Children Left Behind by the Child Tax Credit in 2023

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In 2021, the child poverty rate fell to a historic low of 5.2%, in part driven by the American Rescue Plan's substantial expansion to the federal Child Tax Credit. Key to this was the inclusion of children in families with low and moderate incomes formerly left behind.[1] By "left behind," we refer to children whose family incomes are too low to qualify for the full Child Tax Credit of $2,000 per child. We previously documented that, prior to 2021, approximately one in three children nationwide were left behind.[2] Those left behind were disproportionately children of color, young children, and children in single parent families, larger families, rural areas, and more. Because the 2021 expansion was temporary, children historically excluded from the full Child Tax Credit were left behind once again, with 18 million children – 26% of children under age 17 – left out again the next year in 2022.[3]

This analysis provides updated estimates of the share of children ineligible for the full Child Tax Credit in 2023, overall and by income, race/ethnicity, family type, and metro/rural area residence. We find one in four children in the United States were ineligible for the full Child Tax Credit in 2023 – representing approximately 17 million children in total and almost 90% of children in poverty. We also discuss how the Child Tax Credit's earning's requirement and partial refundability structure leaves the full credit out of reach for families with low and moderate incomes.

Key Findings

- In 2023, one in four children (25%) under age 17 (representing 17 million children) were ineligible for the full Child Tax Credit because their family income was too low to qualify. Just 5% of children were ineligible for the full credit because their family income was too high.

- There was substantial inequity in full credit eligibility across population subgroups: 39% of Black children, 36% of Latino children, 56% of children living with a female single parent, 33% of children in large families, and 30% of rural children were ineligible for the full Child Tax Credit because their family income was too low.

- 87% of children living below the poverty line and 32% of those living between 100% and 200% of the poverty line were ineligible for the full Child Tax Credit.

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[1] Wimer et al., 2022, 2021 Child Tax Credit expansion: Child poverty reduction and the children formerly left behind
[2] Collyer et al., 2019, Left behind: The one-third of children in families who earn too little; Curran and Collyer, 2020, Children left behind in larger families; Also see: Goldin and Michelmore, 2022, Who benefits from the Child Tax Credit?
[3] Collyer et al., 2023, Children left behind by the Child Tax Credit in 2022.

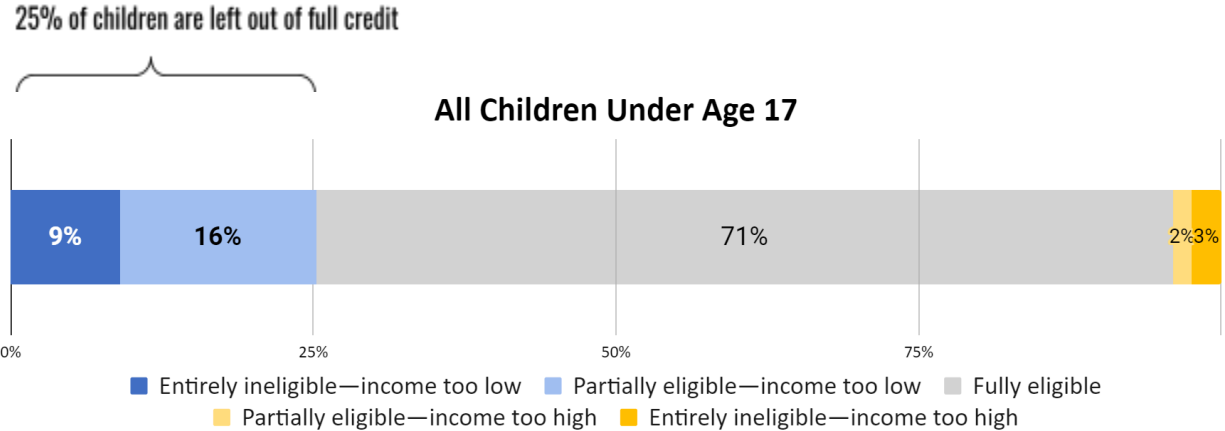CENTER ON
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Results

Our analysis uses 2023 data to identify the share of children[4] who were:

