Annual Report to Congress on the Refundable Credits Gap: Scope and Draft Analysis Plan

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Abstract: For decades, Congress and the IRS have embraced the goal of increasing coverage of the Earned Income Tax Credit (EITC)—and, more recently, other anti-poverty refundable credits including the Child Tax Credit (CTC) and the Recovery Rebate Credit (RRC). However, despite the long-time focus on this goal, there remains little public data on the programs' actual participation rates. The IRS publishes limited estimates on EITC participation rates and only high-level trends on the types of populations most likely to be missing out. We propose that an Annual Report to Congress on the Refundable Credits Gap, prepared by Treasury, would help build momentum to improve participation rates, and to improve on efforts to expand access and outreach. This memo outlines a rough analysis plan for such a report—containing headline participation rate statistics and in-depth analysis of those populations missing out on refundable credits. It explores the data sources Treasury could rely on in this analysis and compares the proposed analysis to other extant reports.

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1. Scope, audience, and purpose

Congress and the IRS have long sought to increase the Earned Income Tax Credit (EITC) participation rate—see, e.g., statements by IRS commissioners and outreach initiatives dating back 20 years. More recently, Congress and the Trump administration took extraordinary steps to ensure coverage of the pandemic-era stimulus payments (Economic Impact Payments, or EIPs; or Recovery Rebate Credit, or RRC), while Congress and the Biden administration took extraordinary steps to ensure coverage of the TY2021 expanded Child Tax Credit (CTC). Despite these commitments and efforts, however, reporting on the size and nature of the credit coverage gap has remained highly limited. The limited data hampers efforts to track progress over time, build momentum toward goals, and develop targeted efforts to reach specific underserved populations.

An Annual Report on the Refundable Credits Coverage Gap would help policymakers and advocates identify continuing barriers to full coverage for refundable credits and focus attention on reforms that could close the gaps. The Report would help outreach and tax filing assistance organizations better refine and target their work. It would also build momentum and generate accountability inside and outside government toward the goal of achieving full coverage of refundable tax credits. Indeed, the first step to achieving any such systemic objective is having a reliable measure of the current status and tracking progress toward the goal.

The Report, prepared at the end of each calendar year, would analyze those households[1] who appeared eligible for but did not access federal refundable credits for the prior two tax years. (I.e., the December 2023 Report would analyze households missing out on the TY2021 and TY2022 EITC and CTC.) The Report should be designed to identify trends and overall progress. It is *not* the goal to identify specific individuals for micro-targeting. As such, unlike some previous data releases on these topics, estimated counts should be unbiased extrapolations from available data sources—even if the specific households comprising various populations cannot be precisely identified.[2]

The Annual Report would not contain any real-time reporting throughout the filing season. (Such real-time reporting would be valuable to build momentum and target outreach efforts, but it comes with additional logistical and disclosure complications.) The Report would primarily analyze gaps in coverage of the EITC and CTC.[3] Generally, the Report would not analyze those households who *do* successfully claim these credits, except in a limited capacity to identify successes worth emulating (see Section 6). The focus is on those households who do *not* claim the credits.

2. Existing reports

The IRS publishes yearly estimates of the overall EITC participation rate by state, accompanied by limited analysis of certain demographic groups more likely to miss out. The demographic estimates do not indicate the scope of each population; while the IRS indicates, for example, that veterans are less likely to claim the EITC, it does not indicate how much less likely, or what fraction of eligible non-claimants are veterans. It is also not clear how the official estimates handle conflicting child claims (see Section 4). Finally, the IRS's official participation rate estimates are not in line with numbers cited by TIGTA's 2018 report on the EITC coverage gap, which contains somewhat more detail on the missing population—including, for example, whether the missing households filed a tax return.

Treasury published zip code counts of the EIP coverage gap in September 2020 and the CTC coverage gap in May 2021, identifying missing people based solely on information returns. These estimates have not been updated over time and contain only limited geographic information on those missing, without any demographic or socioeconomic indicators. The CTC statistics, too, were likely a serious undercount of missing children.

