



# Nonworking Parents or Hungry Children

How did the Child Tax Credit's COVID expansion affect child poverty and the parental work incentive?

## Shigeru Fujita

Senior Economic Advisor and Economist  
FEDERAL RESERVE BANK OF PHILADELPHIA

## Madison Perry

Research Analyst  
FEDERAL RESERVE BANK OF PHILADELPHIA

*The views expressed in this article are not necessarily those of the Federal Reserve Bank of Philadelphia or the Federal Reserve System.*

Caring for children presents a significant financial burden for many families. To help ease this burden, Congress in 1997 created the Child Tax Credit (CTC), a tax break for low- and middle-income families with children. Since then, Congress has modified the CTC several times, most recently as part of the Tax Credit and Jobs Act (TCJA) of 2017. The TCJA's version of the CTC expires at the end of 2025.

But when COVID hit and millions of families were struggling with lost income due to the pandemic, the CTC proved inadequate to the crisis. So when Congress passed the American Rescue Plan in 2021, it also dramatically increased the size of the credit and the number of low-income families that qualified for the credit. Although the expansion was only enacted for a single year, the TCJA's impending expiration has inspired many policymakers to revisit the CTC expansion.

In this article, we evaluate the effectiveness and trade-offs of the expanded CTC. First, we assess the policy's success in alleviating financial distress for families with children. Several researchers report that the expansion greatly reduced the child

poverty rate in 2021. We provide an in-depth review of this literature and offer a caveat for interpreting these well-publicized findings.

Second, we examine whether the 2021 CTC expansion inadvertently incentivized parents not to return to work. If the expansion reduced the incentives to work, it might have exacerbated the postpandemic worker shortage and thus contributed to the recent inflationary episode. We summarize empirical evidence that suggests that the temporary expansion did not disincentivize work. We discuss why this may be and conclude with a brief discussion of how these findings relate to proposals to renew or permanently expand the CTC.

### Expanding the CTC in 2021

To understand how the temporary 2021 expansion changed the CTC and thus altered work incentives, we need to describe the rules under the preexpansion CTC, which were reinstated after the expansion expired (Table 1). First, to qualify for the CTC, a family must have a minimum annual earned income of \$2,500. Policymakers included this rule to incentivize families with a marginal attachment to the labor market to keep at least one member in the labor force. In other words, this is a work requirement. Once a household surpasses this minimum earned income, the amount of the credit is phased in, increasing at a rate of 15 cents per dollar of earned income until it reaches a maximum of \$2,000 annually per each child under 16 years old. Because Congress intended the credit to benefit low- and middle-income families, the size of the credit begins to decline when a family’s income reaches \$400,000 for married joint filers or \$200,000 for single-parent filers.

When Congress temporarily expanded the CTC in 2021, it removed the phase-in and the minimum earned income threshold; it also increased the credit to \$3,000 per child for children ages 6–17 and \$3,600 for children under 5 (Figure 1).<sup>1</sup> Under the expanded CTC, the size of the credit did not depend on a household’s income until it reached a relatively high level. Although the expanded credit phased out for families making more than \$150,000 a year, the expansion turned the CTC into a lump-sum cash transfer program for those earning a lower income.

Theoretically, these changes disincentivized work through the income effect and the substitution effect. Under the income effect, families receiving more unearned transfer income should work less. Under the substitution effect, the opportunity cost of *not* working declines, further inducing families to work less. Specifically, the opportunity cost of not working corresponds to the income a family can earn by working. Under the CTC, the family receives an additional 15 cents per dollar of their labor income. But

TABLE 1

### The COVID Pandemic Inspired Congress to Expand the Child Tax Credit

This expansion greatly increased the number of families eligible for the credit and the amount each family received.

#### Child Tax Credit Policy: 2020 and 2021

	The 2020 Tax Cuts and Jobs Act (TCJA)	The 2021 American Rescue Plan (ARP)
Credit	Maximum \$2,000 credit per child aged 6–16	Maximum \$3,600 credit for children aged 0–5  Maximum \$3,000 credit for children aged 6–17
Refundability	Partially refundable, up to \$1,400 per child	Fully refundable
Advance Payment	No advance—paid upon tax filing	Advance payment of up to 50 percent of total credit value, paid in monthly installments from July to December 2021, unconditional on tax filing; second half paid upon tax filing
Phase-In	Credit amount equal to 15 percent of earned income above minimum eligibility threshold, up to maximum credit amount	No phase-in
Minimum Eligibility	Must have at least \$2,500/year in earned income	No minimum earned income
Phase-Out	Begins to phase out at a rate of \$50 for every \$1,000 in additional income over income threshold	Decreases at a rate of 5 percent as income exceeds thresholds until credit amount equals TCJA maximum of \$2,000 per child, then follows TCJA phase-out
Phase-Out Income Thresholds	\$200,000 for single/head-of-household filers, \$400,000 for married-joint filers	\$75,000 for single filers, \$112,500 for head-of-household filers, and \$150,000 for married-joint filers

Data Source: Crandall-Hollick (2021)

the 2021 expansion temporarily abolished this additional portion, lowering the price of not working. This could have increased the demand for not working or, more plainly, decreased the labor supply.

