

# Monthly Poverty Rates among Children after the Expansion of the Child Tax Credit

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This report discusses the estimated impact of the expanded Child Tax Credit on the monthly poverty rate for July 2021 in the United States.

## Findings

- COVID-related economic relief, including the expanded Child Tax Credit, kept 6 million children from poverty in July 2021; without COVID relief, the monthly child poverty rate would have been 8.1 percentage points (or 40.6 percent) higher.
- The monthly child poverty rate fell from 15.8 percent in June to 11.9 percent in July 2021, representing a decline of 3 million children living in poverty.
- This drop in child poverty is primarily due to the first payment of the expanded Child Tax Credit, which on its own kept approximately 3 million children from poverty in July; without it, the monthly child poverty rate would have been 4.1 percentage points (or 25.6 percent) higher.
- The first payment reached 59.3 million children; had it covered all likely-eligible children, the expanded Child Tax Credit could, on its own, have reduced monthly child poverty by up to 40 percent.
- These results measure monthly poverty based on resources a family receives in a given month, a different approach than measuring annual poverty. Estimates of the poverty reduction effects of the Child Tax Credit and other transfers are not directly comparable to those based on annual poverty rates ([see more on how to interpret these results here](#)).

## Measuring Monthly Poverty

Over the course of the COVID-19 pandemic, we have charted the impact of the crisis and economic relief efforts on monthly poverty rates ([access our full monthly poverty data here](#)). Our measure of monthly poverty differs from the more frequently used measures of annual poverty. Our measure only considers income that a family receives during the given month (in this case, July 2021), whereas annual measures of poverty consider income received over a 12-month period. As a result, estimates of monthly poverty, and the effects of income transfers on the monthly poverty rate, are not directly comparable to estimates based on annual poverty. Our analysis uses the [Supplemental Poverty Measure \(SPM\)](#) framework, which accounts for cash and noncash government benefits, expenses like taxes, health care, commuting, and child care, and adjusts for family size and local housing costs. In this monthly poverty analysis, we include all taxes and transfers received in July 2021.<sup>1</sup>

<sup>1</sup> Though we have closely followed the policy parameters related to each of the income transfer programs in our simulations, we acknowledge there always remains a possibility for measurement error, either in assigning benefits or estimating poverty rates. See Data and Methods in Appendix I for details on our estimation strategy.

For the average two-parent, two-child family, the monthly poverty threshold is approximately \$2,300 per month. Our methods for calculating a monthly SPM are introduced in [Parolin, Curran, Matsudaira, Waldfogel, and Wimer \(2020\)](#). We detail our data and methods for this analysis in the Appendix.

## The Expanded Child Tax Credit

The temporary expansion of the Child Tax Credit (CTC) was passed under the [American Rescue Plan \(ARP\)](#) in March 2021. Before the ARP, eligible tax filers could receive a maximum CTC of \$2,000 per child; however, [one in three children did not receive the full credit](#) because their families did not earn enough to qualify for the benefits. The ARP made three meaningful changes to the CTC for 2021. First, it increases benefit levels: families with children became eligible for a maximum annual credit of \$3,000 for children ages 6 to 17 and \$3,600 for children under 6. Second, it makes the full benefit available to children in families with the lowest incomes by removing the earnings requirement and making the benefit fully refundable. Third, it pays the benefit out in regular installments: families can now receive monthly installments up to \$250 for each older child and up to \$300 for each younger child. These monthly payments are available for six months, beginning in July 2021. As of the time of writing, the remaining balance of the benefit is due to be paid out in a lump sum in spring 2022.

## Assumed Coverage Rate of the CTC

Our primary analysis assigns the CTC benefits to 59.3 million children, or roughly 80 percent of all children in the U.S. This directly follows documented distributed rates released by the [U.S. Department of Treasury in mid-July 2021](#). We assign the CTC benefits by state to match the state-specific coverage rates reported by the Department of Treasury. Within each state, we adjust the coverage rate so that tax non-filers and lower-income tax units are the most likely to miss out on receiving the benefit. Among tax non-filers, we identify units with 720,000 total children to receive the CTC despite not filing taxes, as this is the number of children that the [Department of Treasury identifies](#) as automatically receiving the CTC benefit in July 2021 due to their registration for the Economic Impact Payments in 2020. Households with children who have not filed recent taxes are now able to register for the CTC through the [IRS Child Tax Credit Non-filer Sign-up Tool](#). As of the time of writing, the number of children successfully registered through this portal and receiving CTC payments is not available. If a large number of tax non-filers with children successfully utilized the online portal to receive their CTC benefits in July, the estimates we present here may understate the true monthly poverty reduction potential of the CTC in this first month.<sup>2</sup> The number of eligible children receiving CTC payments is likely to increase in future months.<sup>3</sup> To illustrate how monthly child poverty rates vary by levels of access to the CTC, we also present alternative scenarios for monthly child poverty in July 2021 based on simulations of higher and lower coverage rates.