3. Data sources

The Report should draw on the following data sources:

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[1] Note, here and elsewhere in this memo, "households" is meant in the tax sense and is a synonym for "tax units."
[2] For example, suppose the Report sought to estimate the number of CTC-eligible children who have not been claimed for the credit, and it identified two million unclaimed children on the basis of 1095 data. The two million estimate should be inflated to account for the estimated number of unclaimed children *without* insurance—even if those unclaimed children cannot be individually identified by name and SSN.
[3] If EIPs are reintroduced in future years, the Report would analyze these too. Other refundable credits covering large portions of the low-income population could be included, as well.

- *IRS data*, including:
    - Forms 1040 in the Individual Master File (IMF).
    - Rejected submissions to the Modernized eFile System (MeF), and rejection reasons.
    - Information returns, including Forms W-2, 1095, and 1099 (especially 1099-NEC and SSA-1099).

  This IRS data is the most comprehensive source of tax and income information on the non-filer population, but it may be missing some households and does not contain data in some key domains. As such, the IRS data should be supplemented with:
- *Census data:* Census American Community Survey (ACS) and Current Population Survey (CPS) data, matched to tax data. This Census-IRS data match **is the basis for existing estimates** of the EITC gap.[4] Census data contains the most detail on the non-filer population, but extrapolating rates of various characteristics may be unreliable, and analysis should account for the fact that survey data **may systematically underestimate income**. (In general, the Report should rely on a combination of Census and IRS income data.)
- *Social Security Administration (SSA) data:* SSA Numident data matched to tax data. SSA holds the most comprehensive data on the total universe of people with Social Security Numbers in the United States, and should be a baseline check as to whether other sources are counting everyone. Of course, Numident data is likely to be missing undocumented immigrants. Analysis may also make use of SSA data that matches children to parents (see **Leibel et al., 2020**, Footnote 13), keeping in mind that parents recorded in SSA data may or may not pass the residency test to claim their child.

None of these data sources is independently complete, and none is strictly more reliable than any other. Estimates published in the Report should be modeled estimates based on—and consistent with—all of these sources.

4. Headline estimates

The cornerstone of the Report should be a set of headline estimates of the number of households—that is, tax units[5]—in the refundable credits gap. Specifically:

- Number and fraction of EITC-eligible households not receiving EITC.
- Number and fraction of CTC-eligible households not receiving CTC.
- If applicable for the tax year, number and fraction of stimulus-eligible[6] households not receiving stimulus.
- Headline coverage rates may also be reported by principal axes of heterogeneity selected based on the findings, perhaps including:

[4] The matched data is held by Census, meaning close interagency collaboration is required.
[5] As noted above, "households" is intended in this memo as a synonym for "tax units." Here, and throughout, the authors should keep in mind that tax units are often not coterminous with Census households, or other common definitions of a household.
[6] E.g., for TY2021, Recovery Rebate Credit.

    - Households with versus without children.
    - Households whose income is within versus above the phase-in range of the credit—or, similarly, households whose credit is worth more versus less than $100.
    - Households who did versus did not file a return.
    - Households who are versus are not required to file a return.

Some key considerations in calculating these estimates:

- *Count adults, not children.* Because it is easier to count adults than children in the tax system,[7] and because adults (not children) file tax returns, headline estimates should generally focus on numbers of adult filers in the gap. Estimates would then roughly represent the number of missing tax returns. The Report should use Census, IRS, and SSA data to model which non-filer adults can claim children for tax purposes. That said, some estimates will be easier at the child level, especially when—as below—estimates must account for cross-household child claims.
- *Group adults into households.* The estimates should also make educated guesses about the grouping of non-filer adults into households, based on Census data and the rate of married filing among similar populations.
- *Consider cross-household child claims.* Estimates must address the confounding issue of children claimed by the "wrong" household—that is, a child claimed by Household B when, in fact, the child's relative/s in Household A have the stronger legal claim. At present, the IRS estimates that **3.2 million** EITC-eligible households with children do not claim the credit they deserve;[8] but, simultaneously, **2.5 million households** receive EITC overpayments by claiming a child they should not claim. In other words, the lion's share of the with-child EITC participation gap *could* be comprised of cases where Household A did not claim the credit that was rightfully theirs because Household B claimed Household A's child—**perhaps with Household A's knowledge and consent**. If both households earn, say, $30,000, the childless household is not eligible for EITC and is not properly in the participation gap. Headline estimates must account for this phenomenon. The authors should produce one estimate that applies the child claiming rules as precisely as possible based on the data. They should also produce another estimate that assumes the child is always being claimed by the right household, and that apparently inappropriate claims across related households are due to imperfect data analysis.
- *Consistency over time.* It is important for estimation methods to be consistent over time, allowing valid year-over-year comparisons. If policy changes impact the universe of households eligible for one or more credits, the authors should construct analogous back-year headline estimates for consistent longitudinal analysis. For example, if the TY2022 CTC is only available to households earning over $2,500, the 2023 Report should show TY2021 CTC coverage *among households eligible for the TY2022 credit*, as a point of comparison. Likewise, if