Two other changes made the CTC more accessible to low-income families. Under the TCJA, the credit was only *partially refundable*. “Refundability” means that benefits can be paid out as cash independent of the family’s tax liability. In contrast, “nonrefundability” means the size of the benefit is limited by the family’s tax liability. Because the CTC under the TCJA is refundable only up to a limit (\$1,400), it is only partially refundable. For example, suppose a tax filer has a tax liability of \$500 and is eligible to receive the CTC of \$2,000. This filer cannot receive the full (net) benefits of \$1,500 because the refund amount is capped at \$1,400. The 2021 expansion made the credit *fully refundable*—that is, it made the size of the credit independent of a household’s tax liability.

The expansion also introduced advance payments, whereby half of the total credit was paid in monthly installments from July to December 2021, prior to tax filing. Normally, the full credit is remitted to eligible recipients after they file their taxes. But under the expansion, eligible households with a history of tax-filing received their benefits prior to filing their 2021 taxes.<sup>2</sup>

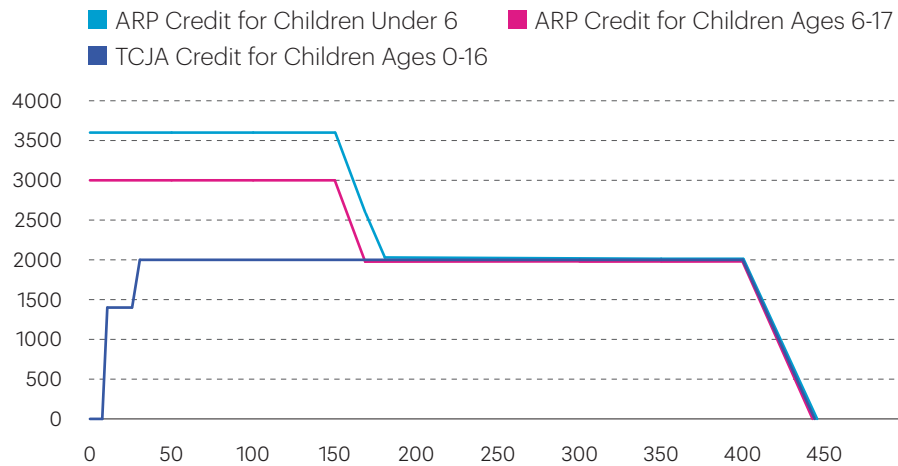


FIGURE 1

## Under the Expanded CTC, the Size of the Credit Did Not Depend on the Income Level Until It Reached a Relatively High Level

For those with a lower income, the expansion turned the CTC into a lump-sum cash transfer.

The CTC schedule under the TCJA and under the 2021 expansion for a married couple with one child; X axis is total household income (in thousands), Y axis is credit amount



**Data Source:** Urban–Brookings Tax Policy Center calculations (Urban–Brookings Tax Policy Center, 2024)

**Note:** This figure assumes that all income comes from earnings; other means-tested benefits are not considered. The figure shows the total credit for one child; families with more children would be eligible for larger credits. Phase-out thresholds apply to married couples filing jointly.

Importantly, many U.S. households are not required to file taxes. For example, single filers under 65 are not required to file taxes if their annual income is less than \$13,850. Of course, that doesn't mean they don't file taxes. But in their 2023 working paper, University of Michigan associate professors of public policy Katherine Michelmore and Natasha V. Pilkauskas report that more than 25 percent of households whose monthly income is less than \$1,000 (\$12,000 per year) are nonfilers. Thus, even though changes in the expanded CTC, such as the removal of the work requirement and the introduction of full refundability, increased the availability of the CTC to previously ineligible families, newly eligible families without a history of filing taxes would have missed out on the advance payments.

To address this issue, the federal government set up an online sign-up tool, allowing these families to register to receive the advance payments.<sup>3</sup> Despite this tool, many eligible families still failed to receive their credit, as discussed below.