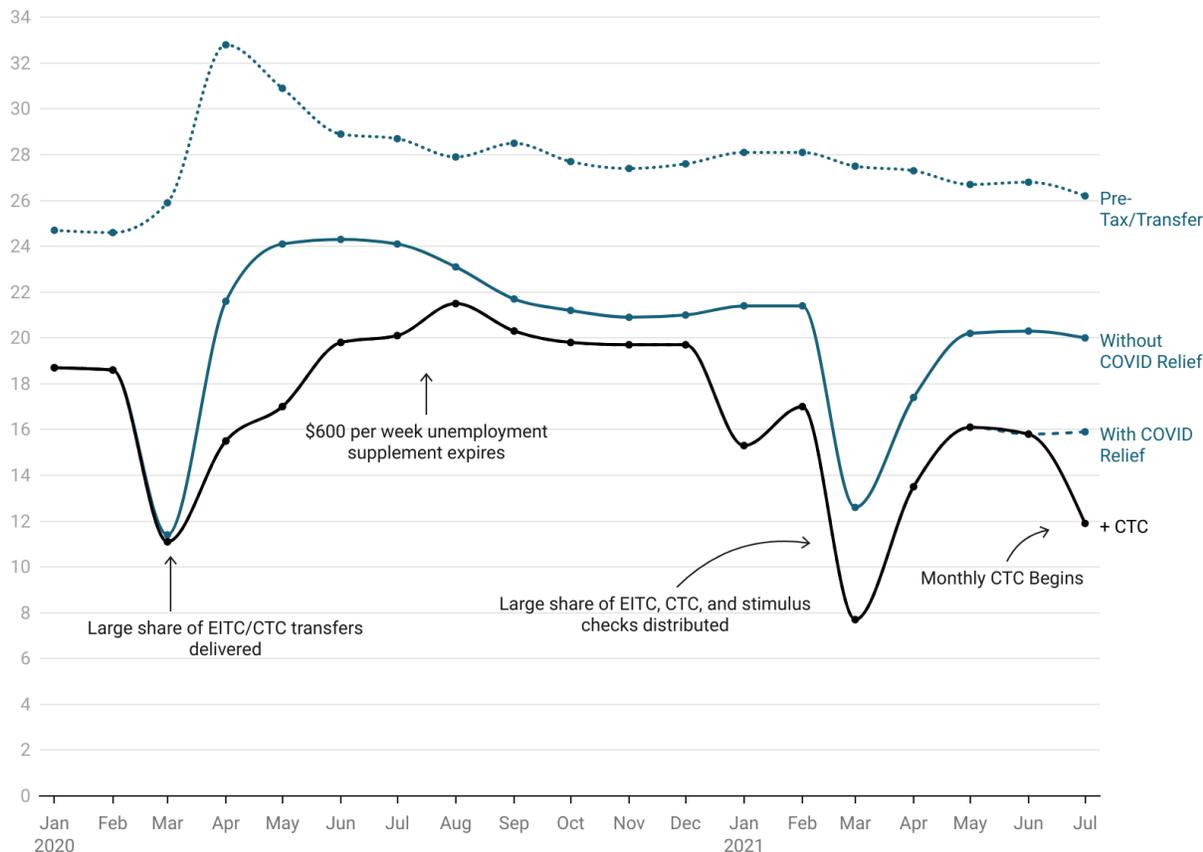
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<sup>2</sup> It is important to note that if a family did not register in time for the payment delivered on July 15, they will receive their backdated benefits in a future payment. For example, a family who registers through the online portal in late summer and begins receiving CTC payments in September should see their first payment also include the value of their missed July and August benefits.

<sup>3</sup> Compared to July 2021, the IRS reported that 1.6 million additional children received the benefit in August 2021, for a [total of 61 million eligible children](#) in receipt of the CTC. We will account for this in a forthcoming estimate of monthly August 2021 poverty and any future increases in subsequent months when the data is available.

## Trends in Monthly Poverty Rates among Children

Figure 1: Trends in Monthly Poverty Rates among Children (January 2020 – July 2021)