[7] Since most adults have income, but most children do not—and so the only information returns reliably reporting children are 1095s.
[8] Based on 86% participation rate among households with children, 19.5 million claimants with children (CRS).

estimation methods are updated, the Report should include recalculated estimates for prior years, using the updated methodology.

- *Two-year analysis window.* Each report should analyze the prior *two* tax years. It is possible that late filing in the year following the initial filing deadline could meaningfully close coverage gaps. If data shows that including the additional historical year does not impact the conclusions, the additional year can be dropped from the report.
- *Two-year and 10-year bans.* Estimates must address the confounding issue of households who are subject to bans under 26 USC 24(g) or 26 USC 32(k) (and the research should report how many households are in this category). A household who appears eligible based on demographic information but is subject to the ban is not an eligible household in the gap.

5. Subpopulation analyses of missing households

The Report should include subpopulation analyses including—but not limited to— the below. For all subpopulation analyses described below, the goal is always to look for actionable clusters and patterns—including looking at cross-domain covariance. If, for example, those in the gap are split evenly between those who filed the previous year and those who didn't (Section 5.2), but those who filed the previous year are nearly all over 65 and those who did not are nearly all under 25 (Section 5.4), this cross-domain covariance is, of course, worth noting. The questions listed below in these sections should be viewed as a point of departure in exploratory analysis.

The analysis should consider not only the odds that a household in the gap has certain attributes, but also the odds that a household with certain attributes is in the gap. For example, if Mandarin speakers comprise only a small minority of households in the gap, but a very large fraction of Mandarin speakers are in the gap, this is worth noting. (Conversely, if Spanish speakers comprise a relatively large portion of households in the gap, but still only a small minority of all Spanish speakers are themselves in the gap, this is worth noting, as well.)

5.1 Credit characteristics of missing households

The Report should break down households in the gap according to the category and estimated size of the credit they did not claim.

- What fraction of missing households have zero, one, two, or three EITC qualifying children?
- What fraction of missing households would have been eligible for a credit in excess of $10? $50? $100?

5.2 Tax filing characteristics of missing households

The Report should break down households in the gap according to various characteristics of their tax filing, including but not limited to:

- What fraction filed taxes and failed to claim the credit, and what fraction did not file at all? Do these fractions vary by whether the household has children? What fraction claimed a childless EITC when they were eligible for an EITC with children?
- Of those who did not file a return, what fraction attempted to submit a return but had the return rejected by MeF business rules? What were the reject reasons among these returns? Did the households attempt to resolve their rejects with additional submissions?
- What fraction filed any tax return in the previous tax year—or at some point in the previous three or 10 tax years? What fraction has never filed a return?
- What fraction filed a tax return *claiming EITC or CTC* in the previous tax year—or at some point in the previous three or 10 years? What fraction has never claimed EITC or CTC? What fraction previously filed a return in which they appeared eligible for EITC or CTC but failed to claim it?
- What fraction were previously subject to a ban under 24(g) or 32(k) that has since ended?
- What fraction were previously subject to an IRS audit?

The analysis in this section should be based largely on IRS datasets, with some extrapolation to the larger population based on Census and SSA data.