## How the Expansion Affected Poverty Rates

As indicated above, the removal of the minimum earned income threshold greatly increased the number of CTC-eligible families. Using data from the Annual Social and Economic Supplement (ASEC) to the Current Population Survey (CPS), Kalee Burns and Liana Fox of the U.S. Census Bureau found that 97.1 percent of all children living in a family unit were eligible to receive the 2021 expanded CTC, relative to 38.2 percent of children before the expansion.<sup>4</sup> They estimate that the expanded CTC lifted 5.3 million people (including 2.9 million children) out of poverty.<sup>5</sup> Both the increased coverage and increased credit amount contributed to this decline in poverty.

The decline of children living under the poverty line corresponds to a decline in the poverty rate from 9.8 percent to 5.3 percent for children under the age of 6 and from 8.9 percent to 5.2 percent for children 6–17. Burns and Fox calculated these figures by comparing the number of people and children who fell on either side of the poverty income threshold, with and without the CTC. Thus, these percentages represent the

total effect of the CTC in 2021. To isolate the expansion's effect, Burns and Fox also considered a counterfactual case in which the CTC eligibility and credit amounts hadn't changed in 2021. According to this calculation, the 2021 CTC expansion lifted 2.1 million children out of poverty.<sup>6</sup> That's about 72 percent (2.1 million out of 2.9 million) of the total effect (Figure 2).

Burns and Fox also found that the 2021 CTC expansion was most significant for Black children and Latino children, with the poverty rate for each group shrinking by 6.3 percentage points. This represents approximately 716,000 Black children and 1.2 million Latino children lifted out of poverty. These researchers also looked at family structure and found that the largest effect was felt among children in households headed by a single mother.

But these differences in the impact of the expansion are not just demographic. They are also geographic. In their 2023 Brookings report, Georgetown University professor of public policy Bradley Hardy, Columbia University research director Sophie Collyer, and Columbia University senior research scientist Christopher Wimer examined how the CTC expansion affected different geographic areas. They divided states into four categories based on whether each state's average cost of housing was above or below the averages' cross-state median, and whether each state's poverty rate was above or below the rates' cross-state median. They found that, although the CTC reduced poverty across all states, reductions were highest in states with a low cost-of-living yet high baseline poverty rate.<sup>7</sup> Moreover, states with an above-median share of Black children or above-median share of children with an unmarried mother had *both* a higher baseline poverty rate *and* a greater reduction in the child poverty rate. These results suggest that the 2021 CTC expansion helped reduce the inequality in child poverty rates between states.

## Not All Eligible Families Received the Credit

The above calculations are based on the expanded *eligibility*—they assume universal uptake and do not account for incomplete participation.

TABLE 2

## Our Difference-in-Differences Estimation of the Effect of the 2021 CTC Expansion Suggests That It Did Not Reduce the Work Incentive

Labor force participation rates among parents and nonparents before and after the policy change

	Parent (Treatment Group)	Nonparent (Control Group)	Difference
Jan-Jun 2021	80.41	76.24	+4.17
Jul-Dec 2021	81.35	77.10	+4.25
Difference	+0.94	+0.86	+0.08

**Data Source:** Authors' calculations using the Current Population Survey's public-use microdata

**Note:** Sample includes only individuals between 18 and 54 years old.

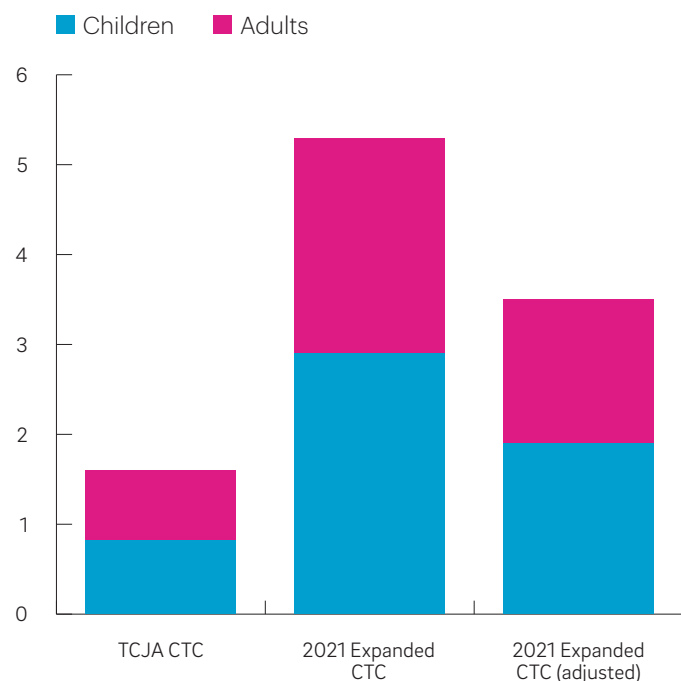
But as previously noted, many (often low-income) families do not file a federal income tax return, which they must do to receive the CTC automatically. Some of these families became eligible for benefits only once Congress expanded the CTC. Did these families somehow overlook the expansion? To find out, we used the 2022 ASEC survey data. This survey asks whether the family received the advance CTC payments in 2021. According to the data, only 67 percent of eligible families answered “yes” to this question. This share is even lower for lower-income families: Among families with an annual income below \$25,000, only 60 percent answered “yes.”

