What Would 2022 Child Poverty Rates Have Looked Like if an Expanded Child Tax Credit Had Still Been in Place?

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In September 2023, the Census Bureau released data on the poverty rate in 2022. Compared to the historic low of 5.2% in 2021, the child poverty rate more than doubled, rising to 12.4%. The sharp spike in child poverty from 2021 to 2022 represents the largest year-over-year increase in the Supplemental Poverty Measure (SPM) child poverty rate on record. The historic low in the child poverty rate in 2021 was largely the result of a major one-year expansion to the federal Child Tax Credit in the American Rescue Plan. The increase in child poverty in 2022, in turn, is largely the result of the expanded Child Tax Credit’s expiration. This alarming rise in child poverty raises the question: what would child poverty rates have been if the 2021 temporary expansion of the Child Tax Credit had continued into 2022? To answer this question, we model an expanded Child Tax Credit – based on the increased credit amounts and expanded eligibility of the 2021 expansion – and adjusting the 2021 credit for inflation to maintain the same purchasing power in 2022 – in the 2022 data.

Key Findings

- From 2021 to 2022, SPM child poverty rates more than doubled from the historic low of 5.2% to 12.4%, resulting in 5.2 million more children living below the poverty line.
- The sharp spike in child poverty from 2021 to 2022 is the largest year-over-year increase in the child poverty rate on record.
- Had the 2021 expanded-Child Tax Credit still been in effect in 2022, the child poverty rate would have been 8.1%, preserving much of the historic decline in child poverty of 2021.
- On its own, an expanded Child Tax Credit could have kept over 5 million children from poverty and cut the 2022 SPM child poverty rate by 47%.

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1 We model an expanded Child Tax Credit similar to the 2021 American Rescue Plan and the 2023 American Family Act, H.R.3899, and adjust the 2021 ARP credit amounts for inflation. See Appendix A for methodological details.

2 In 2021, Economic Impact Payments and other pandemic-era policies contributed to the substantial reduction in poverty. However, on its own, the 2021 Child Tax Credit expansion cut the 2021 child poverty rate by 43%. See: Wimer, C. et al. 2022. The 2021 Child Tax Credit Expansion: Child Poverty Reduction and the Children Formerly Left Behind. New York: Center on Poverty and Social Policy at Columbia University.
Our analysis looks at 2022 child poverty rates under three scenarios:

1. **If no CTC**: before counting income from the 2022 current law Child Tax Credit,
2. **Current law**: after counting the income from the 2022 current law Child Tax Credit, and
3. **If expanded CTC**: after counting income families could have received if an expanded Child Tax Credit, similar to the 2021 expansion, was in effect in 2022.

**Figure 1. 2022 SPM Child Poverty Rates Without vs. With an Expanded Child Tax Credit**

![Graph showing child poverty rates](image)


**Note**: Results assume 100% takeup of the Child Tax Credit, following standard practice in estimating taxes in the CPS-ASEC. The model used to produce the results does not assume that the AFA would significantly affect adult labor force participation, consistent with analysis of parents’ employment response to the 2021 CTC expansion. When evaluating the effects of the Child Tax Credit, we count both the refundable portion of the credit and the non-refundable portion.

**Table 1. 2022 SPM Child Poverty Reduction Without vs. With an Expanded Child Tax Credit**

<table>
<thead>
<tr>
<th></th>
<th>If no CTC</th>
<th>Current law</th>
<th>If expanded CTC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SPM poverty rate</td>
<td>SPM poverty rate</td>
<td>Percent change</td>
</tr>
<tr>
<td>Children under 18</td>
<td>15.2%</td>
<td>12.4%</td>
<td>-19%</td>
</tr>
<tr>
<td>Children under 6</td>
<td>15.9%</td>
<td>12.9%</td>
<td>-19%</td>
</tr>
<tr>
<td><strong>Number</strong></td>
<td><strong>Number</strong></td>
<td><strong>Difference</strong></td>
<td><strong>Number</strong></td>
</tr>
<tr>
<td>Children under 18</td>
<td>11,050,000</td>
<td>8,990,000</td>
<td>-2,060,000</td>
</tr>
<tr>
<td>Children under 6</td>
<td>3,550,000</td>
<td>2,900,000</td>
<td>-650,000</td>
</tr>
</tbody>
</table>

**Source**: Center on Poverty and Social Policy at Columbia University, 2023. Calculated using the 2023 CPS-ASEC, retrieved from U.S. Census Bureau.