1. **Entirely ineligible (income too low)** for the Child Tax Credit due to the credit's earnings requirement
2. **Partially eligible (income too low)** for the Child Tax Credit due to the credit's partial refundability structure
3. **Fully eligible** for the maximum Child Tax Credit
4. **Partially eligible (income too high)** for the Child Tax Credit due to their families' Adjusted Gross Incomes being in the credit phase-out region
5. **Entirely ineligible (income too high)** for the Child Tax Credit due to the credit's income limit

Figure 1 shows the share of children under age 17 falling into these groups. **25%** of children (**roughly 17 million**) were ineligible for the full Child Tax Credit in 2023 because their families had low or moderate income (Figure 1) – including **16%** eligible for only a partial credit and **9%** eligible for no credit at all. Just 5% of children were ineligible for the full Child Tax Credit because their family incomes were too high.

Figure 1. Share of children under 17 left behind by the 2023 Child Tax Credit

25% of children are left out of full credit

All Children Under Age 17

| 9% | 16% | 71% | 2%3% |

0% — 25% — 50% — 75%

■ Entirely ineligible—income too low ■ Partially eligible—income too low ■ Fully eligible
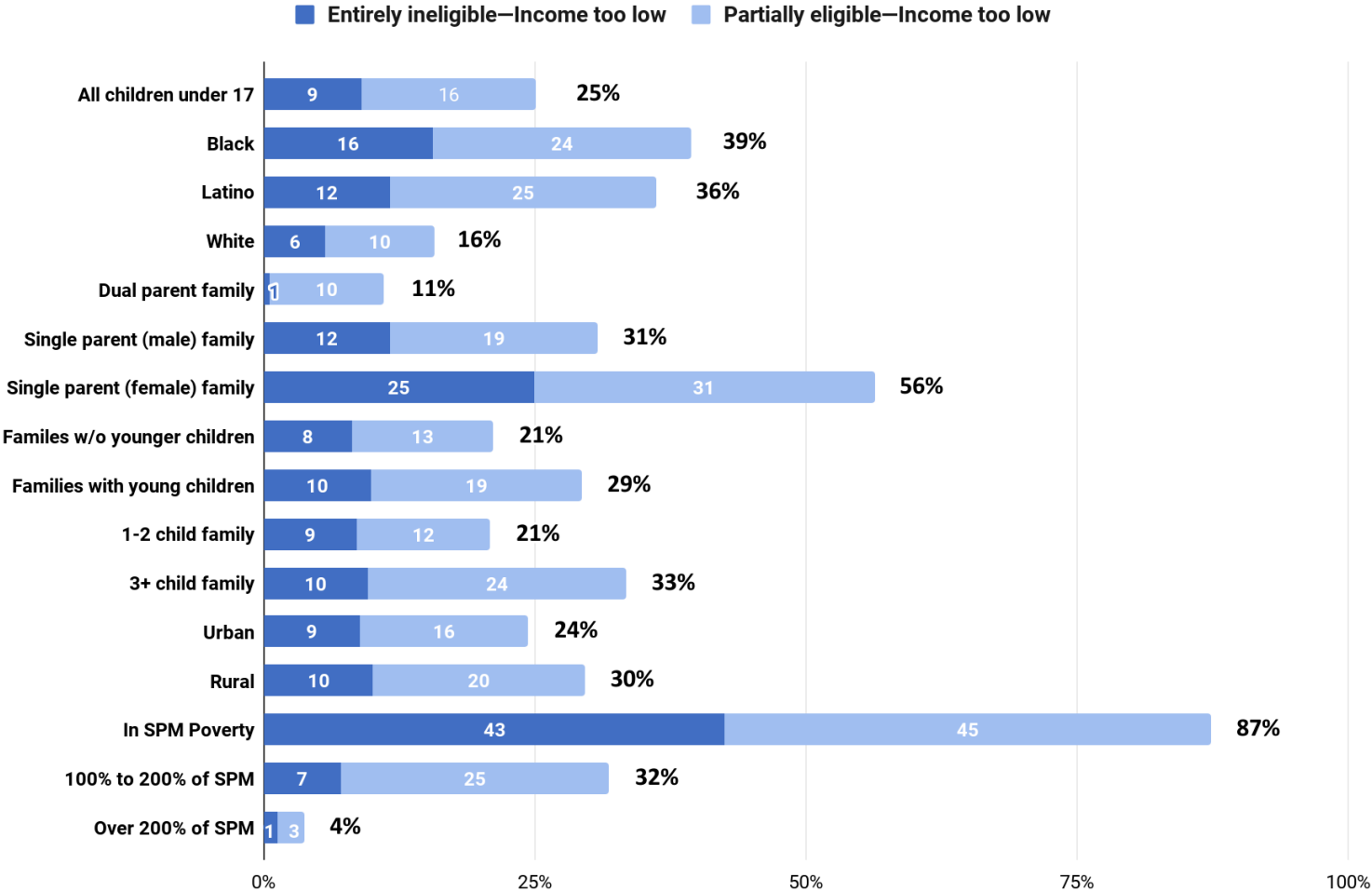■ Partially eligible—income too high ■ Entirely ineligible—income too high