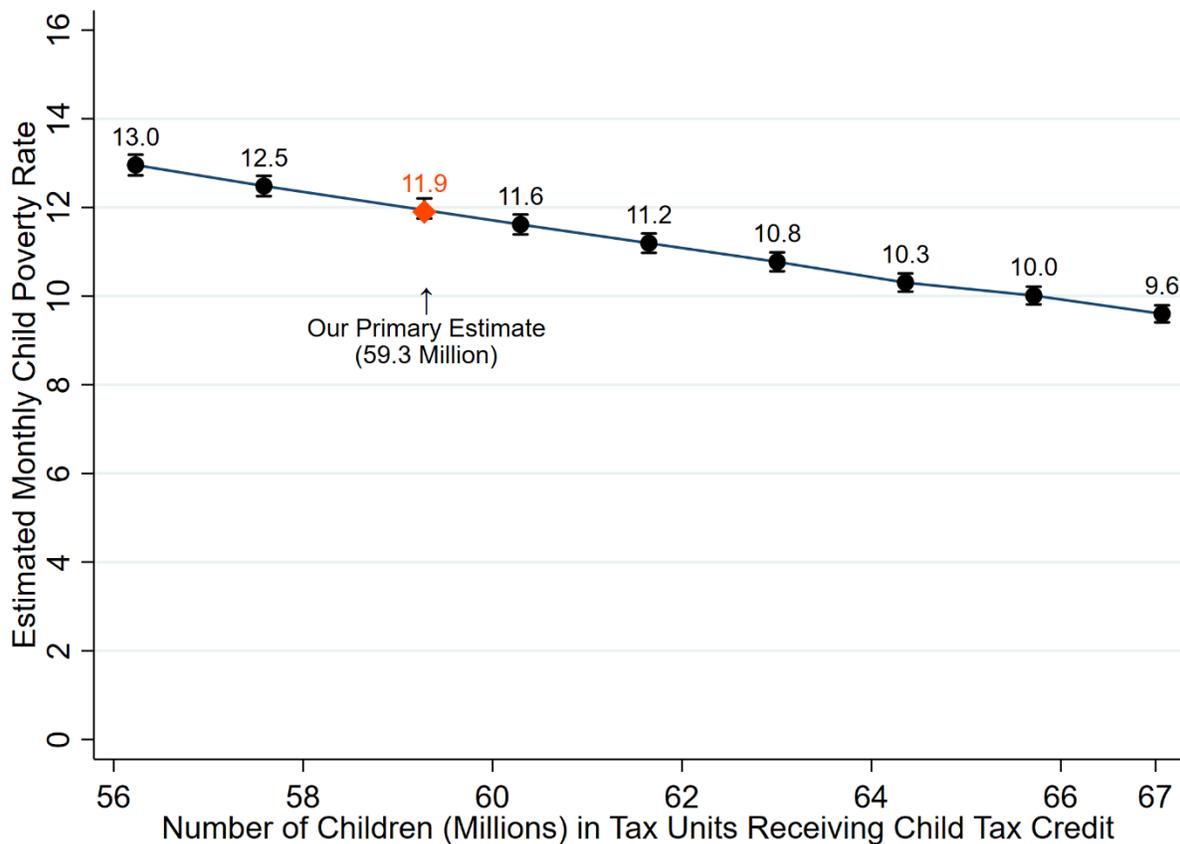
Given that the expanded CTC is targeted at families with children, this report focuses primarily on child poverty rates. We present trends in poverty rates for the full population (all ages) in Appendix III. Figure 1 presents trends in child poverty rates from January 2020 through July 2021 before and after accounting for COVID-related economic relief. As shown, monthly child poverty rates tend to fluctuate throughout the year, with particularly strong declines in March and April when many families receive their traditional lump sum payments of refundable tax credits.

In June 2021, just prior to the first monthly CTC payment, the child poverty rate was 20.3 percent before accounting for COVID-related economic relief, and 15.8 percent after accounting for COVID-related relief. In July 2021, the first month after the monthly CTC was distributed, the monthly child poverty rate fell from 15.8 percent to 11.9 percent. This amounts to a 3.9 percentage point (25 percent) reduction—or nearly 3 million fewer children living below the poverty line—from the prior month. This marks a notable drop in child poverty. The anti-poverty effects can further improve as coverage of the CTC expands; as we note later, a larger number of eligible children receiving their monthly payment could have resulted in an even more substantial decline in monthly poverty.

In the absence of all COVID-related relief (including the CTC), the monthly child poverty rate in July 2021 would have been 20 percent. We estimate that COVID-related economic relief, including the

expanded CTC, contributed to an 8.1 percentage point (40.6 percent) decline in monthly child poverty in July 2021 relative to what the July 2021 rate would have been in the absence of the added support. Put differently, we estimate that COVID relief, including the new CTC, kept around 6 million children out of poverty in July 2021.

Figure 2: Estimated Monthly Poverty Rate among Children in July 2021 by Assumed Level of Child Tax Credit Coverage



Our primary estimates follow Department of Treasury data and assume that 59.3 million children are in tax units that receive the monthly CTC payment in July. This represents around 80 percent of all children. While the precise number of currently eligible children in eligible tax units is not publicly available, evidence from [Cox, Caines, Sherman, and Rosenbaum \(2021\)](#) suggests that approximately 4 million or more children in low income families are at greatest risk of missing out as they would not have automatically received the first payment.<sup>4</sup> Our own estimates, based solely on simulations of eligibility within the Current Population Survey Annual Social and Economic Supplement (CPS ASEC), suggest that up to 67 million children could live in tax units that are eligible for the CTC, but we do not know with certainty the true number of currently eligible children. This aligns with estimates from [Goldin and Michelmore \(2020\)](#), who find, using the CPS ASEC, that a fully refundable CTC could see

<sup>4</sup> Eligible children in families who filed recent taxes or who registered online for the recent Economic Impact Payments (or ‘stimulus checks’) received the July 2021 CTC payments automatically without any additional action required. Other families with eligible children would need to pro-actively [register their information with the IRS](#).

67.6 million children living in eligible tax units.<sup>5</sup> The estimate is slightly higher than the estimate of 65.6 million eligible children reported in [Marr, Cox, Hingtgen, and Windham \(2021\)](#). We emphasize again that each of these are estimates and the true number of currently eligible children in eligible tax units is not publicly available as of the time of writing.

In Figure 2, we simulate a range of monthly child poverty rates under varying levels of CTC receipt (providing estimates that range from around 56 million to around 67 million children receiving the benefit). The objectives are twofold: first, to emphasize how much *access to the benefit matters* in shaping the final poverty reduction effects and, second, to provide estimates of how *the potential poverty reduction effects can increase* as more families receive the benefit.

As reported, the Department of Treasury announcement that 59.3 million children received a CTC payment in July 2021 results in a monthly child poverty rate of 11.9 percent in July 2021. If, instead, 64.4 million children had received the expanded CTC, the estimated monthly child poverty rate for July 2021 would have fallen to 10.3 percent. In this scenario, COVID relief including the CTC would have contributed to a 9.7 percentage point (or 48.4 percent) reduction in the monthly child poverty rate in July 2021 relative to the monthly child poverty rate without COVID relief. The CTC on its own would have lifted an estimated 4.2 million children out of poverty, contributing to a 5.6 percentage point (35 percent) decline in monthly poverty.