**Note**: Results assume 100% takeup of the Child Tax Credit, following standard practice in estimating taxes in the CPS-ASEC. The model used to produce the results does not assume that an expanded CTC would significantly affect adult labor force participation, consistent with analysis of parents’ employment response to the 2021 CTC expansion. Due to rounding, some totals may not correspond with separate figures.
The actual 2022 child poverty rate was 12.4%, with the Child Tax Credit under current law reducing child poverty by 19% and keeping 2.1 million children out of poverty, as seen in Table 1. If families had received the expanded Child Tax Credit in 2022, however, the child poverty rate would have fallen to 8.1%. All told, on its own, an expanded Child Tax Credit would have cut the 2022 child poverty rate for all children under 18 by 47% (from 15.2% to 8.1%) and moved 5.2 million children out of poverty. Results for children under age 6 show a similar pattern: the current law Child Tax Credit contributed to a 19% reduction in poverty for young children, but an expanded Child Tax Credit would have reduced the poverty rate for this group by 49%.

Why an Expanded Child Tax Credit Significantly Reduces Child Poverty

The 2021 Child Tax Credit expansion made three important changes: it increased the size of the maximum credit, with an additional increase for young children; it extended eligibility to children in low and moderate-income families historically left out of the full credit; and it delivered the credit in regular monthly installments, rather than the entire credit in a lump-sum once per year.

Central to the historic reductions in child poverty realized in 2021 was the full inclusion of the one-third of children previously left behind by the policy’s pre-pandemic structure – a group disproportionately made up of young children, children of color, children in larger families, children in single-parent families, and children in rural areas. Children left behind by the policy’s pre-pandemic structure are now once again left behind by the return to that structure. Our latest estimates show that more than 1 in 4 children under age 17 (18 million children) were ineligible for the full Child Tax Credit in 2022 because their families were low- or moderate-income.

In addition to its significant anti-poverty effects, a wealth of evidence shows that the 2021 Child Tax Credit expansion also increased family incomes overall, reduced food insecurity and financial strain, helped families buy food, cover essential expenses, and invest in child-related items and services such as child care and education, and did so without disrupting parental employment. Many families have also seen a reversal of these gains since its expiration.

Conclusion

Child poverty more than doubled between 2021 and 2022, rising to 12.4% from a historic low of 5.2%. The sharp increase can be attributed in large part to the expiration of the American Rescue Plan’s (ARP) one-year expansion of the federal Child Tax Credit (CTC) which, on its own, cut the 2021 child poverty rate by 43%. Had the 2021 Child Tax Credit expansion been in place in 2022, an additional 3 million children would have been kept above the poverty line in 2022 and much of the historic decline in child poverty of 2021 would have been preserved.

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3 We model an expanded Child Tax Credit similar to the 2021 American Rescue Plan and the 2023 American Family Act, H.R.3899. We adjust the 2021 ARPA credit amounts for inflation to maintain the same purchasing power in 2022. See Appendix A for methodological details.

4 This represents the total impact of the full Child Tax Credit in its expanded form.
Data and Methods

This report uses data from the 2023 U.S. Census Bureau's Annual Social and Economic Supplement to the Current Population Survey, or CPS-ASEC, reflective of 2022. Details on our methodology are presented in Appendix A. The poverty results reported here are based on the Supplemental Poverty Measure (SPM), which accounts for cash and noncash government benefits, necessary expenses like taxes, health care, commuting, and child care, and adjusts for family size and local housing costs. For a two-parent, two-child family in an average cost city, the SPM income threshold is about $35,000 per year. The SPM is reported annually along with the official poverty measure (OPM) by the U.S. Census Bureau.

*Update

On October 13, 2023, this brief was updated to add footnote 4 and correct a typo in the first paragraph of page 3. We changed a parenthetical note from “(12.4% to 8.1%)” to “(15.2% to 8.1%)”. All other text remains the same.

Suggested Citation


Acknowledgements

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Appendix A. Methodology

Data

Results presented in this brief were using the 2023 Current Population Survey (CPS) Annual Social and Economic Supplement (ASEC). The CPS-ASEC is a large, representative survey conducted by the Census Bureau and used to produce official poverty statistics for the calendar year preceding survey administration (2022, in this case). We retrieved the person-level 2023 CPS-ASEC file from the Census website for this study.

Approach

The Child Tax Credit (CTC) expansion modeled here assumes that, in 2022, families would have received the fully refundable maximum annual benefit of $3,000 for dependents aged 6 to 17, $3,600 for dependents aged under 6 that they were eligible for in 2021 under the American Rescue Plan, but with credit levels updated for inflation between 2021 and 2022. We assume no change in credit levels for dependents ages 18 and older. We also assume that the CTC would not have an earnings requirement, and overall, follow many of the parameters in the proposed 2023 American Family Act (AFA), H.R. 3899. An expanded Child Tax Credit has also been introduced in the Senate as part of the Working Families Tax Relief Act of 2023 (WFTRA), S. 1992.