FIGURE 2

## The Removal of the Minimum Earned Income Threshold Greatly Increased the Number of Families Eligible for the CTC

But when we account for incomplete take-up, the total effect on poverty reduction is reduced to 3.5 million people.

Number of adults and children lifted out of poverty before and after the CTC expansion



**Data Source:** Authors' calculations using ASEC data and ASEC CTC Research Supplement

**Note:** The third bar is generated using the assumption that if a family indicated nonreceipt of the advance CTC payments, they likely also did not receive the second half of the payments. This assumption is made to create an upper bound on the proportion of eligible families that did not receive the 2021 CTC. Thus, our estimate of the downward-adjusted poverty lift effect of the 2021 CTC is a lower bound on the poverty alleviation of the policy.

This question pertains to the receipt of the *advance* payments. If a family did not receive the advance payments, it could still have received the full benefit by filing a tax return in 2022. (For eligible households that had previously filed a tax return, the advance CTC payments were sent automatically.) Such a family would have had to have filed a tax return for the first time in 2022 *and* been unaware that they could have received advance payments in 2021. This is unlikely. Thus, findings about the receipt of the advance payments likely apply to the receipt of the expanded CTC in general. When we account for the incomplete take-up of the credit, the number of people lifted out of poverty by the expanded CTC shrinks from 5.3 million to 3.5 million; for children, it shrinks from 2.9 million to 1.9 million (Figure 2).

Micheltmore and Pilkauskas present evidence consistent with our estimate of incomplete receipt. They used a data set from a national monthly survey administered by Propel, a software company for low-income households. Propel's mobile app, Providers, allows users to track their Supplemental Nutrition Assistance (SNAP) balance and other government benefits. Micheltmore and Pilkauskas collected the data from the app user surveys administered by Propel between August 2021 and January 2022. According to these surveys, only 67 percent of eligible families reported that they received the credit in that month. These surveys focused on low-income families, and the share is somewhat higher than the comparable share (that is, 60 percent) we found in the ASEC data. But the fact that these survey respondents are users of a benefit-tracking mobile app might mean that the sample is skewed toward the population (within low-income families) that is more likely to know about the advance payments. Thus, we conclude that the ASEC evidence is in line with the evidence from the mobile app users.

As outlined above, the federal government established an online tool to reach eligible households that had not previously filed their taxes. The evidence we present here, however, suggests that further outreach efforts are warranted. Researchers and policymakers should prioritize rigorous cost-benefit analyses of outreach initiatives and explore strategies designed to maximize the policy's intended effects while also minimizing its costs.

Impacts on Other Well-Being Measures

Several researchers have also found that the expansion (especially the advance payments) significantly reduced material hardship for low-income families.

For example, using high-frequency data from the U.S. Census’ Household Pulse Survey, Columbia University senior research fellow Zachary Parolin and his coauthors—Collyer, Wimer, Barnard College professor of economics Elizabeth Ananat, and Columbia University Director of Policy Megan A. Curran—found that the advance payments of the CTC led to a 7.5 percentage point (25 percent) decline in food insufficiency among low-income households (that is, households whose income was less than \$35,000) with children. Food insufficiency among childless households in the same income group remained stable over the same period, consistent with their nonreceipt of the CTC advance payments.

For their 2022 working paper, Pilkaukas and Micheltmore, along with their coauthors, University of Wisconsin postdoctoral fellow Nicole Kovski and University of Michigan professor of public policy H. Luke Shaefer, examined overall material hardship beyond food consumption. Specifically, using the survey data collected by Propel (described above), these authors constructed a set of indexes of material hardship using groups of questions pertaining to homelessness, food insecurity, transportation insecurity, and an inability to pay bills. They found that the receipt of the average monthly amount of the CTC (\$500, as part of the advance payments) reduced the total number of hardships a household experienced by approximately 17 percent. Food-related hardships were the most affected, decreasing by approximately 32 percent.<sup>8</sup>