If coverage of the CTC were to reach 67 million children, the estimated monthly child poverty rate for July 2021 would have fallen to 9.6 percent. In this scenario, the CTC on its own would have lifted an estimated 4.7 million children out of poverty, contributing to a 6.3 percentage point (40 percent) decline in monthly poverty. The clear implication is that enrolling all eligible children is a key priority for achieving the full anti-poverty potential of the expanded Child Tax Credit.

In Appendix II, we present monthly child poverty rates by race and ethnicity at varying levels of CTC access. As displayed there, our estimates suggest that Black and Latino children particularly benefit when the overall coverage rate increases, in large part because families of Black and Latino children were [less likely](#) to have incomes high enough to be required to file federal taxes in the prior year and, thus, were less likely to receive the first CTC payment automatically in July 2021.

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<sup>5</sup> This number is computed from adding the numbers in Table 1, Columns 1 through 4 and Table 5, Column 3 of Goldin and Michelmore (2020).

**Figure 3: Trends in Monthly Poverty Rates among Children by Race and Ethnicity (Jan. 2020 – July 2021; all taxes and transfers included)**

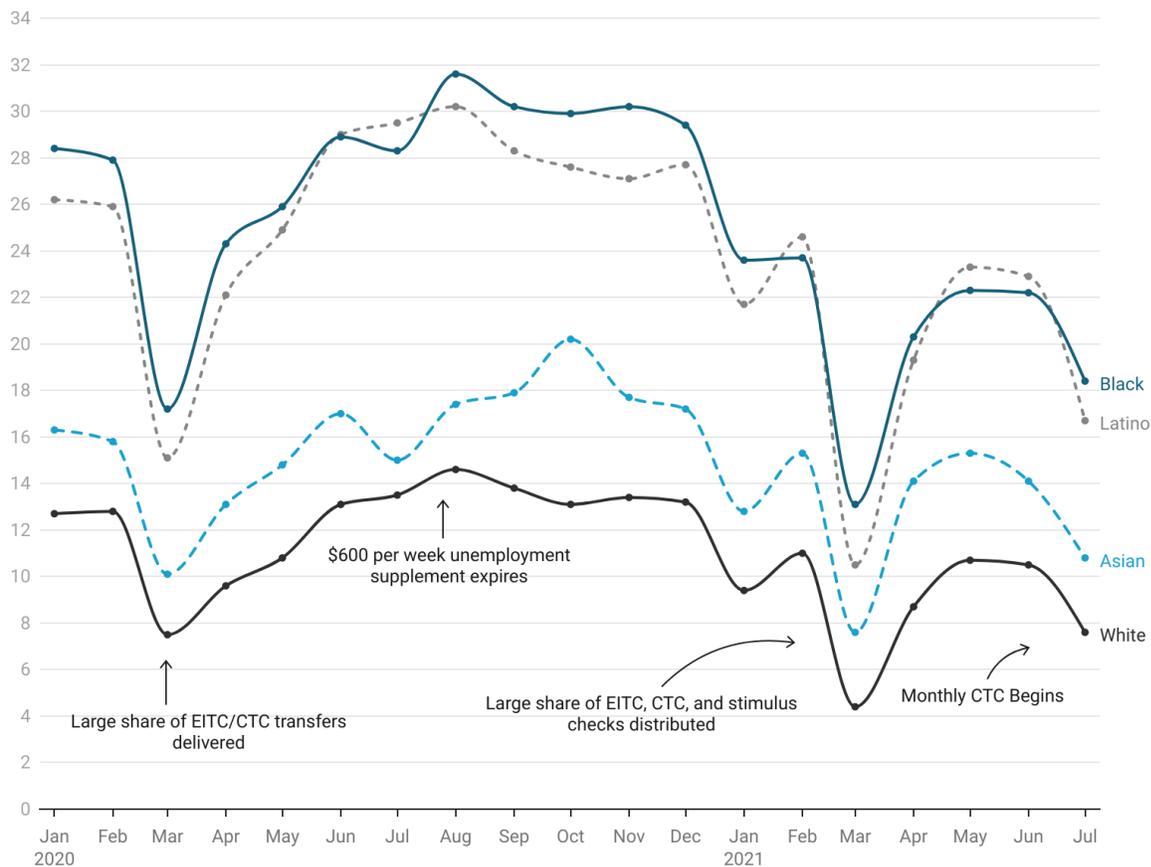


Figure 3 presents trends in child poverty rates by race and ethnicity. From June to July 2021, Black, Latino, Asian, and White children all see large declines in monthly poverty. Specifically, the monthly poverty rate among Black children falls from 22.2 percent in June to 18.4 percent in July, a decline of around 420,000 Black children in poverty relative to June 2021. For Latino children, the rate falls from 22.9 percent to 16.8 percent, a decline of around 1.1 million Latino children in poverty relative to June 2021. For Asian children, the poverty rate falls from 14.1 percent to 11 percent from June to July, a decline of around 130,000 Asian children in poverty. And for White children, the rate falls from 10.5 percent to 7.7 percent, a decline of around 1 million White children in poverty relative to June 2021. As noted earlier, impacts by race and ethnicity under alternative CTC enrollment scenarios are presented in Appendix II.