Source: Center on Poverty and Social Policy at Columbia University, 2024. Calculated using the 2024 Current Population Survey (CPS), Annual Social and Economic Supplement (ASEC), retrieved from U.S. Census Bureau.

Note: Results limited to children under age 17 identified as dependents in the 2024 CPS-ASEC. Due to rounding, some totals may not correspond with separate figures.

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[4] The results we present are specific to children under age 17 who are tax dependents.

In Figure 2, we show the share of children left behind across different population subgroups. Similar to before 2021, Black and Latino children are disproportionately ineligible for the full Child Tax Credit in 2023 since the expiration of the 2021 temporary expansion.[5]

Figure 2. Share of children left behind by the Child Tax Credit in 2023, by population subgroups

Legend: ■ Entirely ineligible—Income too low   ■ Partially eligible—Income too low

Subgroup	Entirely ineligible—Income too low	Partially eligible—Income too low	Total
All children under 17	9	16	25%
Black	16	24	39%
Latino	12	25	36%
White	6	10	16%
Dual parent family	1	10	11%
Single parent (male) family	12	19	31%
Single parent (female) family	25	31	56%
Familes w/o younger children	8	13	21%
Families with young children	10	19	29%
1-2 child family	9	12	21%
3+ child family	10	24	33%
Urban	9	16	24%
Rural	10	20	30%
In SPM Poverty	43	45	87%
100% to 200% of SPM	7	25	32%
Over 200% of SPM	1	3	4%

Source: Center on Poverty and Social Policy at Columbia University, 2024. Calculated using the 2024 Current Population Survey (CPS), Annual Social and Economic Supplement (ASEC), retrieved from U.S. Census Bureau.

Note: Results limited to children under age 17 identified as dependents in the 2024 CPS-ASEC. Poverty defined according to the SPM poverty threshold, after accounting for income from the Child Tax Credit. In 2023, the average SPM poverty threshold among children claimed as dependents was $39,480 and the average 200% SPM threshold among children claimed as dependents was $78,960. See "definition of terms' at the end of this brief for group definitions. Credit receipt and level estimated by the Census Tax Calculator.[6] Racial and ethnic groups are mutually exclusive; individuals identifying as Black and White here are all non-Latino. Any individual identifying as Latino, Hispanic, or Spanish is identified as "Latino," regardless of racial identity. Results are limited to these groups due to sample size constraints. Due to rounding, some totals may not correspond with separate figures.

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[5] We note that these estimates do not account for children left behind because they have Individual Tax Identification Numbers (ITIN) and not Social Security Numbers (SSN) as we cannot identify children who hold ITINs and not SSNs based on the CPS-ASEC data. There are methods for imputing documentation status (for example, see Altman et al., 2020, Sick days: Logical versus survey identification of the foreign-born population in the United States; Borjas, 2017, The labor supply of undocumented immigrants; and Borjas and Slusky, 2022, Health, employment, and disability: Implications from the undocumented population. But, to our knowledge, such methods do not exist for imputing ITIN status.

[6] Lin, 2022, Methods and assumptions of the CPS ASEC Tax Model.