A Disincentive to Work

The expansion of the CTC clearly helped many families, but it could also have reduced their work incentive. This concern was particularly pertinent in 2021-2022, because a labor shortage posed a significant challenge to firms, leading to higher labor costs and subsequently higher inflation.<sup>9</sup>

As discussed above, the substitution

effect refers to the change in the relative prices of working and not working, and the income effect refers to the effective increase in total income. Standard economic theory suggests that the CTC expansion could have reduced the work incentive through both effects. To see how, we need to examine each of the expansion’s three policy changes: the elimination of the phase-in structure, the increase in the credit amount, and the introduction of advance payments. The elimination of the phase-in presumably lowered the work incentive through the substitution and income effects. The increase in the credit amount, independent of the phase-in, did so through the income effect.<sup>10</sup> The advance payments only change the timing of the credit receipt but are particularly relevant for families with limited financial resources because they provide immediate relief from liquidity (or cash) constraints. The effect of relaxing this constraint can thus be thought of as an income effect.

The advance payments provide researchers with a unique opportunity to test the work incentive hypothesis. Households received these payments as monthly installments from July to December 2021. Thus, we can examine how labor force participation rates changed before and after the introduction of advance payments. This is an application of the difference-in-differences estimation of a policy effect (Table 2). For this analysis, we used the public-use microdata of the CPS to compute labor force participation rates among parents and nonparents before and after the policy change. In the first column of Table 2, we compare the participation rates among parents (those who we assume were eligible and received the benefits). These “treated” individuals *increased* their labor force participation rate between the two periods. However, changes in the general economy may have brought workers into the labor force independent of the advance payments. To control for this effect, the second column presents the participation rates among nonparents. Their participation rate *also* increased, and by a similar amount. The difference between the differences in participation rates is 0.08 percent. This finding does not support the work incentive hypothesis.

However, these calculations do not control for other aspects of the data. For example, our calculations assume that the underlying trend in the parents’ labor force participation rate between the two halves of 2021 is the same as the trend for the childless. This is how we infer the “counterfactual” trend—the trend in the absence of the policy change. But this assumption may be wrong. Furthermore, if the work incentive effect is concentrated among low-income households, our calculations, which are based on the entire income spectrum, might mask the expansion’s effect on these households.

Several researchers have used more sophisticated econometric techniques to address these issues. Although their papers differ in methodology, they all focus on the same period surrounding the start of the advance payments, and they all apply difference-in-differences estimations using the same data set we used for Table 2.

For their 2022 working paper, Ananat and her coauthors—Columbia University post-

TABLE 3  
But When We Apply a Difference-in-Differences Estimation to Single Mothers, We See the Disincentive at Work

This matches what other researchers have found about this subgroup  
Labor force participation rates among young unmarried females without a college degree, parents and non-parents, before and after the policy change

	Parent	Nonparent	Difference
Jan-Jun 2021	59.11	61.64	-2.53
Jul-Dec 2021	58.85	63.62	-4.77
Difference	-0.26	+1.98	-2.24

Data Source: Authors’ calculations using the Current Population Survey’s public-use microdata  
Note: Sample includes only unmarried females between 18 and 30 years old with some college or less.

