tables, where the tax benefits of the credits are grouped by the income level of the recipients, are often used by policy analysts to help them make informed judgments about the equity of tax policies like the RTCs. People

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<sup>69</sup>See [GAO-05-1009SP](#) for a more detailed discussion of how tax credits are used to address externalities.

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may have different notions about what is a fair distribution but they cannot make a judgment about the fairness of a particular policy without consulting the actual distribution of tax benefits.

Simplicity is a criterion used to evaluate tax systems because simple tax systems tend to impose less compliance burden on the taxpayer and less cost on tax administrators than more complex tax systems. Taxpayer compliance burden is the value of the taxpayer's own time and resources, along with any out-of-pocket costs paid to tax preparers and other tax advisors, invested to ensure their compliance with tax laws. Compliance costs include the value of time and resources devoted to activities like record keeping (for the purpose of tax compliance and not records that would be kept in any case), learning about requirements and planning, preparing and filing tax returns, and responding to IRS notices and audits. The administrative costs include the resources used to process tax returns, inform taxpayers about their obligations, detect noncompliance, and enforce compliance with the provisions of the tax code. However, while simplicity is linked to administrability, they are not always the same. For example, a national sales tax may be relatively simple for taxpayer compliance but difficult to administer as it requires distinguishing between tax-exempt and taxable commodities and between taxable retail sales and nontaxable sales among companies.

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## A Review of Changes Proposed for One or More of the Key Features of the Refundable Tax Credits

Changes to the RTCs can be analyzed using the above criteria where the changes are grouped according to the key design elements of the credits that are most affected by the changes. The key design elements are (1) the degree to which the credit is refundable; (2) the eligibility rules for filers and qualifying children or dependent students; (3) the structure of the credit consisting of parameters that determine credit rates and phase-in and phase-out ranges; and (4) the credit's interaction with other code provisions. As mentioned above, changing these elements will have effects that are common for all the credits. In the following review of proposals, a description of the effect on revenue will be provided where possible but a dollar estimate of revenue costs cannot be provided because it depends too much on variable details of proposals. For example, increasing refundability would increase revenue costs but the amount would depend, as explained below, on factors like the refundability rate and income or spending threshold of refundability.

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Changing Refundability Affects  
Access to the RTCs by  
Taxpayers with Lower Incomes  
and Judgments about Equity of  
the Credits

Refundability can affect judgments about vertical equity by providing a larger share of the tax benefits to lower income filers than a nonrefundable credit does. These filers are more likely to have little or no tax liability and thus are not able to fully benefit from the nonrefundable credit. Refundability, as such, may have little effect on judgments on horizontal equity because these judgments depend chiefly on the eligibility rules which need not be different from those under a nonrefundable credit.

The effect of refundability on compliance and administrative costs depends on how the change in refundability is implemented. If the eligibility rules, a major source of complexity as described above, are not changed when refundability is introduced, it may have less impact on compliance burden and administrative costs. However, other structural changes may be needed when refundability is introduced that can add complexity and compliance burden for the taxpayer. For example, additional calculations were made necessary for the CTC when the ACTC was introduced as its partially refundable counterpart with a phase-in range and rate. In addition, administrative burden could increase if the population of claimants changes when refundability is introduced. IRS costs could increase if IRS reviews more returns when the number of claimants increases in response to refundability and taxpayer compliance burden may increase if the claimants include more taxpayers for whom understanding or documenting compliance is more difficult.

Changes have been proposed to expand refundability for the currently partially refundable CTC/ACTC and AOTC.<sup>70</sup> For the CTC/ACTC, the refundable ACTC is limited to 15 percent of income in excess of the \$3,000 refundability threshold up to a maximum of \$1,000 for each child and for the AOTC the refund is limited to 40 percent of qualified spending up to a maximum of \$1,000. Modifications of these credits that have been proposed include raising the refundability rate and reducing the refundability threshold for the CTC/ACTC or in the case of the AOTC, making the credit fully refundable. The principal effect of these modifications is to increase the share of benefits going to low-income filers by increasing their access to the credit. In the AOTC, the expansion

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<sup>70</sup>For further discussion of proposals to change the refundability of RTCs, see Congressional Research Service, *The American Opportunity Tax Credit: Overview Analysis and Policy Options*, R42561 (July 28, 2014) and *Child Tax Credit: Economic Analysis and Policy Options*, R41935 (May 14, 2013).

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Changes in Eligibility Rules  
Can Affect Judgments about  
the RTCs' Equity and  
Effectiveness

could also increase effectiveness as described in appendix III by increasing access to the credits by low-income filers who are more responsive to changes in the price of education. The effect on revenue of these changes would vary considerably depending chiefly on the extent to which refundability is increased.

Modifications to the RTCs' eligibility rules affect the criteria of a good tax system by changing taxpayers' access to the credits. The change in access in turn can affect judgments about equity and effectiveness. For example, expanding the availability of the AOTC to part-time in addition to half-time and full-time students could affect judgments about vertical equity by increasing access for lower income filers if they are more represented among part-time students. This proposal may also increase the effectiveness of the AOTC by targeting more of the population that is more responsive to education price changes, but, as described in appendix III, these effects have not been tested.

Another change to eligibility rules that has been proposed for RTC filers would require that SSNs be provided by all claimants of the AOTC and the ACTC and that, in some cases, claimants' qualifying children or student dependents have SSNs.<sup>71</sup> SSNs are currently required for all EITC claimants and qualifying children but claimants of the other RTCs can use individual taxpayer identification numbers (ITIN). IRS issues ITINs to individuals who are required to have a taxpayer identification number for tax purposes, but who are not eligible to obtain an SSN because they are not authorized to work in the United States. In 2013, 4.38 million tax returns were filed with ITINs (about 3 percent of all returns) which claimed \$1.31 billion in CTC, \$4.72 billion in ACTC, and \$ 204 million in AOTC, or 5 percent, 17 percent, and 1.1 percent of the total credits claimed, respectively.

The effect of restrictions on access to the credits by ITIN users depends on whether all filers claiming refundable tax credits and their qualifying children or permit "mixed-use" households to obtain a partial credit. Most households using ITINs are mixed-use households in the sense that they

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<sup>71</sup>For further discussion of proposals to require SSNs for certain RTC filers, see Congressional Research Service, *Ability of Unauthorized Aliens to Claim Refundable Tax Credits*, R42628 (July 26, 2012).

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use both ITINs and SSNs on their returns.<sup>72</sup> In 2013, 2.68 million returns (or 61 percent of all ITIN returns) were mixed-use returns having (1) a parent with an ITIN and at least one child with an SSN or (2) a parent with an SSN and at least one child with an ITIN. If the change requires that the parent have an SSN, about 82 percent of current ITIN users will be excluded. A change that permits RTCs for a child or parent with an SSN would exclude 39 percent of current ITIN filers.

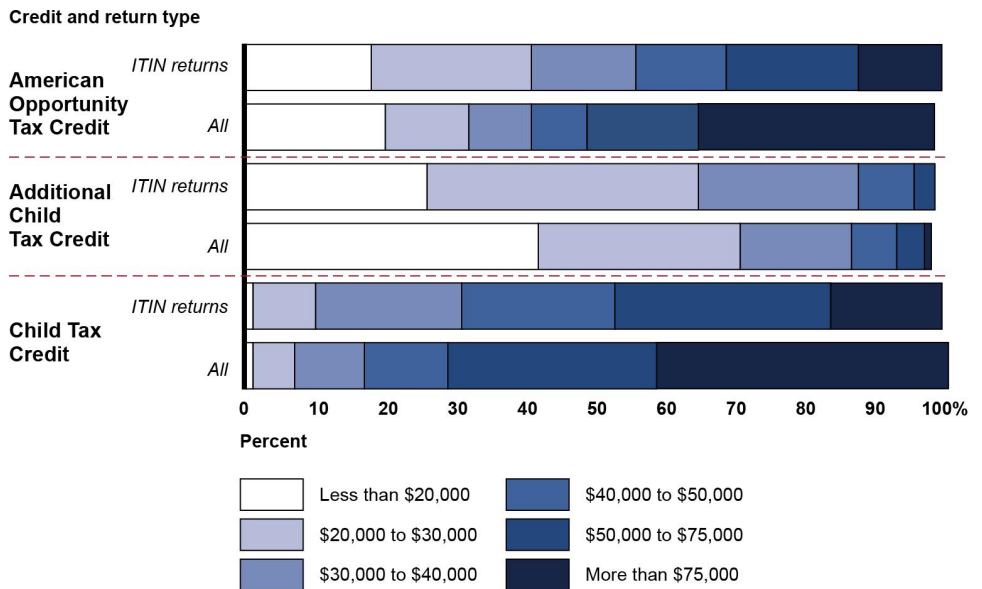
Restrictions on access to RTCs by ITIN users may affect judgments about vertical equity of the credits. ITIN claimants of the CTC, ACTC, and AOTC tend to have similar or lower levels of income than claimants who do not use ITINs. As figure 9 shows, 31 percent of CTC claimants with ITINs have incomes less than \$40,000 while 17 percent of all CTC claimants have incomes as low and 56 percent of AOTC claimants have incomes less than \$40,000 while 41 percent of all AOTC claimants have incomes this low. On the other hand, the income levels of the ACTC claimants with ITINs generally track those of all ACTC claimants: 87 percent of all ACTC claimants and 88 percent of ACTC claimants with ITINs have incomes less than \$40,000.

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<sup>72</sup> The term 'mixed-use' appearing in this report should not be confused with 'mixed status.' Mixed-status families are households headed by unauthorized aliens who have U.S. citizen children, as well as other family members who may be legal permanent residents. Mixed-use refers to households distinguished by their method of taxpayer identification (SSN or ITINs) and includes households that are not considered mixed-status like parents with SSNs (not unauthorized aliens) and children with ITINs (not U.S. citizens).



**Figure 9: Percentage Share of Credit Amounts of All Filers and Individual Taxpayer Identification Numbers (ITIN) Filers by Adjusted Gross Income Level, 2013**



Source: GAO analysis of IRS Statistics of Income (SOI) data, 2013. | GAO-16-475

Note: Bars in figure may not sum to 100 percent due to rounding error.

Restrictions on ITIN use may also have implications for compliance. From 2009 through 2011, credit claimants using ITINs had higher overclaim error rates than other claimants. The overclaim error rate for CTC claimants using ITINs was 14 percent as opposed to 6 percent for all CTC claimants. Similarly, the CTC/ACTC error rate was 32 percent for ITIN users and 10 percent for all claimants.<sup>73</sup> As we discussed above, complying with the eligibility rules can be challenging for everyone and the ITIN users may have greater difficulty from factors like language barriers which could contribute to these higher error rates.

<sup>73</sup>The error estimates for all claimants are more precise than those for ITIN users. We can conclude that the ITIN error rate is higher than for all claimants though the exact difference is less certain. This is the case because there are many fewer ITIN users claiming the credits than all credit claimants in the sample. The AOTC error estimate for ITIN users is too imprecise to be reported because there are too few such claimants in the sample.

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The scope of the SSN requirement—whether it includes the taxpayer, the spouse if married filing jointly, or the qualifying dependents—would add to the complexity of administering and complying with the credits. For example, the value of the credit could be apportioned among taxpayers who meet the criteria (e.g., if three of the four individuals claimed on a tax return have SSNs, the taxpayers would be eligible for 75 percent of the total value of the credit). Determining and enforcing compliance with these apportionment rules could be difficult. On the other hand, as noted above, a majority of ITIN households are mixed use and in the absence of an apportionment procedure, taxpayers with valid SSNs could be denied access to the credits entirely. Lastly, the AOTC is likely to be less effective to the extent that ITIN users are excluded because, as they have lower incomes than other claimants, they are more likely to respond to an effectively lower cost of education due to the credit by increasing attendance.