Despite declines in poverty for all groups, racial and ethnic differences in poverty remain persistent: even in July 2021, Black and Latino children face twice the rate of monthly poverty relative to White children.

Table 1: Monthly Poverty among Children by Race/Ethnicity in July 2021

RATES	Pre-COVID Relief	COVID Relief w/o Child Tax Credit	COVID Relief with Child Tax Credit	Child Tax Credit Only		COVID Relief with Child Tax Credit	
				Pct. Pt. Change	Percent Change	Pct. Pt. Change	Percent Change
All Children	20.0%	15.9%	11.9%	-4.1%	-25.6%	-8.1%	-40.6%
White Children	13.4%	10.7%	7.7%	-3.0%	-28.1%	-5.7%	-42.5%
Black Children	30.8%	23.3%	18.4%	-4.9%	-20.9%	-12.3%	-40.1%
Latino Children	27.5%	22.4%	16.8%	-5.7%	-25.2%	-10.7%	-38.9%
Asian Children	17.1%	13.9%	11.0%	-2.9%	-20.9%	-6.1%	-35.7%
<b>COUNTS</b>				<b># Moved out of Poverty</b>			
All Children	14,742,000	11,768,000	8,759,000	3,009,000		5,983,000	
White Children	4,928,000	3,944,000	2,836,000	1,108,000		2,093,000	
Black Children	3,433,000	2,601,000	2,058,000	543,000		1,375,000	
Latino Children	5,184,000	4,236,000	3,169,000	1,068,000		2,015,000	
Asian Children	742,000	604,000	477,000	126,000		264,000	

Note: Counts rounded to the nearest thousand. Estimates assume 59.3 million eligible children were in tax units that received expanded CTC benefits in July 2021. See Figure 2 for poverty estimates that assume higher levels of CTC coverage. See Appendix for more details on calculations.

Finally, Table 1 breaks down the child poverty reduction effect of COVID relief, including the CTC, in July 2021. The top set of rows focus on percent and percentage point changes, while the bottom set of rows present raw numbers of children in poverty. As noted, the CTC payment on its own lifted 3 million children out of poverty in July 2021, a reduction of over 25 percent in the monthly poverty rate. When the CTC payment was combined with all other existing COVID relief, the total number of children lifted from poverty in July 2021 totaled 6 million—a reduction of the overall monthly child poverty rate by 40.6 percent.

The relative poverty reduction effect of COVID relief in our July 2021 estimates is slightly stronger for White children (42.5 percent) relative to Black children (40.1 percent), Latino children (38.9 percent), and Asian children (35.7 percent). The stronger effect for White children can largely be attributed to their higher likelihood of receiving the CTC in the first month of the benefit rollout in our simulations (given that their families are more likely to have filed taxes in the prior year and thus were more likely to reside in households that received the first payment automatically). Appendix II presents counterfactual poverty rates by race under higher coverage rates of the CTC. The results there show that increasing the overall coverage rate of the CTC to around 64.4 million children would have reduced the Black monthly child poverty rate in July 2021 to 13.6 percent (rather than 18.4 percent, as currently estimated), and the Latino child poverty rate to 14.1 percent (rather than 16.8 percent, as currently estimated). Thus, if coverage rates continue to increase over subsequent months of the CTC rollout, we expect that the poverty reduction effects of the CTC will likewise increase for Black and Latino children.

Our estimates find that ongoing COVID relief efforts continue to have a sizable effect on reducing child poverty, cutting the July 2021 monthly child poverty rate by more than one-third for all racial and ethnic groups and over 40 percent—equal to 6 million children lifted from poverty in July—overall.

This impact resulted in a notable drop in child poverty between June and July 2021—due primarily to the introduction of the monthly payment. On its own, this new payment kept 3 million children from poverty in its first month. As rollout continues, the expanded Child Tax Credit has the potential to achieve even greater child poverty reduction. If all likely-eligible children are covered, it has the potential to reduce monthly child poverty by up to 40 percent on its own. In this scenario, all COVID-related relief, including the CTC, could contribute to a 52 percent reduction in monthly child poverty. Expanding coverage to all eligible children is key to achieving the Child Tax Credit’s full anti-poverty potential, with the greatest gains to be realized for Black and Latino children.

### *How Do These Results Compare to Other Studies?*

Our results align with [recent evidence from the U.S. Census Bureau](#) that the expanded CTC appears to have contributed to a decline in food hardship among families with children (Perez-Lopez, 2021). Relative to other analyses of the potential poverty reduction effects of the CTC, our results feature some similarities and some differences.

First, our framework estimates *monthly* child poverty rates based on the income a family unit (as [defined by the Supplemental Poverty Measure](#)) receives in a given month. In contrast, prior estimates of the poverty reduction effect of the CTC focus almost exclusively on *annual* poverty rates (see Acs and Werner, 2021; Parolin, Collyer, Curran, and Wimer, 2021; Wheaton, Minton, Giannarelli, and Dwyer, 2021; Marr, Cox, Hingtgen, and Windham, 2021). In the annual framework, many families in 2021 would also receive benefits from the Earned Income Tax Credit (EITC), stimulus checks (also known as Economic Impact Payments), unemployment benefits, and other transfers (including food and housing assistance and more) that lift families closer to the poverty line. As a result, the effect of the CTC often appears stronger when examined in conjunction with these other income transfers. Put simply, our focus on monthly poverty may, in most months, understate the poverty reduction effect of the CTC compared to its effect on annual poverty.