FIGURE 3

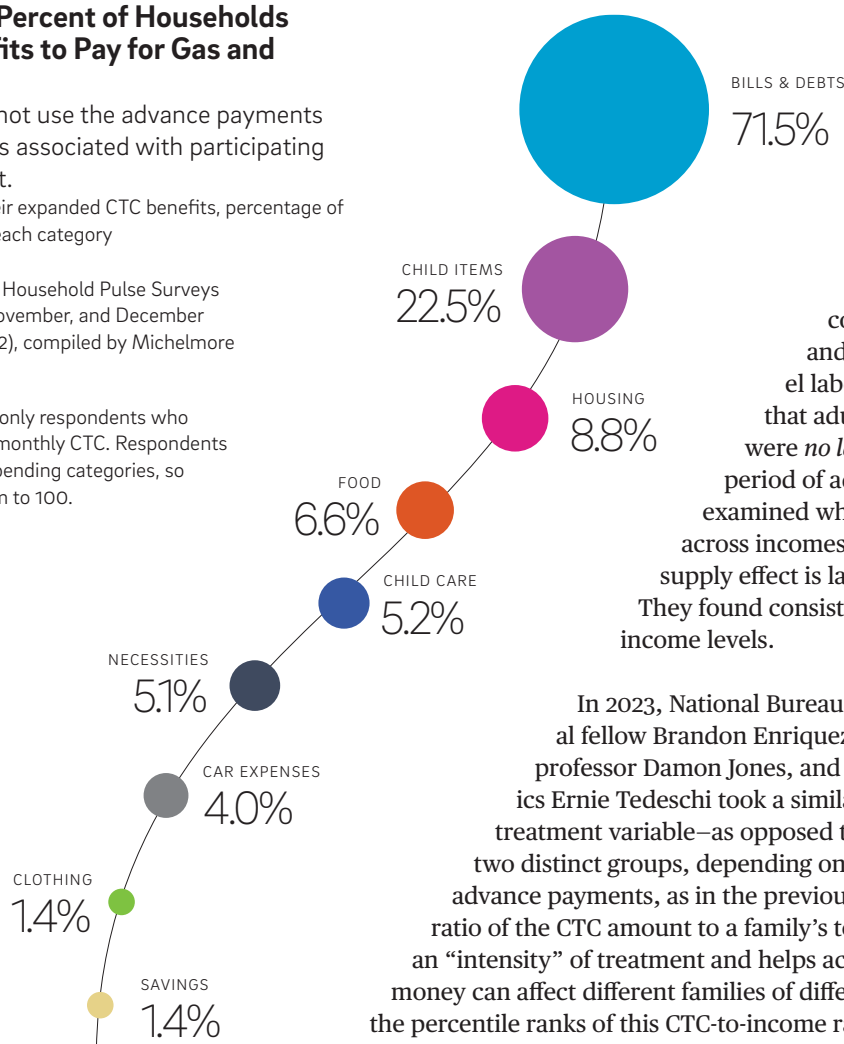
## Only About 10 Percent of Households Used the Benefits to Pay for Gas and Child Care

Most families did not use the advance payments to pay for the costs associated with participating in the labor market.

How families spent their expanded CTC benefits, percentage of families' spending for each category

**Data Source:** Providers Household Pulse Surveys (August, September, November, and December 2021, and January 2022), compiled by Michelmore and Pilkauskas (2023)

**Note:** Sample includes only respondents who reported receiving the monthly CTC. Respondents could select multiple spending categories, so percentages do not sum to 100.



They found consistently insignificant effects across all income levels.

In 2023, National Bureau of Economic Research postdoctoral fellow Brandon Enriquez, University of Chicago associate professor Damon Jones, and Yale Budget Lab director of economics Ernie Tedeschi took a similar approach but used a continuous treatment variable—as opposed to categorizing families into only two distinct groups, depending on whether they were eligible for the advance payments, as in the previous studies. They first calculated the ratio of the CTC amount to a family's total income. This ratio represents an “intensity” of treatment and helps account for how the same amount of money can affect different families of different income levels. They then used the percentile ranks of this CTC-to-income ratio in their difference-in-differences regression analysis to examine whether a higher rank is associated with a lower labor force participation rate. (Households that did not qualify for the CTC—for example, families without children—have a ratio of 0 and thus are at the lowest ranking.) They found that labor force participation rates steadily declined as ranking increased during the second half of 2021, but this pattern is statistically indistinguishable from the pattern in the first half of the year. Again, it seems that the CTC expansion (more specifically, the advance payments) did not reduce the work incentive.

In 2024, Northwestern University professor of education and social policy Diane Whitmore Schanzenbach and American Enterprise Institute economist Michael Strain conducted further robustness checks on previous research, including the research we have just discussed. They argue for splitting the sample based on key observable characteristics and estimating the impacts separately for each group. Using this approach, they can estimate the incentive effects in a more flexible manner than in the previous literature, albeit at the expense of statistical power due to a smaller sample size. They found a statistically significant negative effect of the CTC payments in the second half of 2021 among a specific subgroup: unmarried mothers with some college education or less and with children who are less than 6 years old. Specifically, this group was 4.5 percentage points less likely to be employed during the period when advance payments were made, compared with the comparable group without children. This is a substantial effect, given that the overall share of employed individuals prior to the advance payments was 64 percent.

We verified Schanzenbach and Strain's findings by applying our difference-in-differences estimation to a sample of unmarried females with some college education or less (Table 3). We restricted our sample to mothers between 18 and 30 years old, and our analysis did not distinguish by the age of their children.<sup>11</sup> Also, we considered the labor force participation rate instead of the share of the employed. We find that the treated parents dropped their participation rate by 0.26 percentage point between the first half and second half of 2021. While this raw difference is minimal, the control group *increased* its participation rate by 1.98 percentage points in the second half of the year. This implies that the overall effect is 2.24 percentage points, roughly in line with what Schanzenbach

doctoral research scientist Benjamin Glasner, University of Connecticut assistant professor of public policy Christal Hamilton, and Parolin—constructed an econometric model that controls for individual-level characteristics that influence employment outcomes (such as age, level of education, and sex) and that accounts for state-level labor market conditions. They found that adults in households with children were *no less likely* to be employed during the period of advance CTC payments. They also examined whether the treatment effect differs across incomes—that is, whether the negative labor supply effect is larger for lower-income households.



and Strain found. When Shanzenbach and Strain considered other groups of people, however, they found no statistically significant effect.