Also left behind at disproportionately high rates were children with single female parents (56% left behind), those in families with younger children (29% left behind) and in larger families (33% left behind), and children in rural areas (30% left behind). 87% of children below the poverty line (in 2023, poverty here means their family incomes were below $39,000, on average) were ineligible for the full Child Tax Credit in 2023. Children in families with moderate incomes between 100% and 200% of the poverty threshold (in 2023, with family incomes between $39,000 and $79,000, on average) were also left out of the full credit at a significant rate, with close to one in three (32%) children in this income range ineligible.[7]

How does the structure of the Child Tax Credit leave families behind?

The Child Tax Credit is a partially refundable tax credit, and to be eligible for the credit at all, families must have earned income above $2,500 in the tax year. This is the credit's **'earnings requirement'.** Above this amount, families can receive a **partially refundable** credit of up to $2,000 per child under age 17. Refundability applies to the credit value that exceeds a filers' tax liability. When a credit is **fully refundable**, if the value of the credit is greater than a filers' tax bill, the credit will reduce the filer's tax liability to $0 and they can receive the remainder of the credit as a cash refund. This is not the case with the Child Tax Credit. Instead, in cases where the maximum value of the Child Tax Credit exceeds a families' tax liability, they can receive a *capped* refundable credit equal to the lesser of 15% of their earnings over $2,500 and the capped amount. In 2023, the cap on the refundable credit was $1,600 per child.[8]

This partial refundability structure underlies the Child Tax Credit's phase-in which is documented in Figure 3. Families need to have a certain level of income in order to qualify for the full Child Tax Credit, and the minimum amount of income required to access the full Child Tax Credit increases with the number of children in the family. For example, a two-parent family (filing jointly) with two children needed at least $35,700 in 2023 to access the full Child Tax Credit for their children. But the same two-parent family, if they welcomed a third child, would have needed at least $39,700 in order to maintain access to the full credit for all of their children.[9]

Overall, the Child Tax Credit's earnings requirement and partial refundability structure leave the full credit out of reach for families with low and moderate incomes. The credit phases out for higher income families when their Adjusted Gross Incomes are over $200,000 in the case of heads of household and $400,000 in the case of joint filers, though the phaseouts are not depicted below.

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[7] In 2023, this approximate 100% to 200% SPM threshold range would be between $39,000 and $79,000, based on the average SPM poverty thresholds among children claimed as dependents. SPM thresholds vary by family size and geography, among other items.
[8] IRS, 2023, What you need to know about the CTC, ACTC, and ODC.
[9] AGIs at which families received full CTC rounded to the nearest hundred.

Figure 3. Minimum income needed to qualify for the full 2023 Child Tax Credit, by family size