Changes to the Structure of the RTCs Involve Trade-offs among Equity, Efficiency, and Revenue Cost

A change in the structure of the RTCs can affect all the criteria for evaluating the credits as part of a good tax system. The credit structure includes features that determine the rate at which the credit is calculated. The phase-in range – the range of income levels over which the credit amount is increasing; the plateau range – the range where the credit amount is unchanged and reaches the maximum amount and the phase-out range – where the credit amount is declining. The cut-off amount of income determines the end of the phase-out range and maximum income that can qualify for the credit. All the RTCs have phase-in and phase-out ranges subject to different phase-in and phase-out rates and the EITC also has different values for these ranges that vary according to the number of qualifying children being claimed. The phase-in range generally provides incentives for increasing the activity promoted by the credit: as they work more, EITC recipients receive a larger credit amount and, as they spend more on education, AOTC recipients also get a larger credit. The phase-out ranges generally introduce disincentives by reducing the credit benefit for any increase in the activity that the credit is intended to promote.<sup>74</sup>

One of the key trade-offs in this structure is between the size of the maximum credit amount and the steepness of the phase-out range. If the maximum credit amount is increased with no change in the qualifying

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<sup>74</sup> See appendix III for more detailed discussion of the incentives provided by the RTCs.

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income cut-off amount, the phase-out range becomes steeper—the phase-out rate increases—and therefore disincentives increase over the phase-out range. In this case, the increase in the maximum credit reduces efficiency in the phase-out range. On the other hand, if disincentives are to be reduced without reducing the maximum credit, the qualifying income cut-off amount must be increased in order to flatten the phase-out range and thereby lower the phase-out rate. However, by increasing the cut-off income amount, the credit becomes available to people with higher incomes, affecting judgments about the equity of the credit and increasing its revenue cost.

Structural modifications proposed for the EITC include expanding the credit for childless workers.<sup>75</sup> As described in appendix III, the EITC for childless workers is much lower than the credit for workers with children and has not been shown to have an effect on workforce participation or raising these workers out of poverty. Expanding the credit for childless workers generally means increasing the maximum credit with the follow-on effects described above on other parameters like the phase-out rate. The effect on efficiency, equity, and simplicity will depend upon which parameters are changed and will have similar trade-offs.

Although the relative effects of expanding the credit for childless workers will depend on details of the parameter changes, the overall effect is likely to increase the effectiveness of the credit. Increasing the credit for childless workers would increase work incentives for individuals for whom, as described in appendix III, the current EITC is ineffective because it provides little or no work incentive. The expansion of the credit for childless workers could also affect judgments about equity of the EITC by decreasing the percentage of taxpayers living in poverty and by changing how benefits are distributed by income level. The expansion would also affect judgments about horizontal equity concerns arising from the current large disparity in the credit available to filers with and without children. In addition, expanding the EITC for childless workers is unlikely to add complexity to the filing process for taxpayers, although it would increase the number of taxpayers claiming the credit. A major source of complexity for the EITC that increases both compliance and administration burden is determining whether a dependent meets the

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<sup>75</sup>For further discussion of the EITC for childless workers and other proposed changes to the EITC, see Congressional Research Service, *The Earned Income Tax Credit (EITC): An Overview*, RL31768 (Sept. 14, 2011).

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requirements for a qualifying child. These determinations would not be necessary for the childless worker. However, again depending on specifics of proposals like the size of the maximum credit, the revenue cost could be high.

Proposed structural changes for the AOTC can impact its effectiveness by increasing or decreasing access to the credit. Modifications that expand access include increasing the maximum credit, raising the upper limit on income for credit claimants and lowering the phase-out rate. Changes like these may also reduce effectiveness because the credit is now more available to taxpayers for whom it is likely to be a windfall while less of the increase is available to lower income people who are more responsive to education price changes. These changes may also affect judgments about equity because the increase in the phase-out range would increase the share of the credit going to higher income taxpayers. However, the increase in the maximum credit benefits the lower income filers as well as those with higher income. Modifications that reduce access include reducing the maximum credit and phase-out income and increasing the phase-out rate. Modifications like these may concentrate the AOTC's benefit on lower income individuals and could increase effectiveness by reducing the windfall going to higher income taxpayers.

Changes to the CTC/ACTC illustrate how structural changes interact to affect the criteria for evaluating the credit. For example, a modification that increases the credit per child and increases the income limit may have offsetting effects on judgments about equity by reducing the share of benefits going to low-income taxpayers but at the same time increasing the credit amount per child. However, raising the amount of the credit may not benefit lower income taxpayers to the extent that the refundability threshold and rate prevent them from accessing the full credit. Further adjustments such as eliminating the current refundability threshold of \$3,000 and making the credit refundable up to \$1,000 at a refundability rate of 25 percent may provide more benefits to lower income taxpayers. However, the more adjustments are made the harder it is to determine the net effect on equity.

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Changes That Address Interactions of the RTCs with Other Programs Attempt to Improve Effectiveness by Increasing Transparency

The RTCs share purposes and target populations with a variety of government spending programs and other provisions of the tax code. We previously estimated that, in 2012, 106 million people, or one-third of the U.S. population, received benefits from at least one or more of eight selected federal low-income programs: the ACTC, the EITC, SNAP, SSI, and four others.<sup>76</sup> Almost two-thirds of the eight programs' recipients were in households with children, including many married families. Without these programs' benefits, we estimated that 25 million of these recipients would have been below the Census Bureau's Supplemental Poverty Measure (SPM) poverty threshold.<sup>77</sup> Of the eight programs, the EITC and SNAP moved the most people out of poverty. In addition, the AOTC interacts with other spending provisions like Pell grants and tax provisions like the Lifetime Learning Credit and the deduction for tuition and fees to provide subsidies for college attendance.

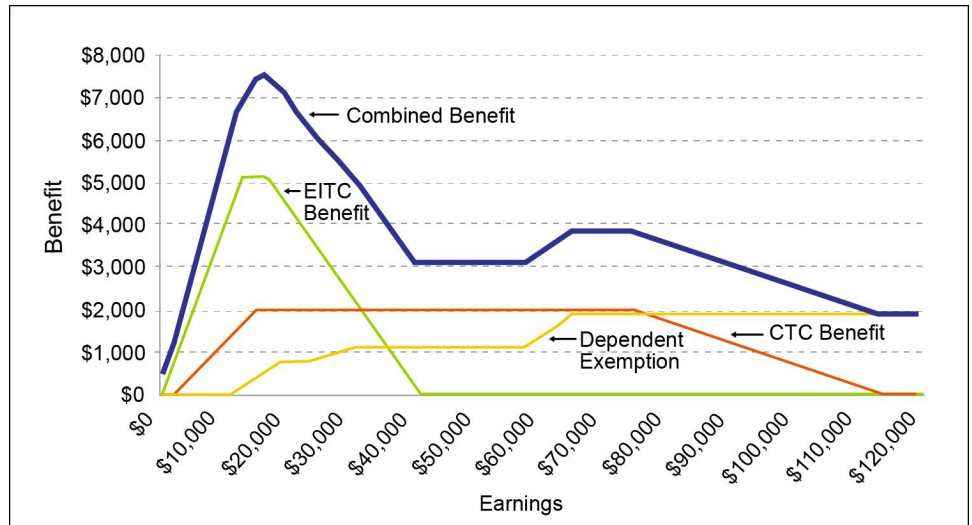
This shared focus of certain tax benefits has led to consideration of their combined effect on incentives and complexity. As figure 10 shows, the combined effects of the EITC, CTC/ACTC, and the dependent exemption produce a steeper phase-in of total benefit amounts than that attributable to any of the tax benefits alone. As incomes increase, total benefits peak and then decline sharply when the phase-out range of the EITC is reached. How taxpayers respond to the RTCs will depend on the taxpayer's ability to sort out and assess the combined effects of all these tax benefits. Each RTC was the product of unique social forces and was designed to address a specific social need. As a result, it is unlikely that attempts were made to coordinate and focus on the combined tax rates, combined subsidy rate and combined incentive effects and effects on compliance and administration. The lack of coordination that leads to increased administrative and compliance burden is exemplified in the differing age limits of what constitutes an eligible child for different tax benefits.

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<sup>76</sup>See GAO, *Federal Low Income Programs: Multiple Programs Target Diverse Population and Needs*, [GAO-15-516](#) (Washington, D.C.: July 30, 2015). The other four programs were TANF, Low Income Home Energy Assistance Program (LIHEAP), Special Supplemental Nutrition Program for Woman, Infants and Children (WIC), and housing assistance programs including housing programs administered by HUD and other federal agencies or state or local governments.

<sup>77</sup>The SPM takes into account certain expenses and federal and state government benefits not included in the official poverty measure. The SPM is not used to determine program eligibility; however, it does provide more information than the official measure on household resources available to meet living expenses

**Figure 10: Combined and Separate Child-Related Tax Benefits by Income Level for a Single Parent with Two Children Filing as Head of Household, 2011**



Source: Congressional Research Service, *The Child Tax Credit: Economic Analysis and Policy Options*, R41935 (May 14, 2013). | GAO-16-475

Interactions like these have raised concerns that the RTCs and other provisions may not be coordinated to be most effective. To increase coordination and transparency, a number of different ways have been proposed to consolidate the tax benefits. Proposals include combining tax benefits for low income taxpayers (such as CTC/ACTC, dependent exemption and child related EITC ) into a single credit or combining child related benefits into a single credit while creating a separate work credit based on earnings and unrelated to the number of children in the family. In a similar vein, proposals have been made to combine education tax benefits by using the AOTC to replace all other education tax credits, the student loan interest deduction and the deduction for tuition and fees. These proposals may also expand certain features of the credit like increasing refundability or making the credit available for more years of post-secondary education. Consolidation can make incentives more transparent to taxpayers and increase simplicity and decrease compliance and administrative burden to the extent it includes harmonizing and simplifying the eligibility requirements.

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## Conclusions

Each year the EITC, ACTC, and AOTC help millions of taxpayers—many of whom are low-income—who are working, raising children, and paying tuition. Nonetheless, challenges related to the RTCs' design and administration contribute to errors, improper payments, and taxpayer burden.

Annual budget cuts have forced IRS officials to make difficult decisions about how best to target declining resources to ensure they can still meet agency-wide strategic goals of increasing taxpayer compliance, using resources more efficiently, and minimizing taxpayer burden. In light of these budget cuts, it is essential that IRS take a strategic approach to identifying and addressing RTC noncompliance in an uncertain budget environment. IRS is working on a strategy to document current EITC compliance efforts and identify and evaluate potential new solutions to address improper payments, but this review does not include the other refundable credits. A more comprehensive approach could help IRS determine whether its current allocation of resources is optimal, and if not, what adjustments are needed.

IRS is also missing opportunities to use available data to identify potential sources of noncompliance and develop strategies for addressing them. For example, IRS does not track the number of returns erroneously claiming the ACTC and AOTC identified through screening activities. This information would help IRS deepen its understanding of common errors made by taxpayers claiming these credits; IRS could then use these insights to develop strategies to educate taxpayers. IRS has also not yet evaluated the Department of Education's PEPS database of eligible educational institutions; these data could help IRS identify potentially erroneous AOTC returns.