Second, prior estimates of the potential poverty reduction effects of the CTC—including our own past annual poverty estimates examining [a CTC expansion on its own](#), as well as [a CTC expansion as part of the broader American Rescue Plan](#)—generally assume 100 percent coverage among eligible family units. The assumption of perfect coverage matches the U.S. Census Bureau’s approach when estimating annual poverty rates in the CPS ASEC. Our analysis of monthly poverty rates, in contrast, does not assume perfect coverage of the CTC. As noted, we instead use Department of Treasury data to assign benefits to 59.3 million children, and we adjust non-coverage to lower-income family units. We demonstrate the impact of increasing access and receipt by providing, in Figure 2, hypothetical July 2021 monthly child poverty estimates at higher coverage rates. Future monthly poverty analyses will continue to draw upon available data on receipt from the Department of Treasury; including, for example, [the fact that 1.6 million more children](#) received the CTC benefits in August 2021 relative to July 2021 and accounting, to the degree possible, for the fact that families who missed their first payments (due to delayed sign-up or other reasons) will receive their backdated benefits in future payments.

As a result of these differences, the estimated overall poverty reduction effect of the CTC in this study differs from the estimated effect presented in the studies listed above. Nonetheless, even under our more conservative parameters, we find the first monthly payment of the expanded CTC contributed to large reductions in child poverty. Combined with other existing COVID-related relief, the expanded CTC helped lift approximately 6 million children out of poverty in July 2021 and cut the monthly child poverty rate by 40 percent compared to what it would have been without the COVID relief.

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## Appendix I: Data and Methods

Our framework for producing monthly poverty rates follows the method introduced in [Parolin, Curran, Matsudaira, Waldfogel, and Wimer \(2020\)](#). We describe the primary features below.

### Data Source

We use two versions of the U.S. Current Population Survey (CPS) to produce our estimates. The first is the Annual Social and Economic Supplement (ASEC), which is released annually but features comprehensive data on income and poverty. The second is the basic monthly files, which do not have the same income and poverty information as the ASEC, but do feature timely information on demographic and labor market characteristics. As discussed below, we combine the poverty information from the ASEC with the updated demographics of the monthly files to estimate monthly poverty rates.

### Constructing Monthly Poverty

We construct our monthly poverty measure in the ASEC file. In doing so, we use the same components as in the annual SPM framework, but we convert each annual value into an estimated monthly value. To do so we, we use five sets of assumptions, detailed in Table 1, regarding the annual-to-monthly conversions of income components in the ASEC.

**Table A1: Conversion of annual income components to monthly income components**

1	<b>Income components divided by 12 to move from annual to monthly values:</b>
Components	Social Security, income from retirement, SSI, worker's compensation, veteran's benefits, survivor's benefits, income from disability, income from dividends, child support, alimony, income from other sources, WIC, heating assistance, housing assistance, Medical Out-Of-Pocket Expenses, state and federal taxes (excluding tax refunds).
Rule	Divide annual values by 12 and apply to each month.
2	<b>Income components that should be adjusted if members of SPM unit are not employed in the given month, but were employed in prior months:</b>
Components	(1) Income from wages, business, farm work, work-related expenses, FICA taxes. (2) Standard (non-CARES Act) unemployment insurance benefits.
Rule	(1) Income components are converted to zero for an individual who is unemployed for five or more weeks. For individuals unemployed for 1-4 weeks, we pro-rate the earnings to estimate a monthly value based on average hourly earnings and number of the weeks in the month employed. (2) Convert unemployment insurance benefits to zero if the individual is currently employed. If the individual is currently jobless and reports receiving unemployment benefits in the prior year, we pro-rate the benefits to match the weeks of unemployment in month (individual UI benefits / weeks of unemployment * max [weeks of unemployment, 4.3]).
3	<b>Income components that are only distributed in a single month:</b>
Components	EITC, CTC, ACTC, other refundable tax credits
Rule	We project the month of tax filing based on IRS data and allocate the refundable tax credits accordingly in the given month. In practice, this leads to the largest share of refundable tax credits being distributed in February and March, with the remaining benefits being concentrated in April.

4	<b>Means-tested transfer benefits that are not typically dispersed evenly throughout the year:</b>
Components	SNAP, TANF
Rule	Among all SPM units who report receipt of the SNAP (or TANF) in the ASEC, we calculate the benefit value that family is eligible for in a given month based on state policy rules, family size, monthly earnings. If the projected benefit value is greater than one-twelfth the annual value of SNAP (TANF) but less than the reported annual SNAP (TANF) value, we set the unit's monthly SNAP (TANF) value as the projected benefit value. If the projected monthly benefit value is greater than the reported annual value, we assign the reported annual value as the monthly benefit (by definition, this will be less than the maximum monthly benefit value). If unit reports no annual benefits: we give no monthly benefits, even if they appear to be eligible.
5	<b>Education-related income support:</b>
Components	School lunches and income from education (including Pell Grants or other aid from government sources, non-governmental scholarships, and grants)
Rule	These income components are divided by nine and applied to non-summer months to account for the fact that they are typically distributed throughout the school year.

In short, the conversions make assumptions regarding the relationship of annual-to-monthly values based on current employment status, duration of unemployment, current month, and more. For individuals who report receiving earnings from employment during the year, but report being currently unemployed for more than four weeks, we set the monthly earnings to zero (see Category 2). We distribute refundable tax credits in the month in which low-income family units are most likely to file taxes, according to IRS data (see Category 3). We only include the value of subsidized school lunches in the months in which children tend to attend schools (see Category 5).