Married, filing jointly

Head of household
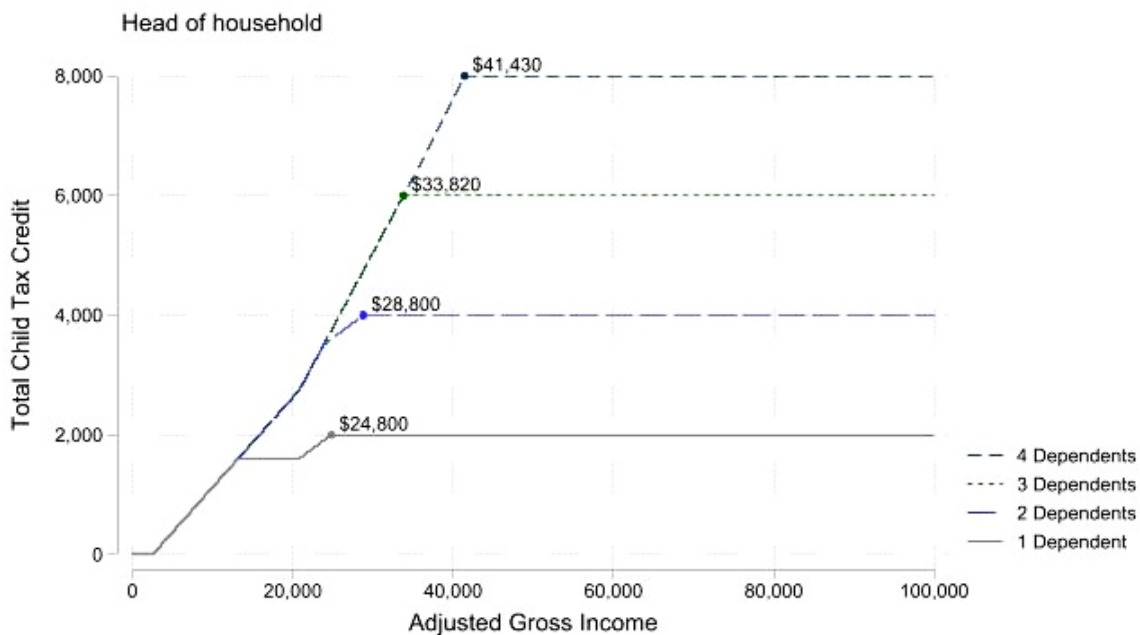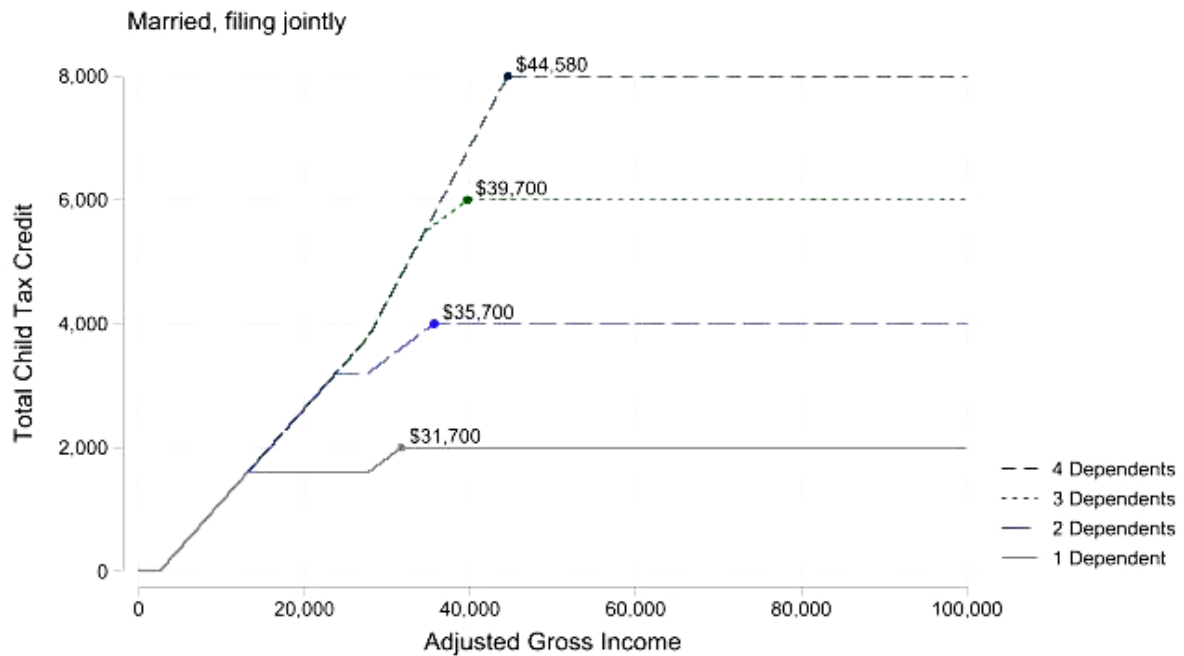
Source: Center on Poverty and Social Policy at Columbia University, 2024. Calculated NBER's Taxsim35 calculator.[10]

Note: Results assume Adjusted Gross Incomes (AGI) and earnings are equal and do not account for potential effects of other nonrefundable tax credits (e.g., the Child and Dependent Care Tax Credit) on tax liabilities. AGIs at which families received full CTC rounded to the nearest hundred.

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[10] For more information about Taxsim35, see: https://taxsim.nber.org/.

Conclusion

Due to a complex eligibility criteria and credit structure tied to family income, the current law Child Tax Credit leaves out a substantial portion of the child population nationwide. The majority of children in families with low and moderate incomes are ineligible for the full credit. Almost 90% of children in families living in poverty were left behind. Children in families with incomes below twice the poverty line were also left behind at high rates. In contrast, only 5% of children were left behind because their family incomes were too high. Those disproportionately excluded also include Black and Latino children, young children, children in single parent families, children in larger families, and children in rural areas. The 2021 American Rescue Plan expanded full access to the Child Tax Credit to those previously left behind, while also increasing benefit levels and delivering the credit in monthly installments. Partially as a result, child poverty fell to a historic low.[11] However, the 2021 expansion was temporary. In 2022, families saw much of these gains reversed as the credit reverted to a structure where those families who might benefit from it the most did not have access to the full credit once again and this situation continued into 2023, in which roughly 17 million children were left behind by the Child Tax Credit once again.