Finally, although IRS reviews the amount of revenue collected from EITC post-refund enforcement activities, it could not verify the reliability of that data during the timeframe of the GAO audit. By not taking necessary steps to ensure the reliability of that data and linking them to tax assessments to calculate a collections rate, IRS lacks information required to assess its allocation decisions. Periodic reviews of collections data and analyses could help IRS officials more efficiently allocate limited enforcement resources by providing a more complete picture about compliance results and costs.

Over the years we have recommended various actions IRS and Congress could take to reduce the tax gap; several of these would also help bolster IRS's efforts to address noncompliance with these credits. For example,

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developing a better understanding of sole proprietor noncompliance and linking sole proprietor compliance efforts with broader tax gap reduction could help IRS to identify noncompliant sole proprietor issues and address one of the drivers of EITC noncompliance. Providing IRS with the authority to regulate paid preparers would also help. In addition, as we recommended in 2011, we continue to believe that Congress should consider providing IRS with math error authority to use tax return information from previous years to enforce lifetime limit rules. Any refundable tax credits that contain these limits such as the AOTC should fall under this authority as well if it is granted by Congress. Structural changes to the credits, such as changes to eligibility rules, will involve trade-offs with respect to standard tax reform criteria, such as effectiveness, efficiency, equity, simplicity, and revenue adequacy.

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## Recommendations for Executive Action

To strengthen efforts to identify and address noncompliance with the EITC, ACTC, and AOTC, we recommend that the Commissioner of Internal Revenue direct Refundable Credits Policy and Program Management (RCPPM) to take the following steps:

1. Building on current efforts, develop a comprehensive operational strategy that includes all the RTCs for which RCPPM is responsible. The strategy could include use of error rates and amounts, evaluation and guidance on the proper use of indicators like no-change and default rates, and guidance on how to weigh trade-offs between equity and return on investment in resource allocations.
2. As RCPPM begins efforts to track the number of erroneous returns claiming the ACTC or AOTC identified through pre-refund enforcement activities, such as screening filters and use of math error authority, it should develop and implement a plan to collect and analyze these data that includes such characteristics as identifying timing goals, resource requirements, and the appropriate methodologies for analyzing and applying the data to compliance issues.
3. Assess whether the data received from the Department of Education's PEPS database (a) are sufficiently complete and accurate to reliably correct tax returns at filing and (b) provide additional information that could be used to identify returns for examination; if warranted by this research, IRS should use this information to seek legislative authority to correct tax returns at filing based on PEPS data.
4. Take necessary steps to ensure the reliability of collections data and periodically review that data to (a) compute a collections rate for post-



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refund enforcement activities and (b) determine what additional analyses would provide useful information about compliance results and costs of post-refund audits and document-matching reviews.

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## Agency Comments and our Evaluation

We provided a draft of this report to Treasury and IRS. Treasury provided technical comments which we incorporated where appropriate. In written comments, reproduced in appendix IV, IRS agreed with three of our four recommendations and described certain actions that it plans or is undertaking to implement them.

After sending us written comments, IRS informed us it could not verify the reliability of the collections data it provided during the timeframe of our audit. We removed this data from the report and modified our fourth recommendation to address data reliability. The revised recommendation states that IRS should take necessary steps to ensure the reliability of collections data and then periodically review that data to compute a collections rate for post-refund enforcement activities and determine what additional analyses would provide useful information.

In response to this recommendation, IRS stated it is taking steps to verify the reliability of the collections data, but further analysis would not be beneficial because the majority of RTC audits are pre-refund. However, we found that a significant amount of enforcement activity is occurring in the post-refund environment. According to IRS data, IRS conducted 87,000 EITC post-refund audits and over 1 million document-matching reviews in 2014.

We recognize that gathering collections data has costs and the data have limitations, notably that not all recommended taxes are collected. However, use of these data—once IRS is able to verify its reliability—could better inform resource allocation decisions and improve the overall efficiency of enforcement efforts. In fact, the Internal Revenue Manual states that examiners are expected to consider collectability as a factor in determining the scope and depth of an examination. IRS also stated that previous studies have indicated that post-refund audits of RTCs have a high collectability rate. However, the studies that IRS provided did not include collection rates for the EITC, ACTC, or AOTC. IRS further cautioned that collections can be influenced by factors like the state of the economy; however an appropriate statistical methodology would take such factors into account. Finally, opportunities may exist to reduce the costs of data collection efforts, for example, if coordinated as part of an agency wide analysis of the costs and results of various enforcement efforts.

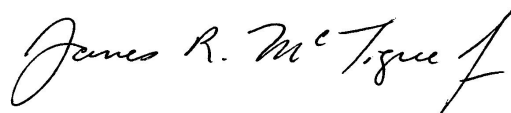
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IRS disagreed with our conclusion that its compliance strategy and selection criteria for its prefund compliance program do not consider equity and compliance burden. In its comments, IRS describes its audit selection process but did not explain how it measures equity or compliance burden. Without such measures, it is not possible to assess whether IRS is achieving its strategic goals of increasing taxpayer compliance, using resources more efficiently, and minimizing taxpayer burden. Finally, IRS stated that nonresponse to its taxpayer enquiries is a strong indicator of noncompliance but did not provide data to support this assumption.

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As agreed with your offices, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from the report date. At that time, we will send copies to the Secretary of the Treasury, Commissioner of Internal Revenue, and other interested parties. In addition, the report will be available at no charge on the GAO website at <http://www.gao.gov>.

If you or your staff has any questions about this report, please contact me at (202) 512-9110 or [mctiguej@gao.gov](mailto:mctiguej@gao.gov). Contact points for our offices of Congressional Relations and Public Affairs are on the last page of this report. GAO staff members who made major contributions to this report are listed in appendix V.



James R. McTigue  
Director, Tax Issues  
Strategic Issues Team

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*List of Requesters*

The Honorable Orrin G. Hatch  
Chairman  
Committee on Finance  
United States Senate

The Honorable Charles E. Grassley  
Chairman  
Committee on the Judiciary  
United States Senate

The Honorable Fred Upton  
Chairman  
Committee on Energy and Commerce  
House of Representatives

The Honorable Kevin Brady  
Chairman  
Committee on Ways and Means  
House of Representatives

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# Appendix I: Objectives, Scope, and Methodology

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This report (1) describes the claimant population including the number of taxpayers and the amount they claim along with other selected characteristics for the Earned Income Tax Credit (EITC), Additional Child Tax Credit (ACTC), and American Opportunity Tax Credit (AOTC); (2) describes how the Internal Revenue Service (IRS) administers these credits and what is known about the administrative costs and compliance burden associated with each credit; (3) assesses the extent to which IRS identifies and addresses noncompliance with these credits and collects improperly refunded credits; and (4) assesses the impact of selected proposed changes to elements of the EITC, ACTC, and AOTC with respect to three criteria for a good tax system: efficiency, equity, and simplicity.

To describe the taxpayer population claiming the EITC, ACTC, and AOTC, we used the IRS Statistics of Income (SOI) Individual Study for tax years 1999 to 2013.<sup>1</sup> The SOI Individual Study is intended to represent all tax returns filed through annual samples of unaudited individual tax returns (about 330,000 returns in 2013), which are selected using a stratified, random sample.

IRS performs a number of quality control steps to verify the internal consistency of SOI sample data. For example, it performs computerized tests to verify the relationships between values on the returns selected as part of the SOI sample and edits data items to correct for problems, such as missing items. The SOI data are widely used for research purposes and include information on returns prior to changes due to IRS audits. We used SOI data to describe the number of returns claiming credits, the credit amounts, and characteristics about credit claimants, such as filing status or adjusted gross income (AGI) for each credit.

When necessary, we combined the nonrefundable Child Tax Credit (CTC) with the ACTC, referring to the combined credit as the CTC/ACTC. We did this when their combined effect is at issue or to facilitate comparison with other RTCs that do not break out refundable and nonrefundable components. Similarly we combined the refundable and nonrefundable

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<sup>1</sup>We used micro-level SOI data for 2006 to 2013, the most recent data available, in order to get information on the credits before and after the recession. Prior to 2006 we relied on SOI data on refundable credits, which are publicly available on the IRS website at [https://www.irs.gov/uac/SOI-Tax-Stats-Individual-Income-Tax>Returns-Publication-1304-\(Complete-Report\)](https://www.irs.gov/uac/SOI-Tax-Stats-Individual-Income-Tax>Returns-Publication-1304-(Complete-Report)).

portions for AOTC estimates. However, unlike the other credit amounts, SOI data do not report the nonrefundable AOTC amounts. Estimating the level of nonrefundable AOTC requires decomposing the nonrefundable education credits into AOTC and other nonrefundable education credit amounts using education expenses amounts and other line items reported on the tax return that determine the taxpayer's eligibility for claiming the credit.<sup>2</sup> These computations are done by tax return prior to producing the aggregate total AOTC estimates.

We reviewed documentation on SOI data, interviewed IRS officials about the data, and conducted several reliability tests to ensure that the data excerpts we used for this report were sufficiently complete and accurate for our purposes. For example, we electronically tested the data for obvious errors and used published data as a comparison to ensure that the data set was complete. The SOI estimates of totals and averages in the report, excluding ITIN estimates, have a margin of error of less than 3.5 percent of the estimates unless otherwise noted. The SOI percentages, excluding ITIN percentages, have a margin of error of less than 1 percentage points unless otherwise noted. Totals based on ITIN returns have a margin of error less than 18 percentage points unless otherwise noted. Percentages and ratios based on ITIN filers have a margin of error of less than 8 percentage points unless otherwise noted. We concluded that the data were sufficiently reliable for the purposes of this report.

To describe how IRS administers these credits, we reviewed documentation on program procedures from the Internal Revenue Manual (IRM), internal documents describing audit procedures, and memorandums from IRS officials. We also interviewed IRS officials who oversee or who work on administering the refundable tax credits. To describe what is known about the administrative costs, we reviewed information IRS provided us on processing returns and conducting audits. To supplement these cost data, we spoke with IRS and Treasury officials about challenges IRS faces in administering the credits. To describe the compliance burden associated with each credit, we collected and reviewed IRS forms, worksheets, and instructions for each credit. We also reviewed the National Taxpayer Advocate's annual reports to Congress, including the most serious issues affecting taxpayers. Finally, we

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<sup>2</sup>IRS Form 8863, *Education Credits (American Opportunity and Lifetime Learning Credits)*.

interviewed experts involved with tax preparation to determine challenges taxpayers face when claiming the credits.

To assess the extent to which IRS identifies and addresses noncompliance with these credits and collects improperly refunded credits, we reviewed reports by GAO, IRS, the Treasury Inspector General for Tax Administration (TIGTA) National Taxpayer Advocate (NTA), Congressional Research Service (CRS), and Congressional Budget Office (CBO) on challenges IRS faces to reduce EITC, ACTC, and AOTC noncompliance and steps IRS is taking to address those challenges. We also reviewed relevant strategic and performance documents such as annual financial and performance reports; education and outreach plans; annual planning meeting minutes; and project summary reports. We met on a regular basis throughout the engagement with IRS officials responsible for developing and implementing RTC policy to determine the scope and primary drivers of RTC noncompliance as well as the steps IRS is taking to address those challenges. We integrated information from our document review and interviews to describe and assess IRS compliance efforts—including steps IRS is taking to implement specific programs and projects, how IRS’s internal controls ensure that specific efforts are being pursued as intended, how IRS monitors and assesses the progress of specific efforts toward reducing noncompliance, and how IRS incorporates new data to adjust its strategy as needed. We compared IRS efforts to develop, implement, and monitor compliance efforts to criteria in Standards for Internal Control in the Federal Government and federal guidance on performance management.<sup>3</sup> We also applied the criteria concerning the administration, compliance burden, and transparency that characterize a good tax system, as developed in our guide for evaluating tax reform proposals.<sup>4</sup>

To evaluate compliance within the refundable credits, we used audit data from the National Research Program (NRP) for tax years 2009 to 2011, the most recent years for which data were available. NRP audits are like

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<sup>3</sup> GAO, *Standards for Internal Control in the Federal Government*, [GAO-14-704G](#) (Washington, D.C.: September 2014); GAO, *Tax Administration: IRS Needs to Further Refine its Tax Filing Season Performance Measures*, GAO-03-143 (Washington, D.C.: Nov. 22, 2002); and GAO, *Managing for Results: Practices for Effective Agency Strategic Reviews* GAO-15-602 (Washington, D.C. Jul. 29, 2015).