We simulate all COVID-era transfers directly in the ASEC file. In doing so, we estimate the monthly value each family receives in expanded unemployment benefits, the three rounds of Economic Impact Payments (EIPs), expanded SNAP benefits, and more. We assume imperfect coverage among the eligible for each using data on state-month distributions of unemployment benefits, Department of Treasury data on the distribution of EIPs, and coverage rates of SNAP as observed in the ASEC. Our simulations of unemployment benefits also account for the decision of some states to stop administering the federal unemployment benefit expansions beginning in June 2021.

We simulate the expanded CTC beginning in the July 2021 data (the first monthly payments were distributed on July 15). As detailed before, our primary analysis assigns the CTC benefits to 59.3 million children, or roughly 80 percent of all children in the U.S. This directly follows documented distributed rates for the July 2021 payment from the U.S. Department of Treasury.<sup>6</sup> We assign the CTC benefits by state to match the state-specific coverage rates from the Department of Treasury. Within each state, we bias the coverage rate so that tax non-filers and lower-income tax units are the most likely to miss out on receiving the benefit. Among tax non-filers, we identify units with 720,000 total children to receive the CTC despite not filing taxes, as this is the number of children that the Department of Treasury identifies as receiving the benefit due to their prior registration for Economic Impact Payments in 2020.

<sup>6</sup> The IRS has reported that [1.6 million additional children](#) received the benefit in August.

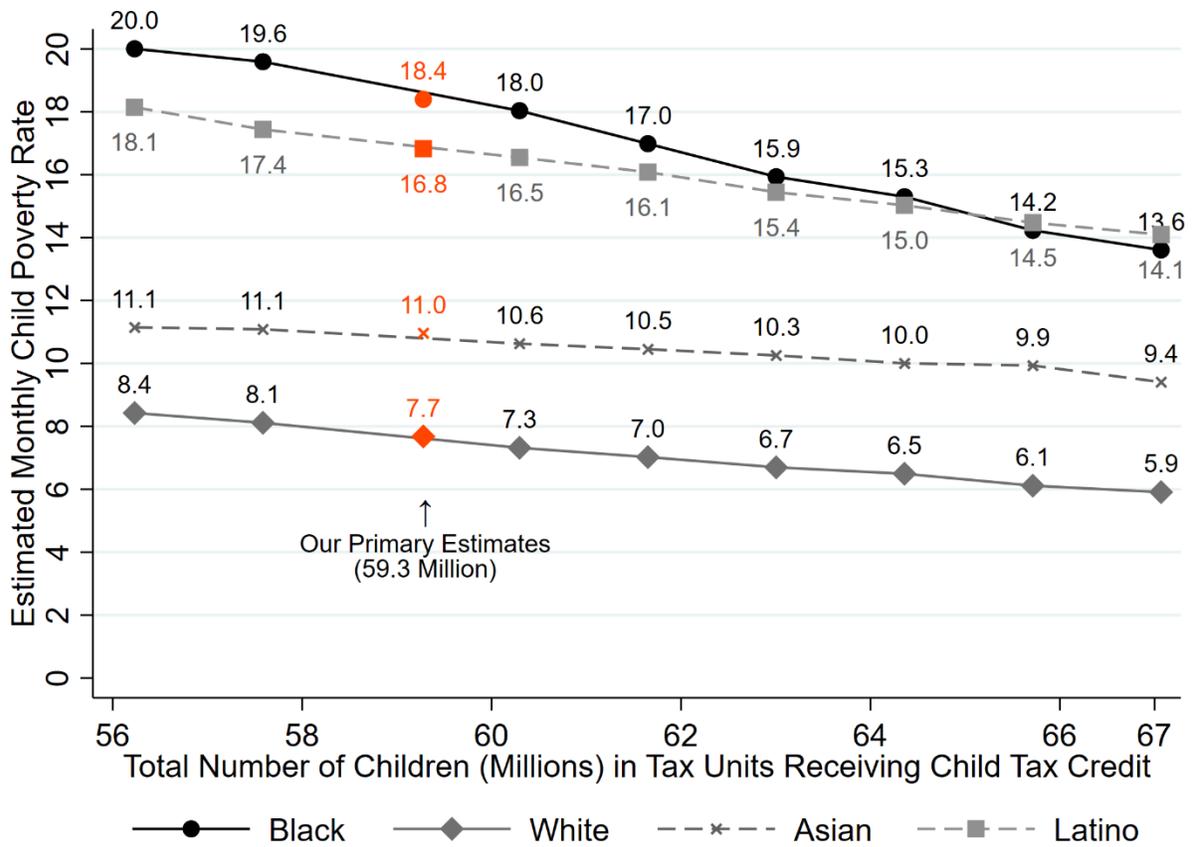
If a large number of tax non-filers with children successfully completed the online [Child Tax Credit Non-filer Sign-up Tool](#) (also known as the ‘online portal’) to receive their CTC benefits, then our model undercounts the number of children in non-filer households in receipt of the CTC payment in July 2021 and our estimates may understate the true poverty reduction potential of the CTC in this month.