5.3 Income and economic characteristics of missing households

The Report should break down households in the gap according to various characteristics of their income and economic status, including but not limited to:

- What is the distribution of estimated total income of missing households? What fraction have gross income below the standard deduction amount for their filing status? What fraction have gross income below their state's standard deduction amount for their filing status?
- What fraction appear to have a tax filing obligation for any reason—including gross income amount, self-employment income amount, Advance Premium Tax Credit receipt, or other special cases?
- What is the distribution of income sources among missing households? What fraction only receive W-2 income? What fraction receive only W-2 and 1099-NEC income? What are the top five most frequent sources of income? What fraction are estimated (based on Census data) to have additional unreported cash income?
- What fraction of the missing households are employed?
- What industries do the missing households work in? (Based on EINs of employers on W-2s—and/or industry employment reported on Form 1040 of taxpayers linked to the same employers.)
- What is the income volatility of missing households—on average, how much did their income change from the prior tax year?
- What fraction of the missing households are headed by students? (Unlike other items in this section, this may not be knowable from IRS data.)

The analysis in this section should be based largely on IRS datasets, with some extrapolation to the larger population based on Census and SSA data.

5.4 Demographic characteristics of missing households

The Report should break down households in the gap according to various demographic characteristics, including but not limited to:

- What is the distribution of ages of the missing households?
- What fraction of the missing households speak proficient English? Among those that do not, what languages are most commonly spoken? Are there any specific geographic-linguistic hotspots (e.g., Somali speakers in Minnesota)?
- What is the race/ethnicity of the missing households? Are there any specific geographic-ethnic hotspots (e.g., Vietnamese-Americans in California)?
- What is the immigration status of the missing households (especially for credits where parents with ITINs may qualify on account of their SSN-holding children)? (In analyzing this question, the authors should attempt to account for the impact of any W-2 data erroneously reported on an SSN that does not belong to the immigrant worker.)

The analysis in this section should be based largely on Census and SSA data.

5.5 Geographic characteristics of missing households

The Report should identify any relevant geographic characteristics of missing households, including but not limited to:

- Any regions, states, counties, or cities with anomalously high (or low) rates of missing families.
- Any types of geographies (e.g., rural areas; urban areas within certain regions) that have especially high rates of missing households.

The Report should be careful not to delve too deeply into geographic patterns if the data does not support the importance of such an analysis. In 2021, outreach organizations indexed heavily on geographic data released by the Treasury Department, despite the fact that **that data showed very little in the way of geographic patterns**. Much targeting was done on the basis of zip code counts that had not been normalized for overall zip code population, or for the number of zip codes in a state. Geographic analysis should only be published if it is useful; otherwise, it will serve as a distraction.

6. Successes and positive deviance

The Report should include some analysis of efforts that were successful in getting high-risk populations (that is, populations who, according to Section 5, were unlikely to file) to file.

6.1 Impact of IRS outreach

In 2020, 2021, and 2022, the IRS sent direct outreach letters to non-filer households, encouraging them to file. To the degree the IRS continues to perform such outreach, the Report should analyze the success of such efforts. If feasible, such outreach campaigns could be performed in waves, with random assignment into the wave, allowing for causal inferences about the impact of the letters. If

not, the authors could estimate the impact of the letters by looking at temporal surges in filing at the time of their sending, and subtracting the secular rate of filing at that point in the season. The Report should specifically examine the experience of filers who received such outreach—what fraction visited the website on the letter, what fraction tried to file a return, and what fraction successfully did so. Among those that filed, how did they file? The Report should look for heterogeneity in outreach effectiveness along a few pre-specified axes—perhaps age, previous filing history, and complexity of tax filing situation.

6.2 Impact of other outreach activities

The Report may also look for successful outreach activities undertaken by other actors. Such analysis could include mining filing data for clear clusters of filing—cases when large numbers of returns come in from the same filing software in the same geography in a given timespan—and then seeking outside information on what set of outreach activities contributed to the surge. The Report could, in fact, simply document the size and nature of the surges and allow outside analysts to match them to outreach activities.

6.3 Tax filing characteristics of similar populations

The Report should identify a population of filers who very nearly resemble those who missed out on credits in the previous year (based on available sociodemographic, economic, and tax filing characteristics—including, perhaps, a history of intermittent tax filing) and analyze key tax filing characteristics of this population. When in the year did these households file? What services did they use to file? Were their returns initially rejected, and how did they resolve this rejection? This analysis may suggest possible reforms, through a positive deviance approach.