<sup>4</sup> GAO, *Understanding the Tax Reform Debate: Background, Criteria, & Questions*, [GAO-05-1009SP](#) (Washington, D.C.: Sept. 1, 2005).

other IRS audits, but they can be used for population estimates of taxpayer reporting compliance. The goal of the NRP is to provide data to measure payment, filing, and reporting compliance of taxpayers, which are used to inform estimates of the tax gap and provide information to support development of IRS strategic plans and improvements in workload identification. The NRP audits provide a reflection of the domestic taxpayer populations through an annual sample of returns (about 14,000 returns in 2011), which are selected for NRP audits using a stratified, random sample.

One potential source of nonsampling error comes from NRP audits where the taxpayer does not respond to the NRP audit, so audit results may not reflect the taxpayer's true eligibility for the RTCs. For the calculations in this report, audit observations within the data that correspond to nonrespondent filers are given observation weights of zero (i.e., the observations do not influence the calculations). In contrast, IRS's compliance study of the EITC produced high and low estimates for overclaim rates, where the former assumes the nonrespondents to be generally noncompliant and the latter assumes the nonrespondents to be as compliant as the respondent observations.

Data for analysis include amounts reported by taxpayers on their tax returns and corrected amounts that were determined by examiners. Using NRP data, we estimated the errors and mistakes individual taxpayers made claiming the EITC, ACTC, and AOTC on their Forms 1040, *U.S. Individual Income Tax Return*. We present the results as a percent of the credit amounts claimed.

We reviewed documentation on the NRP, interviewed IRS officials about the data, and conducted several reliability tests to ensure that the data excerpts we used for this report were sufficiently complete and accurate for our purposes. For example, we electronically tested the data for obvious errors and used totals from our analysis of SOI data as a comparison to ensure that the data set was complete. We concluded that the data were sufficiently reliable for the purposes of this report. See appendix II for further discussion of our NRP estimation techniques and for information about the sampling errors of our estimates.

To assess the impact of selected proposed changes to elements of the EITC, ACTC, and AOTC, we first identified proposals to improve the three refundable tax credits through a literature review on RTCs. Our literature search started with a review of studies and reports issued by government agencies including GAO, IRS, CRS, CBO, JCT, and TIGTA. We

supplemented this search with academic literature and studies produced by think tanks and professional organizations. Additionally, we inquired of agency officials and subject-matter experts for relevant studies.

We then interviewed external subject-matter experts from government, academia, think tanks, and professional organizations knowledgeable about refundable tax credits in general and specifically the EITC, ACTC, and AOTC. We spoke to those with expertise on how IRS administers RTCs, how low-income taxpayers claim the credits, and how tax preparers interact with the credits. We conducted interviews to obtain views of experts on criteria commonly used to evaluate refundable tax credits and possible modifications to the credit. The experts were from across the ideological spectrum. The views from these interviews are not generalizable. Based on these interviews and our review of studies, we drew conclusions about the likely impact of modifying elements of the RTC with respect to three criteria we identified for a good tax system: efficiency, equity, and simplicity.

We conducted this performance audit from July 2015 to May 2016 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.



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# Appendix II: National Research Program Error Rate Methodology and Estimates with Sampling Errors

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## National Research Program Error Rate Calculation Methodology

Error rates by credit are computed using National Research Program (NRP) data. The Child Tax Credit (CTC) is combined with the Additional Child Tax Credit (ACTC) and shown as an aggregated credit amount for the CTC/ACTC. The American Opportunity Tax Credit (AOTC) includes refundable and nonrefundable portions, where the refundable portion of the credit benefits the taxpayer regardless of the tax liability.

The AOTC estimates combine refundable and nonrefundable portions. The nonrefundable portion of the AOTC is estimated as the proportion of total nonrefundable education credits that is from claiming the AOTC. Eligibility for claiming the different education credits can vary by adjusted gross income (AGI), filing status, and the year the return was filed. Statistics of Income (SOI) data were used to estimate these proportions of AOTC to total nonrefundable education credits. These proportions were multiplied by NRP total nonrefundable credits values for each tax return, which estimates the nonrefundable portion of AOTC for that tax return. Measurement errors for AOTC estimates shown in tables 4 through 8 reflect sampling errors from NRP data only and do not reflect sampling errors from SOI data, which was used to estimate the proportion of nonrefundable AOTC claimed from nonrefundable education credits within NRP data.

The credit adjustment or error is the difference between the credit amount originally claimed by the taxpayer and the correct credit amount, as determined by the NRP audit. The net credit adjustments can be separated into audited returns that received negative and positive adjustments. Negative adjustments, or credit overclaims, occur when the taxpayer claimed the credit, but either did not qualify for the credit or the credit amount originally claimed was adjusted downward. Credit overclaim amounts represent a potential for revenue loss to the government, where taxpayers incorrectly claim a tax benefit. Similarly, positive adjustments, or credit underclaims, occur when the taxpayer either failed to claim the credit or the credit amount originally claimed was adjusted upward. Credit underclaim amounts represent a potential expense for the government, where taxpayers forego available tax benefits. Using NRP data (2009 to 2011), the annual average credit and credit adjustment amounts are shown in table 4.

**Appendix II: National Research Program Error  
Rate Methodology and Estimates with  
Sampling Errors**

**Table 4: Annual Average Credit Amounts, 2009 to 2011 (Dollars in Billions)**

|  | <b>Earned<br/>Income<br/>Tax Credit</b> | <b>95 percent<br/>confidence<br/>interval</b> | <b>Credit/Additional<br/>Child<br/>Tax Credit</b> | <b>95 percent<br/>confidence<br/>interval</b> | <b>American<br/>Opportunity Tax<br/>Credit</b> | <b>95 percent<br/>confidence<br/>interval</b> |
|--|---|---|---|---|--|---|
| Credit amount claimed                          | 63.1                                    | (62.4, 63.8)                                  | 55.4  | (53.9, 56.8)                                  | 20.2   | (19.0, 21.5)                                  |
| Correct credit amount                          | 45.9                                    | (44.8, 46.9)                                  | 49.9  | (48.6, 51.3)                                  | 16.1   | (15.0, 17.2)                                  |
| Credit adjustment (overclaims and underclaims) | 17.2                                    | (16.4, 18.1)                                  | 5.4   | (4.9, 6.0)                                    | 4.1  | (3.5,4.7)                                     |
| Credit adjustment (overclaims)                 | 18.1                                    | (17.3, 19.0)                                  | 6.4   | (5.9, 7.0)                                    | 5.0  | (4.5, 5.5)                                    |
| Credit adjustment (underclaims)                | -0.9                                    | (-1.1, -0.7)                                  | -1.0  | (-1.2, -0.9)                                  | -0.9   | (-1.1, -0.7)                                  |

Source: GAO analysis of IRS National Research Program (NRP) data. | GAO-16-475

Notes: Because a probability procedure based on random selections was used, the sample was only one of a large number of samples that might have been drawn. Since each sample could have provided different estimates, we express our confidence in the precision of our particular sample's results as a 95 percent confidence interval (e.g., +/- 7 percentage points). This is the interval that would contain the actual population value for 95 percent of the samples that could have been drawn.

Measurement errors for AOTC estimates shown in this table reflect sampling errors from NRP data only and do not reflect sampling errors from SOI data, which was used to estimate the proportion of nonrefundable AOTC claimed from nonrefundable education credits within NRP data.

Annual averages for 2009 to 2011 within this table are adjusted for inflation and converted to 2013 dollar values.

The error rates are computed as the credit adjustment amount divided by the net credit amount claimed by the taxpayers prior to the NRP audit, where the credit adjustment may represent all returns claiming, overclaiming, or underclaiming the credit. These error rates for all credit claimants are computed for 2011 and 2009 to 2011, as shown in table 5. The precision of these estimates generally increases when using 3 years instead of a single year of data. The numbers of overclaim and underclaim returns as a percent of all returns claiming the credits are shown in table 6. The overclaim error rates are computed for Schedule C and non-Schedule C returns and for returns based on the preparer of the return, as shown in tables 7 and 8.

**Appendix II: National Research Program Error  
Rate Methodology and Estimates with  
Sampling Errors**

**Table 5: Error Rates by Total Claims, Overclaims, and Underclaims, 2011 and 2009 to 2011**

|   | Component           | 2011        |                                | 2009–2011   |                                |
|---|---------------------|-------------|--------------------------------|-------------|--------------------------------|
|   |                     | Error rate  | 95 percent confidence interval | Error rate  | 95 percent confidence interval |
| <b>Earned Income Tax Credit</b>                     | <b>Total claims</b> | <b>26.3</b> | <b>(23.6, 28.9)</b>            | <b>27.3</b> | <b>(26.0, 28.7)</b>            |
|   | Overclaims          | 27.3        | (24.7, 29.8)                   | 28.7        | (27.4, 30.1)                   |
|   | Underclaims         | -1.0        | (-1.4, -0.7)                   | -1.4        | (-1.7, -1.1)                   |
| <b>Child Tax Credit/Additional Child Tax Credit</b> | <b>Total claims</b> | <b>10.7</b> | <b>(8.6, 12.9)</b>             | <b>9.8</b>  | <b>(8.8, 10.8)</b>             |
|   | Overclaims          | 12.8        | (10.9, 14.8)                   | 11.6        | (10.7, 12.6)                   |
|   | Underclaims         | -2.1        | (-2.6, -1.5)                   | -1.8        | (-2.1, -1.5)                   |
| <b>American Opportunity Tax Credit</b>              | <b>Total claims</b> | <b>25.7</b> | <b>(21.2, 30.6)</b>            | <b>20.2</b> | <b>(17.6, 22.7)</b>            |
|   | Overclaims          | 29.4        | (25.3, 33.8)                   | 24.7        | (22.3, 26.9)                   |
|   | Underclaims         | -3.6        | (-5.7, -2.1)                   | -4.5        | (-5.7, -3.4)                   |

Source: GAO analysis of IRS National Research Program (NRP) data. | GAO-16-475

Note: Measurement errors for AOTC estimates shown in this table reflect sampling errors from NRP data only and do not reflect sampling errors from SOI data, which was used to estimate the proportion of nonrefundable AOTC claimed from nonrefundable education credits within NRP data.