After converting our income components to monthly values within the ASEC, we create a binary monthly poverty indicator equal to 1 if the SPM unit’s monthly income is below one-twelfth the value of the SPM unit’s annual SPM poverty threshold. We use observed SPM thresholds from the ASEC file (i.e. 2020 poverty estimates are based on poverty thresholds observed from the 2019 ASEC), as projecting new poverty thresholds requires more timely consumption data and introduces the possibility of new sources of measurement error. [SPM poverty thresholds vary](#) based on family unit size, geographic location of residence, and whether the family units owns or rents its residence.

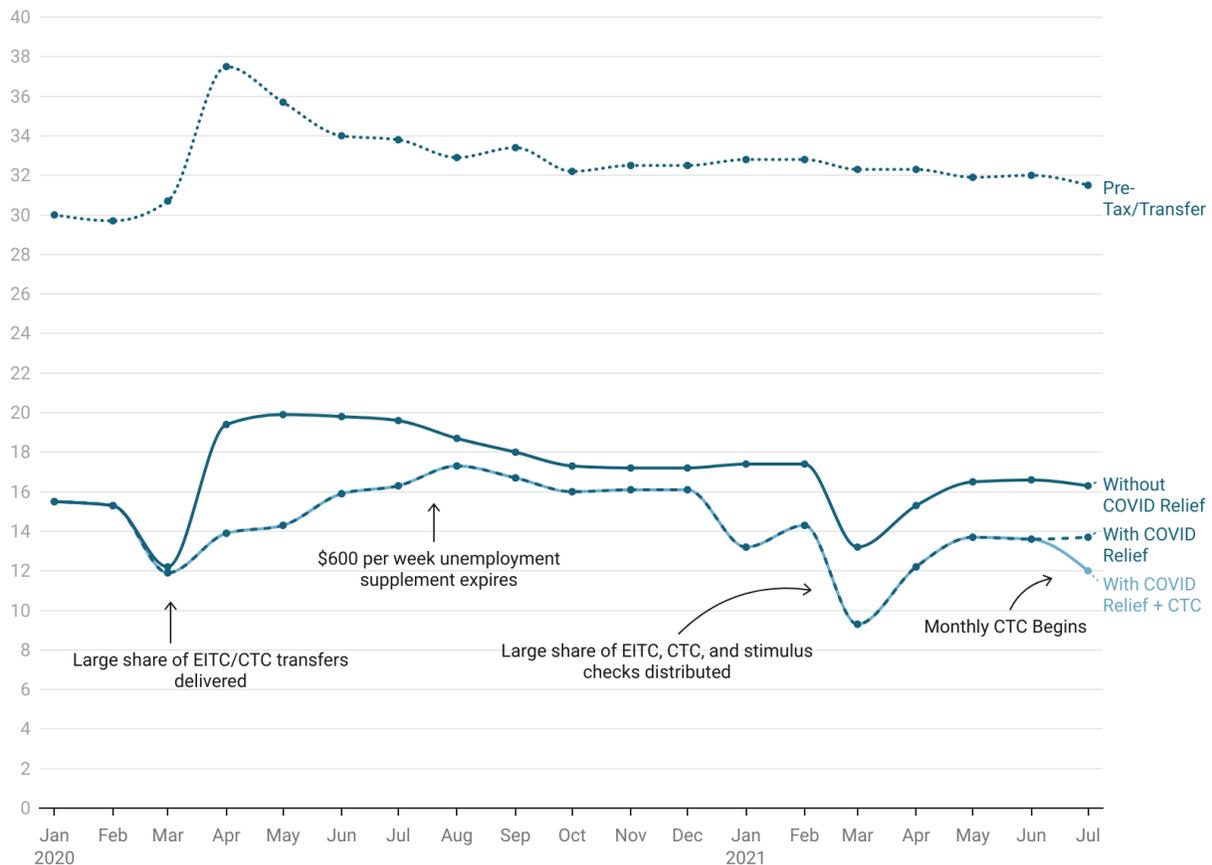
After creating the monthly SPM poverty indicator in the ASEC, we merge in the latest CPS monthly file (e.g. July 2021). We treat the lack of poverty status in the monthly files as a missing data problem and borrow methodological tools from the statistics literature for imputing the missing data. Specifically, we apply combined-sample multiple imputation (CSMI), a data fusion technique commonly applied in the statistics and social science literatures. Here, we apply the method to estimate poverty status in the monthly CPS files. To apply the CSMI, we merge the two samples and construct a common set of indicators that are likely to be useful in estimating a family unit’s poverty status. As detailed in [Parolin et al. \(2020\)](#), the indicators cover information relating to age, sex, education status, race/ethnicity, citizenship, country of origin, family structure, marital status, employment status, duration of unemployment, disability status, state and city-type of residence, and a large selection of interactions among those indicators.

We then apply multiple imputation using chained equations to estimate SPM poverty status in the monthly data. In doing so, we can compute the likelihood of poverty for each family unit and, in turn, an average poverty rate for the country as a whole. Results are robust when using an alternative approach that estimates the conditional likelihood of poverty using logistic regression in the ASEC and subsequently producing out-of-sample predictions in the basic monthly files.

Appendix II: Estimated Monthly Poverty Rates among Children by Race and Ethnicity in July 2021 by Assumed Level of Child Tax Credit Coverage



### Appendix III: Trends in Monthly Poverty Rates among full U.S. Population, All Ages (January 2020 – July 2021)



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<https://www.povertycenter.columbia.edu/news-internal/monthly-poverty-july-2021>

Access monthly data: <https://www.povertycenter.columbia.edu/forecasting-monthly-poverty-data>

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