Definition of terms

- 'Child' represents a tax dependent under the age of 17.
- 'Family' refers to a tax unit.
- Latino represents anyone who is of Hispanic, Latino, or Spanish origin.
- Urban areas represent metropolitan areas and rural areas represent non-metropolitan areas, as defined by the U.S. Census Bureau in the Current Population Survey.
- Poverty defined according to the SPM poverty threshold.

Data and Methods

This report uses data from the 2024 U.S. Census Bureau's Annual Social and Economic Supplement to the Current Population Survey, or CPS-ASEC, reflective of calendar year 2023. Details on our methodology are presented in Appendix A.

Suggested Citation

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Acknowledgements

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[11] Burns et al., 2022, Expansions to Child Tax Credit contributed to 46% decline in child poverty since 2020.

Appendix A. Methodology

Data and Approach

We retrieved the person-level and household-level 2024 CPS-ASEC files from the Census website and combined them for this study. Below, we describe the steps we took to estimate the share of children ineligible for the full Child Tax Credit (CTC) in 2023. Note that our estimates are based on several variables produced by the Census Tax Model, which relies on the direct reporting of income and household composition from those who completed the CPS-ASEC, as well as imputations of missing data that feeds into that tax model. Therefore estimates of the CTC allocated to tax filers in the CPS-ASEC may not exactly correspond to administrative totals and/or their distributions.

1) Identifying tax units with dependents under age 17
The 2024 CPS-ASEC includes a variable identifying the tax unit that each person in the data belongs to. This tax unit includes tax filers as well as any of their dependents. Dependents are also identifiable as there is a flag for them included in the data. We begin by identifying all tax units in the data with a dependent under age 17 and also determine the number of dependents under 17 associated with each tax unit. The tax unit identifiers and dependent identifiers available in the CPS-ASEC were produced by the Census Tax Model. See Lin (2022) for more information on the methods applied to identify dependents and the related assumptions made in the Census Tax Model.

2) Calculating the per-child Child Tax Credit received by families for their children under age 17
The 2024 CPS-ASEC includes an estimate of the Child Tax Credit and Additional Child Tax Credit received by each tax unit. We combine these values to determine the total CTC that each tax unit in the data was estimated to receive. This total CTC included the value of the CTC for children under age 17 *and* those ages 17 and older who could have received a credit as part of the credit for older dependents (ODC). To determine the per-child Child Tax Credit received by families for their children under age 17, we first needed to estimate the credit received for older dependents (ODC) and remove this from the total CTC.

The ODC is a nonrefundable maximum annual credit of $500 for dependents ages 17 and older. To estimate the ODC, we first determined the maximum ODC a tax unit could receive based on the count of dependents ages 17 and older in the unit. We then calculated the pre-credit tax liability for all tax units in the data using their marginal tax rates and taxable income values (both also available in the data). If the unit's maximum ODC was greater than their pre-credit federal tax liability, then we reduce the ODC to be equivalent to the unit's pre-credit tax liability.[12]

To determine the per-child Child Tax Credit received by families for their children under age 17, we removed the ODC from their total Child Tax Credit and then divided the Child Tax Credit absent the OCD by the number of dependents under age 17 in the tax unit.

3) Identifying if families received a partial Child Tax Credit or no Child Tax Credit, and if they were high or low income
In our final step, we determine if children were eligible for a full ($2,000), partial (under $2,000), or no CTC, and if they were eligible for a partial or no credit because they were low income or high income. We use the tax unit's Adjusted Gross Income and the CTC phaseout thresholds of $200,000 and $400,000 (for heads of households and joint filers, respectively) to make this determination.

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[12] When comparing Child Tax Credit amounts for tax units with older dependents exclusively, our estimates have a 0.99 correlation with the Child Tax Credit amount included in the CPS-ASEC data.

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