**Table 6: Returns with Overclaims and Underclaims as a Percent of Returns Claiming Credits, 2011 and 2009 to 2011**

|  | Component   | 2011                   |                                | 2009–2011              |                                |
|--|-------------|------------------------|--------------------------------|------------------------|--------------------------------|
|  |             | Percent of all returns | 95 percent confidence interval | Percent of all returns | 95 percent confidence interval |
| Earned Income Tax Credit                     | Overclaims  | 40.6                   | (38.3, 42.7)                   | 41.4                   | (40.2, 42.6)                   |
|  | Underclaims | 5.9                    | (4.9, 6.9)                     | 6.5                    | (5.9, 7.1)                     |
| Child Tax Credit/Additional Child Tax Credit | Overclaims  | 17.7                   | (15.6, 19.7)                   | 17.0                   | (16.0, 18.1)                   |
|  | Underclaims | 6.2                    | (5.1, 7.2)                     | 5.7                    | (5.2, 6.3)                     |
| American Opportunity Tax Credit              | Overclaims  | 40.0                   | (35.8, 44.1)                   | 35.9                   | (33.7, 38.1)                   |
|  | Underclaims | 9.7                    | (7.5, 12.0)                    | 11.4                   | (10.0, 13.0)                   |

Source: GAO analysis of IRS National Research Program (NRP) data. | GAO-16-475

Note: Measurement errors for AOTC estimates shown in this table reflect sampling errors from NRP data only and do not reflect sampling errors from SOI data, which was used to estimate the proportion of nonrefundable AOTC claimed from nonrefundable education credits within NRP data.

**Appendix II: National Research Program Error  
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**Table 7: Overclaim Error Rates by Schedule C, 2009 to 2011**

|               | <b>Earned<br/>Income<br/>Tax Credit</b> | <b>95 percent<br/>confidence<br/>interval</b> | <b>Credit/Additional Child<br/>Tax Credit</b> | <b>95 percent<br/>confidence<br/>interval</b> | <b>American<br/>Opportunity Tax<br/>Credit</b> | <b>95 percent<br/>confidence<br/>interval</b> |
|---------------|---|---|---|---|--|---|
| Schedule C    | 40.1                                    | (37.7, 42.8)                                  | 12.4  | (11.0, 14.0)                                  | 29.4   | (25.2, 33.7)                                  |
| No Schedule C | 23.7                                    | (22.1, 25.4)                                  | 11.4  | (10.3, 12.6)                                  | 23.6   | (21.0, 26.2)                                  |

Source: GAO analysis of IRS National Research Program (NRP) data. | GAO-16-475

Note: Measurement errors for AOTC estimates shown in this table reflect sampling errors from NRP data only and do not reflect sampling errors from SOI data, which was used to estimate the proportion of nonrefundable AOTC claimed from nonrefundable education credits within NRP data.

**Table 8: Overclaim Error Rates by Preparer Type, 2009 to 2011**

|                                 | <b>Earned<br/>Income<br/>Tax Credit</b> | <b>95 percent<br/>confidence<br/>interval</b> | <b>Credit/Additional Child<br/>Tax Credit</b> | <b>95 percent<br/>confidence<br/>interval</b> | <b>American<br/>Opportunity Tax<br/>Credit</b> | <b>95 percent<br/>confidence<br/>interval</b> |
|---------------------------------|---|---|---|---|--|---|
| Enrolled preparers              | 26.7                                    | (21.3, 32.6)                                  | 9.7   | (6.9, 13.2)                                   | 24.6   | (14.8, 35.2)                                  |
| Unenrolled preparers            | 33.6                                    | (30.8, 36.4)                                  | 17.0  | (14.6, 19.6)                                  | 44.5   | (37.3, 51.3)                                  |
| Certified public accountants    | 27.7                                    | (22.1, 33.1)                                  | 5.1   | (3.8, 6.6)                                    | 11.5   | (8.2, 15.4)                                   |
| Volunteer Income Tax Assistance | 15.9                                    | (9.6, 23.1)                                   | 8.3   | (2.9, 15.0)                                   | 14.6   | (3.5, 33.3)                                   |
| Self-prepared                   | 27.5                                    | (25.1, 30.1)                                  | 9.8   | (8.3, 11.5)                                   | 22.6   | (19.2, 26.2)                                  |

Source: GAO analysis of IRS National Research Program (NRP) data. | GAO-16-475

Note: Measurement errors for AOTC estimates shown in this table reflect sampling errors from NRP data only and do not reflect sampling errors from SOI data, which was used to estimate the proportion of nonrefundable AOTC claimed from nonrefundable education credits within NRP data.

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# Appendix III: Research Findings on the Current Refundable Tax Credits

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The following is a summary of the findings in the policy literature of the effect of the current design of the Earned Income Tax Credit (EITC), the Additional Child Tax Credit (ACTC), and the American Opportunity Tax Credit (AOTC) on the effectiveness, efficiency, equity, and simplicity of these credits. This description can be viewed as a baseline against which to compare specific proposals that are advanced to improve the credits. For example, a proposal to change the EITC would be evaluated, at least in part, on its effect on poverty rates judged against the poverty reduction under the current EITC structure.

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## Research Has Shown That the EITC Has Increased Employment and Reduced Poverty but Is Complex to Comply with and Administer

The EITC provides financial assistance to a relatively large proportion of its target population of low-income taxpayers. As mentioned earlier in this report, the EITC was claimed by about 29 million people in 2013 for an average amount of about \$2,300. These claimants represent over 85 percent of the eligible population – a large participation rate for a government anti-poverty program. For example, the participation rate for TANF recipients is estimated at about 34 percent and 67 percent for SSI recipients in 2011 and the rate for SNAP was 83 percent in 2012.

One purpose of the EITC is to increase employment among low-income taxpayers by providing incentives for claimants to become employed or to increase the hours they work if they are already employed. The empirical evidence shows that the EITC has had a strong effect on labor force participation for certain claimants but much less, if any, effect on hours worked. The EITC has led more single mothers to enter the workforce. However, the effect on labor force participation for secondary workers (for example, a spouse of someone already in the labor force) is inconclusive with studies showing no effect or a small reduction in labor force participation. In addition, studies have shown that the EITC has little or no effect on hours worked by credit claimants already in the labor force.

The EITC affects efficiency directly because it changes the behavior of workers that claim it and indirectly because it is funded through the tax system where tax rate differences can also change taxpayer behavior. However, the size of these effects, if any, has not been measured.<sup>1</sup> As

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<sup>1</sup>The Office of Management and Budget (OMB) provides a rule of thumb for the efficiency costs of raising revenue for government projects. According to OMB guidance, the efficiency cost of a tax increase, which would be included as part of the total cost when calculating the benefits and costs of a government spending project, is equal to 25 percent of the tax revenue used to fund the project. For additional detail, see [GAO-05-1009SP](#).

described in our 2012 report, a full evaluation of the EITC or any tax expenditure would require information on the total benefits of the credit as well as its costs, including efficiency costs.

When examining the impact the EITC has on fairness or equity, research has tended to focus on how the credit affects poverty rates and tax burdens among different groups of recipients. The EITC has also been shown to be effective in reducing the percentage of low-income working people living in poverty. Nearly all studies that we reviewed show that the EITC has had a substantial effect on reducing poverty on average among all recipients and particularly those with children. For example, the U.S. Census Bureau found that in 2012 the refundable tax credits reduced the poverty rate by 3 percentage points for all claimants and by 6.7 percentage points for claimants with children.<sup>2</sup> However, studies show a much smaller effect on poverty for childless workers. A Congressional Research Service analysis found that in 2012 the EITC reduced unmarried and married childless workers' poverty rates by 0.14 percentage points and 1.39 percentage points respectively.<sup>3</sup> These differences in the effect on poverty rates are not unexpected given the much smaller credit amounts available for childless workers.

The effect of the EITC on vertical equity can be judged based, at least in part, on the distribution of the credit's benefits by income level. As figure 4 earlier in this report shows, EITC claimants have lower incomes than the population of claimants for the other refundable tax credits. As Figure 4 also shows, a greater share of EITC benefits goes to lower-income taxpayers. More than half (62 percent) of the EITC benefits go to taxpayers making less than \$20,000.

The EITC's effect on horizontal equity depends on whether its eligibility rules and the credit rates that apply to different types of taxpayers are viewed as appropriate. For example, the current credit has very different

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<sup>2</sup>Kathleen Short, *The Research Supplemental Poverty Measure: 2012* (Census Bureau: November 2013) table 5a, p.15. This report does not determine the separate effect of the ACTC and EITC. As discussed below, the effect of the ACTC is difficult to separate from the EITC's effect. Most of the effect of these credits is attributed to the EITC. See also Margot L. Crandall-Hollick, *The Impact of Refundable Tax Credits on Poverty Rates*, CRS Report R41999.

<sup>3</sup>Margot L. Crandall-Hollick, *The Earned Income Tax Credit (EITC): An Economic Analysis*, CRS Report R44057 (Congressional Research Service: Feb. 1, 2016) p.15.

rates for taxpayers with and without children (for 2016, a maximum of \$503 for childless workers vs. a maximum of \$6,242 for families of three or more children). The result is that the EITC benefits mostly families with children and provides very little benefit to childless workers. This difference in credit amounts may reflect, in part, judgements about horizontal equity because larger families may be viewed as having greater costs to achieve the same standard of living than smaller families. However, some studies have shown that differences in EITC benefits may overstate the difference in costs between childless and other families. For example, one study estimated the credit's benefits in terms of the reduction in effective tax rates and found that benefits were considerably larger for households with children compared to those without even after family incomes were adjusted to account for family size.<sup>4</sup> When the study compared families with incomes equivalent to \$10,000, it found that effective tax rates range from -1.47 percent for a married couple with no children to -39.21 percent for a head-of-household return with two children, a difference of more than a third of income

Concerns have been raised that the credit may provide unintended incentives that discourage people from marrying to avoid a reduction in their EITC (the "marriage penalty"). The marriage penalty occurs when married EITC recipients receive a smaller EITC as married couples than their combined EITCs as single tax filers. The EITC can create marriage penalties for low-income working couples who qualify for the EITC if, when they marry, the combined household income rises into the EITC phase-out range or beyond, reducing or completely eliminating the credit.<sup>5</sup> However, while limited, the research on this issue indicates that the EITC's effects on marriage patterns are small and ambiguous. In addition, a marriage bonus is also possible when two very low-income people marry and their earnings increase but not enough to put them into the phase-out range of the credit.

The EITC is a complicated tax provision that is difficult for taxpayers to comply with and IRS to administer. As explained earlier in this report, the difficulties arise from the EITC's complex rules and formulas. In particular,

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<sup>4</sup>Jane Gravelle and Jennifer Gravelle, "Horizontal Equity and Family Tax Treatment: The Orphan Child of Tax Policy," *National Tax Journal*, vol. 59, no. 3 (September 2006).

<sup>5</sup>The marriage penalty may also be present when one or both of the spouses have the maximum or more of the number of qualifying children

as described above, the rules that determine whether a child qualifies the taxpayer to claim the credit are a major source of most of the taxpayer compliance burden. However, the participation rate for eligible taxpayers is relatively high when compared to other antipoverty programs and administrative and compliance costs are likely to be lower for the EITC.

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**The CTC/ACTC Provides  
Financial Assistance to  
Families with Children but  
It Is Complicated to  
Comply with and  
Administer**

The CTC was created in 1997 as a nonrefundable tax credit for most families to help ease the financial burden that families incur when they have children. Since then, the amount of the credit per child has increased and the current ACTC was introduced to make the CTC credit partially refundable for more families. The current structure of the CTC/ACTC also subsidizes the costs of rearing children by the \$1,000 per child credit and employment by the ACTC's phase-in income range which increases the amount of credit as the taxpayer's earned income increases.