Below, we describe the steps we took to estimate how family income in 2022 would have been different if the expanded Child Tax Credit we simulated had been in effect.

1) Identifying tax units with Child Tax Credit-qualifying dependents

The 2023 CPS-ASEC includes variables identifying tax units and dependents. Using these variables and the ages associated with all people flagged as dependents, we identify all tax units in the CPS-ASEC with dependents under the age of 6, and dependents between ages 6 and 17, and dependents ages 18 or older.

2) Calculating Child Tax Credit Benefits under the expansion

The policy change simulated here assumes that in 2022, families would have received the fully refundable maximum annual credit of $3,000 for dependents aged 6 to 17, $3,600 for dependents aged under 6 that they were eligible for in 2021 under the American Rescue Plan, but with credit levels updated for inflation between 2021 and 2022 and no change in credit levels for dependents ages 18 and older. The expansion we model also eliminates the credit’s earnings requirement and phase-in. The higher credit value we model would also phase out for tax units with Adjusted Gross Incomes (AGI) exceeding $112,500 (heads of household) or $150,000 (joint filers) until reaching the credit value that families are eligible for under current law.

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Because we are looking at annual poverty, we focus on the annual credit amounts and do not account for monthly delivery in this analysis. We also do not account for the adjusted payment amount for newborns, as proposed in H.R.3899, as detailed in Step 2 of the Approach section of Appendix A.

More information about how the CPS-ASEC identifies tax units and dependents can be found in pgs. 4-6 of Lin, D. 2022. Methods and Assumptions of the CPS ASEC Tax Model. U.S. Census Bureau.
The Child Tax Credit values used to model the credit’s expansion were calculated using the dependent count variables and the maximum annual benefit amounts under the parameters described above. Such benefits were calculated by multiplying the number of dependents in a tax unit under the age of 6 or between the ages of 6 and 17 (provided by the tax-unit-level dependent count variables constructed) by the higher credit amounts, respectively. Credit amounts for dependents under 17 have been adjusted for inflation between 2021 and 2022 using the average annual Consumer Price Index (CPI) obtained from the Federal Reserve Bank of St. Louis.

The Child Tax Credit expansion modeled here also assumes a nonrefundable maximum annual benefit of $500 for older dependents (ODC), which is calculated following the same procedures as under current law. We calculated ODC value under current law parameters by first determining the maximum ODC a tax unit could receive based on the count of dependents ages 18 and older, with a maximum of $500 per older dependent. 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.\footnote{When comparing CTC amounts for tax units with older dependents exclusively, our estimates have a 0.99 correlation with the CTC amount included in the CPS-ASEC data.}

All families with adjusted gross incomes (AGIs) below the phase-out thresholds qualified for the maximum per child credit values specified above; this includes individuals with qualifying dependents who did not file taxes because they had very low or no earnings. The credit – which includes both the credits for dependents under the age of 18 and the ODC – was set to phase out for joint filers with an AGI above $150,000 and single filers with an AGI above $112,500. For tax units with AGIs over such thresholds, the credit was reduced (but not below zero) at a rate of 5% of the tax unit’s excess AGI over the initial threshold amount. Tax units whose phased-out Child Tax Credit was lesser than their Child Tax Credit under current law had their Child Tax Credit value replaced with that of the current law Child Tax Credit. The value of a tax unit’s phased-out current law Child Tax Credit was included in the CPS-ASEC’s microdata and phased out for joint filers with an AGI above $400,000 and single filers with an AGI above $200,000 at the same rate of 5% of the excess AGI over the initial threshold amount (but not below zero). We maintain these values for tax units whose incomes are above the initial thresholds ($112,500 or $150,000) and whose AFA credit value would fall below their current law CTC with a phase out rate of 5%. After calculating the portions of the Child Tax Credit for children under age 18 and for older dependents, we summed both values to calculate the Child Tax Credit's maximum annual benefit under the expanded Child Tax Credit.

3) Replacing Current Child Tax Credit with Expanded Child Tax Credit and Re-Calculating Poverty Statistics

To calculate poverty rates with the expanded CTC, we replaced the current SPM unit’s current law CTC value with the value calculated based on the procedure described above. To estimate the poverty impacts of the proposal, we calculated the poverty rate again to account for the replacement of the Child Tax Credit values included in the CPS-ASEC microdata with the Child Tax Credit values we calculated according to above parameters. The new poverty rate was calculated by determining each SPM unit’s poverty status with the new credit, with an SPM unit being considered “in poverty” if the value of their SPM resources with the expanded CTC was less than their SPM poverty threshold.
Endnotes