## The Missing Negative Effect on the Labor Supply

Why don't we observe a negative effect on the labor supply, despite what standard economic theory suggests? One possibility is that the negative incentive is offset by positive effects, resulting in no net effect. For example, if participating in the labor market is costly, the advance payments might have helped overcome this barrier. These costs include gas and child care. For this question, Micheltore and Pilkauskas presented useful survey results on how low-income families spent their CTC advance payments (Figure 3). According to this survey, only about 10 percent of households used the benefits for child care and gas or car expenses. This suggests that the majority of advance payments were not used to pay for the costs associated with participating in the labor market.

Another possibility is that most workers won't change their labor supply behavior (that is, by quitting a job or reducing their work hours) only because of the temporary availability of government transfer payments. For example, a worker is unlikely to quit a job they have had for a long time—even if their financial situation eases for a short period, as it did with the CTC payments—because their employer might not keep the position open until they want to return to work.<sup>12</sup> This example implies that the value of the employment relationship reflects not just today's earnings but also future earnings and how long the relationship is expected to last.

Moreover, the employment decision is not divisible: Individual workers generally have little flexibility to adjust their work schedule at will. The individual decision is likely to be either work or not work. One might have some flexibility in hours of work, but even then, a worker cannot adjust their workday by X hours in response to the availability of transfer payments. (If a firm operates three eight-hour shifts per day, its workers do not have the luxury of working, say, 0.8 shift a day.)

For these two reasons, individuals are unlikely to change their labor force participation unless the transfer is very large. And the findings in the literature suggest that even for low-income families, the CTC advance payments were not big enough to induce a transition from working to not working.

## Conclusion

The 2021 CTC expansion significantly reduced child poverty, although this widely advertised reduction is probably overstated because the earlier results were based on the expansion of eligibility, not on the actual receipt of the credit. The government must improve its outreach to ensure that all eligible families receive the credits for which they are eligible.

Researchers generally find no evidence that the expansion (more specifically, the advance payments) reduced the work incentive. Does this mean that the 2021 CTC expansion should be reinstated and even made permanent? Our discussion in the

previous section suggests that policymakers should exercise caution because a permanent enactment of such a policy might disincentivize work.

On the other hand, a recent paper by Ananat and Columbia University professor of contemporary urban problems Irwin Garfinkel makes a compelling case for also considering the long-term positive impact of the CTC on child development and children's future labor market outcomes. They appeal to the notion of "dynamic complementarity," whereby investments in children's development at each age have multiplicative effects—that is, greater human capital at each stage enhances returns on subsequent investments. This perspective warrants further in-depth research. [\[4\]](#)

## Notes

**1** Figure 1 illustrates the CTC schedule under the TCJA and under the 2021 expansion for a married couple with one child. The phase-in and the minimum income requirement under the TCJA are represented by the upward-sloping portion of the dark blue line for those making less than \$27,000.

**2** See Table 1 for a comparison of the CTC before and during its expansion.

**3** To receive the remaining portion of their credit, these families were required to file a 2021 tax return.

**4** Burns and Fox (2022).

**5** This estimate is based on an accounting exercise calculating the number of people (including both adults and children) lifted above the predetermined income poverty line by the expanded CTC who would have been below the poverty line without *any* CTC.

**6** The poverty line is defined by the Supplementary Poverty Measure (SPM). SPM thresholds depend on family size, composition, tenure in area of residence, and geographic location. SPM thresholds also account for changes in the cost of living. According to the U.S. Bureau of Labor Statistics' 2021 release, SPM thresholds for household units with two adults and two children were \$31,107 for owners with a mortgage, \$26,279 for owners without a mortgage, and \$31,453 for renters (Bureau of Labor Statistics, 2022).

**7** The authors of this study determined that Pennsylvania and New Jersey have a high cost-of-living and low baseline poverty, whereas Delaware has a high cost-of-living and high baseline poverty. The group of states that contains Pennsylvania and New Jersey experienced a reduction in child poverty of 47 percent, whereas the group containing Delaware experienced a reduction of 41 percent. These reductions can be compared with a 51 percent decrease in child poverty in high-cost high-poverty states.

**8** See Stuart (2023) for more on the longer-term trend in how the economic position of children compares with that of their parents.