The CTC/ACTC provides financial assistance to a relatively large number of people in its target population of families with children. According to our analysis of IRS data, the CTC/ACTC was claimed on about 36 million returns in 2013 for an average amount claimed of \$1,537. The credit supplies up to \$1,000 per child in assistance which may be a significant amount for lower income taxpayers but becomes a decreasing percentage of income as income increases toward the phase-out threshold of \$110,000 for taxpayers who are married and filing jointly.<sup>6</sup>

There is currently little research evaluating the impact of the CTC/ACTC on how taxpayers respond to the wage incentives. The ACTC encourages work by providing a wage subsidy of 15 cents for every dollar of earnings above \$3,000 until the credit maximum of \$1,000 per child is reached. Because both the ACTC and EITC subsidize earnings over the same income range, researchers find it difficult to isolate the ACTC's effects on employment from the similarly structured but larger subsidy provided by

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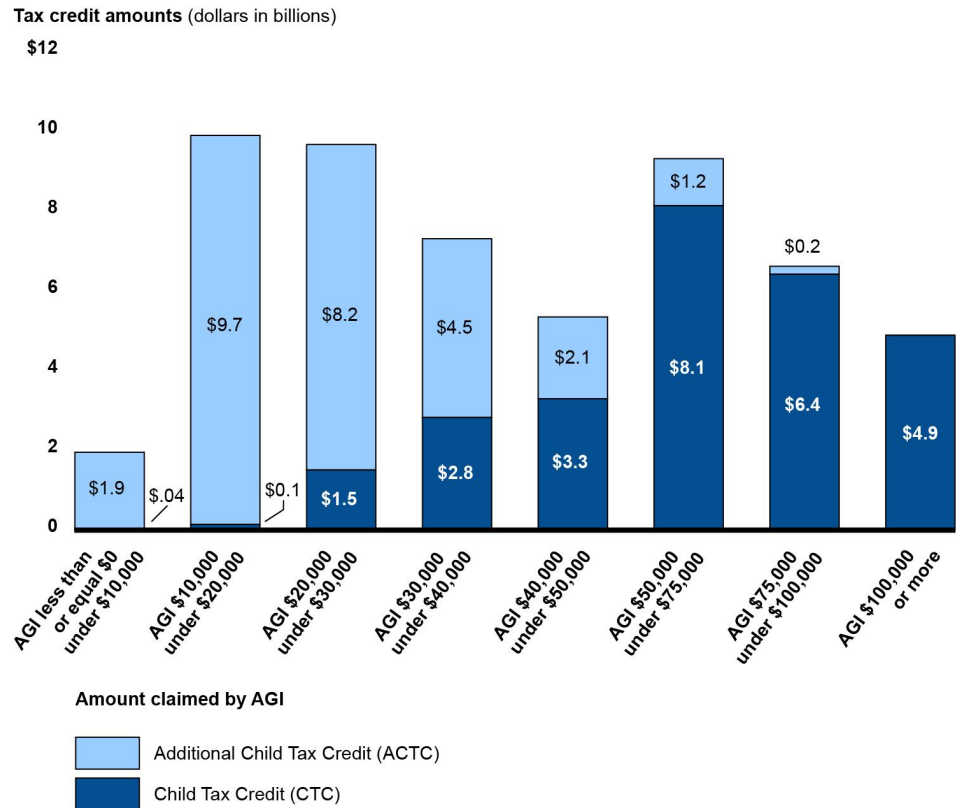
<sup>6</sup>Expenditures on children also increase when the family's income increases. According to the U.S. Department of Agriculture, spending on a child born in 2013 up through 2030 (age 17) is expected to be 39 percent higher for middle income families and 132 percent higher for upper income families than expenditures by lower income families. See table 10 in Mark Lino, U.S. Department of Agriculture, Center for Nutrition Policy and Promotion, *Expenditures on Children by Families in 2013*, Miscellaneous Publication No. 1528-2013 (2014).



the EITC. In the absence of any evidence concerning the effectiveness of the credits, no conclusions can be drawn about its effect on efficiency.

The conversion of the CTC into the broader partially refundable CTC/ACTC may affect judgments about vertical equity by changing the income distribution of tax credit benefits from what it would be under the CTC alone. The ACTC concentrates more of the benefits of the CTC/ACTC among lower income households. Because the ACTC is refundable and the refundability threshold has been reduced to \$3,000, more lower income filers with no or very low tax liability can qualify for the ACTC than qualify for the CTC. As figure 11 shows, the ACTC significantly increases the availability of the tax benefit for lower income taxpayers with children.

**Figure 11: Distribution of ACTC and CTC Credit Amounts by Adjusted Gross Income, 2013**



Source: GAO analysis of IRS Statistics of Income (SOI) data, 2013. | GAO-16-475

However, according to our analysis of IRS data, the combined CTC/ACTC does not provide as great a share of benefits to lower income taxpayers as the EITC. About 22 percent of the CTC/ACTC is claimed by taxpayers with less than \$20,000 in income whereas 62 percent of EITC is claimed by taxpayers in this income range. The difference may be due in part to differences in the phase-in rates and ranges. The ACTC phases in at 15 percent beginning when earnings exceed \$3,000 while the EITC has no phase-in threshold and can have a phase-in rate as high as 45 percent depending on the number of children. The EITC benefits are more front-loaded for lower income taxpayers than the CTC/ACTC benefits.

Views differ on the effect of the CTC/ACTC on horizontal equity. Some argue that these families should get this tax relief because the additional children reduce their ability to pay relative to families or individuals without children. Others, however, regard children as a choice that parents make about how they use their resources and horizontal equity requires that people with the same income pay similar taxes. Their view is that parents have children because they get satisfaction from this choice and that subsidies are no more warranted for this choice (on an ability to pay basis) than any other purchase the parents make. This disagreement highlights that, although the credit may promote a social good by providing assistance to families with children, the equity of this approach is still a matter of judgment.

The CTC/ACTC shares the complexity of the EITC and other tax provisions directed toward children and families which derives from the rules for determining whether a child qualifies for the tax benefit. Like the EITC, the CTC/ACTC has relationship, age, and residency requirements that contribute to complexity. Applying the rules can be complicated because the CTC/ACTC rules may be similar but not always the same as the EITC. For example, the EITC requires that qualifying children be under 19 years old (or under 24 and in school) and the CTC/ACTC requires that the qualifying children be under 17 years old. To further complicate matters, the CTC/ACTC adds a support test to the age residency and relationship requirements. Furthermore, these family centered provisions are currently structured very differently and the amount of the tax benefits change with changing circumstances. The benefits can change when the parent marries, has an additional child or the child gets older, or their income changes.

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The AOTC Provides Assistance for Educational Expenses but Its Effect On College Attendance Is Unknown and It Is Complicated to Comply with and Administer

The AOTC provides financial assistance to students from middle-income families (like its predecessor the Hope credit) who may not benefit from other forms of traditional student aid, like Pell Grants. But the AOTC, through its refundability provisions, also expands financial assistance to students from lower income families. Under the AOTC, claimants can receive up to \$2,500 per student in credits for qualifying education expenses with up to \$1,000 of the credit being refundable. The AOTC was claimed on about 10 million returns in 2013. The Protecting Americans from Tax Hikes Act of 2015 made the AOTC a permanent feature of the tax code, replacing the nonrefundable Hope credit.

The effectiveness of the AOTC in getting financial assistance to its target population depends in part on the incidence of the credit. The AOTC's benefits may be shifted to the educational institutions if the colleges and universities respond to the availability of the AOTC by increasing their tuition. We identified no current research on this institutional response to the AOTC but there is evidence that institutions have not raised tuition in response to the Hope and Lifetime Learning Credits. However, recent research indicates that colleges may react by reducing other forms of financial aid provided by the colleges so that the credit claimants receive no net benefit from the credits.<sup>7</sup> In contrast to the other education credits, the AOTC may also affect tuition if its refundability makes it more available to lower income claimants. If these students attend schools like community colleges with more scope to raise tuitions because their tuition is initially relatively low, they may face increased tuition and a reduced effective value of their AOTC. In this case, if tuitions rise, the cost of college for students ineligible for the AOTC would go up.

To the extent that the AOTC reduces the after-tax cost of education, it provides a benefit that may influence decisions about college attendance. A goal of education tax benefits like the Hope Credit has been to increase college attendance and the AOTC shares some of the education cost reducing features of this credit that could increase attendance. Research on education credits has not focused on the AOTC because, due to its relatively recent enactment, data are less available for the AOTC than other education credits like the Hope and Lifetime Learning Credits. Studies have shown some but not a large impact on college attendance due to these credits and other education tax incentives. For example, a

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<sup>7</sup>Nicholas Turner, "Who benefits from student aid? The economic incidence of tax-based federal student aid," *Economics of Education Review*, vol. 31 (2012) pp. 463-481

study found that tax-based aid increases full-time enrollment in the first 2 years of college for 18 to 19 years old by 7 percent and that the price sensitivity of enrollment suggests that college enrollment increases 0.3 percentage points per \$100 of tax-based aid.<sup>8</sup> The AOTC shares features with other education credits related to the timing of the credit that may limit its effectiveness in promoting college attendance. The AOTC may be received months after education expenses are incurred, making it less useful for families with limited resources to pay education expenses. However, the refundability of the AOTC has made it more accessible to lower income households where it may have a greater impact on college attendance than the Hope Credit. Research indicates that students from lower income households are more sensitive to changes in the price of a college education than higher income households when deciding whether to attend college.

If the AOTC can be shown to influence attendance decisions it may also affect efficiency by increasing an activity with a positive externality. Education would have a positive externality if the benefit to society of increased productivity and innovation that is due to a more educated populace is greater than the benefit to the individuals who make the college attendance decision and consider only their private benefit. When this is the case, the result may be under-investment in education from a social perspective.<sup>9</sup> By lowering costs, the credit may increase the private return to investment in education, bringing it closer to the social return.

The conversion of the Hope Credit into the partially refundable AOTC may affect judgments about vertical equity by changing the income distribution of tax credit benefits. The refundability of the AOTC has increased the share of the credit's benefits received by lower income filers when compared to its predecessor, the Hope Credit. According to our analysis of IRS data, about 20 percent of the AOTC in 2013 was claimed by filers making less than \$20,000 per year. In the case of the Hope Credit in 2008 (the last year this credit was in effect) only about 6.8

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<sup>8</sup>Nicholas Turner, "The Effect of Tax-based Federal Student Aid on College Enrollment," *National Tax Journal*, vol. 64, issue 3 (September 2011) pp. 839–862

<sup>9</sup>In addition to the positive social benefits discussed, increased education is also correlated with reduced reliance on government assistance programs, less crime, and greater civic participation. Other reasons for government intervention include (1) private capital markets may be unwilling to lend to students to finance their higher education and (2) access to college, since college-educated workers earn more than those with a high school diploma, ultimately may mitigate income inequality.

percent of the credit was claimed by taxpayers earning less than \$20,000 per year. As mentioned above, this shift to lower income taxpayers also has the potential to make the credit more effective and efficient. The effect on horizontal equity as in the case of the child credits described above depends on judgements about whether taxpayers should pay different taxes based on decisions about whether or not to attend college.

The complexity of the AOTC is derived largely from its relationship to other education tax preferences. The AOTC is one of a variety of education tax benefits that students or their families can claim which include the Lifetime Learning Credit and the tuition and fees deduction. These tax preferences differ in terms of their eligibility criteria, benefit levels, and income phase-outs. The value of the tax benefit also depends on the amount of student aid taxpayers or their children receive. Evidence indicates that due to this complexity, taxpayers may not know which education tax preference provides the most benefit until they file their taxes—and calculating the tax benefit of each provision can “place substantial demands on the knowledge and skills of millions of students and families.”<sup>10</sup> In addition, as described in our 2012 report, filing for AOTC is complex enough to raise concerns that some taxpayers choose not to claim a tax benefit like the AOTC or are not claiming the tax provision that provides the greatest benefit.

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<sup>10</sup>See GAO, *Higher Education: Improved Tax Information Could Help Families Pay for College*, [GAO-12-560](#) (Washington, D.C.: May 18, 2012).

# Appendix IV: Comments from the Internal Revenue



DEPUTY COMMISSIONER

DEPARTMENT OF THE TREASURY  
INTERNAL REVENUE SERVICE  
WASHINGTON, D.C. 20224

Mr. James R. McTigue  
Director, Tax Issues  
U.S. Government Accountability Office  
441 G Street, N.W.  
Washington, DC 20548

Dear Mr. McTigue:

I have reviewed the draft report entitled *REFUNDABLE TAX CREDITS: Comprehensive Compliance Strategy and Expanded Use of Data Could Strengthen IRS Efforts to Address Noncompliance*, and appreciate your acknowledgment of IRS actions already taken to address refundable tax credits and the numerous challenges the IRS faces in effectively administering these credits.

The IRS continues to work with the Department of Treasury, which supports expanded error correction authority and other legislative changes beyond those recently included in the Consolidated Appropriations Act of 2016, that will help improve compliance and reduce refundable credit overclaims. We continue to use every tax administration tool and technique available to us, as well as explore additional data sources and partners to verify claim eligibility, deter overclaims, and reduce payment errors.

Without additional authorities granted by Congress, it is difficult for the IRS to make significant improvements in reducing improper payments of refundable tax credits under current budget constraints. The issues identified in the draft report illustrate some of the challenges we currently face in trying to reduce payment errors in benefit programs administered through the tax system. Our past experience with the Earned Income Tax Credit (EITC) demonstrates this difficulty. Despite years of studies, audits, and considerable resources invested, the estimated EITC improper payment rate has remained relatively constant. Our continuing actions to address and reduce improper payments of the EITC include a series of EITC Summit events, to be held during our annual Tax Forums. The forums, scheduled from July through September, will provide opportunities for dialog with public and private stakeholders to identify opportunities for improvement on outreach, administration, and compliance strategies.

Recent legislative changes have enabled us to build on our experience to improve our existing strategies for mitigating risks. Mitigation actions and strategies will continue to be identified and pursued, as resources permit, especially the continuous exploration of additional data sources and partners to deter the submission of tax returns with

refundable credit overclaims. The IRS is refining the improper payment risk assessment questionnaire for the Additional Child Tax Credit and American Opportunity Tax Credit to better reflect the risks inherent in administering refundable credits through the tax system.


National Research Program (NRP) estimates, along with enforcement performance data and the insights they have provided IRS over time in administering refundable credits, have already enabled us to understand the likelihood and magnitude of ACTC and AOTC overclaims, as well as the drivers or issues associated with the overclaims. Root causes of these refundable credits are known from IRS enforcement experience, primarily through examination and matching programs. Future analyses of NRP data will further refine estimates and enhance our knowledge of the noncompliance associated with these credits. Supplemental measures are also being developed to help monitor our progress in addressing these credits. By viewing refundable credits within the broader context of tax compliance provided by the NRP, the IRS is able to apply our limited resources along with risks to noncompliance with the laws, not just those involving refundable credits.

Regarding our pre-refund compliance program, we disagree with certain statements and conclusions presented in the report that infer our compliance strategies and selection criteria do not consider equity and compliance burden. Our model for audit selections of EITC and other refundable credit claims is based on automated filters that evaluate the information presented within the four corners of the tax return. The selection process is designed to identify those returns with the highest likelihood of error or non-compliance and select them for audit. While there is a certain amount of burden associated with compliance activities, taxpayers have the responsibility, under the tax Code, of substantiating the claims made on their returns. When taxpayers do not respond to multiple attempts by the IRS to obtain support for their claims, and the claims are ultimately denied by default, we consider that to be a very strong indication that the claim was improper and could not be supported. On average, the amounts of EITC and other refundable credit claims are significant enough that a reasonable person would not opt to lose the claim by default if they were legitimately entitled to receive it.

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We appreciate the insights provided in the draft report. Responses to your specific recommendations are enclosed. If you have any questions, please contact Ken Corbin, Director, Return Integrity and Compliance Services, Wage and Investment Division, at (404) 338-9042.

Sincerely,

  
John M. Dalrymple  
Deputy Commissioner for  
Services and Enforcement

Enclosure



Enclosure

**Recommendations**

To strengthen efforts to identify and address noncompliance with the EITC, ACTC, and AOTC, we recommend that the Commissioner of Internal Revenue direct RCPM to take the following steps:

**RECOMMENDATION 1**

Building on current efforts, develop a comprehensive operational strategy that includes all the RTCs for which RCPM is responsible. The strategy could include use of error rates and amounts, evaluation and guidance on the proper use of indicators like no-change and default rates, and guidance on how to weigh trade-offs between equity and return on investment in resource allocations.

**COMMENT**

We are working toward developing one comprehensive strategy for refundable credits which includes outreach and education, audit coverage, preparer treatments, soft notices, and Submission Processing compliance activities. The strategy will outline recommended treatments for all refundable credits and the data-based decisions behind the types and planned level of treatments. Resource levels, coverage rates, historical behavior change, and levels of revenue protected will all be considered in development of an overall strategy.

**RECOMMENDATION 2**

As RCPM begins efforts to track the number of erroneous returns claiming the ACTC or AOTC identified through pre-refund enforcement activities, such as screening filters and use of math error authority, it should develop and implement a plan to collect and analyze this data that includes such characteristics as identifying timing goals, resource requirements and the appropriate methodologies for analyzing and applying the data to compliance issues.

**COMMENT**

We will ensure that efforts to build out enforcement strategies for the Additional Child Tax Credit and American Opportunity Tax Credit will be data-driven and supported by research and analyses that will be documented in the strategies. This recommendation is closely related to Recommendation 1, and as such, will be worked simultaneously. Once the collection of data is complete, a Compliance study will be created to include identification of timing goals, resource requirements, and appropriate methodologies.

**RECOMMENDATION 3**

Assess whether the data received from the Department of Education PEPS database is a) sufficiently complete and accurate to reliably correct tax returns at-filing and b) provided additional information that could be used to identify returns for examination; if warranted by this research, IRS should use this information to seek legislative authority to correct tax returns at-filing based on PEPS data.

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**COMMENT**

We are currently investigating whether we can use data from the Department of Education's Postsecondary Education Participants System (PEPS) database to develop a compliance filter since we do not currently have correction authority for specific errors. Discussions are being scheduled to determine whether PEPS data can be used to verify Employer Identification Number (EIN) data on Form 8863, *Education Credits*. We are also conducting additional research to determine the best source to use for EIN matching. While our existing request for correction authority for specific errors would include this, additional research results could provide further support for the existing request.

**RECOMMENDATION 4**

Periodically review collections data to compute a collections rate for post-refund enforcement activities and determine what additional analyses would provide useful information about compliance results and costs of post-refund audits and document-matching reviews.

**COMMENT**

The majority of the refundable credit audits conducted are pre-refund (refundable credit portion of the refund held) audits, so a collectability rate would not be beneficial. The small volume of post-refund refundable credit audits conducted has a high collectability rate. A collectability study is very labor intensive; costs therefore would outweigh the benefits derived, since previous studies have indicated that any post-refund audits on these credits have a high collectability rate. Collectability levels are based on circumstances affecting taxpayers, such as the economy, and therefore should not be used as a selection criteria or weight for selection of certain types of credits for audit.

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# Appendix V: GAO Contact and Staff Acknowledgments

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## GAO Contacts:

James R. McTigue, Jr. (202) 512-9110, [mctiguej@gao.gov](mailto:mctiguej@gao.gov)

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## Staff

## Acknowledgments:

In addition to the contact named above, Kevin Daly, Assistant Director, Susan Baker, Russell Burnett, Jehan Chase, Adrienne Cline, Nina Crocker, Sara Daleski, Catrin Jones, Diana Lee, Robert MacKay, Ed Nannenhorn, Jessica Nierenberg, Karen O'Connor, Robert Robinson, Max Sawicky, Stewart Small, and Sonya Vartivarian made major contributions to this report.

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# Appendix VI: Accessible Data

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## Agency Comment Letter

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Text of Appendix IV:  
Comments from the  
Internal Revenue

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Page 1

DEPARTMENT OF THE TREASURY

INTERNAL REVENUE SERVICE

WASHINGTON, D.C. 20224

DEPUTY COMMISSIONER

May 11, 2016

Mr. James R. McTigue

Director, Tax Issues

U.S. Government Accountability Office

441 G Street, N.W.

Washington, DC 20548

Dear Mr. McTigue:

I have reviewed the draft report entitled REFUNDABLE TAX CREDITS: Comprehensive Compliance Strategy and Expanded Use of Data Could Strengthen IRS Efforts to Address Noncompliance, and appreciate your acknowledgment of IRS actions already taken to address refundable tax credits and the numerous challenges the IRS faces in effectively administering these credits.

The IRS continues to work with the Department of Treasury, which supports expanded error correction authority and other legislative changes beyond those recently included in the Consolidated Appropriations Act of 2016, that will help improve compliance and reduce

refundable credit overclaims. We continue to use every tax administration tool and technique available to us, as well as explore additional data sources and partners to verify claim eligibility, deter overclaims, and reduce payment errors.

Without additional authorities granted by Congress, it is difficult for the IRS to make significant improvements in reducing improper payments of refundable tax credits under current budget constraints. The issues identified in the draft report illustrate some of the challenges we currently face in trying to reduce payment errors in benefit programs administered through the tax system. Our past experience with the Earned Income Tax Credit (EITC) demonstrates this difficulty. Despite years of studies, audits, and considerable resources invested, the estimated EITC improper payment rate has remained relatively constant. Our continuing actions to address and reduce improper payments of the EITC include a series of EITC Summit events, to be held during our annual Tax Forums. The forums, scheduled from July through September, will provide opportunities for dialog with public and private stakeholders to identify opportunities for improvement on outreach, administration, and compliance strategies.

Recent legislative changes have enabled us to build on our experience to improve our existing strategies for mitigating risks. Mitigation actions and strategies will continue to be identified and pursued, as resources permit, especially the continuous exploration of additional data sources and partners to deter the submission of tax returns with

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National Research Program (NRP) estimates, along with enforcement performance data and the insights they have provided IRS over time in administering refundable credits, have already enabled us to understand the likelihood and magnitude of ACTC and AOTC overclaims, as well as the drivers or issues associated with the overclaims. Root causes of these refundable credits are known from IRS enforcement experience, primarily through examination and matching programs. Future analyses of NRP data will further refine estimates and enhance our knowledge of the noncompliance associated with these credits. Supplemental measures are also being developed to help monitor our progress in addressing these credits. By viewing refundable credits within the broader context of

tax compliance provided by the NRP, the IRS is able to apply our limited resources along with risks to noncompliance with the laws, not just those involving refundable credits.