**9** For example, Shapiro (2023) shows that increased labor costs con-

tributed significantly to higher prices of nonhousing services during the pandemic years.

**10** This effect disappears if households anticipate that the increased amount must be financed by tax increases on their future income. But this assumption is unlikely to hold, especially for low-income families.

**11** Schanzenbach and Strain (2024) consider females between 20 and 50, but we focus on a younger group since it gives us a clearer pattern.

**12** Reducing hours might be somewhat easier, but the same idea applies.

## References

- Ananat, Elizabeth, and Irwin Garfinkel. "The Potential Long-Run Implications of a Permanently-Expanded Child Tax Credit," National Bureau of Economic Research Working Paper 32870 (2024), <https://doi.org/10.3386/w32870>.
- Ananat, Elizabeth, Benjamin Glasner, Christal Hamilton, and Zachary Parolin. "Effects of the Expanded Child Tax Credit on Employment Outcomes: Evidence from Real-World Data from April to December 2021," National Bureau of Economic Research Working Paper 29823 (2022), <https://doi.org/10.3386/w29823>.
- Bureau of Labor Statistics. "2021 Research Supplemental Poverty Measure Thresholds," (2022), [https://www.bls.gov/pir/spm/spm\\_thresholds\\_2021.htm](https://www.bls.gov/pir/spm/spm_thresholds_2021.htm).
- Burns, Kalee, and Liana E. Fox. "The Impact of the 2021 Expanded Child Tax Credit on Child Poverty," U.S. Census Bureau SEHSD Working Paper 2022–24 (2022), <https://www.census.gov/library/working-papers/2022/demo/SEHSD-wp2022-24.html>.
- Crandall-Hollick, Margot L. "The Child Tax Credit: Legislative History," Congressional Research Service Report R45124 (2021), <https://crsreports.congress.gov/product/pdf/R/R45124>.
- Enriquez, Brandon, Damon Jones, and Ernie Tedeschi. "The Short-Term Labor Supply Response to the Expanded Child Tax Credit," *AEA Papers and Proceedings*, 113 (2023), pp. 401–405, <https://doi.org/10.1257/pan-dp.20231087>.
- Hardy, Bradley, Sophie M. Collyer, and Christopher Wimer. "The Antipoverty Effects of the Expanded Child Tax Credit Across States: Where Were the Historic Reductions Felt?" Brookings Institution (2023), <https://www.brookings.edu/articles/the-antipoverty-effects-of-the-expanded-child-tax-credit-across-states-where-were-the-historic-reductions-felt/>.
- Micheltmore, Katherine, and Natasha V. Pilkauskas. "The 2021 Child Tax Credit: Who Received It and How Did They Spend It?" *AEA Papers and Proceedings*, 113 (2023), pp. 413–419, <https://doi.org/10.1257/pan-dp.20231089>.
- Parolin, Zachary, Elizabeth Ananat, Sophie M. Collyer, Megan Curran, and Christopher Wimer. "The Initial Effects of the Expanded Child Tax Credit on Material Hardship," National Bureau of Economic Research Working Paper 29285 (2021), <https://doi.org/10.3386/w29285>.
- Pilkauskas, Natasha, Katherine Micheltmore, Nicole Kovski, and H. Luke Shaefer. "The Effects of Income on the Economic Wellbeing of Families with Low Incomes: Evidence from the 2021 Expanded Child Tax Credit," National Bureau of Economic Research Working Paper 30533 (2022), <https://doi.org/10.3386/w30533>.
- Schanzenbach, Diane Whitmore, and Michael R. Strain. "Employment and Labor Supply Responses to the Child Tax Credit Expansion: Theory and Evidence," National Bureau of Economic Research Working Paper 32552 (2024), <https://doi.org/10.3386/w32552>.
- Shapiro, Adam. "How Much Do Labor Costs Drive Inflation?" *FRBSF Economic Letter* 2023-13 (2023), <https://www.frbsf.org/research-and-insights/publications/economic-letter/2023/05/how-much-do-labor-costs-drive-inflation/>.
- Stuart, Bryan. "Inequality Research Review: Intergenerational Economic Mobility," Federal Reserve Bank of Philadelphia *Economic Insights* (third quarter 2023), pp. 2–7, <https://www.philadelphiafed.org/the-economy/inequality-research-review-intergenerational-economic-mobility>.
- Urban-Brookings Tax Policy Center. "How Did the 2021 American Rescue Plan Act Change the Child Tax Credit?" The Tax Policy Briefing Book (2024), <https://taxpolicycenter.org/briefing-book/how-did-2021-american-rescue-plan-act-change-child-tax-credit>.