Regarding our pre-refund compliance program, we disagree with certain statements and conclusions presented in the report that infer our compliance strategies and selection criteria do not consider equity and compliance burden. Our model for audit selections of EITC and other refundable credit claims is based on automated filters that evaluate the information presented within the four corners of the tax return. The selection process is designed to identify those returns with the highest likelihood of error or non-compliance and select them for audit. While there is a certain amount of burden associated with compliance activities, taxpayers have the responsibility, under the tax Code, of substantiating the claims made on their returns. When taxpayers do not respond to multiple attempts by the IRS to obtain support for their claims, and the claims are ultimately denied by default, we consider that to be a very strong indication that the claim was improper and could not be supported. On average, the amounts of EITC and other refundable credit claims are significant enough that a reasonable person would not opt to lose the claim by default if they were legitimately entitled to receive it.

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Sincerely,

John M. Dalrymple

Deputy Commissioner for Services and Enforcement

Enclosure

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Enclosure

Recommendations

To strengthen efforts to identify and address noncompliance with the EITC, ACTC, and AOTC, we recommend that the Commissioner of Internal Revenue direct RCPDM to take the following steps:

### RECOMMENDATION 1

Building on current efforts, develop a comprehensive operational strategy that includes all the RTCs for which RCPMM is responsible. The strategy could include use of error rates and amounts, evaluation and guidance on the proper use of indicators like no- change and default rates, and guidance on how to weigh trade-offs between equity and return on investment in resource allocations.

### COMMENT

We are working toward developing one comprehensive strategy for refundable credits which includes outreach and education, audit coverage, preparer treatments, soft notices, and Submission Processing compliance activities. The strategy will outline recommended treatments for all refundable credits and the data-based decisions behind the types and planned level of treatments. Resource levels, coverage rates, historical behavior change, and levels of revenue protected will all be considered in development of an overall strategy.

### RECOMMENDATION 2

As RCPMM begins efforts to track the number of erroneous returns claiming the ACTC or AOTC identified through pre-refund enforcement activities, such as screening filters and use of math error authority, it should develop and implement a plan to collect and analyze this data that includes such characteristics as identifying timing goals, resource requirements and the appropriate methodologies for analyzing and applying the data to compliance issues.

### COMMENT

We will ensure that efforts to build out enforcement strategies for the Additional Child Tax Credit and American Opportunity Tax Credit will be data-driven and supported by research and analyses that will be documented in the strategies. This recommendation is closely related to Recommendation 1, and as such, will be worked simultaneously. Once the collection of data is complete, a Compliance study will be created to include identification of timing goals, resource requirements, and appropriate methodologies.

### RECOMMENDATION 3

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Assess whether the data received from the Department of Education PEPS database is a) sufficiently complete and accurate to reliably correct tax returns at-filing and b) provided additional information that could be used to identify returns for examination; if warranted by this research, IRS should use this information to seek legislative authority to correct tax returns at-filing based on PEPS data.

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RECOMMENDATION 4

Periodically review collections data to compute a collections rate for post-refund enforcement activities and determine what additional analyses would provide useful information about compliance results and costs of post-refund audits and document- matching reviews.

COMMENT

The majority of the refundable credit audits conducted are pre-refund (refundable credit portion of the refund held) audits, so a collectability rate would not be beneficial. The small volume of post-refund refundable credit audits conducted has a high collectability rate. A collectability study is very labor intensive; costs therefore would outweigh the benefits derived, since previous studies have indicated that any post-refund audits on these credits have a high collectability rate. Collectability levels are based on circumstances affecting taxpayers, such as the economy, and therefore should not be used as a selection criteria or weight for selection of certain types of credits for audit.



## Data Tables

Data Table for Highlights Figure: Overclaims and Underclaims as a Percent of Total Credit Amount

| Type of Credit                               | Refundable Credits Amount |           |
|--|---------------------------|-----------|
|  | Underclaim                | Overclaim |
| Earned Income Tax Credit                     | -1%                       | 29%       |
| Child Tax Credit/Additional Child Tax Credit | -2%                       | 12%       |
| American Opportunity Tax Credit              | -4%                       | 25%       |

Data Table for Figure 2: Number of Taxpayers Claiming Credits, 1999 to 2013

|  | 1999       | 2000       | 2001       | 2002       | 2003       | 2004       | 2005       | 2006       |
|--|------------|------------|------------|------------|------------|------------|------------|------------|
| Child Tax Credit (CTC)                 | 26,016,019 | 26,404,521 | 26,452,875 | 25,939,801 | 25,672,254 | 25,988,711 | 25,950,568 | 25,741,511 |
| Earn Income Tax Credit (EITC)          | 19,258,715 | 19,277,225 | 19,593,122 | 21,703,187 | 22,024,227 | 22,269,577 | 22,751,904 | 23,042,200 |
| American Opportunity Tax Credit (AOTC) | No data    | No data    | No data    | No data    | No data    | No data    | No data    | No data    |
| Additional Child Tax Credit (ACTC)     | 985,579    | 1,104,143  | 8,562,900  | 10,937,417 | 12,570,455 | 14,528,434 | 15,219,712 | 15,219,712 |

|  | 2007       | 2008       | 2009       | 2010       | 2011       | 2012       | 2013       |
|--|------------|------------|------------|------------|------------|------------|------------|
| Child Tax Credit (CTC)                 | 25,889,333 | 25,173,769 | 23,563,012 | 23,579,773 | 23,136,250 | 22,889,677 | 22,563,277 |
| Earn Income Tax Credit (EITC)          | 24,583,940 | 24,756,744 | 27,041,498 | 27,367,757 | 27,911,726 | 27,848,264 | 28,821,785 |
| American Opportunity Tax Credit (AOTC) | No data    | No data    | 8,979,751  | 12,097,009 | 12,927,339 | 10,038,949 | 10,469,713 |
| Additional Child Tax Credit (ACTC)     | 15,884,285 | 18,160,498 | 21,290,682 | 20,979,862 | 21,151,049 | 20,533,173 | 20,727,634 |

Data Table for Figure 3: Total Amount of Credits Received By Taxpayers, 1999 to 2013

|  | 1999       | 2000       | 2001       | 2002       | 2003       | 2004       | 2005       | 2006       |
|--|------------|------------|------------|------------|------------|------------|------------|------------|
| Child Tax Credit (CTC)                 | 25,909,073 | 25,711,138 | 28,634,576 | 27,060,904 | 28,095,097 | 38,758,397 | 37,256,304 | 35,800,341 |
| Earn Income Tax Credit (EITC)          | 42,607,562 | 42,173,831 | 42,613,681 | 48,033,220 | 47,659,860 | 48,026,197 | 49,303,214 | 50,063,401 |
| American Opportunity Tax Credit (AOTC) | No data    | No data    | No data    | No data    | No data    | No data    | No data    | No data    |
| Additional Child Tax Credit (ACTC)     | 1,085,058  | 1,276,642  | 6,377,345  | 8,067,560  | 11,234,964 | 17,339,061 | 18,013,581 | 18,326,633 |
| ACTC/CTC combined                      | 26,994,131 | 26,987,780 | 35,011,922 | 35,128,464 | 39,330,062 | 56,097,459 | 26,994,131 | 26,987,780 |

Appendix VI: Accessible Data

|  | 2007       | 2008       | 2009       | 2010       | 2011       | 2012       | 2013       |
|--|------------|------------|------------|------------|------------|------------|------------|
| Child Tax Credit (CTC)                 | 34,667,389 | 32,913,223 | 30,387,688 | 30,111,326 | 29,073,059 | 28,178,707 | 27,233,304 |
| Earn Income Tax Credit (EITC)          | 24,583,940 | 24,756,744 | 27,041,498 | 27,367,757 | 27,911,726 | 27,848,264 | 28,821,785 |
| American Opportunity Tax Credit (AOTC) | No data    | No data    | 16,868,896 | 22,127,316 | 22,544,484 | 17,601,912 | 17,807,881 |
| Additional Child Tax Credit (ACTC)     | 18,335,693 | 22,015,828 | 29,406,614 | 29,319,653 | 29,586,512 | 28,169,346 | 27,855,164 |
| ACTC/CTC combined                      | 53,003,083 | 54,929,051 | 59,794,303 | 59,430,980 | 58,659,571 | 56,348,054 | 55,088,468 |

Data Table for Figure 4: Percent of EITC, ACTC/CTC, and AOTC Credit Amounts Claimed by Adjusted Gross Income (AGI), 2013

| Adjusted Gross Income                     | Earned Income Tax Credit (EITC) | American Opportunity Tax Credit (AOTC) | ACTC/CTC Combined |
|---|---------------------------------|--|-------------------|
| AGI Less than or equal \$0 under \$10,000 | 14%                             | 8%                                     | 4%                |
| AGI \$10,000 under \$20,000               | 48%                             | 12%                                    | 18%               |
| AGI \$20,000 under \$30,000               | 27%                             | 12%                                    | 18%               |
| AGI \$30,000 under \$40,000               | 9%                              | 9%                                     | 13%               |
| AGI \$40,000 under \$50,000               | 2%                              | 8%                                     | 10%               |
| AGI \$50,000 under \$75,000               | 0%                              | 16%                                    | 17%               |
| AGI \$75,000 under \$100,000              | No data                         | 12%                                    | 12%               |
| AGI \$100,000 or more                     | No data                         | 22%                                    | 9%                |

Data Table for Figure 6: Overclaims and Underclaims as a Percent of Total Credit Amount, 2009 to 2011

| Type of Credit                               | Refundable Credits Amount |           |
|--|---------------------------|-----------|
|  | Underclaim                | Overclaim |
| Earned Income Tax Credit                     | -1%                       | 29%       |
| Child Tax Credit/Additional Child Tax Credit | -2%                       | 12%       |
| American Opportunity Tax Credit              | -4%                       | 25%       |

Data Table for Figure 7: Overclaim Percentage by Income Type, 2009 to 2011

| Income Type              | Percentage |                |
|--------------------------|------------|----------------|
|                          | Schedule C | Non-Schedule-C |
| Earned Income Tax Credit | 40%        | 24%            |

| Income Type                                  | Percentage |                |
|--|------------|----------------|
|  | Schedule C | Non-Schedule-C |
| Child Tax Credit/Additional Child Tax Credit | 12%        | 11%            |
| American Opportunity Tax Credit              | 30%        | 24%            |

**Data Table for Figure 8: Overclaim Percentages by Type of Tax Return Preparer, 2009 to 2011**

| Income Type                                   | Percentage     |                      |                              |            |               |
|---|----------------|----------------------|------------------------------|------------|---------------|
|   | Enrolled agent | Unenrolled preparers | Certified Public Accountants | Volunteers | Self-prepared |
| Earned Income Tax Credit                      | 27%            | 34%                  | 28%                          | 16%        | 27%           |
| Child Tax Credit/ Additional Child Tax Credit | 10%            | 17%                  | 5%                           | 8%         | 10%           |
| American Opportunity Tax Credit               | 25%            | 45%                  | 12%                          | 15%        | 23%           |

**Data Table for Figure 9: Percentage Share of Credit Amounts of All Filers and ITIN Filers by Adjusted Gross Income Level, 2013**

|               | CTC |              | ACTC |              | AOTC |              |
|---------------|-----|--------------|------|--------------|------|--------------|
|               | All | ITIN returns | All  | ITIN returns | All  | ITIN returns |
| < \$20K       | 1   | 1            | 42   | 26           | 20   | 18           |
| \$20 - \$30K  | 6   | 9            | 29   | 39           | 12   | 23           |
| \$30 - \$40K  | 10  | 21           | 16   | 23           | 9    | 15           |
| \$40 - \$50 K | 12  | 22           | 7    | 8            | 8    | 13           |
| \$50 – \$75K  | 30  | 31           | 4    | 3            | 16   | 19           |
| > \$75K       | 42  | 16           | 1    | 0            | 34   | 12           |

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